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Docket ID NRC-2014-0147:
APOG (AP1000 Utilities') Comments on
AP1000 Standard Technical Specification (STS)
Generic Technical Specification Travelers (GTSTs)

Ladies and Gentlemen:

The Federal Register Notice dated June 23, 2014 (reference ML14129A393) requested public comments on the AP1000 generic technical specification travelers. This letter forwards for NRC consideration the enclosed integrated comments from AP1000 utilities. The enclosed comments were prepared by representatives from APOG; which is comprised of the following utilities: Southern Nuclear Operating Company, South Carolina Electric & Gas, Duke Energy, and Florida Power and Light.

This letter contains no new or revised regulatory commitments.

Should you have any questions, please contact Wes Sparkman 205-992-5061 or myself at 256-308-1770.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "R. Grumbir", is written over a horizontal line.

Richard J. Grumbir
Manager, APOG

Enclosure: AP1000 Utilities' Comments on AP1000 Standard Technical Specification (STS)
Generic Technical Specification Travelers (GTSTs)

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Enclosure:

AP1000 Utilities' Comments on
AP1000 Standard Technical Specification (STS)
Generic Technical Specification Travelers (GTSTs)

In accordance with the Federal Register Notice (FRN) dated June 23, 2014 (reference ML14129A393), the AP1000 utilities are submitting the enclosed comments.

As discussed in the cover letter, the review was performed by APOG Members using a multi-disciplinary team. The following items provide some parameters regarding the scope of review performed and some general observations:

- A. The following portions of the material included in the FRN were not included in the review scope:
- Initial Tables, "DISPOSITION OF TSTF CHANGES CONSIDERED FOR INCLUSION IN AP1000 STANDARD TECHNICAL SPECIFICATIONS - BY TSTF," and "DISPOSITION OF TSTF CHANGES CONSIDERED FOR INCLUSION IN AP1000 STANDARD TECHNICAL SPECIFICATIONS - By GTST."
 - Reference sections
 - Evaluator Comments sections
- B. Although the review did not perform a line-by-line comparison of the GTST clean Technical Specification (TS) and Bases pages, several formatting errors in the GTSTs were noticed during our review – beyond those identified by the NRC Staff in the GTSTs. Many were provided as specific comments; however, others may not have been detailed. It is anticipated that a final review of the compiled initial AP1000 NUREG would provide the more appropriate time for a line-by-line review to assure formatting errors have been corrected. Examples of comments provided include the following:
- The construction of NOTE(S) is modified from the AP1000 GTS. The Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, provides for use of Note format as presented in GTS.
 - GTST Section 1.2, page 17: In Example 1.2-1 the indentation of Required Action A.1 text is not aligned with the indentation of the Required Action A.2 text. It is important that the "Logical Connectors" section accurately portray the proper format.
 - GTST Section 1.3, page 28: DESCRIPTION a.: "first" is not underlined as it is in GTS and NUREG-1431.
- C. A few GTST Sections made changes to include a hyphen in the Bases mention of Completion Times and/or Frequencies between the value and units. For example "a 12-hour Completion Time is..." or "the 92-day Frequency provides..." Proper grammar would apply these hyphens; however, the GTST applies this rule inconsistently throughout the Bases. Historically, the existing STS NUREGs removed and avoided efforts to include these hyphens. So the effort to include these hyphens now is unique for the AP1000 GTST. The AP1000 utilities did not comment on these differences. The NRC Staff may consider determining a consistent policy and applying it consistently for all NUREGs, as well as consistently for the GTST.
- D. As a generic philosophy, the AP1000 utilities are generating GTST comments not to include "optional" TS provisions. Plant-specific differences are not applicable to the AP1000 community at this time. There are several TSTFs that have bracketed options for plants to consider for adoption. The utilities providing comments on the GTST are maintaining a position that the AP1000 community desires TS/Bases consistency and chooses to avoid preferential differences. These are specifically detailed in the included comments.

- E. Finally, the following generic observation is offered for NRC consideration prior to finalizing the GTSTs and AP1000 STS NUREG. The level of discussion varies from section to section. For example, the discussion detail for DOC L03 in the Description of changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes and the Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes for GTST Sections 1.1, 3.8.2, 3.8.4, and 3.8.6 differ from those provided in GTST Sections 3.9.1, 3.9.2, and 3.9.3. There is no specific request for feedback on this observation.

When reviewing the table of comments, note that each specific comment provided cites the GTST section and one or more GTST Section page number(s). These page numbers are intended to provide a pointer to one location applicable to the topic of the comment. There may be other locations, where the comment is applicable, which are not defined.

GTST Section Pg #	Comment	Proposed Action
_Disposition of TSTF Changes	Approved TSTF-522 is not dispositioned in the material provided to support the GTSTs.	Include TSTF-522 in the reference disposition tables, as "TSTF already Included in GTS Rev. 19 with variation." Note that minor changes to the Bases are as appropriate to the AP1000 design.
_Disposition of TSTF Changes	Approved TSTF-523 is not dispositioned in the material provided to support the GTSTs.	Include TSTF-523 in the reference disposition tables, as "TSTF deferred for future consideration"
_Generic	Throughout the Bases, references to Sections and Chapters of the FSAR (or AP1000 DCD) do not state the "FSAR" (or DCD) clarifier. Since these Section and Chapter references are to an external document, it is appropriate to include the "FSAR" modifier. This was done in VEGP LAR; refer to DOC A003.	Add "FSAR" before each Bases reference to "Section" and/or "Chapter," including each Reference Section listing.
_Generic	The construction of NOTE(S) is modified from the AP1000 GTS. The Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, provides for use of Note format as presented in GTS. Consistency with GTS and issued COL TS is desired.	Revert Note format to match that used in GTS

GTST Section Pg #	Comment	Proposed Action
_Generic	<p>TSTF-51-A made two changes: it changed Applicabilities and Actions from "movement of irradiated fuel" to "movement of [recently] irradiated fuel" and removed most uses of the defined term Core Alterations. This change has the effect of removing the Applicability of the affected TS after a specified decay time (i.e., beyond "recently") has occurred. Only the second change to delete Core Alterations was incorporated into the AP1000 STS. Further clarification of the full scope of TSTF-51 should be addressed; that is to acknowledge it is deferred to a future consideration.</p>	<p>Include the addition of "recently" from TSTF-51 in the reference disposition tables, as "TSTF deferred for future consideration"</p>
_Generic	<p>The GTST sections often repeat VEGP LAR DOCs, which reference "existing" and "current" requirements. The inclusion in the GTST of references to "existing" and "current," are not always valid in the context of the GTS.</p>	<p>Each occurrence of "existing" and "current" should be revised to be clear and specific to GTS, MTS, or VEGP COL TS (or other), as appropriate.</p>
_Generic	<p>Section VII, GTST Safety Evaluation, inconsistently completes the subsection "References to Previous NRC Safety Evaluation Reports (SERs)." When technical changes are made based on VEGP LAR, citing the associated SER is not always done.</p> <p>It is not clear whether there is a substantive intended difference when omitting the citation.</p>	<p>Evaluate consistent citations within the subsection "References to Previous NRC Safety Evaluation Reports (SERs)"</p>
_Generic	<p>In section II, subsection titled, "RCOL PTS Change Number and Title," there are inconsistent titles given (between the various GTST sections) for the various TSU LAR DOCs.</p>	<p>Suggest making DOC titles consistent between GTST sections.</p>

GTST Section Pg #	Comment	Proposed Action
_TSTF-071 _TSTF-494	<p>TSTF-071-A, Rev. 2, was incorporated in Revision 2 of the WOG NUREG; however, TSTF-071-A was not included in the AP1000 GTS. The GTST proposes to add it.</p> <p>This Bases-only change is generally not adopted by most plant-specific ISTS conversions (for example, it is currently not in VEGP Units 1 and 2 Bases). The Bases examples are not considered to be helpful, especially given the plant-specific details provided in procedures.</p> <p>Since neither issued COL Bases for VEGP or V.C. Summer include this portion of the Bases, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COL Bases.</p> <p>Similarly, TSTF-494 is not appropriate to be included.</p>	Remove TSTF-071 and TSTF-494 from GTST
_TSTF-165	<p>TSTF-165 made several changes to the LCO 3.0.5 Bases, which are not incorporated in the AP1000 GTS, and not evaluated in the GTST. Generally, TSTF-165 replaces the phrase "Surveillance Requirements" or "SRs" with "required testing." This change corrects an inconsistency with LCO 3.0.5.</p>	Incorporate the changes approved in TSTF-165 into the Bases for LCO 3.0.5.

GTST Section Pg #	Comment	Proposed Action
_TSTF-359	<p>The GTS incorporates TSTF-359-A, Rev. 9. The justification for TSTF-359 was based on vendor-specific evaluations. For Westinghouse plants, that evaluation was in MUHP-3015, "Qualitative Risk Assessment Supporting Increased Flexibility in Mode Restraints," January 2002. This report evaluated "the key plant changes that occur during the mode changes so it is possible to identify the initiating events that can occur and systems available for event detection, actuation, and mitigation." It also considered initiating events and equipment available to mitigate those events. Based on that evaluation, Notes were proposed for several systems to prohibit the use of LCO 3.0.4.b. These Notes were applied to LTOP, ECCS-Shutdown, AFW, and AC Sources - Operating. TSTF-359-A also removed existing Notes from the ISTS and revised SR 3.0.4. There is no technical basis for concluding that the analysis performed in support of TSTF-359-A and the high-risk configurations addressed by the Notes are applicable to AP1000 plants.</p>	<p>Remove TSTF-359-A from the GTST. Include TSTF-359-A in the reference disposition tables, as "TSTF deferred for future consideration"</p> <p>Note: also reinstate LCO 3.0.4 "not applicable" Notes deleted in various Specifications as a result of incorporating TSTF-359.</p>
_TSTF-372	<p>TSTF-372-A adds LCO 3.0.8, which provides a delay time in declaring a supported system inoperable when a required snubber cannot perform its function. It is a risk-informed change, which evaluated a loss of offsite power due to a seismic event. This analysis (both system configuration and assumed limiting earthquake frequencies) may not be applicable to the AP1000.</p>	<p>Remove TSTF-372-A from the GTST. Include TSTF-372 in the reference disposition tables, as "TSTF deferred for future consideration"</p>

GTST Section Pg #	Comment	Proposed Action
_TSTF-425	<p>GTST evaluated this TSTF with the following note:</p> <p><i>Risk-informed TS changes will be considered at a later time for application to the AP1000 STS.</i></p> <p>The NRC approval of TSTF-425, and model safety evaluation provided in the CLIP for TSTF-425, are generically applicable to any design's Technical Specifications. As such, the replacement of certain Frequencies with a Surveillance Frequency Control Program should be included in the GTST for AP1000 STS NUREG.</p> <p>However, implementation in the AP1000 STS should not reflect optional (i.e., bracketed) material showing retention of fixed Surveillance Frequencies where relocation to a Surveillance Frequency Control Program is acceptable. Since each represented AP1000 Utility is committed to maintaining standardization, there is no rationale for an AP1000 STS that includes bracketed options.</p>	<p>Consistent with TSTF-425 criteria, replace applicable Surveillance Frequencies with "In accordance with the Surveillance Frequency control Program" and add that Program as new AP1000 STS Specification 5.5.15</p>
_TSTF-427	<p>TSTF-427-A adds LCO 3.0.9, which provides a delay time in declaring a supported system inoperable when a barrier cannot perform its function. It is a risk-informed change, which evaluated a number of initiators (LOCA, HELB, RCP seal failures, feedline and steamline breaks, flooding, turbine missile, tornados). This analysis may not be applicable to the AP1000.</p>	<p>Remove TSTF-427-A from the GTST. Include TSTF-427-A in the reference disposition tables, as "TSTF deferred for future consideration"</p>

GTST Section Pg #	Comment	Proposed Action
_TSTF-437	<p>TSTF-437 was drafted against NUREG-1431, Revision 2. However, it was not adopted by the NRC in NUREG-1431 Revision 3 or Revision 4. Since then, TSTF-547 is drafted and under NRC review and makes different changes from that in TSTF-437. This change also does not currently exist for AP1000 plants.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include this option, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p> <p>It is appropriate for the AP1000 NUREG to remain consistent with the GTS (and issued COLs) until TSTF-547 is dispositioned. At that time, a subsequent GTST can be considered for the AP1000 NUREG.</p>	<p>Remove TSTF-437 from GTST. Include TSTF-437 in the reference disposition tables, as "TSTF deferred for future consideration"</p>

GTST Section Pg #	Comment	Proposed Action
_TSTF-500	<p>As noted in the GTST analysis for TSTF-500, the AP1000 DC system design differs from the design assumed for the standard plant basis for TSTF-500. As such, the changes and possible options provided in TSTF-500 are not necessarily applicable to the AP1000 design.</p> <p>Since each represented AP1000 Utility is committed to maintaining a standard design, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs. Any future DC electrical power source design changes would also be anticipated to become a standard AP1000 design, and at that time, a design-specific review would be performed for the appropriate AP1000 STS change.</p> <p>Furthermore, TSTF-500 is itself out of date in being based on RG 1.129 Revision 2 and its endorsement of IEEE-450-2002. RG 1.129 Revision 3 now endorses IEEE-450-2010.</p>	Remove TSTF-500 from the AP1000 STS and supporting GTSTs.
1.1 Pg 03	Fourth paragraph discussion of TSTF-419-A incorrectly states "As proposed by VEGP LAR DOC L04, VEGP Units 3 and 4 COL Amendment 13 removed the last sentence of the PTLR definition in PTS Section 1.1, consistent with TSTF-419-A, Rev. 0." VEGP LAR DOC A004 made this deletion.	Revise discussion to replace reference to "DOC L04" with reference to "DOC A004"

GTST Section Pg #	Comment	Proposed Action
1.1 Pg 11	Last paragraph on page just states that "Similar changes are suggested for Specifications 3.1.8, 3.3.1, and 5.5.14." However, the previous three paragraphs do not explain any change other than the deletion of RTCOT.	For the three specs referenced, it should state "Similar changes are made for Specifications 3.1.8, 3.3.1, and 5.5.14. Specifically, the definition of RTCOT is replaced with ACTUATION LOGIC TEST or CHANNEL OPERATIONAL TEST, as appropriate."
1.1 Pg 11	It appears that the last two full paragraphs on page 11, describing the rationale for the revised PTS Section 1.1 definitions of ACTUATION LOGIC TEST (reference DOC A001 and DOC L01) and CHANNEL OPERATIONAL TEST (reference DOC A001), were inserted in the discussion of DOC M01.	Move the two paragraphs describing the revised PTS Section 1.1 definitions of ACTUATION LOGIC TEST and CHANNEL OPERATIONAL TEST. It appears that the DOC A00x and DOC L0x changes are intended to be discussed prior to the DOC M0x change(s).
1.1 Pg 13	GTST Safety Evaluation for Section 1.1 does not provide a conclusion for the administrative changes that were incorporated.	Add the following paragraph at the end of the Safety Evaluation section: "The remaining changes are editorial, clarifying, grammatical, or otherwise considered administrative. These changes do not affect the technical content, but improve the readability, implementation, and understanding of the requirements, and are therefore acceptable."

GTST Section Pg #	Comment	Proposed Action
1.1 Pg 14	GTST 1.1 Section VIII, Evaluator Comments contain an "evaluation" drawing a conclusion regarding the acceptability of the AP1000 GTS Rev. 19 difference from WOG STS. This is inconsistent with other uses of this section. Furthermore, given the approval of the AP1000 GTS in Part 52, Appendix D, additional conclusions regarding the acceptability of the GTS are not appropriate.	Delete evaluation of the AP1000 GTS difference from WOG STS.
1.1 Pg 18	The Channel Calibration definition has unnecessary differences from the NUREG-1431 definition. The NUREG wording was approved as part of TSTF-205, however, in the second sentence, the AP1000 GTS omitted the word "channel" prior to "OPERABILITY"	The second sentence should be revised to add the word "channel," as shown, "The CHANNEL CALIBRATION shall encompass all devices in the channel required for <i>channel</i> OPERABILITY."
1.1 Pg 19 & 28	The change to the PTS definition of CHANNEL OPERATIONAL TEST (COT) is not reflected in the GTST definition.	Revise the GTST definition to delete "the" prior to OPERABILITY in the first sentence such that it reads "A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify the OPERABILITY of all devices in the channel required for channel OPERABILITY."

GTST Section Pg #	Comment	Proposed Action
1.1 Pg 20	<p>The GTS includes a definition of Dose Equivalent XE-133, which is proposed to be revised by the GTST in the AP1000 STS. The changes are not needed. The GTS definition is consistent with the DCD licensing basis and is specific to the AP1000 plants.</p> <p>Furthermore, the GTST proposed change is based on TSTF-490, Rev. 0. However, in a March 14, 2012 memorandum (Accession No. ML12039A201), the NRC Staff effectively withdrew the approval of TSTF-490, Rev. 0.</p>	Remove changes to Dose Equivalent XE-133 definition.
1.1 Pg 22 & 31	Text added to the definition of PHYSICS TESTS by VEGP TSU DOC A003 is missing a comma that should be inserted following the FSAR Chapter title.	Insert a comma following "...Initial Test Program" as shown in VEGP DOC A003.
1.1 Pg 25 & 33	The GTST inappropriately adds brackets around the AVERAGE REACTOR COOLANT TEMPERATURE (°F) values in Table 1.1-1. There are no options (and no Reviewer's Notes) associated with or applicable to these MODE definition break points. Furthermore, there is no change justification provided by the GTST.	Remove brackets from the AVERAGE REACTOR COOLANT TEMPERATURE (°F) values in Table 1.1-1.
1.1 Pg 32	The definition of STAGGERED TEST BASIS is missing from the clean typed pages (but is correctly shown in the mark-up pages).	Include the GTS definition of STAGGERED TEST BASIS.
1.2 Pg 17	In Example 1.2-1 the indentation of Required Action A.1 text is not aligned with the indentation of the Required Action A.2 text. It is extremely important that the "Logical Connectors" section accurately portray the proper format.	Revise Example 1.2-1 to correctly indent the Required Action text.

GTST Section Pg #	Comment	Proposed Action
1.2 Pg 18	In Example 1.2-2 the indentation of the logical connectors does not match the Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, section 2.1.5.c.	Revise Example 1.2-2 logical connectors to be consistent with NUREG-1431 and Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, section 2.1.5.c.
1.3 Pg 28	There are unnecessary differences in the DESCRIPTION section of Section 1.3 from NUREG-1431. In the paragraph labeled "a.", underline the word "first"	Revise the Description section of Specification 1.3 to underline "first"
1.3 Pg 30	The clean-typed Example 1.3-2, Condition A is not properly aligned.	Correct formatting of Example 1.3-2 Condition A.
1.3 Pg 30	In the first paragraph of Example 1.3-2, last sentence, change "Condition A and B" to "Conditions A and B". Use of "and" leads to plural "Conditions"	In the first paragraph of Example 1.3-2, last sentence, change "Condition A and B" to "Conditions A and B" (plural "Conditions")
1.3 Pg 34	In the third paragraph, add a paragraph break before the last sentence, as the sentence conveys a different thought than the third paragraph. This is consistent with NUREG-1431.	Add the paragraph break
1.3 Pg 35	Example 1.3-6, first paragraph, second sentence, change the phrase "The initial 8 hours interval" to "The initial 8 hour interval" for appropriate presentation. This is consistent with NUREG-1431.	Change "hours" to "hour"

GTST Section Pg #	Comment	Proposed Action
1.4 Pg 24	In the Section 1.4, Description, first paragraph, second line, capitalize the word "surveillance." This is consistent with Surveillance being a capitalized term.	Section 1.4, Description, first paragraph, second line, capitalize the word "surveillance"
1.4 Pg 26	Correct typographical errors in the Section 1.4, Example 1.4-1 discussion: <ul style="list-style-type: none"> • First paragraph, third and fourth line, capitalize the word "surveillance." • First paragraph, tenth line, do not capitalize the word "Unit" 	Section 1.4, Example 1.4-1 discussion, first paragraph, third and fourth line, capitalize the word "surveillance"; and first paragraph, tenth line, do not capitalize the word "Unit"
1.4 Pg 27	In the Section 1.4, Example 1.4-2 discussion, first paragraph, fifth line, capitalize the word "surveillance." This is consistent with Surveillance being a capitalized term.	Section 1.4, Example 1.4-2 discussion, first paragraph, fifth line, capitalize the word "surveillance"
1.4 Pg 28	Example 1.4-3, second paragraph, first line does not have "performance" underlined as it is in GTS and NUREG-1431.	Example 1.4-3, second paragraph, first line, underline "performance"
2.0 Pg 13 & 21	The GTST Header inconsistently uses "2.0" and "2.1" on different pages.	Evaluate consistent numbering.
2.0 Pg 25	The Applicable Safety Analyses "a" list item should be the lead-in for the list and not a listed item.	Move List item "a" as a lead-in paragraph

GTST Section Pg #	Comment	Proposed Action
2.1.02 Pg 25	Clarify GTST 2.1.2 Bases for Applicable Safety Analysis to relate the equivalency of RCS depressurization valves and ADS valves. The AP1000 DCD Figure 7.2-1, sheet 15, which shows the actuation logic for ADS valves, is titled "Automatic RCS Depressurization Valve Sequencing." Similarly, AP1000 DCD 10.4.4 supports the equivalency of the terms Turbine Bypass System and Steam Dump System.	Make the following changes to Applicable Safety Analysis: a. RCS depressurization valves (Automatic Depressurization System [ADS] valves); b. Steam line relief valves (SG PORVs); c. Turbine Bypass System (Steam Dump System);
3.0 LCO Pg 27	TSTF-122-A was incorporated with minor errors. The following changes would correct the errors. In the LCO 3.0.2 Bases, 3rd paragraph on mark-up page 27: <ul style="list-style-type: none"> • Following the struck term "Alternatives that" delete the word "not" • Place a comma prior to the inserted word "alternatives" 	In the LCO 3.0.2 Bases, 5 th paragraph, following the struck term "Alternatives that" delete the word "not". Also, place a comma prior to the inserted word "alternatives"
3.0 LCO Pg 37	A typographical error was made in incorporating TSTF-273 in the last sentence of the LCO 3.0.6 Bases. The sentence should state (emphasis added; revise "support" to "supported"): "When the loss of function is the result of multiple support systems, the appropriate LCO is the LCO for the supported system."	The last sentence in the LCO 3.0.6 Bases should be revised to match TSTF-273.
3.0 LCO Pg 48	There is an editorial error in LCO 3.0.2, first paragraph, third line, where the word "LCO" should be added before "3.0.5." Adding "LCO" would be consistent with NUREG-1431.	LCO 3.0.2, first paragraph, third line, add "LCO" before "3.0.5"
3.0 LCO Pg 49	In LCO 3.0.5, last sentence, change "test" to "testing" to be consistent with the first sentence. This is consistent with NUREG-1431.	LCO 3.0.5, last sentence, change "test" to "testing"

GTST Section Pg #	Comment	Proposed Action
3.0 LCO Pg 52	In the Bases for LCO 3.0.1, add a coma after "i.e." for editorial correctness.	In the Bases for LCO 3.0.1, add a coma after "i.e."
3.0 LCO Pg 52	In the Bases for LCO 3.0.2, first paragraph, last line, capitalize "specification." This is consistent with Specification being a capitalized term.	In the Bases for LCO 3.0.2, first paragraph, last line, capitalize "specification"
3.0 LCO Pg 53	In the Bases for LCO 3.0.2, third paragraph, twelfth line, the word "could" should be revised to "may" for consistency with the mark-up (page 27) and with the TSTF-122 change.	In the Bases for LCO 3.0.2, third paragraph, twelfth line, revise the word "could" to "may"
3.0 LCO Pg 54	In the Bases for LCO 3.0.3, for editorial correctness: <ul style="list-style-type: none">• First paragraph, remove the semicolon after "met"• Fifth paragraph, first line, remove the word "into"• Sixth paragraph, remove the coma after "terminated"• Last two paragraphs labeled "a." and "b." should be ended in a semicolon, not a period This is consistent with NUREG-1431.	In the Bases for LCO 3.0.3 make the changes outlined in the Comments.

GTST Section Pg #	Comment	Proposed Action
3.0 LCO Pg 55	<p>Revise LCO 3.0.3 Bases to clarify that compliance with Actions of LCO 3.0.3 do not depend solely on use of safety-related or TS-required systems. The shutdown and cooldown for compliance with TS can/will utilize normal plant operating systems, which are nonsafety-related systems and not governed by TS LCOs.</p>	<p>Make the following changes to LCO 3.0.3 Bases discussion:</p> <p>. . . less than the total time allowed.</p> <p><u>Compliance with the time limits of Specification 3.0.3 rely on the use of nonsafety-related systems, which are not governed by Technical Specification LCOs.</u></p> <p>In MODES 1, 2, 3, and 4, LCO 3.0.3 provides actions for Conditions . . .</p>
3.0 LCO Pg 55	<p>In the Bases for LCO 3.0.3, for editorial correctness:</p> <ul style="list-style-type: none"> • Second paragraph, first line, change "Specification 3.0.3" to "LCO 3.0.3" • Last paragraph, first line, change "Exceptions to 3.0.3" to "Exceptions to LCO 3.0.3" • Last paragraph, second line, delete the comma after "LCO 3.0.3" <p>This is consistent with NUREG-1431.</p>	<p>In the Bases for LCO 3.0.3 make the changes outlined in the Comments.</p>
3.0 LCO Pg 55	<p>In the third paragraph, delete the last sentence, which states, "In MODES 5 and 6, LCO 3.0.8 provides actions for Conditions not covered in other Specifications." LCO 3.0.8 has been deleted.</p>	<p>Delete the third paragraph last sentence</p>

GTST Section Pg #	Comment	Proposed Action
3.0 LCO Pg 58	In the Bases for LCO 3.0.4, for editorial correctness: <ul style="list-style-type: none"> • Third paragraph, fifth line, change "results" to "result" 	In the Bases for LCO 3.0.4, third paragraph, fifth line, change "results" to "result"
3.0 LCO Pg 59	In the Bases for LCO 3.0.5, for editorial correctness: <ul style="list-style-type: none"> • First paragraph, first sentence, change "allowance of restoring" to "allowance for restoring" • Fourth paragraph, fourth line, change "specification" to "Specification" 	In the Bases for LCO 3.0.5 make the changes outlined in the Comments
3.0 LCO Pg 60	Revise LCO 3.0.6 Bases to add a factual statement (“There are no support system LCO requirements for offsite power based on the safety-related passive design”). This clarifies the preceding mention that operations are being restricted in accordance with the Actions of the support system.	Make the following changes to LCO 3.0.6 Bases discussion: . . . resulting temporary loss of redundancy or single failure protection is taken into account. <u>There are no support system LCO requirements for offsite power based on the safety-related passive design.</u>
3.0 LCO Pg 60	Delete the LCO 3.0.6 Bases statement retained from NUREG-1431 Bases that cites “pump suction” as an example of a TS support system. This example is not applicable to the passive AP1000 design. Deleting this TS Bases example has no impact on compliance with the TS requirements.	Make the following changes to LCO 3.0.6 Bases discussion: . . . (e.g., loss of automatic start due to inoperable instrumentation, or loss of pump suction source due to low tank level) . . .

GTST Section Pg #	Comment	Proposed Action
3.0 SR Pg 24	In SR 3.0.1, fourth line, capitalize "surveillance" for editorial correctness.	In SR 3.0.1, fourth line, capitalize "surveillance"
3.0 SR Pg 24	In SR 3.0.3, change first paragraph, fourth line, "which ever" to "whichever" for editorial correctness.	In SR 3.0.3, change first paragraph, fourth line, "which ever" to "whichever"
3.0 SR Pg 27	In the Bases for SR 3.0.2, third paragraph, fourth line, change "surveillance" to "Surveillance" for editorial correctness.	In the Bases for SR 3.0.2, third paragraph, fourth line, change "surveillance" to "Surveillance"
3.0 SR Pg 28	In the Bases for SR 3.0.2, second paragraph, fifth line, change "remedial action" to "other remedial action" for consistency with other STS NUREGs.	In the Bases for SR 3.0.2, second paragraph, fifth line, change "remedial action" to "other remedial action"
3.0 SR Pg 28	<p>In the Bases for SR 3.0.3:</p> <ul style="list-style-type: none"> • First paragraph, last sentence, remove comma after "not been performed" • Second paragraph, third line, change "compliance" to "complying" • Third paragraph, first line, change "Conditions" to "conditions" <p>These changes provide editorial correctness and consistency with NUREG-1431.</p>	In the Bases for SR 3.0.3, make the changes outlined in the Comments

GTST Section Pg #	Comment	Proposed Action
3.0 SR Pg 29	<p>In the Bases for SR 3.0.3.</p> <ul style="list-style-type: none"> • First paragraph, insert a paragraph break before, "When a Surveillance with a Frequency based not on time intervals" • First paragraph, change "unit <u>C</u>onditions or operational <u>s</u>ituations" to "unit <u>c</u>onditions, operat<u>i</u>ng situations" • Second paragraph, place a paragraph break before "SR 3.0.3 provides a time limit for, and allowances for ..." • Second paragraph, change from single quotes to double quotes around the title of Regulatory Guide 1.182 <p>These changes provide editorial correctness and consistency with NUREG-1431.</p>	<p>In the Bases for SR 3.0.3, make the changes outlined in the Comments</p>
3.0 SR Pg 31	<p>In the Bases for SR 3.0.3:</p> <ul style="list-style-type: none"> • First paragraph, lines three and seven, add "the" before "Completion Times" • Second paragraph, second line, change "specification" to "Specification" • Second paragraph, second line, add a comma after "ACTIONS" <p>These changes provide editorial correctness and consistency with NUREG-1431.</p>	<p>In the Bases for SR 3.0.3, make the changes outlined in the Comments</p>

GTST Section Pg #	Comment	Proposed Action
3.0 SR Pg 31	<p>In the Bases for SR 3.0.4:</p> <ul style="list-style-type: none"> • First paragraph, first sentence, change "changes in MODES" to "entry into MODES" • First paragraph, second sentence, change "LCO 3.0.4" to "SR 3.0.4" • Second paragraph, eighth line, remove the comma after "Surveillance" • Second paragraph, eleventh line, change "NOTE" to "Note" <p>These changes provide editorial correctness and consistency with NUREG-1431 prior to the incorporation of TSTF-359.</p>	<p>In the Bases for SR 3.0.4, make the changes outlined in the Comments</p>
3.1.01 Pg 07	<p>Second paragraph under "Technical Analysis" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.</p>	<p>Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."</p>
3.1.01 Pg 25	<p>These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.</p>	<p>Make the following changes to the 2nd paragraph of SR 3.1.1.1 Surveillance Requirements Bases:</p> <p>In <u>MODE 2 with $k_{eff} < 1.0$ and in</u> MODES 3, 4, and 5, the SDM is verified by performing a reactivity balance calculation, considering at least the listed reactivity effects:</p>

GTST Section Pg #	Comment	Proposed Action
3.1.02 Pg 25	Revise TS 3.1.2 Bases Background last paragraph to provide a more complete description of core reactivity. The paragraph does not include description of burnable absorbers depletion and the fact that boron concentration may actually increase at BOC (as shown in AP1000 DCD Figure 4.3-3). Note that this wording is also found in other plant-specific TS Bases.	<p>Make the following changes to the last paragraph of the Background:</p> <p>When the core is producing THERMAL POWER, the fuel <u>and burnable absorbers are</u> is being depleted and excess reactivity <u>(except possibly near beginning of cycle (BOC))</u> is decreasing. As the fuel <u>and burnable absorber</u> depletes, the RCS boron concentration is reduced <u>adjusted</u> to compensate <u>for the net core</u> reactivity <u>change while</u> and-maintaining constant THERMAL POWER.</p>
3.1.02 Pg 25	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Applicable Safety Analyses:</p> <p>If the measured and predicted RCS boron concentrations for identical core conditions at beginning of cycle (BOC) do not agree, then . . .</p>
3.1.02 Pg 28	Revise TS 3.1.2 Required Action B.1 Bases to replace “SR 3.1.1.1” with “LCO 3.1.1 Required Action A.1.” Page B 3.1.2-5 states “If the SDM for MODE 3 is not met, then the boration required by SR 3.1.1.1 would occur.” Note that SR 3.1.1.1 does not require boration but Required Action A.1 for TS 3.1.1 does. Revised to correctly refer to Required Action A.1.	<p>Make the following replacement under Action B.1 Bases:</p> <p>If the SDM for MODE 3 is not met, then the boration required by SR 3.1.1.1 <u>LCO 3.1.1 Required Action A.1</u> would occur.</p>

GTST Section Pg #	Comment	Proposed Action
3.1.02 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Make the following changes to SR 3.1.2.1 Surveillance Requirements Bases: ... performed prior to entering MODE 1 as an initial check on core conditions and design calculations at BOC. The SR is modified by a Note. The Note indicates that the normalization ...
3.1.03 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Make the following additions to the last sentence of the Bases Background: ... since this coefficient changes slowly due principally to the RCS boron concentration changes associated with fuel burnup and burnable absorbers depletion .

GTST Section Pg #	Comment	Proposed Action
3.1.03 Pg 27	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the second paragraph in the Bases Applicability:</p> <p>In MODE 2, with the reactor critical, the upper limit must also be maintained to ensure that startup and subcritical accidents (such as the uncontrolled CONTROL ROD assembly <u>control rod</u> or <u>control rod</u> group withdrawal) will not violate the assumptions of . . .</p>
3.1.03 Pg 29	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.1.3.1 Bases:</p> <p>This SR requires measurement of the MTC <u>once</u> at BOC prior to entering MODE 1 . . .</p>
3.1.03 Pg 30	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.1.3.2 Bases:</p> <p>Because the MTC changes slowly with core depletion, the <u>second</u> Frequency of 14 . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.1.04 Pg 08	The first paragraph under "Replacing "OPDMS Operable" and "OPDMS inoperable" respectively with "OPDMS monitoring parameters" and "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.1.04 Pg 35	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Make the following changes to the Bases Background: These The 16 GRCA s have been subdivided into what has been termed as MA, MB, MC, and MD Banks with 4 GRCA in each.

GTST Section Pg #	Comment	Proposed Action
3.1.04 Pg 39	Additional clarifying information is included consistent with the TS being addressed. Note that this information is copied from LCO 3.1.6 Applicability Bases.	<p>Make the following additions to the last paragraph of the LCO Bases:</p> <p>The LCO is modified by a Note to relax the rod alignment limit on GRCA's during GRCA bank sequence exchange operations. <u>The two exchanging banks will move out of sequence and overlap limits for several minutes during the sequence exchange.</u></p> <p>This operation which occurs frequently throughout the fuel cycle would normally violate the LCO. <u>GRCA bank sequence exchange is only allowed with the OPDMS OPERABLE to monitor the parameters of LCO 3.2.5. "On-Line Power Distribution Monitoring System (OPDMS) - Monitored Parameters."</u></p>
3.1.05 Pg 19	The GTS Applicability for LCO 3.1.5 has a Note that is not captured in the GTST Section XI or in Section XII Specification pages. This appears to be an oversight.	Include the Applicability Note from GTS LCO 3.1.5.

GTST Section Pg #	Comment	Proposed Action
3.1.05 Pg 20	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Break the fourth paragraph in Bases Background into two paragraphs:</p> <p>. . . capable of adding a large amount of positive reactivity.</p> <p>Boration or dilution of the Reactor Coolant System (RCS) compensates for the reactivity changes associated with large changes in RCS temperature.</p>
3.1.06 Pg 08	The first paragraph under "Replacing "OPDMS Operable" and "OPDMS inoperable" respectively with "OPDMS monitoring parameters" and "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.1.06 Pg 13	The GTS Applicability for LCO 3.1.6 has two Notes that are not captured in the GTST Section XI or in Section XII Specification pages. This appears to be an oversight.	Include the Applicability Note from GTS LCO 3.1.6 with the change described in GTST Section V, "Applicability"

GTST Section Pg #	Comment	Proposed Action
3.1.06 Pg 24	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Split the first sentence of the Bases third Background paragraph into two sentences:</p> <p>The rod cluster control assemblies (RCCAs) are divided among control banks and shutdown banks. Gray rod cluster assemblies (GRCAs) are limited to control banks.</p>
3.1.06 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following capitalization in the Bases Applicable Safety Analyses:</p> <ol style="list-style-type: none"> 1. Specified fuel design limits, or
3.1.07 Pg 25	LCO 3.1.7, Required Action B.4 Completion Time is "24 hours" in GTS. The Section GTST Section XI and Section XII pages reflect "8 hours" for this Completion Time. There is no discussion of this difference. The "8 hours" appears to be a typographical oversight.	Revise GTST LCO 3.1.7, Required Action B.4 Completion Time to "24 hours"
3.1.08 Pg 07	DOC M01 description, last paragraph uses phrase "new" in front of three renumbered SRs (3.3.1.6, 3.3.1.7, and 3.3.3.2). Other places call this MTS in lieu of new.	Establish and apply consistent terminology to each specific TS reference

GTST Section Pg #	Comment	Proposed Action
3.1.08 Pg 27	Revise TS 3.1.8 Bases Background sentence to accurately state the role of 10 CFR 50.59. The sentence incorrectly states that 10 CFR 50.59 requires notifying the NRC of tests and experiments.	<p>Make the following changes to the Bases Background:</p> <p>Requirements for notification of prior approval by the NRC, for the purpose of conducting tests and experiments not described in the FSAR, are specified in 10 CFR 50.59 (Ref. 2).</p>
3.1.08 Pg 30	Correct TS 3.1.8 Bases for Applicable Safety Analysis reference to title of LCO 3.4.2 for consistency with TS title.	<p>Add "RCS" to LCO 3.4.2 title:</p> <p>LCO 3.4.2 "<u>RCS</u> Minimum Temperature for Criticality,"</p>
3.1.08 Pg 30 Pg 34	<p>Delete TS 3.1.8 Bases for Applicable Safety Analyses last sentence. Reference 7 (i.e., WCAP-11618) is the MERITS Topical Report and was never "NRC Approved." Furthermore, a WCAP could never "allow" any TS provision. As such, the paragraph contains misleading information and should be deleted.</p> <p>Also delete the corresponding Reference on GTST page 34.</p>	<p>Delete the last paragraph of Bases Applicable Safety Analyses:</p> <p>Reference 7 allows special test exceptions (STE) to be included as part of the LCO that they affect. It was decided, however, to retain this STE as a separate LCO because it was less cumbersome and provided additional clarity.</p> <p>Delete the corresponding Bases REFERENCE:</p> <p>7. WCAP-11618, including Addendum 1, April 1989.</p>

GTST Section Pg #	Comment	Proposed Action
3.1.08 Pg 31	Revise TS 3.1.8 LCO Bases to add information consistent with the TS requirement being addressed. This is also consistent with NUREG-1431 Bases content.	<p>Make the following additions to Bases LCO discussion:</p> <p>The requirements of LCO 3.1.3, LCO 3.1.4, LCO 3.1.5, LCO 3.1.6, and LCO 3.4.2 may be suspended <u>and the number of required channels for LCO 3.3.1, "Reactor Trip System (RTS) Instrumentation," Functions 1, 2, and 3 may be reduced to 3 required channels</u> during the performance of PHYSICS TESTS provided:</p>
3.1.08 Pg 32	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.1.8.1 Bases:</p> <p>. . . and LCO 3.3.3, "Reactor Trip System (RTS) <u>Intermediate</u> Range Instrumentation."</p>
3.1.09 Pg 17	SR 3.1.9.2 states "Verify the closure time of each CVS makeup isolation valve is within limits on an actual or simulated actuation signal." However, the philosophy of TSTF-GG-05-01, as stated in paragraph 3.1.1.e.3, is to minimize the use of articles in table entries and tabular instructions unless a passage cannot be clearly understood without articles. The proposed SR 3.1.9.2 is easily understood without using "the." Therefore, the text of SR 3.1.9.2 should state "Verify closure time of each CVS makeup isolation valve is within limits on an actual or simulated actuation signal." This would also align the text with the VEGP TSU LAR text.	Delete "the" from the SR 3.1.9.2 text

GTST Section Pg #	Comment	Proposed Action
3.1.09 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Bases Background:</p> <p>The safety related functions provided by the CVS include containment isolation of chemical and volume control system <u>CVS</u> lines penetrating containment, termination</p>
3.1.09 Pg 27	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to LCO Bases:</p> <p>The requirement that at least two <u>CVS</u> demineralized water isolation valves (CVS-PL-V136A and V136B) and two <u>CVS</u> makeup line isolation valves (CVS-PL-V090 and V091) be OPERABLE</p>
3.1.19 Pg 08	In section titled, "Description of changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes," subsection, "VEGP LAR DOC L01,"second paragraph, last sentence, "CVS" is missing from "For SR 3.1.9.3, the verification that each demineralized water isolation valve actuates to the isolation position in an actual or simulated signal is conducted at 24 months interval." Addition is suggested for consistency with SR wording.	Add "CVS" so sentence reads, "For SR 3.1.9.3, the verification that each CVS demineralized water isolation valve actuates to the isolation position in an actual or simulated signal is conducted at 24 months interval."

GTST Section Pg #	Comment	Proposed Action
3.2.01 Pg 10	The second paragraph under "Replacing "OPDMS inoperable" with "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.2.01 Pg 41	Editorial change for clarity.	<p>Make the following changes to LCO Bases:</p> <p>The actual values of CFQ are given in the COLR; however, CFQ is normally a number on the order of 2.60. For the AP1000, the normalized . . .</p>
3.2.01 Pg 43	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. This corrects an obvious misstatement and reduces potential for misunderstanding and misapplication. The TS requirement is 72 hours.	<p>Correct the following typo in the Bases Actions discussion for A.2:</p> <p>. . . Power Range Neutron Flux - High trip setpoint reductions within & <u>72</u> hours of the F_c (Z) determination, if necessary to comply with the decreased maximum allowable . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.2.02 Pg 09	The second paragraph under "Replacing "OPDMS inoperable" with "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.2.02 Pg 31	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following correction to the Bases Applicable Safety Analyses discussion:</p> <p>. . . Without the OPDMS, core monitoring and control under transient conditions (Condition I events) are accomplished .</p> <p>. . .</p>
3.2.02 Pg 33	Revise TS 3.2.2 Bases for Required Action A.2 to delete assumption that power was reduced to < 50% by Required Action A.1.2.1. This may not be correct. Action A.1.1 could have been performed, while the Condition A Note continues to ensure that Required Action A.2 is performed. The TS Bases change clarifies the information consistent with the actual TS requirements.	<p>Make the following changes to the Bases Actions discussion for A.2:</p> <p>Once the power level has been reduced to < 50% RTP per Required Action A.1.2.1 <u>Condition A is entered</u>, an incore flux map (SR 3.2.2.1) must be obtained and the measured value of $n_{F\Delta H}$ verified not to exceed the allowed limit at the lower power level.</p>

GTST Section Pg #	Comment	Proposed Action
3.2.03 Pg 08	The second paragraph under "Replacing "OPDMS inoperable" with "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.2.03 Pg 21	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Remove the inadvertently added word from the Bases Applicable Safety Analyses: The AFD is a measure of the axial power distribution skewing SAFETY to either the top or bottom half of the core.
3.2.03 Pg 21	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability. See AP1000 DCD Chapter 15 for proper format.	Correct the numeric formatting in the Bases Applicable Safety Analyses: . . . initial conditions in the analyses of Condition <u>112</u> , <u>3111</u> , or <u>1V4</u> events. This ensures that the fuel cladding integrity is maintained for these postulated accidents. The most important Condition <u>41V</u> event is the LOCA. The most important Condition <u>1113</u> event is the loss of flow accident. The most important Condition <u>211</u> events are uncontrolled bank withdrawal and boration or dilution accidents. Condition <u>112</u> accidents . . .

GTST Section Pg #	Comment	Proposed Action
3.2.03 Pg 22	<p>Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.</p> <p>See AP1000 DCD Chapter 15 for proper format.</p>	<p>Correct the numeric formatting in the Bases LCO discussion:</p> <p>. . .with the OPDMS inoperable, could produce unacceptable consequences if a Condition <u>II, III, or IV</u>2, 3 or 4 event occurs while the AFD is outside its. . .</p>
3.2.04 Pg 07	<p>VEGP LAR DOC A021, first paragraph, includes a parenthetical statement "(revised to "not monitoring parameters")." This implies that the change is part of VEGP LAR DOC A021. However, this change is discussed in VEGP LAR DOC A011.</p>	<p>Add to the end of the parenthetical statement (i.e., inside the parentheses) "as discussed in VEGP LAR DOC A011"</p>
3.2.04 Pg 08	<p>The second paragraph under "Replacing "OPDMS inoperable" with "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.</p>	<p>Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."</p>
3.2.04 Pg 27	<p>Correct TS 3.2.4 Bases Background reference to title of LCO 3.1.6 for consistency with TS title.</p>	<p>Change the title for LCO 3.1.6 in the Bases Background:</p> <p>. . . and LCO 3.1.6, "Control Red <u>Bank</u> Insertion Limits," provide limits. . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.2.04 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Split the last sentence of the first paragraph in Bases Applicability into two sentences:</p> <p>Therefore, QPTR must be monitored_ and the limits on QPTR ensure that peaking factors will be within design limits</p>
3.2.04 Pg 31	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.	<p>Make the following changes to the Bases Actions discussion for A.6:</p> <p>Required Action A.6 is modified by a Note that states that the peaking factor surveillances may only be done after the excore detectors have been <u>normalized to restore QPTR to within limits</u>calibrated to show zero tilt (i.e., Required Action A.5).</p>
3.2.04 Pg 32	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.2.4.1 Bases:</p> <p>SR 3.2.4.1 is modified by two Notes. Note 1 allows QPTR to be calculated with three pPower rRange <u>Neutron Flux</u> channels if THERMAL . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.2.04 Pg 32 - 33	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.2.4.2 Bases:</p> <p>With a PMS pPower rRange <u>Neutron Flux</u> channel inoperable, tilt monitoring for a portion of the reactor core becomes degraded.</p> <p>. . . .</p> <p>For purposes of monitoring the QPTR when one pPower rRange <u>Neutron Flux</u> channel is</p> <p>With the OPDMS <u>not monitoring parameters</u> and one PMS channel inoperable</p>
3.2.05 Pg 06	Description of VEGP LAR DOC A023 change. The words in the quote state "If the power distribution parameters are restored to within the limits..." The phrase "the limits" is actually "their limits" in TS 3.2.5 Required Action B.1 Note.	Change "the limits" to "their limits."
3.2.05 Pg 09	<p>In the justification for deleting the Note in Required Action B.1 (which is VEGP LAR DOC A023), the last paragraph states that it is not agreed that the change is administrative. However, in approving VEGP Amendment 13, the NRC Staff presented this as an administrative change.</p> <p>It is not clear why the classification of this change was revised. No justification beyond what was provided in VEGP LAR DOC A023 is provided.</p>	Remove opinion that the VEGP TSU approved change A023 is not "administrative." Otherwise, include additional discussion of the appropriate classification (since not "administrative") and include additional justification, as appropriate, for the technical change identified.

GTST Section Pg #	Comment	Proposed Action
3.2.05 Pg 09	The second paragraph under "Replacing "OPDMS inoperable" with "OPDMS not monitoring parameters"" states "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied." The intent of this sentence is not apparent. Sufficient information is provided in the rest of the paragraph to justify the change.	Delete sentence stating "The use of the term "OPDMS operable" and "OPDMS inoperable" is not appropriate since only monitoring of the parameters by the system is implied."
3.2.05 Pg 26	Editorial change for clarity.	<p>Make the following changes to Bases Background:</p> <p>The On-line Power Distribution Monitoring System (OPDMS) for the AP1000 is an advanced core monitoring and support package.</p>
3.3.01 Pg 011	Rationale for Changes section, 1st paragraph, mentions A028. This DOC is for changes to ESFAS TS and does not affect 3.3.1. Note that it is not mentioned anywhere else in this section. This is also stated in Section 3.3.2 through 3.3.7.	Change "DOCs A024 and A028" to "DOC A024" in GTST 3.3.1 through 3.3.7
3.3.01 Pg 014	In section titled, "VII. GTST Safety Evaluation," fifth paragraph states, "With the VEGP LAR DOC L01 changes, an RTCOT is not required by the TS. Therefore, the Section 1.1 RTCOT definition is deleted." The definition of RTCOT is deleted for a series of reasons as described in DOC M01.	Replace sentences with "Current section 1.1 definition of RTCOT is deleted per TSU LAR DOC M01."

GTST Section Pg #	Comment	Proposed Action
3.3.01 Pg 014	DOC M01 technical analysis, 5th paragraph, first sentence, states "With the VEGP LAR DOC L01 changes..." The reference to DOC L01 is not correct. It appears to be a typographical error and should be "DOC M01."	Change "L01" to "M01"
3.3.01 Pg 043	The modifier "PMS" for "power range detectors," "Intermediate Range Neutron Flux," and "Source Range, Neutron Flux," is unnecessary. Inclusion of "PMS" in the Bases is inconsistent with other PMS instruments, with the LCO requirement nomenclature, and the general AP1000 DCD presentation.	Delete "PMS" as a modifier to "power range," "Intermediate Range," and "Source Range," throughout the Bases
3.3.01 Pg 060	<p>Paragraph from STS LCO 3.3.1, Required Action A.1 Bases is applicable to the STS LCO 3.3.3, Required Action A.1 Bases, which is already captured in those Bases. Recommend deleting this paragraph from the STS LCO 3.3.1, Required Action A.1 Bases:</p> <p>As an alternative to placing the inoperable channel(s) in bypass or trip if THERMAL POWER is greater than the P-6 setpoint but less than the P-10 setpoint, 2 hours are allowed to reduce THERMAL POWER below the P-6 setpoint or to increase the THERMAL POWER above the P-10 setpoint. The Intermediate Range Neutron Flux channels must be OPERABLE when the power level is above the capability of the source range, P-6, and below the capability of the power range, P-10. If THERMAL POWER is greater than the P-10 setpoint, the PMS power range detectors perform the monitoring and protective functions and the intermediate range is not required. The Completion Times allow for a slow and controlled power adjustment below P-6, and takes into account the redundant capability afforded by the two remaining OPERABLE channels and the low probability of their failure during this period.</p>	Delete the commented paragraph from the STS LCO 3.3.1, Required Action A.1 Bases

GTST Section Pg #	Comment	Proposed Action
3.3.01 Pg 083 - 084	GTST Section XI and Section XII, Table 3.3.1-1, Item 3, REQUIRED CHANNELS states "4", whereas GTS states "4 (2/loop)". There is no discussion of change. This appears to be a typographical oversight.	Replace "4" with "4 (2/loop)" in Table 3.3.1-1, Item 3 Required Channels
3.3.01 Pg 086	Bases, last paragraph, statement concerning NTS states "...the NTS assured that the SLs are not exceeded." The tense of the verb assure should be changed to be "assures," not "assured."	Change "assured" to "assures"
3.3.01 Pg 089	Bases, next to last bullet on the page uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)."
3.3.01 Pg 091	Bases, first and second paragraph of NTS section uses the term " \pm " ("i.e., \pm rack calibration accuracy") without using a value with the term. Term should be "plus or minus" to align with Writer's Guide convention.	Change " \pm " to "plus or minus"
3.3.01 Pg 091	Revise TS 3.3.1 Bases Background under Reactor Trip Switchgear Interface section to include additional clarifying information for the reactor trip switchgear voting logic consistent with the design as described in AP1000 DCD section 7.2.1.1.7.	Add phrase ", which allows RTB closure" to the end of the first sentence of the section
3.3.01 Pg 094	First sentence of ASA, LCO, and Applicability states "The RTS functions to maintain the SLs..." A more correct statement would be that RTS functions to "maintain compliance with" the SLs. This change is also applicable to Section 3.3.02, Pg 042, Section 3.3.03, Pg 036, Section 3.3.04, Pg 031, Section 3.3.05, Pg 028, Section 3.3.06, Pg 027, and Section 3.3.07, Pg 028.	Add phrase "compliance with"

GTST Section Pg #	Comment	Proposed Action
3.3.01 Pg 094	Last paragraph uses the term " \pm " without using a value with the term. Term should be "plus or minus." This change is also applicable to Section 3.3.08, Pg 131, second paragraph.	Change " \pm " to "plus or minus"
3.3.01 Pg 096	Bases, under Power Range Neutron Flux, P-10 section, item (1), first word "on" should be initial cap ("On").	Change "on" to "On"
3.3.01 Pg 097	Bases, first paragraph in the Pressurizer Pressure, P-11 section, the symbol ">" is used but the term following the symbol is not a value.	Change ">" to "greater than"
3.3.01 Pg 097	<p>Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Revise the Applicable Safety Analyses, LCOs, and Applicability for the P-10 interlock:</p> <p>(5) . . . the following Functions:</p> <ul style="list-style-type: none"> · Pressurizer Pressure - Low Setpoint, <p>(6) . . . P-10 interlock automatically enables the Power Range Neutron Flux - Low Setpoint reactor trip</p>	Make the commented change to Applicable Safety Analyses, LCOs, and Applicability for the P-10 interlock
3.3.01 Pg 107	Bases, first paragraph of Function 11, first line, the word "range" should be initial cap. Second paragraph, phrase "2 per SG" should be "(2 per SG)"	Change "range" to "Range" and "2 per SG" to "(2 per SG)"
3.3.01 Pg 109	Bases, Action A.1 section, a second paragraph is included, which discusses a 2 hour Required Action. This entire paragraph is not consistent with the TS Action A and needs to be deleted.	Delete second paragraph for Action A.1 Bases.

GTST Section Pg #	Comment	Proposed Action
3.3.01 Pg 111	Bases SR 3.3.1.1, has a paragraph that lists the channels that are to be checked by the SR. This information is already provided in the Function column of the TS Table 3.3.1-1 and does not need to be repeated in the Bases. Including these functions is not consistent with other SR Bases.	Delete the Bases paragraph listing the channel titles.
3.3.01 Pg 114	Bases, SR 3.3.1.4, first paragraph, there is an extra period at end of last sentence.	Delete extra period.
3.3.01 Pg 117	Bases, SR 3.3.1.7, third paragraph, states that the Frequency is "prior to startup." The TS SR 3.3.1.7 Frequency is actually "prior to reactor startup"	Change "prior to startup" to "prior to reactor startup"
3.3.01 Pg 119	Bases, SR 3.3.1.9, third paragraph includes a closing sentence that states an exception for entering Modes 1 and 2, and that the plant must be in MODE 1 to perform the test. This provision is not in accordance with the actual SR.	Delete SR 3.3.1.9 Bases, third paragraph, final sentence
3.3.01 Pg 121	Bases, SR 3.3.1.11, last paragraph, first two sentences state the same thing. Combine them into a single sentence for clarity	Delete first two sentences and replace with: SR 3.3.1.11 is modified by a Note indicating that neutron detectors may be excluded from RTS RESPONSE TIME testing.
3.3.01 Pg 121	Bases, first paragraph, references "DCD" Chapter 7 response time. This should be "FSAR," not "DCD"	Change "DCD" to "FSAR"

GTST Section Pg #	Comment	Proposed Action
3.3.02 Pg 06	First paragraph parenthetical "STS 3.3.3 Condition F" is incorrect and should be "STS 3.3.2, Condition F"	Change 3.3.3 to 3.3.2
3.3.02 Pg 06	On page 6 and 12, the discussion states the Required Action is changed to state, "Suspend positive reactivity additions that could result in a loss of SDM," consistent with TSTF-469-T. TSTF-469-T and the AP1000 STS markups state, "Suspend positive reactivity additions that could result in a loss of <i>required</i> SDM."	Revise the discussions to add the word "required" to be consistent with the TS markups.
3.3.02 Pg 07	First Table on the page, GTS 3.3.1 Condition column lists two Condition "Q" items. The second one of these items identifies the STS 3.3.2 Condition as "E" and the Additional DOC Changes as "M02." The DOC change should be "L07" just like the previous Condition Q item.	Change M02 to L07
3.3.02 Pg 12	In section titled, "VII. GTST Safety Evaluation," sixth paragraph states, "Based on the VEGP LAR DOC L01 changes, an RTCOT is not required by the TS. Therefore, the Section 1.1 RTCOT definition is deleted." The definition of RTCOT is deleted for a series of reasons as described in DOC M01.	Replace sentences with "Current section 1.1 definition of RTCOT is deleted per TSU LAR DOC M01"
3.3.02 Pg 12	DOC M01 technical analysis, 5th paragraph (6th paragraph on the page), first sentence, states "With the VEGP LAR DOC L01 changes..." The reference to DOC L01 is not correct. It appears to be a typographical error and should be "DOC M01"	Change "L01" to "M01"

GTST Section Pg #	Comment	Proposed Action
3.3.02 Pg 43	Bases, third paragraph, discusses other LCOs where the source range detectors are addressed. LCO 3.3.15, Engineered Safety Feature Actuation System (ESFAS) Actuation Logic - Operating," should be identified since Source Range Monitors are required by LCO 3.3.8 in MODE 2, 3, and 4.	Add LCO 3.3.15 into the listing
3.3.02 Pg 48	Bases, third paragraph, first sentence repeats a Note (i.e., provides a new description of the note), which is already described in the previous paragraph.	Delete the first sentence of this paragraph
3.3.02 Pg 50	Bases, second paragraph in SR 3.3.2.4, references "DCD" Chapter 7 response time. This should be "FSAR," not "DCD"	Change "DCD" to "FSAR"
3.3.03 Pg 09	Discussion of VEGP LAR DOC M02 addresses the fact that MTS 3.3.3 "does not specify Actions for inoperability of more than two inoperable intermediate range channels with power above P-6..." The VEGP DOC also discussed that there are no Actions for this condition when below P-6. This portion of the change needs to be described here. By deleting the phrase "with power above P-6," it would apply both above and below P-6.	Delete the phrase "with power above P-6"
3.3.03 Pg 11	In section titled, "VII. GTST Safety Evaluation," sixth paragraph states, "Based on the VEGP LAR DOC L01 changes, an RTCOT is not required by the TS. Therefore, the Section 1.1 RTCOT definition is deleted." The definition of RTCOT is deleted for a series of reasons as described in DOC M01.	Replace sentences with "Current section 1.1 definition of RTCOT is deleted per TSU LAR DOC M01"

GTST Section Pg #	Comment	Proposed Action
3.3.03 Pg 11	DOC M01 technical analysis, 5th paragraph (6th paragraph on the page), first sentence, states "With the VEGP LAR DOC L01 changes..." The reference to DOC L01 is not correct. It appears to be a typographical error and should be "DOC M01"	Change "L01" to "M01"
3.3.03 Pg 11	The discussion states the Required Action is changed to state, "Suspend positive reactivity additions that could result in a loss of SDM," consistent with TSTF-469-T. TSTF-469-T and the AP1000 STS markups state, "Suspend positive reactivity additions that could result in a loss of <i>required</i> SDM."	Revise the discussions to add the word "required" to be consistent with the TS markups.
3.3.03 Pg 33	"OR" between Required Actions A.1 and A.2 is not underlined.	Underline "OR" between Required Actions A.1 and A.2
3.3.03 Pg 42	Bases, second paragraph, states there are two Notes to SR 3.3.3.2. The first note described concerning P-6 and P-10 interlocks is not in the actual SR 3.3.3.2. Delete references to the first Note. There is only one Note that needs to be described.	Replace paragraph with: <u>"SR 3.3.3.2 is modified by a Note. The Note allows this surveillance to be satisfied if it has been performed within 92 days of the Frequencies prior to reactor startup and four hours after reducing power below P-10."</u>
3.3.03 Pg 44	Bases, second paragraph in SR 3.3.3.4, references "DCD" Chapter 7 response time. This should be "FSAR," not "DCD"	Change "DCD" to "FSAR"

GTST Section Pg #	Comment	Proposed Action
3.3.04 Pg 11	Last paragraph, first line, repeats the phrase "Conditions B and D"; however, the correct phrase is to include only "Condition B." The second sentence appropriately deals with Condition D.	Revise first sentence as shown: ... Conditions B and D Conditions B and D lead to <u>leads to</u> a new default actions
3.3.04 Pg 11	Last paragraph, second sentence states that the default actions require fully inserting all rods and placing the Plant Control System in a condition incapable of rod withdrawal must be done in 6 hours. The time for these Actions is 1 hour. In addition, the first action is not to require "fully inserting" all rods, but to "initiating action to fully insert" all rods. This sentence should also clarify that the default action being discussed is Condition D.	Revise the second sentence to state: Further default actions <u>of Condition D</u> require fully inserting <u>initiating action to fully insert</u> all rods within 6 hours <u>1 hour</u> and placing the Plant Control System in a condition incapable of rod withdrawal within 6 hours <u>1 hour</u> ...
3.3.04 Pg 30	Table 3.3.4-1 is incorrectly numbered "(page 0 of 1)"	Change Page numbering to "(page 1 of 1)"
3.3.04 Pg 32	Bases, ASA, LCO, and Applicability section is missing a statement concerning what criterion of 10 CFR 50.36 is met.	Add the following statement to the end of this Bases section: <u>The RTS ESFAS instrumentation satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii).</u>

GTST Section Pg #	Comment	Proposed Action
3.3.05 Pg 10	Last paragraph, first sentence incorrectly cites both Conditions B and C. The correct citation is to only "Condition B." The second sentence appropriately deals with Condition C. Also, the second sentence states that the default actions require fully inserting all rods and placing the Plant Control System in a condition incapable of rod withdrawal must be done in 6 hours. The time for these Actions is actually 1 hour. In addition, the first action is not to require "fully inserting" all rods, but to "initiating action to fully insert" all rods.	<p>Revise first sentence as shown:</p> <p>... Conditions B and D Conditions B and D lead to <u>leads to a</u> new default actions</p> <p>Revise the second sentence to state:</p> <p>Further default actions <u>of Condition C</u> require fully inserting <u>initiating action to fully insert</u> all rods within 6 hours <u>1 hour</u> and placing the Plant Control System in a condition incapable of rod withdrawal within 6 hours <u>1 hour</u> ...</p>
3.3.05 Pg 31	Bases, first paragraph under SR 3.3.5.1, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.06 Pg 11	Last paragraph, first sentence incorrectly cites both Conditions B and D. The correct citation is to only "Condition B." The second sentence appropriately deals with Condition D. Also, the second sentence states that the default actions require fully inserting all rods and placing the Plant Control System in a condition incapable of rod withdrawal must be done in 6 hours. The time for these Actions is actually 1 hour. In addition, the first action is not to require "fully inserting" all rods, but to "initiating action to fully insert" all rods.	<p>Revise first sentence as shown:</p> <p>... Conditions B and D lead to <u>leads to a</u> new default actionss</p> <p>Revise the second sentence to state:</p> <p>Further default actions <u>of Condition D</u> require fully inserting <u>initiating action to fully insert</u> all rods within 6 hours <u>1 hour</u> and placing the Plant Control System in a condition incapable of rod withdrawal within 6 hours <u>1 hour</u> ...</p>

GTST Section Pg #	Comment	Proposed Action
3.3.06 Pg 27	Bases, fourth paragraph under ASA, LCO, Applicability section, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.07 Pg 11	Last paragraph, first sentence incorrectly cites both Conditions C and D. The correct citation is to only "Condition C." The second sentence appropriately deals with Condition D. Also, the second sentence states that the default actions require "fully inserting all rods..." This action is not to require "fully inserting" all rods, but to "initiating action to fully insert" all rods.	<p>Revise first sentence as shown:</p> <p>... Conditions C and D <u>lead to</u> <u>leads to a</u> new default actionss</p> <p>Revise the second sentence to state:</p> <p>Further default actions <u>of Condition D</u> require fully inserting <u>initiating action to fully insert</u> all rods within 6 hours <u>1 hour</u> and placing the Plant Control System in a condition incapable of rod withdrawal within 6 hours <u>1 hour</u> ...</p>
3.3.08 Pg 012	First paragraph states that Condition C is revised by adding a second condition that states "one or more Functions with more than two channels inoperable." The Condition actually reads "one or more Functions with three or more channels inoperable"	Change sentence to read "...one or more Functions with three or more channels inoperable"
3.3.08 Pg 015	Changes to Functions Table, Function 13.b (first entry) - Additional DOC column should specify A032 and L12, just like Function 14.b.	Add A032 and L12 to column.

GTST Section Pg #	Comment	Proposed Action
3.3.08 Pg 020	Rationale for Changes section, 1st paragraph, mentions A024. This DOC is for changes to RTS TS and does not affect 3.3.8. Note that it is not mentioned anywhere else in this section.	Change "DOCs A024 and A028" to "DOC A028" in GTST 3.3.8 through 3.3.18
3.3.08 Pg 051	Bases, first paragraph, statement concerning NTS states "...the NTS assured that the SLs are not exceeded." The tense of the verb assure should be changed to be "assures" not "assured"	Change "assured" to "assures"
3.3.08 Pg 121	Table 3.3.8-1 first page number states "(page -2 of 2)"; it should be "(page 1 of 2)"; and second page states "(page -1 of 2); it should be "(page 2 of 2)"	Correct page Table 3.3.8-1 page numbering
3.3.08 Pg 121	Table 3.3.8-1, Function 7, APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS states "4 ^(d) , 5 ^(e) ", whereas VEGP TSU Amendment page states "4 ^(d) , 5 ^{(e)(f)} ". Bases support the "(e)" and the "(f)" footnotes, as do the GTS (i.e., with footnotes "(b)" and "(l)"). There is no GTST discussion that evaluates the revised Applicability; it therefore, appears to be a typographical oversight.	Include footnote "(f)" for Function 7 MODE 5 Applicability
3.3.08 Pg 122	Table 3.3.8-1, Function 17, APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS has parentheses after "4" with no corresponding note. VEGP TSU Amended page has no parenthetical note after "4". The mark up on page 47 deletes the footnote, but failed to mark out the parentheses.	Delete parentheses on page 47 and 122
3.3.08 Pg 126	Bases, last line on the page, word "bases" should be "basis"	Change "bases" to "basis"

GTST Section Pg #	Comment	Proposed Action
3.3.08 Pg 131	Bases, second paragraph, last sentence, include the phrase "...values must be confirmed to be operating within the assumptions..." The word "operating" is incorrect, as the values should be "within" the assumptions.	Delete the word "operating"
3.3.08 Pg 133	The Bases for the interlock functions include a discussion of Applicability and operability requirements. However, VEGP TSU DOC L10 relocated Applicability and operability requirements. The appropriate discussion of the Applicability and operability requirements is found in the Bases for the COT (SR 3.3.8.2, page 175, third paragraph).	<ul style="list-style-type: none"> • Delete page 133 last two paragraphs for P-4 interlock. • Delete page 134 last sentence for the P-6 interlock. • Delete page 135 last paragraph for interlock P-11. • Delete page 135 last sentence of the P-12 interlock. • Delete page 136 last sentence of the first paragraph for the P-19 interlock.
3.3.08 Pg 140	Bases, SG Blowdown Isolation section, first paragraph, states: "The primary Function of the steam generator blowdown isolation is to ensure that sufficient water inventory is present in the steam generators to remove the excess heat..." For clarity and to be more accurate, the statement should be changed to read: "The primary Function of the steam generator blowdown isolation is to preserve water inventory in the steam generators to support removing the excess heat..." The blowdown isolation by itself does not ensure sufficient water inventory.	Change sentence to read as described in the comment field

GTST Section Pg #	Comment	Proposed Action
3.3.08 Pg 146	Bases, Passive Containment Cooling Action section, first paragraph, last sentence states "Heat removal is initiated ..." This sentence is discussing "PCS" heat removal. The modifier "PCS" should be added because there is more than one type of heat removal method.	Add "PCS" in front of the word "Heat" and de-capitalized the word "heat"
3.3.08 Pg 153	Bases, last paragraph of Containment radioactivity - High 1 Functions, states that the Function is not required under certain conditions "because any DBA release of radioactivity into the containment in these MODES would not require containment isolation. For clarity and to be more correct, the statement should be a new sentence that reads "Any DBA release of radioactivity into the containment in these conditions would not require this containment isolation function." The conditions described are not all MODES and the discussion is about this specific containment isolation function, not all containment isolations.	Change as described in the comment section.
3.3.08 Pg 156	Bases, Pressurizer Water Level - High 2 Function, first paragraph should be revised to correct a typographical error regarding the automatic blocking. The TS Bases reference to the P-11 permissive (saying that it is automatically blocked) should be the P-19 permissive (saying that it can be manually blocked) per FSAR Section 7.3.1.2.15. Note that in the TS itself, the Function (TS 3.3.8, Function 9) has footnote (g), which indicates "Above the P-19 (RCS Pressure) interlock..."	Change the phrase "is automatically" to "can be manually" and the interlock number from "11" to "19"
3.3.08 Pg 169	Bases, Actions F.1 and F.2 are typographically mis-identified as "FG.1" and "FG.2"	Delete the G from "FG.1" and "FG.2"

GTST Section Pg #	Comment	Proposed Action
3.3.08 Pg 175	Bases, next to last paragraph for SR 3.3.8.2, last line uses the phrase "integrated protection cabinets." The Bases for SR 3.3.8.3, first paragraph uses the term "IPC," which is the acronym for integrated protection cabinets. The SR 3.3.8.2 Bases should be changed from "integrated protection cabinets" to "integrated protection cabinets (IPCs)." This change also applies to Section 3.3.10, Pg 47 (SR 3.3.10.2), Section 3.3.11, Pg 32 (SR 3.3.11.2), Section 3.3.13, Pg 34 (SR 3.3.13.2), and Section 3.3.14, Pg 31 (SR 3.3.14.2).	Add the acronym "(IPCs)" after the words "integrated protection cabinets" in SR 3.3.8.2 (and others identified in the Comments)
3.3.09 Pg 02	In the RCOL PTS Change number and title section, VEGP LAR DOC A029 is identified as a "Revision of MTS 3.3.9 Required Action G.2 statement." This should either be "STS" 3.3.9 Required Action G.2 or MTS 3.3.9 Required Action "I.2"	Correctly identify the change using consistent terminology
3.3.09 Pg 08	DOC M02 description (fifth paragraph below the table) states that Condition C is revised by adding a second condition that states "one or more Functions with more than two channels inoperable." The Condition actually reads "one or more Functions with two channels inoperable"	Change sentence to read "one or more Functions with two channels inoperable"
3.3.09 Pg 17	4th paragraph starts a description of the changes due to DOC M02. The third change is related to Action F. The first sentence states in a parenthetical that it is "MTS 3.3.9 revised Actions F, G, and H." However, the description of the new action is only for Action F. Neither Action G nor Action H are described.	Revise the parenthetical to delete reference to Actions G and H.

GTST Section Pg #	Comment	Proposed Action
3.3.09 Pg 18	There is a fragment of a sentence ("which applies to STS 3.3.9 Functions 4, 5, 10, and 11") following the first paragraph under the heading "VEGP LAR DOC L12, ..."	Add the additional text necessary to complete the sentence, or delete the fragment.
3.3.09 Pg 54	Table 3.3.9-1 first page number states "(page -1 of 2)"; it should be "(page 1 of 2)"; and second page states "(page 0 of 2); it should be "(page 2 of 2)"	Correct Table 3.3.9-1 page numbering
3.3.09 Pg 56	GTST Bases ASA lead-in section has a bullet for "Main Feedwater Control Valve Isolation" and refers to LCO 3.3.8 Bases for details. However, the protective functions also include "Main Feedwater Pump Trip and Valve Isolation" as well as "Startup Feedwater Isolation." These two functions should be included in this list	Add bullets for: <ul style="list-style-type: none"> • Main Feedwater Pump Trip and Valve Isolation • Startup Feedwater Isolation
3.3.09 Pg 57	Bases, last paragraph, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.10 Pg 38	Table 3.3.10-1 first page number states "(page 0 of 1)"; it should be "(page 1 of 1)"	Correct Table 3.3.10-1 page numbering
3.3.10 Pg 45	Bases, first paragraph is a continuation of Action E discussion. It describes what Required Action E.2.3 requires. However, there is no Required Action E.2.3.	Delete the entire paragraph discussing the nonexistent Required Action E.2.3.
3.3.10 Pg 46	Bases, second paragraph under SR 3.3.10.2, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"

GTST Section Pg #	Comment	Proposed Action
3.3.11 Pg 06	First paragraph states that Condition B is revised by adding a second condition that states "one or more Functions with more than two channels inoperable." The Condition actually reads "one or more startup feedwater lines with two channels inoperable"	Change sentence to read "one or more startup feedwater lines with two channels inoperable"
3.3.11 Pg 09	First paragraph states that MTS 3.3.11 "...does not specify Actions for inoperability of more than two inoperable automatic initiation channels. This results in entry into LCO 3.0.3 when three or more channels are inoperable." MTS 3.3.11 actually requires only two channels. The MTS did not have an Action for more than one channel. The description does not reflect the specific details of MTS 3.3.11.	Revise the discussion as follows: ... more than two <u>one</u> inoperable automatic initiation channels. This results in entry into LCO 3.0.3 when three or more <u>two</u> channels are inoperable
3.3.11 Pg 31	Bases, second paragraph under SR 3.3.11.2, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.12 Pg 06	In section titled "Changes to the Generic Technical Specifications and Bases," last full paragraph on page 6 discusses changes GTS Specification 3.7.3, SR 3.7.3.1. Specifically, the discussion incorrectly quotes SR 3.7.3.1, as revised according to VEGP LAR DOC D09, (i.e., "Verify the closure time of each MFIV and MFCV is ≤ 5 seconds within limits on an actual or simulated actuation signal"). However, SR 3.7.3.1, as revised by VEGP LAR DOC D09 actually reads "Verify closure time of each MFIV and MFCV is within limits on an actual or simulated actuation signal."	Correct the quote of SR 3.7.3.1.
3.3.12 Pg 26	Bases, second paragraph under SR 3.3.12.2, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"

GTST Section Pg #	Comment	Proposed Action
3.3.13 Pg 11	Last paragraph states that Condition C specifies Actions that require placing the unit in Mode 3 in 6 hours and Mode 4 in 12 hours. Condition C has the Mode 3 Action, but does not include the Mode 4 Action. It requires placing the unit in Mode 5 in 36 hours.	Change Mode "4" to Mode "5" and change "12" hours to "36" hours.
3.3.13 Pg 33	Bases, second paragraph under SR 3.3.13.2, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.14 Pg 29	Bases, first paragraph, first word should be "In," not "n"	Change "n" to "In"
3.3.14 Pg 30	Bases, second paragraph under SR 3.3.14.2, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.15 Pg 12	Fourth paragraph below the Table discusses DOC M02 and states that Condition B is revised by adding a second condition that states "one or more Functions <u>with</u> two or more divisions inoperable." The revised condition actually states "one or more Functions <u>within</u> two or more divisions inoperable."	Change the word "with" to "within"
3.3.15 Pg 15	Last paragraph and continues on next page. The description states that MTS 3.3.15 does not specify Actions for inoperability of one or more Functions "with" two or more divisions. The actual change relates to one or more Functions "within" two or more divisions.	Change the word "with" to "within"

GTST Section Pg #	Comment	Proposed Action
3.3.15 Pg 17	Fifth paragraph states "VEGP LAR DOC D03 provides design detail that is not necessary in the TS to protect the health and safety of the public." VEGP LAR DOC D03 does not "provides" design details; it "removes" design detail.	Revise fifth paragraph to state "provides" to "removes"
3.3.15 Pg 40	LCO 3.3.15, part a, ESF has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.15 Pg 43	Bases, ASA, LCO, Applicability second paragraph, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.16 Pg 12	Fourth paragraph below the Table discusses DOC M02 and states that Conditions B, C, and D are revised by adding a second condition that states "one or more Functions <u>with</u> two or more divisions inoperable." The revised conditions actually state "one or more Functions <u>within</u> two or more divisions inoperable."	Change the word "with" to "within"
3.3.16 Pg 16	Third paragraph, the description states that MTS 3.3.16 does not specify Actions for inoperability of one or more Functions "with" two or more divisions. The actual change relates to one or more Functions "within" two or more divisions.	Change the word "with" to "within"
3.3.16 Pg 18	Last paragraph regarding STS 3.3.7 appears to be an editorial error. It is in the middle of the justification for MTS 3.3.16. STS 3.3.7 is the RTS Actuation Logic - Shutdown Specification. Does not seem to apply to this specific change.	Delete paragraph.

GTST Section Pg #	Comment	Proposed Action
3.3.16 Pg 41	LCO 3.3.16, part a, ESF has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.16 Pg 45	Bases, ASA, LCO, Applicability second paragraph, uses the term "ESF." ESF - Engineered Safety Features - has not been previously defined.	Change "ESF" to "Engineered Safety Features (ESF)"
3.3.17 Pg 05	The discussion of the MTS Table 3.3.17-1 Function 12 title change under "Changes to the Generic Technical Specifications and Bases" states that the title is changed to "Passive Residual Heat Removal (PRHR)." However, the title is actually changed to "Passive Residual Heat Removal (PRHR) <u>Heat Removal</u> "	Revise title to add "Heat Removal"
3.3.17 Pg 05	The discussion of the MTS Table 3.3.17-1 Function 17 title change under "Changes to the Generic Technical Specifications and Bases" states that the title is changed to "Passive Containment Cooling System (PCS)." However, the title is actually changed to "Passive Containment Cooling System (PCS) <u>Heat Removal</u> "	Revise title to add "Heat Removal"
3.3.17 Pg 09	Fifth item under "Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes" refers to "Passive Residual Heat Removal" where it should refer to "Passive Residual Heat Removal <u>Heat Removal</u> " as more appropriately describing Function 12.	Revise to "Passive Residual Heat Removal" to "Passive Residual Heat Removal Heat Removal"

GTST Section Pg #	Comment	Proposed Action
3.3.17 Pg 09	Fifth item under "Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes" refers to "Passive Containment Cooling System" where it should refer to "Passive Containment Cooling System Heat Removal" as more appropriately describing Function 17.	Revise "Passive Containment Cooling System" to "Passive Containment Cooling System Heat Removal"
3.3.17 Pg 11	Paragraph describing changes resulting from LAR DOC L13 provides incorrect titles for Function 12 and Function 17 title revision.	Revise titles to "Passive Residual Heat Removal (PRHR) Heat Removal" and to "Passive Containment Cooling System (PCS) Heat Removal"
3.3.17 Pg 37	<p>Bases Background section is missing NUREG-1431 discussion on basis for including Category 1 PAM instrumentation in TS.</p> <p>FSAR 7.5.2.2.1 supports the TS Bases addition for the first two bullets from the NUREG only. The third bullet found in NUREG-1431 is descriptive of Type E variables which are not required to be designed Category 1 to meet the VEGP licensing basis.</p>	<p>Insert at end of Bases Background</p> <p>Category 1 variables are the key variables deemed risk significant because they are needed to:</p> <p style="padding-left: 40px;">Determine whether other systems important to safety are performing their intended functions; and</p> <p style="padding-left: 40px;">Provide information to the operators that will enable them to determine the likelihood of a gross breach of the barriers to radioactivity release.</p>
3.3.19 Pg 22	LCO 3.3.19 statement ends with a colon (:). It should be a period (.)	Revise LCO 3.3.19 statement to end with a period (.)

GTST Section Pg #	Comment	Proposed Action
3.3.19 Pg 25 - 26	Bases, Background section, first paragraph, references "DCD" Chapter 15 analyses. In addition, last paragraph references "DCD" Section 8.3.2 and "DCD" Section 7.7.1.11 (on Pg 26). These should be "FSAR," not "DCD"	Change "DCD" to "FSAR"
3.3.19 Pg 26	Bases ASA section, second paragraph, references "DCD" Chapter 15 safety analyses. This should be "FSAR," not "DCD"	Change "DCD" to "FSAR"
3.3.19 Pg 27	Bases, Actions B.1 and B.2, second paragraph states "Required Action B.1 requires SR 3.3.1.6..." This should be SR 3.3.7.1, as specified in TS 3.3.19, Required Action B.1.	Change "3.3.1.6" to "3.3.7.1"
3.4.01 Pg 06	Description of changes section for VEGP LAR DOC A038 states that it revises SR 3.4.1.4. It actually revises SR 3.4.1.5.	Change "SR 3.4.1.4" to "SR 3.4.1.5"
3.4.01 Pg 21	Heading in upper right corner has large space after "Temperature," and before "and Flow"	Delete extraneous space in header
3.4.01 Pg 21	GTS LCO 3.4.1 Applicability has 2 Notes regarding Pressurizer pressure limits. GTST contains no evaluation discussing deletion of these Notes. This appears to be a typographical oversight omitting these Notes.	Include Applicability Notes as found in GTS 3.4.1
3.4.01 Pg 23	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Correct the acronym in the following Background:</p> <p>A lower pressure will cause the reactor core to approach DNBR limits.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.01 Pg 23	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Use symbol in the following Background:</p> <p>The reactor coolant flow rate channels are normalized to these test measurements for 100%percent indication using these calibration coefficients and are frequently monitored to determine flow degradation.</p>
3.4.01 Pg 24	Revise TS 3.4.1 Bases for Applicable Safety Analyses to include LCO 3.2.5, "On-Line Power Distribution Monitoring System (OPDMS)-Monitored Parameters." Discussion of the initial analyses assumptions matches NUREG-1431 in referencing LCOs 3.1.6, 3.2.3, and 3.2.4. However, for AP1000, OPDMS (LCO 3.2.5) provides an alternative to LCO 3.2.3 and LCO 3.2.4 when OPDMS is operable. TS Bases are clarified to more specifically acknowledge the actual TS requirements.	<p>Make the following changes to the Applicable Safety Analyses:</p> <p>An assumption for the analysis of these events is that the core power distribution is within the limits of LCO 3.1.6, <u>"Control Bank Insertion Limits,"</u> as well as within the limits of either LCO 3.2.3, "AXIAL FLUX DIFFERENCE (AFD)," and LCO 3.2.4, "QUADRANT POWER TILT RATIO (QPTR)," <u>or within the limits of LCO 3.2.5, "On-Line Power Distribution Monitoring System (OPDMS)- Monitored Parameters."</u></p>

GTST Section Pg #	Comment	Proposed Action
3.4.01 Pg 24	Editorial improvement. While the change departs from the NUREG-1431 wording (which matches the current VEGP TS Bases), the change is more grammatically correct.	<p>Make the following changes to the LCO discussion:</p> <p>However, the minimum RCS flow, usually based on maximum analyzed steam generator tube plugging, is retained in the TS LCO.</p>
3.4.01 Pg 26	Revise SRs 3.4.1.1, 3.4.1.2, and 3.4.1.3 Bases to clarify the applicable Surveillance requirement. Currently, the SR Bases only discuss the Frequency and do not address the purpose of the Surveillance itself.	<p>Add the following to the beginning of SR 3.4.1.1 Surveillance Requirements:</p> <p><u>This surveillance demonstrates that the pressurizer pressure remains greater than or equal to the limit specified in the COLR.</u> Since Required Action A.1 allows a Completion Time of 2 hours to restore . . .</p>
3.4.01 Pg 27	Revise SRs 3.4.1.1, 3.4.1.2, and 3.4.1.3 Bases to clarify the applicable Surveillance requirement. Currently, the SR Bases only discuss the Frequency and do not address the purpose of the Surveillance itself.	<p>Add the following to the beginning of SR 3.4.1.2 Surveillance Requirements:</p> <p><u>This surveillance demonstrates that the average RCS temperature remains less than or equal to the limit specified in the COLR.</u> Since Required Action A.1 . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.4.01 Pg 27	Revise SRs 3.4.1.1, 3.4.1.2, and 3.4.1.3 Bases to clarify the applicable Surveillance requirement. Currently, the SR Bases only discuss the Frequency and do not address the purpose of the Surveillance itself.	<p>Add the following to the beginning of SR 3.4.1.3 Surveillance Requirements:</p> <p><u>This surveillance demonstrates that the RCS total flow rate remains \geq 301,670 gpm and greater than or equal to the limit specified in the COLR.</u> The 12 hour Surveillance Frequency for RCS total flow rate is . . .</p>
3.4.02 Pg 17	Heading in upper right corner has large space after "Temperature," and before "for Criticality"	Delete extraneous space in header
3.4.02 Pg 19	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Spell out the symbol in the Applicable Safety Analyses:</p> <p>All low power safety analyses assume initial RCS loop temperatures <u>\geqgreater than or equal to</u> the HZP temperature of 557° F (Ref. 1).</p>
3.4.03 Pg 05	First paragraph of the Changes to the Generic Technical Specifications and Bases section identifies the changes made as a result of DOC M05. However, it does not discuss the change to the Completion Time of Required Action B.2. The Completion Time changed from 24 hours to 36 hours.	Add a new second sentence that states "The Completion Time for Required Action B.2 is also revised from 24 hours to 36 hours."

GTST Section Pg #	Comment	Proposed Action
3.4.03 Pg 08	First paragraph of Technical Analysis justifies the DOC M05 change. However, no mention is made of the Completion Time change associated with the Change to Required Action B.2	Add the following sentence to the end of the paragraph: "In addition to the change to the Required Action B.2 end state, this change revises the Completion Time to be consistent with NUREG-1431 and with other Completion Times in the GTS that are associated with placing the unit in Mode 5. This change in Completion Time is necessary to ensure a safe and orderly shutdown to Mode 5."
3.4.03 Pg 29	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Rewrite sentence in Background:</p> <p>The criticality limit curve includes the Reference 1 requirement that itto be ≥ 40° F above the heatup curve or the cooldown curve, and not less than the minimum permissible temperature for ISLH Testing <u>per Reference 1</u>.</p>
3.4.03 Pg 29	Editorial change for clarity.	<p>Make the following changes to Background:</p> <p>. . . heatup curve or the cooldown curve, and not less than the minimum permissible temperature for RCS ISLH Testing.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.03 Pg 30	Revise TS 3.4.3 Bases LCO to delete “and criticality.” Consistent with Background next-to-last paragraph and SR 3.4.3.1 Bases discussion (and NUREG-1431), this Specification does not provide the criticality temperature limits.	<p>Make the following changes in the LCO discussion:</p> <p>a. The limit curves for heatup, cooldown, and ISLH testing and criticality; and</p>
3.4.03 Pg 31	Delete TS 3.4.3 Actions Bases first paragraph (i.e., “...additional actions from emergency operating procedures”). Paragraph is inconsistent with NUREG-1431 and standard TS Bases content, and is therefore deleted. EOP actions are not appropriate to be referenced from TS Bases.	<p>Remove the following from the Actions:</p> <p>The actions of this LCO consider the premise that a violation of the limits occurred during normal plant maneuvering. Severe violations caused by abnormal transients, at times accompanied by equipment failures, may also require additional actions from emergency operating procedures.</p>
3.4.03 Pg 31	Delete TS 3.4.3 Bases sentence for Actions A.1 and A.2 (i.e., “Restoration is in the proper direction to reduce RCPB stress”). This sentence is not standard content in NUREG-1431 or other standard TS, and gives no guidance concerning “proper direction” of restoration and is not helpful to the operator.	<p>Remove the following from the Actions:</p> <p><u>A.1 and A.2</u> Operation outside the P/T limits must be restored to within the limits. The RCPB must be returned to a condition that has been verified by stress analyses. Restoration is in the proper direction to reduce RCPB stress.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.04 Pg 03	Last paragraph states that the NRC Staff RAIs are Reference 8 and the Southern Nuclear responses are Reference 9. The correct references are References 5 and 6.	Change Reference "8" to "5" and Reference "9" to "6"
3.4.04 Pg 06	There are five instances on this page where the term VEGP LAR "DOC" is mistyped as VEGP LAR "DCO"	Correct "DCO" to "DOC"
3.4.04 Pg 28	Delete TS 3.4.4 Bases LCO discussion of 3,000 gpm and revise TS 3.4.8 Bases LCO to include the 3,000 gpm limit. Currently, there is no mention of 3,000 gpm in TS 3.4.8 Bases to align with the TS 3.4.8 LCO requirement.	Remove the following from the LCO Bases discussion: With the PLS not capable of rod withdrawal and all rods fully inserted only a minimum RCS flow of 3,000 gpm is necessary to ensure removal of decay heat from the core in accordance with LCO 3.4.8, Minimum RCS Flow.
3.4.04 Pg 31	Editorial change for clarity.	Make the following changes to Actions A.1, A.2, A.3, and A.4: . . . the core heat removal needs and minimizes <u>minimizing</u> the possibility of violating DNB limits.

GTST Section Pg #	Comment	Proposed Action
3.4.06 Pg 20	GTS LCO 3.4.6 has Applicability Notes that are mistakenly moved in the GTST as LCO Notes. The GTS evaluation and the corresponding Bases, continue to reflect the existence of Applicability Notes. The GTST Section XI and Section XII TS pages appear to have typographical errors in the placement of the Notes.	Revise Section XI and Section XII to present the LCO Notes as Applicability Notes
3.4.07 Pg 26	Revise TS 3.4.7 Bases Background to add discussion about LCO 3.4.15, "RCS Pressure Isolation Valve (PIV) Integrity," consistent with NUREG-1431 LCO 3.4.14. The discussion regarding treatment of leakage through PIVs aids in more fully describing RCS operational leakage.	Add the following to the end of the Background: <u>LCO 3.4.15, "RCS Pressure Isolation Valve (PIV) Integrity," measures leakage through each individual PIV and can impact this LCO. Of the two PIVs in series in each isolated line, leakage measured through one PIV does not result in RCS LEAKAGE when the other is leak tight. If both valves leak and result in a loss of mass from the RCS, the loss must be included in the allowable identified LEAKAGE.</u>

GTST Section Pg #	Comment	Proposed Action
3.4.07 Pg 27	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following editorial changes to LCO Bases:</p> <p>RCS operational <u>al</u> LEAKAGE shall be limited to:</p> <p>Violation of this LCO could result in continued degradation of the RCPB. LEAKAGE past seals and gaskets are <u>is</u> not pressure boundary LEAKAGE.</p>
3.4.07 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following editorial changes to LCO Bases:</p> <p>If leaked <u>leakage is</u> through many cracks, <u>and</u> the cracks are very small, and then the above assumption is conservative.</p>
3.4.07 Pg 30	Revise TS 3.4.7 Bases and SR 3.4.7.1 Bases definition of "steady state" to match AP1000 DCD 5.2.5.3.2. Current Bases incorrectly defines steady state. There are no RCP seals, and no seal injection or seal return flow in the AP1000 design.	<p>Make the following changes to Surveillance Requirements:</p> <p>Steady state operation is required to perform a proper inventory balance since calculations during maneuvering are not useful. For RCS operational LEAKAGE determination by inventory balance, steady state is defined as stable RCS pressure, temperature, power level, pressurizer <u>level</u>, and <u>reactor coolant drain tank and in-containment refueling water storage tank levels</u> makeup tank levels, and with no makeup or lotdown.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.07 Pg 30	Revise TS 3.4.9 Bases for Applicability to delete discussion of "RCS inventory monitoring via the pressurizer level changes." Monitoring pressurizer level changes is not part of RCS Leakage Detection Instrumentation. The indirect relation to RCS inventory balance is a discussion item for TS 3.4.7, "RCS Operational LEAKAGE." Therefore, move this TS Bases sentence to SR 3.4.7.1 Bases.	<p>Add the following to Surveillance Requirements, immediately before paragraph beginning with "An early warning of pressure boundary . . .":</p> <p><u>RCS inventory monitoring via the pressurizer level changes is valid in MODES 1, 2, 3, and 4 only when RCS conditions are stable, i.e., temperature is constant, pressure is constant, no makeup and no letdown.</u></p>
3.4.07 Pg 30	Revise TS 3.4.7 Bases and SR 3.4.7.1 Bases definition of "steady state" to match AP1000 DCD 5.2.5.3.2. Current Bases incorrectly defines steady state. There are no RCP seals, and no seal injection or seal return flow in the AP1000 design.	<p>Make the following changes to Surveillance Requirements for SR 3.4.7.2:</p> <p>For RCS primary to secondary LEAKAGE determination, steady state is defined as stable RCS pressure, temperature, power level, pressurizer and <u>reactor coolant drain tank and in-containment refueling water storage tank levels</u>makeup tank levels, and <u>and</u> makeup and letdown,and RCP seal injection and return flows.</p>
3.4.08 Pg 03	Last paragraph states that the NRC Staff RAIs are Reference 8 and the Southern Nuclear responses are Reference 9. The correct references are References 5 and 6.	Change Reference "8" to "5" and Reference "9" to "6"

GTST Section Pg #	Comment	Proposed Action
3.4.08 Pg 06	Under the Rationale for Changes section, VEGP LAR DOC A046 states that it provides clarification of "Note 4." DOC A046 affects "LCO Note 1," not "Note 4"	Change "Note 4" to "LCO Note 1"
3.4.08 Pg 14	Markup of the GTS 3.4.8 Applicability statement is missing a comma separating "all rods fully inserted" from the remainder of the Applicability. Failure to include the comma results in a grammatically incorrect statement that could be misinterpreted.	Insert a comma after "all rods fully inserted"
3.4.08 Pg 22	STS 3.4.8 Applicability statement is missing a comma separating "all rods fully inserted" from the remainder of the Applicability. Failure to include the comma results in a grammatically incorrect statement that could be misinterpreted.	Insert a comma after "all rods fully inserted"
3.4.08 Pg 24	Revise TS 3.4.8 Bases Background to delete last paragraph. This paragraph contains a potentially misleading discussion of means to achieve RCS circulation beyond RCP forced circulation. Since these means are not appropriate for compliance with the LCO, this discussion is deleted.	Delete the following from Background: Within the RCS, coolant loop flow can be provided by the reactor coolant pumps, the Normal Residual Heat Removal System (RNS), and to a lesser degree when in the passive mode of operation, natural circulation.

GTST Section Pg #	Comment	Proposed Action
3.4.08 Pg 25	<p>Revise TS 3.4.8 Bases LCO to include the 3,000 gpm limit. Currently, there is no mention of 3,000 gpm in TS 3.4.8 Bases to align with the TS 3.4.8 LCO requirement. This discussion was inappropriately provided in the Bases for LCO 3.4.4.</p> <p>Also, revise TS 3.4.8 Bases LCO to clarify that the intended Action entry is understood to encompass the condition of less than 3,000 gpm also. TS 3.4.8 requires both that one RCP be in operation and that it be providing at least 3,000 gpm. Condition A states only "No RCP in operation." That both conditions are included in the Action entry is clarified in the LCO Bases.</p>	<p>Make the following changes to LCO:</p> <p>The requirement that <u>at least one RCP be in operation with a minimum RGS-core flow $\geq 3,000$ gpm</u> be maintained provides assurance that in the event of an inadvertent BDE, the diluted water will be properly mixed with the primary system coolant, and the increase in core reactivity will be detected by the source range instrumentation. <u>A core flow $< 3,000$ gpm is considered equivalent to no RCP in operation.</u></p>
3.4.09 Pg 05	<p>In the Changes to the Generic Technical Specifications and Bases section, the DOC A048 description does not identify that changes were also made to the Surveillance Requirements.</p>	<p>Change the description of DOC A048 to include mention of " the Surveillance Requirements"</p>
3.4.09 Pg 27	<p>GTS LCO 3.4.9 Applicability has 2 Notes. GTST contains no evaluation discussing deletion of these Notes. This appears to be a typographical oversight omitting these Notes.</p>	<p>Include Applicability Notes as found in GTS 3.4.9</p>
3.4.09 Pg 31	<p>Revise the TS 3.4.9 Bases for Applicable Safety Analyses reference to finding Leakage detection system response time and sensitivities in Chapter 15 to Chapter 5. The reference to Chapter 15 is not correct and Chapter 5 (Section 5.2) has the appropriate discussions.</p>	<p>Make the following change to Applicable Safety Analyses:</p> <p>The system response times and sensitivities are described in <u>FSAR Chapter 5</u> (Ref. 3).</p>

GTST Section Pg #	Comment	Proposed Action
3.4.09 Pg 32	Revise TS 3.4.9 Bases for Applicability to delete discussion of "RCS inventory monitoring via the pressurizer level changes." Monitoring pressurizer level changes is not part of RCS Leakage Detection Instrumentation. The indirect relation to RCS inventory balance is a discussion item for TS 3.4.7, "RCS Operational LEAKAGE." Therefore, move this TS Bases sentence to SR 3.4.7.1 Bases.	Delete the following from Applicability: RCS inventory monitoring via the pressurizer level changes is valid in MODES 1, 2, 3, and 4 only when RCS conditions are stable, i.e., temperature is constant, pressure is constant, no makeup and no letdown.
3.4.09 Pg 33	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Make the following change to Bases for both Actions A.1 and A.2, and for Actions B.1 and B.2: This time is acceptable, considering the frequency and adequacy of the monitoring of the change in integrated sump discharge required by Required Action A.1.
3.4.09 Pg 33	Editorial change is recommended to provide accuracy. Since there are two required channels inoperable, the 72-hours applies after the second monitor's failure. This kind of detail is not typical of STS Bases.	Delete the following from Bases Actions B.1 and B.2: Restoration of one sump channel to OPERABLE status is required to regain the function in a Completion Time of 72 hours after the monitor's failure.

GTST Section Pg #	Comment	Proposed Action
3.4.09 Pg 33	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Delete the following from Bases Actions C.1.1, C.1.2, and C.2: With the F18 particulate containment atmosphere radioactivity-monitoring instrumentation channel inoperable, alternative -action is required.
3.4.09 Pg 34	Editorial change is recommended to provide better accuracy. There could be "automatic" means that are either inoperable or not required to be operable. More accurately, the Condition is entered when all LCO "required" means are inoperable.	Delete the following from Bases Actions E.1: With all required monitors inoperable, no automatic <u>required</u> means of monitoring leakage is available and plant shutdown in accordance with LCO 3.0.3 is required.
3.4.09 Pg 35	Revise the TS 3.4.9 Bases for Applicable Safety Analyses reference to finding Leakage detection system response time and sensitivities in Chapter 15 to Chapter 5. The reference to Chapter 15 is not correct and Chapter 5 (Section 5.2) has the appropriate discussions.	Make the following changes to References: 3. <u>FSAR</u> , Chapter 15 , " <u>Reactor Coolant System and Connected Systems</u> Accident <u>Analysis</u> ."
3.4.09 Pg 35	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	Make the following changes to Bases Surveillance Requirements SR 3.4.9.3 and SR 3.4.9.4: Again, o perating experience has proven that this Frequency is acceptable.

GTST Section Pg #	Comment	Proposed Action
3.4.10 Pg 25	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Use the symbol in Background:</p> <p>The LCO limits are established to be consistent with a fuel defect level of 0.25% percent and to ensure that . . .</p>
3.4.10 Pg 25	Delete TS 3.4.10 Bases Applicable Safety Analysis section, first paragraph, second half of statement beginning with "either." The statement is confusing since both the Steam Generator Tube Rupture (SGTR) and the Steam Line Break (SLB) are fundamentally the same pathways to environment. This "either" distinction is not found in NUREG-1431. Deleting the statement avoids confusion without detracting from TS Bases intent.	<p>Delete the following from the Applicable Safety Analyses:</p> <p>The LCO limits on the reactor coolant specific activity are a factor in accident analyses that assume a release of primary coolant to the environment either directly as in a Steam Generator Tube Rupture (SGTR) or indirectly by way of LEAKAGE to the secondary coolant system and then to the environment (the Steam Line Break).</p>
3.4.11 Pg 08	Last paragraph under "Technical Analysis" states that the changes (implied "all") are editorial, clarifying, grammatical, or otherwise considered administrative." However, the Technical Analysis discusses VEGP LAR DOC L01 as "less restrictive"	Revise the first sentence of the last paragraph to add "remaining" such that it states: "The remaining changes are editorial, clarifying, grammatical, or otherwise considered administrative "

GTST Section Pg #	Comment	Proposed Action
3.4.11 Pg 20	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Move the last paragraph of Actions C.1 to be the first paragraph of D.1 and D.2:</p> <p>Condition D is applicable, if two stage 4 flow paths are inoperable, more than three flow paths are inoperable, or a combination of three flow paths not listed above (i.e., with a combined flow capacity greater than the largest capacity ADS division) is inoperable.</p> <p>D.1 and D.2</p> <p>Condition D is applicable if two stage 4 flow paths are inoperable, more than three flow paths are inoperable, or any combination of three flow paths not listed above (i.e., with a combined flow capacity greater than the largest capacity ADS division) is inoperable.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.11 Pg 31	Revise SR 3.4.11.3 and SR 3.5.6.8 Bases to make editorial improvements to more completely reference the stated ASME OM Code and add the Code as a Reference consistent with other TS Bases Specifications. The "paragraph 4.6" reference for squib valve testing is more specifically "paragraph ISTC 4.6," which is the applicable paragraph from ASME OM Code 1995, 1996 addenda, Subsection ISTC (refer to AP1000 DCD 3.9.6, and 3.9.9 Reference 2).	<p>Make the following additions to Surveillance Requirements discussion for SR 3.4.11.3:</p> <p>The squib valves will be tested in accordance with the ASME OM Code (Ref. 5). The applicable ASME OM Code squib valve requirements are specified in paragraph ISTC 4.6, Inservice Tests for Category D Explosively Actuated Valves.</p>
3.4.11 Pg 31	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Add the following to SR 3.4.11.5:</p> <p>The ACTUATION LOGIC TEST overlaps this Surveillance to provide complete testing of the assumed safety function. The OPERABILITY of the squib valves is checked by performing a continuity check of the circuit from the Protection Logic Cabinets to the squib valve.</p>
3.4.11 Pg 32	With the change to SR 3.4.11.3 and SR 3.5.6.8 Bases to include a Reference citation, include ASME OM Code as new Reference.	<p>Add the following to LCO 3.4.11 Bases References:</p> <p>5. ASME OM Code, "Code for Operation and Maintenance of Nuclear Power Plants."</p>

GTST Section Pg #	Comment	Proposed Action
3.4.12 Pg 17	Consistency with Writer's Guide –When making an “or” statement, “Condition” is singular.	<p>Do not make "Condition" plural for Action C.1 Bases:</p> <p>If the Required Actions and associated Completion Times of Conditions A, B, or C are not . . .</p>
3.4.12 Pg 24	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Format the list by adding bullets in Actions:</p> <ul style="list-style-type: none"> • One stage 1, one stage 2 or 3, and one stage 4 • One stage 1 and two stage 2 or 3 • Two stage 1 and one stage 2, 3, or 4 • Two stage 2 or 3 and one stage 4 • Three stage 2 or 3
3.4.13 Pg 04	The GTST Section IV discussion of VEGP LAR DOC A056 incorrectly describes a change to the Bases. The DOC does not address Bases changes. Furthermore, there are no differences in the AP1000 NUREG STS draft from the VEGP Amended TS or associated Bases changes. This Section IV discussion appears to be a mistake.	Remove the GTST Section IV discussion related to VEGP LAR DOC A056.

GTST Section Pg #	Comment	Proposed Action
3.4.13 Pg 14	Text added to first entry condition of Condition C incorrectly states plural "Conditions." The discussion of VEGP LAR DOC A059 states that the first entry condition of Condition C is revised by adding "of Condition A or B" (i.e., singular) to the condition statement.	Revise the added text by making "Conditions" singular.
3.4.13 Pg 18	Consistency with Writer's Guide –When making an "or" statement, "Condition" is singular.	Do not make "Condition" plural for Action C.1 and C.2 or for D.1 and D.2: ... associated Completion Times of Conditions A, B, or C are not ...
3.4.13 Pg 26	Revise various TS Bases stating "withdrawal of reactivity control assemblies" to "withdrawal of control rods" for editorial improvement and consistency with other TS Bases discussions.	Make the following changes to Actions in two places, C.1 and C.2, as well as D.1 and D.2: Sources of positive reactivity addition include boron dilution, withdrawal of reactivity control assemblies rods, and excessive cooling of the RCS.
3.4.14 Pg 17	Condition C wording has a typo. The phrase "Conditions A or B" should be "Condition A or B." Note that the clean typed version on Pg 32 has the same error.	Change "Conditions" to "Condition"

GTST Section Pg #	Comment	Proposed Action
3.4.14 Pg 38	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Applicable Safety Analyses for RNS Suction Relief Valve Performance:</p> <p>. . . the relief valve will pass flow greater than that required for the limiting LTOP transient while maintaining RCS pressure less than the minimum <u>lowest</u> of either the P/T limit curve, 110% percent of the . . .</p>
3.4.14 Pg 38	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Applicable Safety Analyses for RCS Vent Performance:</p> <p>. . . RCS pressure less than the minimum <u>lower</u> of either the maximum pressure on the P/T limit curve or 110% percent of the design pressure of the normal residual heat removal system.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.14 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Move the “or” under LCO discussion:</p> <p>a. One OPERABLE RNS suction relief valve. ;-or</p> <p>An RNS suction relief valve is OPERABLE for LTOP when both RNS suction isolation valves in one flow path are open, its setpoint is set within the PTLR (Reference 6) limit, and testing has proven its ability to open at this setpoint. ; <u>or</u></p>
3.4.14 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to LCO discussion:</p> <p>An RCS vent is OPERABLE when <u>Path is</u> open with an area of ≥ 4.15 square inches.</p>
3.4.14 Pg 40	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.	<p>Make the following changes to Applicability:</p> <p>In MODE 6- <u>with</u> the reactor vessel head is off, and <u>an</u> overpressurization cannot occur.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.14 Pg 43	<p>These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.</p> <p>There is no “operability” for open verification.</p>	<p>Make the following changes to the Surveillance Requirements for SR 3.4.14.3:</p> <p>The RCS vent of ≥ 4.15 square inches is proven OPERABLE by verifying its<u>verified</u> open condition either:</p>
3.4.14 Pg 43	<p>These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.</p>	<p>Make the following changes to the Surveillance Requirements for SR 3.4.14.3:</p> <p>The passive vent arrangement must only be open to be OPERABLE. This Surveillance is <u>modified by a Note that states it is only</u> required to be performed if the vent is being used to satisfy the pressure relief requirements of the LCO 3.4.14b.</p>
3.4.15 Pg 22	<p>Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.</p>	<p>Add the following to the Background:</p> <p>The RCS PIV Leakage LCO allows RCS high pressure operation when PIV leakage has been verified <u>to be within limits</u>.</p>

GTST Section Pg #	Comment	Proposed Action
3.4.15 Pg 23	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Background:</p> <p>The RNS pressure boundary isolation valves are considered to meet the first criterion for inclusion in this specification. The PXS accumulator check valves were determined to meet the second PIV criteria for inclusion in this specification. It is determined that the CVS PIVs do not meet either criteria on for inclusion in this specification.</p>
3.4.16 Pg 21	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Applicability:</p> <p>In MODES 1, 2, <u>and</u> 3, and <u>MODE</u> 4 with the RCS not being cooled by the RNS, the RVHV . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.4.16 Pg 21 - 22	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.	<p>Make the following additions to the Actions:</p> <p>C.1 and C.2</p> <p>... for reasons other than Conditions A or B, the plant must be brought to MODE 4 <u>with the RCS cooling provided by the RNS</u> where the probability and consequences of an event are minimized. To achieve this status, the plant must be brought to at least MODE 3 within 6 hours and to MODE 4 <u>with the RCS cooling provided by the RNS</u> within 12 hours.</p>
3.4.17 Pg 02	Second item under "RCOL PTS Change Number and Title" for VEGP LAR DOC D04 states that SR 3.4.17.2 is relocated to STS 3.1.9 as SR 3.1.9.2. However, VEGP LAR DOC D04 justifies the relocation of the CVS makeup line isolation valve stroke time from the TS to the Bases of SR 3.1.9.2. It does not discuss relocating SR 3.4.17.2 as SR 3.1.9.2, which is discussed in VEGP LAR DOC A064.	Revise second item to state "The CVS makeup line isolation valve stroke time is relocated from the STS to the SR 3.1.9.2 TS Bases."
3.4.17 Pg 05	Second item under "Changes to the Generic Technical Specifications and Bases," quotes SR 3.1.9.2 as "Verify closure time of each CVS makeup isolation valve is within limits ≤ 30 seconds on an actual or simulated actuation signal." However, SR 3.1.9.2 actually states "Verify closure time of each CVS makeup isolation valve is within limits on an actual or simulated actuation signal."	Correct the wording for SR 3.1.9.2.

GTST Section Pg #	Comment	Proposed Action
3.4.17 Pg 06	<p>Second item under "Description of changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes" for VEGP LAR DOC D04 states "VEGP LAR DOC D04 relocates SR 3.4.17.2 to TS 3.1.9 as SR 3.1.9.2 to ensure CVS makeup line isolation closure times are verified." However, VEGP LAR DOC D04 justifies the relocation of the CVS makeup line isolation valve stroke time from the TS to the Bases of SR 3.1.9.2. It does not discuss relocating SR 3.4.17.2 as SR 3.1.9.2, which is discussed in VEGP LAR DOC A064.</p>	Revise second item to state "VEGP LAR DOC D04 relocates the CVS makeup line isolation valve stroke time from the SR 3.4.17.2 to the SR 3.1.9.2 TS Bases."
3.4.18 Pg 05	<p>The GTST proposes changes based on TSTF-510 to GTS 3.4.18 in AP1000 STS 3.4.17. These changes reflect optional (i.e., bracketed) material applicable to SG repair criteria that does not currently exist for AP1000 plants.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include an NRC accepted licensing basis for SG "repair," and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that includes "or repair" options. At the time of a future submittal for NRC approval of repair criteria, the STS changes would also be appropriate to include at that time.</p>	Remove bracketed options for "or repair"

GTST Section Pg #	Comment	Proposed Action
3.5.01 Pg 28	This change is made since there are multiple parameters which need to be met for the accumulators to perform their assumed safety analysis function, and the limits are not all “minimum” limits. This editorial clarification is consistent with the TS requirements and the intended Bases statement.	<p>Make the following changes to LCO:</p> <p>This LCO establishes the minimum conditions<u>limits</u> necessary to ensure that sufficient accumulator flow parameters meet the initial conditions assumed in the safety analyses to satisfy will be available to meet the necessary acceptance criteria established for core cooling by 10 CFR 50.46 (Ref. 5).</p>
3.5.01 Pg 29	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following additions to Actions discussion for B.1:</p> <p>The analysis contained in this reference shows that for a range of other events including small <u>break</u> LOCAs and large hot leg <u>break</u> LOCAs that with one accumulator unavailable the core is adequately cooled.</p>
3.5.01 Pg 30	Delete TS 3.5.1 Bases for Required Action B.1 parenthetical phrase “(i.e., entry into Condition C or E of LCO 3.5.2 has not occurred).” This phrase is incorrectly associated with the preceding “CMTs are required to be available to provide small break LOCA mitigation.” Deleting the parenthetical phrase corrects the discussion without removing any necessary TS Bases substance.	<p>Delete the parenthetical expression:</p> <p>. . . mitigation (i.e., concurrent entry into Condition C or E of LCO 3.5.2 has not occurred). The effectiveness of backup CMT injection . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.5.02 Pg 07	Section "Description of changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes" does not describe changes to Required Action E.1 Completion Time, which is discussed in VEGP LAR DOC A066.	Revise to include description similar to that provided for Required Action C.1 Completion Time.
3.5.02 Pg 33	Revise TS 3.5.2 Bases for LCO, first paragraph, from "sufficient CMT flow will be available to" to "CMT parameters" since there are multiple parameters which need to be met for the accumulators to perform their function.	<p>Make the following changes in the LCO discussion:</p> <p>This LCO establishes the minimum conditions necessary to ensure that sufficient CMT flow parameters will be available to meet the initial conditions assumed in the safety analyses.</p>
3.5.02 Pg 34	Revise second paragraph to delete "the volume of" and change "flow" to "borated water" to more clearly recognize the boration as well as the liquid volume.	<p>Make the following changes in the LCO discussion:</p> <p>The volume of eEach CMT represents 100% of the total injected flow <u>borated water</u> assumed in LOCA analysis.</p>
3.5.02 Pg 34	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Add the following for clarity to Applicability:</p> <p>In MODES 1, 2, <u>and 3</u>, and <u>in MODE</u> 4 when the RCS is not being cooled by the Normal Residual Heat Removal System . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.5.02 Pg 34	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following additions to Actions discussion for A.1:</p> <p>A Completion Time of 72 hours is acceptable for <u>a</u> two train <u>emergency core cooling system (ECCS)</u> systems which are <u>is</u> capable of performing their <u>its</u> safety function without a single failure.</p>
3.5.02 Pg 36	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Remove the underline under “not” that’s highlighted below in D.1 Actions discussion:</p> <p>For CMT injection following a LOCA (steam will enter the CMT through the balance line, displacing the CMT water), gases in the CMT inlet line are not detrimental to the CMT function.</p>
3.5.02 Pg 36	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following additions to Actions discussion for E.1 for clarity:</p> <p>The remaining CMT is sufficient for DBAs except for <u>a</u> LOCA in the OPERABLE CMTs <u>direct vessel injection (DVI)</u> line.</p>

GTST Section Pg #	Comment	Proposed Action
3.5.02 Pg 37	Editorial change for clarity.	<p>Make the following changes to Actions F.1 and F.2:</p> <p>If the Required Action or associated Completion Time of Condition A, B, C, D, or E are not met or two GMTs are inoperable for reasons other than <u>Condition</u> C, the plant . . .</p>
3.5.03 Pg 23	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the A.1 Actions discussion:</p> <p>A Completion Time of 72 hours is consistent with times normally applied to an <u>emergency core cooling system (ECCS)</u> system which is capable of performing its safety function without a single failure.</p>
3.5.04 Pg 05	In GTST Section V, Applicability, last sentence, description of valves verified by SR 3.5.4.8 is incomplete.	<p>Add “air operated outlet” and “gutter” to the sentence: “New SR 3.5.4.8 verifies actuation of PRHR HX <u>air operated outlet</u> isolation valves and IRWST <u>gutter</u> isolation valves on an actual or simulated actuation signal at a frequency of 24 months.”</p>

GTST Section Pg #	Comment	Proposed Action
3.5.05 Pg 05	Fifth item under "Changes to the Generic Technical Specifications and Bases" describing changes to Condition E second entry statement as attributed to DOC A076. However, this change is actually discussed in DOC A075.	Replace the reference to "DOC A076" with "DOC A075"
3.5.05 Pg 05	Sixth item under "Changes to the Generic Technical Specifications and Bases" describing changes to Required Action E.1 as attributed to DOC A075. However, this change is actually discussed in DOC A076.	Replace the reference to "DOC A075" with "DOC A076"
3.5.05 Pg 23	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to LCO Bases:</p> <p><u>A</u> reactor coolant pump (RCP) is required to be operating in the loop with the PRHR HX, Loop . . .</p>
3.5.05 Pg 24	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the C.1 Actions Bases discussion:</p> <p>A Completion Time of 24 hours is acceptable, considering that passive feed and bleed cooling is available to revise <u>remove</u> heat from the RCS.</p>
3.5.06 Pg 05	In GTST Section V, Applicability, last sentence, description of SR is incomplete.	Add "Also including a Note to the SR stating: 'Squib actuation may be excluded.'"

GTST Section Pg #	Comment	Proposed Action
3.5.06 Pg 06	Third item under "Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes" simply restates the change, but provides no rationale for the change.	Add the following basis to the third item: "...to clarify the requirement is also applicable to solution volume increase greater than 15,000 gallons"
3.5.06 Pg 33	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Add the following to Applicable Safety Analyses for clarity:</p> <p>During non-LOCA events, the IRWST serves as the initial heat sink for the Passive Residual Heat Removal (PRHR) Heat Exchanger (PRHR HX) if used during reactor cooldown to MODE 4.</p>
3.5.06 Pg 33	Revise TS 3.5.6 Applicable Safety Analyses Bases from "Injection from the IRWST provides core cooling until the tank empties and gravity recirculation from the containment starts" to "Injection from the IRWST provides core cooling until the tank empties and the containment is flooded up to a level sufficient to provide recirculation flow through the gravity injection lines back into the RCS" for consistency with AP1000 DCD 6.3.2.1.3.	<p>Make the following changes to Applicable Safety Analyses:</p> <p>Injection from the IRWST provides core cooling until the tank empties and the containment is flooded up to a level sufficient to provide recirculation flow through the gravity injection lines back into the RCSgravity recirculation from the containment starts.</p>

GTST Section Pg #	Comment	Proposed Action
3.5.06 Pg 34	Function naming is revised consistent with naming convention in the AP1000 DCD and/or other TS Bases.	<p>Make the following changes to Applicability:</p> <p>In MODES 1, 2, 3, and 4, a second safety related function is the low head <u>pressure</u> safety injection of borated water following a LOCA for core cooling and reactivity control.</p>
3.5.06 Pg 35	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the A.1 Actions discussion:</p> <p>The 72 hour Completion Time is consistent with times normally applied to <u>a</u> degraded two train <u>emergency core cooling system (ECCS) systems</u> which can provide 100% of the required flow without a single failure.</p>
3.5.06 Pg 36	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the D.1 Actions Bases discussion:</p> <p>This limit prevents a significant change in boron concentration and is consistent with the long-term cooling analysis performed to justify <u>probabilistic risk assessment (PRA)</u> PRA success criteria (Ref. 3) . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.5.06 Pg 39	Revise SR 3.4.11.3 and SR 3.5.6.8 Bases to make editorial improvements to more completely reference the stated ASME OM Code and add the Code as a Reference consistent with other TS Bases Specifications. The “paragraph 4.6” reference for squib valve testing is more specifically “paragraph ISTC 4.6,” which is the applicable paragraph from ASME OM Code 1995, 1996 addenda, Subsection ISTC (refer to AP1000 DCD 3.9.6, and 3.9.9 Reference 2).	<p>Make the following additions to Surveillance Requirements Bases discussion for SR 3.5.6.8:</p> <p>The squib valves will be tested in accordance with the ASME OM Code (Ref. 4). The applicable ASME OM Code squib valve requirements are specified in paragraph ISTC 4.6, Inservice Tests for Category D Explosively Actuated Valves.</p>
3.5.06 Pg 40	With the change to SR 3.4.11.3 and SR 3.5.6.8 Bases to include a Reference citation, include ASME OM Code as new Reference.	<p>Add the following to LCO 3.5.6 Bases References:</p> <p>4. ASME OM Code, “Code for Operation and Maintenance of Nuclear Power Plants.”</p>
3.5.06 Pg 40	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.5.6.9 Bases:</p> <p>. . . overlaps this Surveillance to provide complete testing of the assumed safety function. The OPERABILITY of the squib valves is checked by performing a continuity check of the circuit from the Protection Logic Cabinets to the squib valve. The Frequency of 24 months is based on . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.5.07 Pg 13	Inserted text in Condition C should refer to plural "stubs": i.e., "...volume in both squib valve outlet line pipe stubs not within limit," instead of "...volume in both squib valve outlet line pipe stub not within limit"	Make "stub" plural in Condition C text.
3.5.07 Pg 14	Text inserted in third entry condition of Condition D states "...≤ 73,100 cu. ft. > 70,907 cu. ft." The statement is missing "and"	Revise third entry condition to state "IRWST borated water volume ≤ 73,100 cu. ft. and > 70,907 cu. ft"
3.5.07 Pg 22	Condition B, 4 th line: Need a space between "gas" and "volume" Condition C, 4 th line: Need a space between "gas" and "volume"	Add a space between "gas" and "volume"
3.5.07 Pg 22	Revised Condition C text should refer to plural "stubs": i.e., "...volume in both squib valve outlet line pipe stubs not within limit," instead of "...volume in both squib valve outlet line pipe stub not within limit"	Make "stub" plural in Condition C text.
3.5.07 Pg 23	Third entry condition of Condition D states "IRWST borated water volume ≤ 73,100 cu. ft. > 70,907 cu. ft." The statement is missing "and"	Revise third entry condition to state "IRWST borated water volume ≤ 73,100 cu. ft. and > 70,907 cu. ft"

GTST Section Pg #	Comment	Proposed Action
3.5.07 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the A.1 Actions Bases discussion:</p> <p>The 72 hour Completion Time is consistent with times normally applied to a degraded two train ECCS <u>emergency core cooling systems (ECCS)</u> which can provide 100% of the required flow without a single failure.</p>
3.5.07 Pg 27	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the B.1 Actions Bases discussion:</p> <p>A <u>direct vessel injection (DVI)</u> line break is not postulated in MODE 5.</p>
3.5.07 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the D.1 Actions Bases discussion:</p> <p>. . . performed to justify <u>probabilistic risk assessment (PRA)</u> success criteria</p> <p>. . .</p> <p>. . . safety function in response to <u>design basis accidents (DBAs)</u> with</p>

GTST Section Pg #	Comment	Proposed Action
3.5.07 Pg 28	Revise various TS Bases stating “withdrawal of reactivity control assemblies” to “withdrawal of control rods” for editorial improvement and consistency with other TS Bases discussions.	<p>Make the following changes in the F.1 and F.2 Actions Bases discussion:</p> <p>Sources of positive reactivity addition include boron dilution, withdrawal of reactivity control assemblies<u>rods</u>, and excessive cooling of the RCS.</p>
3.5.07 Pg 29	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.5.7.1 Bases:</p> <p>The LCO 3.5.6 Surveillance Requirements and Frequencies (SR 3.5.6.1 through <u>SR 3.5.6.11</u>) are applicable . . .</p>
3.5.08 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the A.1 Actions Bases discussion:</p> <p>The 72 hour Completion Time is consistent with times normally applied to <u>a</u> degraded two train ECCS <u>emergency core cooling systems</u> (<u>ECCS</u>) which can provide 100% of the required flow without a single failure.</p>

GTST Section Pg #	Comment	Proposed Action
3.5.08 Pg 28	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the B.1 Actions Bases discussion:</p> <p>A direct vessel injection (DVI) line break is not postulated in MODE 6.</p>
3.5.08 Pg 29	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in the D.1 Actions Bases discussion:</p> <p>... analysis performed to justify probabilistic risk assessment (PRA) success criteria (Ref. 3),</p> <p>...</p> <p>... assumed safety function in response to design basis accidents (DBAs) with slight deviations in</p>
3.5.08 Pg 30	Revise various TS Bases stating “withdrawal of reactivity control assemblies” to “withdrawal of control rods” for editorial improvement and consistency with other TS Bases discussions.	<p>Make the following changes in the F.1 and F.2 Actions Bases discussion:</p> <p>Sources of positive reactivity addition include boron dilution, withdrawal of reactivity control assembliesrods, and excessive cooling of the RCS.</p>

GTST Section Pg #	Comment	Proposed Action
3.5.08 Pg 31	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability. See SR 3.5.8.2 Bases for consistent use of "combined volume"	<p>Make the following changes in the SR 3.5.8.3 Bases Surveillance Requirements:</p> <p>Since the IRWST volume is large and normally stable, the 31 day Frequency is acceptable, considering additional verifications are required within 6 hours after each combined solution volume increase of 15,000 gal.</p>
3.6.01 Pg 19	Revise TS 3.6.1 Bases Background to change from "conform with 10 CFR 50" to "comply with 10 CFR 50" for consistency with NUREG-1431 and editorial clarification.	<p>Make the following changes in Background:</p> <p>SR 3.6.1.1 leakage rate Surveillance Requirements conform <u>comply</u> with 10 CFR 50, Appendix J, Option (Ref. 1), as modified by approved exemptions.</p>
3.6.01 Pg 20	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <ol style="list-style-type: none"> 1. eCo capable of being closed by an OPERABLE automatic containment isolation system, or 2. eCo closed by manual valves, blind flanges, or de-activated automatic valves secured in their closed positions, except as . . .

GTST Section Pg #	Comment	Proposed Action
3.6.01 Pg 21	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Move the period to inside of the close-quote in Applicability:</p> <p>The MODES 5 and 6 requirements are specified in LCO 3.6.7, "Containment Penetrations_." -</p>
3.6.01 Pg 22	Revise various TS Bases from "Appendix J," to "Appendix J, Option B" for consistency with NUREG-1431 and editorial clarification.	<p>Make the following changes in References:</p> <p>1. 10 CFR 50, Appendix J, Option B, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors, Performance-Based Requirements."</p>
3.6.02 Pg 28	Revise various TS Bases from "Appendix J," to "Appendix J, Option B" for consistency with NUREG-1431 and editorial clarification.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>This leakage rate is defined in 10 CFR 50, Appendix J, Option B (Ref. 1), as . . .</p>
3.6.02 Pg 30	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Actions Bases:</p> <p>. . . then it may be easily accessed tofor repair without interrupting containment integrity.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.03 Pg 28	Condition A and Condition B statements are misaligned. Additional typographical error in "NOTES" dashes ("-") rolling to next line.	Correct typographical errors
3.6.03 Pg 29	There is an empty row after the row for Condition B.	Delete the extra row
3.6.03 Pg 36	Revise TS 3.6.3 Bases for Required Actions A.1 and A.2 to change from "testing or valve manipulation" to "testing or device manipulation" since the TS Required Action A.2 cites "devices" and not "valves"	Make the following changes in Actions A.1 and A.2 Bases discussion: This Required Action does not require any testing or valve <u>device</u> manipulation.
3.6.03 Pg 36	Revise TS 3.6.3 Bases for Required Actions A.1 and A.2 to change from "potentially being" to "being" for clarity and to match NUREG-1431 wording.	Make the following changes in Actions A.1 and A.2 Bases discussion: . . . devices outside containment and capable of potentially being mispositioned are in the correct position.

GTST Section Pg #	Comment	Proposed Action
3.6.03 Pg 38	Revise SR 3.6.3.2 Bases to add clarifying nomenclature consistent with NUREG-1431 wording.	<p>Make the following changes in Bases first paragraph of SR 3.6.3.2 Surveillance Requirements discussion:</p> <p>. . . that those containment isolation valves outside containment and capable of being mispositioned are in the correct position. Since verification of valve position for containment isolation valves outside containment . . .</p>
3.6.03 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.6.3.3 Surveillance Requirements Bases discussion:</p> <p>This The Note allows valves and blind flanges located in high radiation areas to be . . .</p>
3.6.03 Pg 40	Revise SR 3.6.3.5 Bases to add clarifying nomenclature consistent with NUREG-1431 wording.	<p>Make the following changes in SR 3.6.3.5 Surveillance Requirements Bases discussion:</p> <p>Automatic containment isolation valves close on a containment isolation signal to prevent leakage of radioactive material from containment following a DBA.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.03 Pg 40	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.6.3.5 Bases:</p> <p>This SR ensures that each automatic containment isolation valve will actuate to its isolation position on a containment isolation signal. The ACTUATION LOGIC TEST overlaps this Surveillance to provide complete testing of the assumed safety function. This surveillance is not required for valves that are locked, sealed, or otherwise . . .</p>
3.6.04 Pg 08	First paragraph of the Technical Analysis discusses DOC A083. The last two sentences discuss an action that is not in GTS and is not in the revised STS (i.e., going to MODE 6). These sentences should be deleted as they are not relevant to the change. This portion of the DOC A083 discussion is related to a similar change in GTS 3.6.5.	Delete sentences that read "While the Required Action B.2 does not specify that an option is to be in MODE 6, it is always an option. It is not necessary to state that the unit can go to a lower mode"
3.6.04 Pg 20	GTS LCO 3.6.4 has Applicability Notes that are mistakenly moved in the GTST as LCO Notes. The GTS evaluation and the corresponding Bases, continue to reflect the existence of Applicability Notes. The GTST Section XI and Section XII TS pages appear to have typographical errors in the placement of the Notes.	Revise Section XI and Section XII to present the LCO Notes as Applicability Notes

GTST Section Pg #	Comment	Proposed Action
3.6.04 Pg 24	Revise TS 3.6.4 Bases for the Applicability to change from “the cooling events” to “the containment cooling events” for clarification.	<p>Make the following changes in Applicability Bases:</p> <p>Therefore, maintaining containment pressure within the low pressure limit is essential to ensure initial conditions assumed in the <u>containment</u> cooling events in MODES 1</p>
3.6.04 Pg 24	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Actions B.1, B.2, and B.3 Bases discussion:</p> <p>Once in MODE 5 or 6 Required Action C.1 requires that a containment air flow path ≥ 6 inches in diameter shall be opened within 8 hours from eCondition entry. </p> <p>The primary means of opening a containment air flow path is by establishing a eContainment aAir filtration system (VFS) air flow path into containment.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.04 Pg 24	<p>Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.</p> <p>The GTST revision is not as concise and leaves erroneous understanding of Condition A (which continues to apply as well).</p>	<p>Make the following changes to Actions B.1, B.2, and C.1 Bases:</p> <p>If the containment high low pressure limit is still not met, <u>Condition C applies</u> only Condition B applies since entry into MODE 5 is sufficient to exit the Applicability applies.</p> <p>If the containment low pressure limit is not met both Conditions B and C apply. Once in MODE 5 or 6, Required Action C.1 requires that a containment air flow path ≥ 6 inches in diameter shall be opened within 8 hours from condition entry.</p>
3.6.04 Pg 25	<p>Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.</p>	<p>Make the following changes in SR 3.6.4.1 Surveillance Requirements Bases:</p> <p>The 12 hour Frequency of this SR was developed based on operating experience related to trending of both containment pressure variations during the applicable MODES.</p>
3.6.05 Pg 08	<p>Next to last paragraph references VEGP LAR DOC "M13." This should be DOC "M12"</p>	<p>Change "M13" to "M12"</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 38	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following sentence a separate paragraph under Actions F.1 and F.2 Bases:</p> <p>These Actions place the plant in a condition which maximize the time to actuation of the Passive Containment Cooling System, thus providing time for repairs or application of alternative cooling capabilities.</p>
3.6.06 Pg 05	Fourth paragraph of the Changes to the Generic TS and Bases section states that the Applicability is revised to include "MODES 5 and 6." The change is actually "MODES 5 and 6 with the reactor decay heat > 6.0 MWt."	Add in the phrase "with the reactor decay heat > 6.0 MWt"
3.6.06 Pg 07	Discussion of VEGP LAR DOC A085 says it adds the word "Conditions." This should be "Condition" (two locations in the paragraph).	Change "Conditions" to "Condition" in both locations.
3.6.06 Pg 08	Discussion of VEGP LAR DOC A085 says it adds the word "Conditions." This should be "Condition" (two locations in the paragraph).	Change "Conditions" to "Condition" in both locations.

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 32	Revise TS 3.6.6 Bases naming convention for the PCCWST to be consistent with AP1000 DCD nomenclature.	<p>Make the following changes in Background:</p> <p>The PCS consists of an 800,000 gal (nominal) cooling water tank <u>Passive Containment Cooling Water Storage Tank (PCCWST)</u>, four headered tank <u>PCCWST</u> discharge lines . . .</p> <p>. . .</p> <p>Algae growth is not expected within the Passive Containment Cooling Water Storage Tank (PCCWST); however, to assure water clarity . . . <u>PCCWST</u> passive containment cooling water storage tank. However, OPERABILITY of the <u>PCCWST</u> tank is assured by compliance with . . . recirculation pumps and heater, the <u>PCCWST</u> PCS water storage tank temperature can be maintained . . . large thermal inertia of the <u>PCCWST</u> tank, or heat</p> <p>. . .</p> <p>Upon actuation of the isolation valves, gravity flow of water from the <u>PCCWST</u> cooling water tank (contained</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 32	Revise TS 3.6.6 Bases Background sentence to define the three sets of isolation valves as the three flow paths and simply use "headers" in reference to the two discharge piping routes. The LCO requires the three flow paths with active isolation valves. In the Background, "flow path" is used in reference to the two discharge headers, which creates confusion.	<p>Make the following changes in Background:</p> <p>. . . and two separate full capacity discharge flow paths<u>headers</u> to the containment vessel with 3 sets of isolation valves (<u>i.e., 3 flow paths</u>), each <u>flow path</u> capable of meeting the design bases.</p>
3.6.06 Pg 32	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>The flow of water to the containment shell surface is initially established to assure that the required short term containment cooling requirements following the postulated worst case LOCA are achieved.</p>
3.6.06 Pg 33	Revise TS 3.6.6 Bases naming convention for the PCCWST to be consistent with AP1000 DCD nomenclature.	<p>Make the following changes in Background:</p> <p>. . . decreasing water level in the elevated <u>PCCWST</u>storage tank.</p> <p>. . . Automatic actuation opens the <u>PCCWST</u>cooling water tank discharge valves, allowing gravity flow . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 33	Delete TS 3.6.6 Bases Background detail regarding the Reliability Assurance Program since it is inconsistent with NUREG-1431 Bases detail. Furthermore, DCD 6.1.3.2 defines a COL Item for this monitoring / inspection, which does not discuss it as a "Reliability Assurance Program"	<p>Make the following changes in Background:</p> <p>. . . effective wetting of the dome and vertical sides of the containment shell. The monitoring of the containment surface through the Reliability Assurance Program (RAP) and the Inservice Testing Program assures containment surface does not unacceptably degrade containment heat removal performance.</p>
3.6.06 Pg 33	Delete TS 3.6.6 Bases Background detail regarding the initial test program since it is inconsistent with NUREG-1431 Bases detail. This is not a TS surveillance or test and does not enhance the understanding of the TS requirements. This information is appropriately provided in AP1000 DCD 6.2.2.4.	<p>Make the following changes in Background:</p> <p>During the initial test program, the containment coverage will be measured at the base of the upper annulus in addition to the coverage at the spring line for the full flow case and a lower flow case with PCS recirculation pumps delivering to the containment shell. These benchmark values at the base of the upper annulus will be used to develop acceptance criteria for technical specifications. Contamination can be removed by PCS actuation and by using coating vendor cleaning procedures.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 33	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>. . . (evaporation) of the water film into the air. As the air heats up and water evaporates into the air, it becomes less dense than the cooler air in the air . . .</p> <p>with heated air/water vapor exiting the top center of the shield building.</p>
3.6.06 Pg 34	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>Reduction of containment pressure reduces the release of fission product radioactivity from containment to the environment in the event of a DBA.</p> <p>The PCS is an <u>engineered safety features (ESF)</u> system and is designed to ensure that the heat removal capability required during the post accident period can be attained.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 34	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>The analyses and evaluations assume a unit specific power level of 3400 MW<u>100% RTP</u>, one passive containment cooling train operating, . . .</p>
3.6.06 Pg 35	Revise TS 3.6.6 Bases naming convention for the PCCWST to be consistent with AP1000 DCD nomenclature.	<p>Make the following changes in LCO Bases discussion:</p> <p>The PCS includes the PCCWST a cooling water tank, valves, piping, instruments and controls to ensure an OPERABLE flow path capable of delivering water from the PCCWST cooling water tank upon an actuation . . .</p> <p>The PCCWST PCS cooling water storage tank ensures that an adequate supply of water is available to cool and depressurize the containment in the event of a Design Basis Accident (DBA). To be considered OPERABLE, the PCCWST PCS cooling water storage tank must meet the water volume and . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 37	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following sentence a separate paragraph under Actions E.1 and E.2 Bases:</p> <p>These Actions place the plant in a condition which maximize the time to actuation of the Passive Containment Cooling System, thus providing time for repairs or application of alternative cooling capabilities.</p>
3.6.06 Pg 37	Revise TS 3.6.6 Bases for Required Action C.1 wording to match the TS requirement for PCCWST water volume or temperature.	<p>Make the following changes in C.1 Actions Bases discussion:</p> <p>If the <u>PCCWST water volume or temperature is not within limits</u>, cooling water tank is inoperable, it must be restored to <u>OPERABLE status within limits</u> within 8 hours. The tank may be declared inoperable due to low water level or temperature out of limits.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 38	Revise TS 3.6.6 Bases naming convention for the PCCWST to be consistent with AP1000 DCD nomenclature.	<p>Make the following changes in SR 3.6.6.1 Surveillance Requirements Bases:</p> <p>This surveillance requires verification that the PCCWSTcooling water temperature is within the limits</p> <p>... approach the temperature limits since the PCCWSTtank is large and temperature variations are slow.</p>
3.6.06 Pg 38-39	Revise SR 3.6.6.3 Bases to change from “Passive Containment Cooling System provides” to “PCS flow path provides” and change from “positions prior” to “position prior” for editorial clarification.	<p>Make the following changes in SR 3.6.6.3 Surveillance Requirements Bases:</p> <p>Verifying the correct alignment of manual, power operated, and automatic valves, excluding check valves, in the Passive Containment Cooling SystemPCS <u>flow path</u> provides assurance that the proper flow paths exist for system operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position since these were verified to be in the correct positions <u>position</u>s prior to being secured.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.06 Pg 39	Excess detail is removed. The detail is not consistent with general content reflected in NUREG-1431. Removal of this detail does not impact the information useful for compliance with the TS requirement.	<p>Make the following changes in SR 3.6.6.4 Surveillance Requirements Bases:</p> <p>The 24 month Frequency is also acceptable based on consideration of the design reliability (and confirmed by operating experience) of the equipment.</p>
3.6.06 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.6.6.5 Surveillance Requirements Bases:</p> <p>Additionally, the 24 month Frequency is based on the desire to perform this Surveillance under conditions that apply during a plant outage, on the need to have access to the locations, and because of the potential for an unplanned transient if the Surveillance were performed with the reactor at power.</p>
3.6.06 Pg 40	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.6.6.6 Surveillance Requirements Bases:</p> <p>The System Level Operability <u>OPERABILITY</u> Testing Program provides specific test requirements and acceptance criteria.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.07 Pg 34	Revise various TS Bases stating "withdrawal of reactivity control assemblies" to "withdrawal of control rods" for editorial improvement and consistency with other TS Bases discussions.	<p>Make the following changes in B.1.1, B.1.2, and B.2 Actions Bases:</p> <p>Sources of positive reactivity addition include boron dilution, withdrawal of reactivity-control assemblies<u>rods</u>, and excessive cooling of the RCS.</p>
3.6.08 Pg 23	Delete SR 3.6.9.2 Bases last sentence. This sentence, describing compliance to the SRP, is confusing and not necessary in this context. The paragraph begins with "Agitation of the test solution is prohibited," which is not related to ensuring compliance with the SRP. As such, the last sentence is deleted.	<p>Make the following changes in SR 3.6.8.2 Surveillance Requirements Bases:</p> <p>. . . before the required pH is achieved. This would ensure compliance with the Standard Review Plan requirement of a pH \geq 7.0 by the onset of recirculation after a LOCA.</p>
3.6.09 Pg 02	RCOL PTS Change Number and Title for VEGP LAR DOC A089 says it is for TS 3.6.9 Condition "B." It affects Condition "A" not "B"	Change "Condition B" to "Condition A"

GTST Section Pg #	Comment	Proposed Action
3.6.09 Pg 25	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>The containment pressure vessel contains two 100%-percent-capacity vacuum relief flow paths with a The MOVs receive an <u>engineered safety features (ESF)</u> “open” signal on Containment Pressure-Low 2. If the-VFS-PL-V009 is not closed, then the vacuum relief MOVs will automatically close to direct VFS purge exhaust through the normal VFS discharge flow path.</p>
3.6.09 Pg 25	Excess detail is removed. Removal of this detail does not impact the information useful for compliance with the TS requirement.	<p>Make the following changes in Background:</p> <p>Each flow path inside containment contains a normally closed, self-actuated check valve inside containment that opens on a negative differential pressure of 0.2 psi.</p>

GTST Section Pg #	Comment	Proposed Action
3.6.09 Pg 26	Additional clarifying information is included consistent with the TS being addressed.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>Design of the vacuum relief system involves calculating the effect of loss of ac power and a <u>low outside</u> ambient air temperature in combination. . .</p>
3.6.09 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in LCO:</p> <p>Two 100% percent vacuum relief flow paths are required to be OPERABLE to ensure that at least one is available, . . .</p>
3.7.01 Pg 05	In the Changes to the Generic Technical Specifications and bases section, fifth paragraph, it discusses the former GTS Condition B and states that the change is associated with DOC A091. It is really associated with DOC A092.	Change "A091" to "A092"
3.7.02 Pg 05	The Changes to the Generic Technical Specifications and Bases section, discussion of DOC A095, says it affects GTS Conditions A, B, C, and D and their Required Actions. DOC A095 does not affect Condition A or its Required Action.	Delete the reference to Condition A.
3.7.02 Pg 06	The Description of Changes in RCOL section, states that VEGP LAR DOC A095 makes changes to GTS Conditions A, B, C, and D and their Required Actions. DOC A095 does not affect Condition A or its Required Action.	Delete the reference to Condition A.

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 10	End of last paragraph discusses M11 changes to Actions of 3.7.2. The VEGP LAR discussed why TS 3.6.3 Actions Notes 3 and 4 were not applicable and not included in 3.7.2. This information was not added by the NRC into this paragraph. (Note similar change is discussed in GTST 3.7.1.)	For consistency, the statement from the VEGP LAR should be added.
3.7.02 Pg 17	Required Action B.1 has a change that adds "s" to the word "valve." It should be "(s)"	Change "s" to "(s)"
3.7.02 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>Each main steam line has one safety related MSIV <u>(which is safety related)</u> to isolate steam flow from the secondary side of the steam generators, <u>which may be required</u> following a high energy line break. MSIV closure terminates flow from the unaffected (intact) steam generator.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background:</p> <p>A description of the MSIVs is found in the-FSAR Section 10.3 (Ref. 1). Descriptions for the turbine bypass valves, and moisture separator reheater 2nd stage steam isolation valves are found in the-FSAR Section 10.4 (Ref. 26).</p>
3.7.02 Pg 40	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>The design basis of the MSIVs is established by the containment analysis for the large steam line break (SLB) inside containment, discussed in the-FSAR Section 6.2 (Ref. 23). It is also affected by the accident analysis of the SLB events presented in the-FSAR Section 15.1 (Ref. 34).</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 41	Excess detail is removed. The detail is not consistent with general content reflected in NUREG-1431. Removal of this detail does not impact the information useful for compliance with the TS requirement.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>b. A break outside of containment, and upstream or downstream from the MSIVs, is not a containment pressurization concern. The uncontrolled blowdown of more than one steam generator . . .</p> <p>d. The MSIVs are also utilized during other events such as a feedwater line break . . .</p>
3.7.02 Pg 41	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Applicable Safety Analyses:</p> <p>c. Following a steam generator tube rupture, eClosure of the MSIVs isolates the ruptured steam generator to minimize radiological releases.</p> <p>d. . . . events such as a feedwater line break, hHowever, these events are less limiting so far as MSIV OPERABILITY is concerned.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 43	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Applicability:</p> <p>. . . 2nd stage steam isolation valves must be OPERABLE in MODES 1, and MODES <u>1</u>, 2, 3, and 4, when there is significant mass and energy. . .</p>
3.7.02 Pg 46	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.7.2.1 Surveillance Requirements Bases:</p> <p>As the MSIVs are not tested at power, they are exempt from the ASME OM Code (Ref. 86) requirements during operation in MODE 1 or 2.</p>
3.7.02 Pg 46	<p>VEGP LAR DOC D09 made the Regulatory commitment to relocate the closure time to the Bases. Similarly, V.C. Summer TSU LAR proposes the same commitment to the Bases. Since each represented AP1000 Utility is committed to maintaining standardization, there currently is no rationale for an AP1000 STS that differs from the TSU LAR commitments and plant-specific Bases for VEGP.</p> <p>Additionally, there is no COL Item, and no Reviewer's Note defining the use of the optional bracketed material. As such, this change is inappropriate.</p>	<p>Make the following changes in Surveillance Requirements Bases for SR 3.7.2.1, and delete GTST Reference 7:</p> <p>This SR verifies that MSIV<u>the</u> closure time of each MSIV is ≤ 5.0 seconds, on an actual or simulated actuation signal. <u>The MSIV isolation time is within the limit given in Reference 7 and is within that</u> assumed in the accident and containment analyses.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 46	These changes are made for editorial consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Surveillance Requirements Bases for SR 3.7.2.1:</p> <p>This SR also verifies the valve closure time is in accordance with the Inservice Testing Program. This Surveillance SR is normally performed upon returning the unit to operation following a refueling outage.</p>
3.7.02 Pg 47	These changes are made for editorial consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Surveillance Requirements for SR 3.7.2.2:</p> <p>This SR also verifies the valve closure time is in accordance with the Inservice Testing Program. This Surveillance SR is normally performed upon returning the unit to operation following a refueling outage.</p>
3.7.02 Pg 47	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.7.2.2 Surveillance Requirements Bases:</p> <p>As the alternate downstream valves are not tested at power, they are exempt from the ASME OM Code (Ref. 86) requirements during operation in MODE 1 or 2.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 47	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in SR 3.7.2.3 Surveillance Requirements Bases:</p> <p>The isolation times are specified in FSAR Section 6.2.3 (Ref. 97) and Frequency of this SR is in accordance with the Inservice Testing Program.</p>
3.7.02 Pg 47	<p>VEGP LAR DOC D09 made the Regulatory commitment to relocate the closure time to the Bases. Similarly, V.C. Summer TSU LAR proposes the same commitment to the Bases. Since each represented AP1000 Utility is committed to maintaining standardization, there currently is no rationale for an AP1000 STS that differs from the TSU LAR commitments and plant-specific Bases for VEGP.</p> <p>Additionally, there is no COL Item, and no Reviewer's Note defining the use of the optional bracketed material. As such, this change is inappropriate.</p>	<p>Make the following changes in Surveillance Requirements Bases for SR 3.7.2.2, and delete GTST Reference 7:</p> <p>This SR verifies that the turbine stop, turbine control, turbine bypass, and moisture separator reheater 2nd stage steam isolation valves' closure time is <u>≤ 5.0 seconds</u>, within the limit given in Reference 7 on an actual or simulated actuation signal.</p> <p>7. [Technical Requirements Manual.]</p>

GTST Section Pg #	Comment	Proposed Action
3.7.02 Pg 48	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in References:</p> <ol style="list-style-type: none"> 1. FSAR Section 10.3, "Main Steam System." 2. FSAR Section 10.4, "Other Features of Steam and Power Conversion Systems." 3. FSAR Section 6.2.1, "Containment Functional Design." 4. FSAR Section 15.1, "Increase in Heat Removal by Secondary System." 4. Not used. 5. NUREG-138, Issue 1, "Staff Discussion of Fifteen Technical Issues Listed in Attachment to November 3, 1976 Memorandum from Director NRR to NRR Staff." 6. Section 10.4, "Other Features of Steam and Power Conversion Systems." 7. [Technical Requirements Manual.] 8. ASME OM Code, Code for Operation and Maintenance of Nuclear Power Plants." 9. FSAR Section 6.2, "Containment Systems."
3.7.03 Pg 05	Changes to the Generic Technical Specifications and Bases discussion for GTS 3.7.3 incorrectly references DOC L09 (instead of "D09") in the description of changes for SR 3.7.3.1.	Revise the references to "DOC L09" to "DOC D09" in the last two paragraphs of the GTS 3.7.3 description of changes to the Generic Technical Specifications.

GTST Section Pg #	Comment	Proposed Action
3.7.03 Pg 10	Fifth paragraph that discusses VEGP LAR DOC M15. Second sentence says "STS 3.7.3 Required Action F.3 is added to be in MODE 5 in 36 hours." This Required Action was not added by VEGP LAR DOC M15. The Required Action was already in the GTS.	Delete this sentence.
3.7.03 Pg 29	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in LCO Bases:</p> <p>This LCO ensures that the MFIVs and the MFCVs will isolate the main feedwater system <u>to the secondary side of the steam generators</u>.</p>
3.7.03 Pg 29	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Applicability Bases:</p> <p>In <u>MODES</u> 1, 2, 3, or<u>and</u> 4, these valves are required to be OPERABLE to limit . . .</p>
3.7.03 Pg 30	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Actions B.1 Bases:</p> <p>With <u>one or</u> both feedwater flow paths with associated MFIV and MFCV inoperable . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.7.03 Pg 31	<p>VEGP LAR DOC D09 made the Regulatory commitment to relocate the closure time to the Bases. Similarly, V.C. Summer TSU LAR proposes the same commitment to the Bases. Since each represented AP1000 Utility is committed to maintaining standardization, there currently is no rationale for an AP1000 STS that differs from the TSU LAR commitments and plant-specific Bases for VEGP.</p> <p>Additionally, there is no COL Item, and no Reviewer's Note defining the use of the optional bracketed material. As such, this change is inappropriate.</p>	<p>Make the following changes in Surveillance Requirements Bases for SR 3.7.3.1, and delete GTST Reference 2:</p> <p>This SR verifies that the closure time of each MFIV and MFCV is <u>≤ 5.0 seconds</u>, within the limit given in Reference 2 on an actual or simulated actuation signal. <u>The MFIV and MFCV isolation times are and</u> is within that assumed in the accident and containment analyses. . . . This is consistent with the ASME OM Code (Ref. <u>2</u> 3) quarterly stroke requirements during operation in MODE 1 or 2.</p> <p>2. [Technical Requirements Manual.]</p>
3.7.03 Pg 31	<p>Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.</p>	<p>Make the following changes in Surveillance Requirements Bases for SR 3.7.3.1:</p> <p>This SR also verifies the valve closure time is in accordance with the Inservice Testing Program. This <u>Surveillance SR</u> is normally performed upon returning the unit to operation following a refueling outage.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.04 Pg 18	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in Background Bases:</p> <p>Other <u>Therefore</u>, fission product isotopes, as well as activated corrosion products in lesser amounts, may also be found in the secondary coolant.</p>
3.7.05 Pg 18	For the spent fuel pool cooling system, which does not have requirements for TS operability, TS 3.7.5 Bases discussion of “inoperable” are replaced with “unavailable” to align with discussions in TS 3.7.9 Bases. There is no change in intent in providing consistent reference to system status.	<p>Make the following changes in Background Bases:</p> <p>The water also provides shielding during the movement of spent fuel, and a large capacity heat sink in the event the spent fuel pool cooling system is inoperable <u>unavailable</u>.</p>
3.7.05 Pg 18	For the spent fuel pool cooling system, which does not have requirements for TS operability, TS 3.7.5 Bases discussion of “inoperable” are replaced with “unavailable” to align with discussions in TS 3.7.9 Bases. There is no change in intent in providing consistent reference to system status.	<p>Make the following changes in Applicable Safety Analyses Bases:</p> <p>In addition to mitigation of the effects of a fuel handling accident, the required minimum water level in the spent fuel pool provides a large capacity heat sink for spent fuel pool cooling in the event the spent fuel pool cooling system is inoperable <u>unavailable</u>.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.05 Pg 19	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes in A.1 Actions Bases:</p> <p>When the initial conditions for prevention of an <u>assumed in</u> accident <u>analyses</u> cannot be met, steps should be taken to preclude the accident from occurring.</p>
3.7.06 Pg 06	Description of changes section for VEGP LAR DOC A038 identifies several SRs that are revised. However, the list leaves out SR 3.7.6.6. The list on page 5 correctly includes SR 3.7.6.6.	Add SR 3.7.6.6 to the list.
3.7.06 Pg 38	Revise TS 3.7.6 Bases for the Applicable Safety Analysis to clarify the VES initiation signals include "Loss of AC power for more than 10 minutes" (see AP1000 DCD 6.4.3.2 and Figure 7.2-1, sheets 13 and 15).	<p>Make the following changes to Applicable Safety Analyses:</p> <p>Operation of the VES is automatically initiated by <u>either of</u> the following safety related signals:</p> <ul style="list-style-type: none"> • <u>High-2 particulate or iodine radioactivity; or</u> • <u>Loss of AC power for more than 10 minutes.</u> <p>In the event of a loss of all AC power, the VES functions to provide ventilation, pressurization, and cooling of the MCRE pressure boundary.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.06 Pg 39	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to LCO Bases:</p> <p>This includes components listed in SR 3.7.6.3 through 3.7.6.10.</p>
3.7.06 Pg 42	<p>Revise SR 3.7.6.11 Bases to delete paragraph that inappropriately discusses Action C Bases and move this paragraph to the Action C Bases.</p> <p>The moved paragraph is: <u>Required Action C.3 allows time to restore the MCRE boundary to OPERABLE status provided mitigating actions can ensure that the MCRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3 (Ref. 3) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 5). These compensatory measures may also be used as mitigating actions as required by Required Action C.2. Temporary analytical methods may also be used as compensatory measures to restore OPERABILITY (Ref. 6). Options for restoring the MCRE boundary to OPERABLE status include changing the licensing basis DBA consequence analysis, repairing the MCRE boundary, or a combination of these actions. Depending upon the nature of the problem and the corrective action, a full scope inleakage test may not be necessary to establish that the MCRE boundary has been restored to OPERABLE status</u></p>	<p>Delete paragraph from SR 3.7.6.11 per comment.</p> <p>Make the following addition to Bases for C.1, C.2, and C.3:</p> <p>The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of mitigating actions. <<INSERT MOVED PARAGRAPH HERE>> The 90 day Completion Time is reasonable based on the determination that the mitigating actions will ensure protection of MCRE occupants within . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.7.06 Pg 42	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Actions D.1, D.2, and D.3 Bases:</p> <p>The 245,680 scf value is 75% percent of the minimum amount of stored compressed air that must be available in the compressed air storage tanks.</p>
3.7.06 Pg 42	TS Bases Figures B 3.7.6-1 and B 3.7.6-2 are reordered to align with Writer's Guide convention.	<p>Make the following changes to Actions D.1, D.2, and D.3 Bases:</p> <p>. . . compressed air storage tanks pressure (VES-PT-001A/B), and Figure B 3.7.6-21, Compressed Air Storage Tanks Minimum Volume . . .</p>
3.7.06 Pg 44	TS Bases Figures B 3.7.6-1 and B 3.7.6-2 are reordered to align with Writer's Guide convention.	<p>Make the following changes to SR 3.7.6.2 Surveillance Requirements Bases:</p> <p>. . . compressed air storage tank room temperature (VAS-TE-080A/B), compressed air storage tanks pressure (VES-PT-001A/B), and Figure B 3.7.6-42, Compressed Air Storage Tanks Minimum Volume.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.06 Pg 46	<p>Revise SR 3.7.6.11 Bases to delete paragraph that inappropriately discusses Action C Bases and move this paragraph to the Action C Bases.</p> <p>The deleted paragraph is: Required Action C.3 allows time to restore the MCRE boundary to OPERABLE status provided mitigating actions can ensure that the MCRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3 (Ref. 3) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 5). These Compensatory measures may also be used as mitigating actions as required by Required Action C.2. Temporary analytical methods may also be used as compensatory measures to restore OPERABILITY (Ref. 6). Options for restoring the MCRE boundary to OPERABLE status include changing the licensing basis DBA consequence analysis, repairing the MCRE boundary, or a combination of these actions. Depending upon the nature of the problem and the corrective action, a full scope inleakage test may not be necessary to establish that the MCRE boundary has been restored to OPERABLE status.</p>	Make the commented changes to the Bases for SR 3.7.6.11
3.7.06 Pg 48	Revise TS Bases Figures B 3.7.6-1 and B 3.7.6-2 to add "Acceptable" region labels. The order of the Figures is swapped to align with Writer's Guide convention.	Add "Acceptable Region" text box to Bases Figure B 3.7.6-1.
3.7.06 Pg 49	Revise TS Bases Figures B 3.7.6-1 and B 3.7.6-2 to add "Acceptable" region labels. The order of the Figures is swapped to align with Writer's Guide convention.	Move existing Bases Figure B 3.7.6-2 before existing Figure B 3.7.6-1 and rename. Also, add "Acceptable Region" text box to Figure.

GTST Section Pg #	Comment	Proposed Action
3.7.07 Pg 25	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Background:</p> <p>The startup feedwater system serves no safety related function and has no safety related design basis, except to isolate feedwater in the event of a Feedline Break (FLB) feedwater, Steam Line Break (SLB) steam line break, a steam generator tube rupture (SGTR), or other secondary side event.</p>
3.7.07 Pg 25	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to the Applicable Safety Analyses:</p> <p>The basis for the requirement to isolate the startup feedwater system is established by the analysis for large Steam Line Break (SLB) inside containment. It is also based on the analysis for a large Feedline Break (FLB) and a steam generator tube rupture.</p>
3.7.07 Pg 27	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following change to Actions A.1 and A.2 Bases:</p> <p>For flow paths isolated in accordance with Required Action A.2.1A.1, the affected flow paths must be verified to be isolated on a periodic basis.</p>

GTST Section Pg #	Comment	Proposed Action
3.7.07 Pg 27	TSTF-440 should be applied to Required Action A.1 and A.2 Bases, last paragraph, to eliminate the phrase "through a system walkdown"	Delete the phrase.
3.7.09 Pg 05	In the Changes to the Generic Technical Specification section, the first paragraph discusses the DOC A105 changes to the LCO title and Specification, but does not mention the LCO Note changes.	Change the sentence from "The LCO title and Specification statement..." to "The LCO title, LCO statement, and LCO Notes..."
3.7.09 Pg 26	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following change to Background:</p> <p>Once decay heat in the spent fuel pool is reduced to \leq at or below 4.7 MWt, the spent</p>
3.7.09 Pg 27	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following change to Applicable Safety Analyses:</p> <p>The worst case decay heat load (decay heat > 7.2 MWt) is produced by an an emergency full core off-load following a refueling plus ten years of spent fuel.</p>
3.7.09 Pg 28	Correct TS 3.7.9 Bases grammar.	<p>Make the following change to LCO:</p> <p>In <u>MODES</u> 5 and 6, with the reactor decay heat > 6.0 MWt, . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.7.09 Pg 28	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. There are no explicit requirements placed on SFP cooling. This LCO (on makeup) is also not required at all times.	<p>Make the following change to Actions:</p> <p>LCO 3.0.3 is applicable while in MODE 1, 2, 3, or 4. Since spent fuel pool cooling requirements apply at all times, the Actions have been modified by a Note stating that LCO 3.0.3 is not applicable.</p>
3.7.09 Pg 28	Editorial change for clarity.	<p>Make the following changes in LCO Bases:</p> <p>. . . the PCWST is reserved for containment cooling in accordance with LCO 3.6.6, Passive Containment Cooling System (PCS) — Shutdown. Thus, . . . pool decay heat to > 7.2 MWt.</p> <p><u>The decay heat specified in the three Notes is normally determined by calculation.</u></p> <p>When a portion of the fuel is returned to the reactor vessel in preparation . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.7.10 Pg 08	<p>The technical Analysis for VEGP LAR DOC A107 is not correct. The fifth sentence states "Once the flow path is isolated as required by GTS 3.7.10 Required Action B.2, Condition D would no longer apply and can be exited." This is not correct. Condition D can only be exited when there is no longer a flow path with two SG blowdown valves inoperable. Performing either Required Action B.1 or B.2 has no impact on exiting Condition D. If Condition D exists (i.e., a flow path with two SG blowdown valves are inoperable), it must remain entered even when Required Action B.1 or B.2 are performed. The justification for deleting Required Action D.2 is that it is redundant to Required Action B.2 - when Required Action D.2 is required, Required Action B.2 will also be required.</p>	Delete the fifth sentence of the DOC A107 discussion
3.7.10 Pg 10	<p>Fourth paragraph states that DOC M04 provides consistency with GTS 3.6.3 Required Action B.2 and Completion Time. There is no GTS 3.6.3 Required Action B.2. This should be Required Action A.2</p>	Change "B.2" to "A.2"
3.7.10 Pg 18	<p>The markup of SR 3.7.10.1 results in the following wording: "Verify each SG PORV, PORV block valve, PORV, and SG blowdown isolation valve strokes closed." The components listed should be only SG PORV, PORV block valve, and SG blowdown isolation valve.</p>	Delete the occurrence of "PORV," that is just prior to "and SG blowdown isolation valve"
3.7.10 Pg 30	<p>The revised SR 3.7.10.1 reads as follows: "Verify each SG PORV, PORV block valve, PORV, and SG blowdown isolation valve strokes closed." The components listed should be only SG PORV, PORV block valve, and SG blowdown isolation valve</p>	Delete the occurrence of "PORV," that is just prior to "and SG blowdown isolation valve"

GTST Section Pg #	Comment	Proposed Action
3.7.10 Pg 32	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.	<p>Make the following changes to LCO Bases:</p> <p>These isolation valves are considered OPERABLE when the valves are capable of closing on a PMS actuation<u>isolation</u> signal.</p>
3.7.10 Pg 33	Editorial change for clarity.	<p>Make the following changes in Applicability:</p> <p>The steam generator PORV, PORV block valve, and steam generator blowdown isolation valves must be OPERABLE in MODES 1, 2, and 3, and 4, <u>where</u> a DBA . . .</p>
3.7.11 Pg 20	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Background:</p> <p>For storage of fuel in the spent fuel racks, the design basis for preventing criticality outside the reactor is that there is a 95% percent probability at a 95% percent confidence level, without soluble boron . . .</p>
3.7.12 Pg 06	In the rationale for changes section, VEGP LAR DOC A109 is discussed. This should be DOC A111.	Change "DOC A109" to "DOC A111"

GTST Section Pg #	Comment	Proposed Action
3.7.12 Pg 21	Revise TS 3.7.12 Bases Background to delete sentence: "Use of the IFE fuel rod storage canister is subject to the same storage requirements as the fuel assemblies." This is the only mention of "canister" in TS or TS Bases, and the TS do not impose any "same storage requirements." Furthermore, "IFE" is not mentioned in AP1000 DCD Chapter 9. Fuel assembly storage requirements are unchanged by this TS Bases deletion.	<p>Make the following changes to Background:</p> <p>Use of the IFE fuel rod storage canister is subject to the same storage requirements as the fuel assemblies.</p>
3.7.12 Pg 21	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Background:</p> <p>. . . the design basis for preventing criticality outside the reactor is that there is a 95% percent probability at a 95% percent confidence level . . .</p>
3.7.12 Pg 22	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Applicable Safety Analyses:</p> <p>The hypothetical <u>fuel handling</u> accidents can only take place during or as a result of the movement of an assembly (Refs. 2 and 3).</p>

GTST Section Pg #	Comment	Proposed Action
3.8.01 Pg 43	Revise TS 3.8.1 Bases Background to insert “equipment” after “monitoring” in first statement for editorial clarification.	Make the following changes to Background: The Class 1E DC and UPS System (IDS) provides electrical power for safety related and vital control instrumentation loads, including monitoring equipment and main control room emergency lighting.
3.8.01 Pg 43	Revise TS 3.8.1 Bases Background first paragraph to add “up to” for editorial clarification.	Make the following changes to Background: It also provides power for safe shutdown when all the onsite and offsite AC power sources are lost and cannot be recovered for up to 72 hours.

GTST Section Pg #	Comment	Proposed Action
3.8.01 Pg 43	Revise TS 3.8.1 Bases Background presentation of battery bank configuration to be more consistent with AP1000 DCD 8.3.2.1.1.1.	<p>Make the following changes to Background:</p> <p>Divisions A and D each consist of one 24 hour battery bank, one battery charger, and the associated control equipment and interconnecting cable. Divisions B and C each consist of two battery banks (one 24 hour and one 72 hour), two battery chargers, and the associated control equipment and interconnecting cabling. <u>The first battery bank in each of the four divisions, designated as the "24 hour" battery bank, provides power to the loads required for the first 24 hours following an event. The second battery bank in Divisions B and C, designated as the "72 hour" battery bank, is used for those loads requiring power for 72 hours following an event.</u></p>
3.8.01 Pg 43	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Background:</p> <p>Loads which are a one time or limited duration load (engineered safeguards <u>safety</u> features (ESF) actuation cabinets and reactor trip . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.8.01 Pg 43	Revise TS 3.8.1 Bases Background to add "(also referred to as the battery)" after "battery bank." This addresses potential confusion concerning the equivalency of the terms "battery" and "battery bank"	<p>Make the following changes to Background:</p> <p>A battery bank (also referred to as the battery) consists of two battery strings connected in series.</p>
3.8.02 Pg 08	Description of new Required Action A.3 incorrectly provides a completion time of "[72] days." The completion time should be "[72] hours"	Revise the completion time from "days" to "hours"
3.8.02 Pg 09	First paragraph discussion of boron dilution accident incorrectly cites TS 3.9.2 versus TS 3.9.3. Additionally, the citation is stated in a confusing context. The possibility of a misloaded fuel assembly is not "in Technical Specification 3.9.2[3]"; rather the added Required Action is in TS 3.9.3. Editorial clarification is appropriate.	Revise to state "To address the possibility of a misloaded fuel assembly, Technical Specification 3.9.3, Required Action A.1, is revised to suspend positive reactivity additions if nuclear instrumentation is not available."
3.8.02 Pg 12	The fifth item under "Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Change," incorrectly references VEGP LAR DOC 22. This discussion should reference VEGP LAR DOC L22.	Revise reference from "DOC 22" to "DOC L22"

GTST Section Pg #	Comment	Proposed Action
3.8.02 Pg 13	Fourth paragraph discussion of boron dilution accident incorrectly cites TS 3.9.2 versus TS 3.9.3 and an "added" Required Action versus a revised Required Action. Additionally, the citation is stated in a confusing context. The possibility of a misloaded fuel assembly is not "in Technical Specification 3.9.2[3]"; rather the revised Required Action is in TS 3.9.3. Editorial clarification is appropriate.	Revise to state "To address the possibility of a misloaded fuel assembly, Technical Specification 3.9.3, Required Action A.1, is revised to suspend positive reactivity additions if nuclear instrumentation is not available"
3.8.02 Pg 21	Required Action A.3 has "Charger(s)" incorrectly capitalized.	Replace "Charger(s)" with "charger(s)"
3.8.02 Pg 32	Required Action A.3 has "Charger(s)" incorrectly capitalized.	Replace "Charger(s)" with "charger(s)"
3.8.02 Pg 39	Editorial change for clarity.	<p>Make the following change in Actions Bases:</p> <p>. . . sufficient systems to allow continuation of fuel movement, and/or operations . . .</p>

GTST Section Pg #	Comment	Proposed Action
3.8.03 Pg 04 3.8.04 Pg 04	<p>The GTST proposes "clarification of nomenclature used for Class 1E electric power distribution subsystems, consistent with VEGP LAR DOC A112." The specific change proposed replaces "bus[es]" with "electric power distribution system[s]" or "division"</p> <p>However, there are distinctions between these proposed changes and the clarifications involved with LAR DOC A112. Specifically, the LAR DOC A112 changes were related to operability statements in the electrical power distribution system LCO and Actions. In that instance, "bus[es]" presented lack of clarity when the intent was tied to any distribution aspect of the subsystem. A clarification was appropriate and generally brought closer alignment to the presentation in NUREG-1431. For the GTST proposed changes to TS 3.8.3 and TS 3.8.4, the use of "bus[es]" more naturally aligns with specific verifications of bus attributes. These uses of "bus[es]" do not present confusion, and are consistent with the presentation in NUREG-1431.</p> <p>Furthermore, since the AP1000 Owner's Group desires to maintain consistency across the fleet, a presentation difference between the STS NUREG and issued GTS / COLs is not warranted.</p>	Remove the additional clarification of nomenclature changes proposed by the NRC staff

GTST Section Pg #	Comment	Proposed Action
3.8.03 Pg 26	Revise TS 3.8.3 Bases for Required Action A.1 for consistency with TS 3.8.3 Condition A Note and TS 3.8.5 Action A Completion Time.	<p>Make the following changes for A.1 Actions Bases:</p> <p>For this reason a Note has been included in Condition A requiring the entry into the applicable Conditions and Required Actions of LCO 3.8.5, "Distribution Systems - Operating." This ensures that the instrument and control division is reenergized within 12-6 hours.</p>
3.8.04 Pg 06	Fourth paragraph discussion of boron dilution accident incorrectly cites TS 3.9.2 versus TS 3.9.3 and an "added" Required Action versus a revised Required Action. Additionally, the citation is stated in a confusing context. The possibility of a misloaded fuel assembly is not "in Technical Specification 3.9.2[3]"; rather the revised Required Action is in TS 3.9.3. Editorial clarification is appropriate.	Revise to state "To address the possibility of a misloaded fuel assembly, Technical Specification 3.9.3, Required Action A.1, is revised to suspend positive reactivity additions if nuclear instrumentation is not available."
3.8.04 Pg 09	Fourth paragraph discussion of boron dilution accident incorrectly cites TS 3.9.2 versus TS 3.9.3 and an "added" Required Action versus a revised Required Action. Additionally, the citation is stated in a confusing context. The possibility of a misloaded fuel assembly is not "in Technical Specification 3.9.2[3]"; rather the revised Required Action is in TS 3.9.3. Editorial clarification is appropriate.	Revise to state "To address the possibility of a misloaded fuel assembly, Technical Specification 3.9.3, Required Action A.1, is revised to suspend positive reactivity additions if nuclear instrumentation is not available."

GTST Section Pg #	Comment	Proposed Action
3.8.04 Pg 25	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.	<p>Make the following changes for Applicable Safety Analyses:</p> <p>The OPERABILITY of the minimum inverters to each Class 1E AC instrument and control bus during MODES 5 and 6, and during movement of irradiated fuel assemblies, ensures that (Refs. 1 and 2):</p>
3.8.04 Pg 28	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following change in Actions A.1, A.2.1, A.2.2, A.2.3, and A.2.4:</p> <p>Therefore, the allowance for sufficiently conservative actions is made (i.e., suspend movement of irradiated fuel assemblies, any activities that could potentially result in inadvertent draining . . .</p>
3.8.04 Pg 29	Revise SR 3.8.4.1 Bases to delete phrase “the effectiveness of the voltage and frequency instruments.” This makes it consistent with the NUREG-1431 SR 3.8.7.1 Bases and eliminates confusion. Removal of this detail does not impact the information useful for compliance with the TS requirement.	<p>Make the following changes to SR 3.8.4.1 Surveillance Requirements:</p> <p>The 7 day Frequency takes into account the effectiveness of the voltage and frequency instruments, the redundant capability of the inverters, and other indications available in the control room that alert the operator to inverter malfunctions.</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 21	Component naming is revised consistent with naming convention in the AP1000 DCD and/or other TS Bases. "Regulating transformer" is consistently used throughout the DCD; however, "constant voltage transformer" is used only in a couple places in the TS and Bases.	Revise LCO 3.8.3 Note 1 reference to "constant voltage source transformer" to "voltage regulating transformer"
3.8.05 Pg 35	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Background:</p> <p>The onsite Class 1E and DC and UPS electrical power distribution system is divided by division into four independent <u>divisions of</u> AC and DC electrical power distribution subsystems (Divisions A, B, C, and D).</p> <p>...</p> <p>The buses are normally powered from separate inverters which are connected to the respective <u>D</u>ivision Class 1E battery banks. The backup source provided for each <u>D</u>ivision for the Class 1E AC instrument and control buses is a Class 1E regulating transformer providing regulated output</p> <p>...</p> <p>The list of all required distribution buses <u>and/or panels</u> is presented in Table B 3.8.5-1 and shown in Section 8.3.2 (Ref. 1).</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 36	<p>Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.</p>	<p>Make the following changes in Applicable Safety Analyses:</p> <p>The Class 1E AC instrument and control and DC electrical power distribution systems are designed to provide sufficient capacity,</p> <p>...</p> <p>The OPERABILITY of the Class 1E AC instrument and control and DC electrical power distribution systems is consistent . . . at least three of the four Divisions of Class 1E AC instrument and control and DC power distribution systems OPERABLE during accident . . .</p>
3.8.05 Pg 36	<p>Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.</p> <p>The required power distribution subsystems listed in Table B 3.8.5-1 ensure the availability of Class 1E AC instrument and control and DC electrical power . . . The Division A, B, C, and D Class 1E AC instrument and control and DC electrical power distribution subsystems are required to be OPERABLE.</p> <p>Maintaining the Division A, B, C, and D AC instrument and control and DC electrical power distribution subsystems . . . Three of the four Class 1E AC instrument and control and DC power distribution subsystems are capable of providing . . .not prevent safe shutdown of the reactor.</p> <p>OPERABLE Class 1E DC electric power distribution subsystems require . . . OPERABLE Class 1E AC instrument and control electrical power distribution subsystems require the associated buses to be energized . . .</p>	<p>Make the commented changes in LCO Bases.</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 39	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Actions B.1:</p> <p>Inoperability of a PMS division is similar to loss of one DC electrical power distribution subsystem division. In both cases, actuation of the safety functions associated with one of the four subsystems/divisions may no longer be available.</p>
3.8.05 Pg 40	Component naming is revised consistent with naming convention in the AP1000 DCD and/or other TS Bases. "Regulating transformer" is consistently used throughout the DCD; however, "constant voltage transformer" is used only in a couple places in the TS and Bases.	<p>Make the following changes for C.1 Actions:</p> <p>. . . the associated inverter via inverted DC, inverter using internal AC source, or Class 1E constant-voltage regulating transformer.</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 40	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Actions C.1:</p> <p>With two divisions of AC instrument and control <u>divisions</u> inoperable, the remaining OPERABLE</p> <p>...</p> <p>Condition C represents two divisions of AC instrument and control <u>divisions</u> without power; potentially both the DC source</p> <p>...</p> <p>It is, therefore, imperative that the operator's attention focus on stabilizing the unit, minimizing the potential for loss of power to the remaining buses <u>divisions</u> and restoring power to</p> <p>...</p> <p>The 2 hour Completion Time takes into account the importance to safety of restoring the AC instrument and control divisions to OPERABLE status, the redundant capability afforded by the other OPERABLE buses <u>divisions</u>, and the low probability of a DBA occurring during this period.</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 41	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Actions D.1:</p> <p>With two divisions of DC electrical power distribution subsystems divisions inoperable, the remaining DC electrical power distribution subsystems divisions are capable of supporting . . . single failure in the remaining DC electrical power distribution subsystem division could result in the minimum required ESF functions not being supported.</p> <p>. . .</p> <p>The 2 hour Completion Time for <u>one DC electrical power distribution subsystem division</u> buses is consistent with Regulatory Guide 1.93 (Ref. 4).</p>
3.8.05 Pg 42	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Actions F.1:</p> <p>With two inoperable d <u>Divisions</u> with inoperable distribution subsystems that result in a loss of safety function, adequate core cooling, containment OPERABILITY. . .</p>

GTST Section Pg #	Comment	Proposed Action
3.8.05 Pg 43	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in SR 3.8.5.1:</p> <p>This Surveillance verifies that the Class 1E AC <u>instrument and control</u> and DC electrical power distribution subsystems are functioning properly, with the required circuit breakers and switches properly aligned. . . . account the redundant capability of the Class 1E AC <u>instrument and control</u> and DC electrical power distribution subsystems, and other . . .</p>
3.8.05 Pg 44	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Table B 3.8.5-1:</p> <ul style="list-style-type: none"> • DIVISION A* • DIVISION B* • DIVISION C* • DIVISION D* <ul style="list-style-type: none"> • AC Instrumentation and Control <u>BusesPanels</u> <ul style="list-style-type: none"> • * Each Division of the AC and DC electrical power distribution systems is a subsystem.

GTST Section Pg #	Comment	Proposed Action
3.8.06 Pg 06	Fourth paragraph discussion of boron dilution accident incorrectly cites TS 3.9.2 versus TS 3.9.3 and an "added" Required Action versus a revised Required Action. Additionally, the citation is stated in a confusing context. The possibility of a misloaded fuel assembly is not "in Technical Specification 3.9.2[3]"; rather the revised Required Action is in TS 3.9.3. Editorial clarification is appropriate.	Revise to state "To address the possibility of a misloaded fuel assembly, Technical Specification 3.9.3, Required Action A.1, is revised to suspend positive reactivity additions if nuclear instrumentation is not available."
3.8.06 Pg 24	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes for Applicable Safety Analyses:</p> <p>. . . reliability to ensure the availability of necessary power to the <u>engineered safety features (ESF)</u> systems so that the fuel, Reactor Coolant System</p> <p>. . .</p>
3.8.06 Pg 24	Editorial change for clarity – These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes in Background:</p> <p>A description of the Class 1E AC instrument and control bus and Class 1E DC electrical power distribution system is provided in the Bases for Specification 3.8.5, "Distribution Systems - Operating."</p>

GTST Section Pg #	Comment	Proposed Action
3.8.07 Pg 04	<p>The GTST Section IV additional change #1 in part proposes: "GTS 3.8.7 Condition A, is revised ..." and ". A similar change is made to the second condition statement of Condition F..."</p> <p>These changes consist of adding "[]" around values, which is consistent with the changes already addressed by TSTF-500. TSTF-500 changes are commented on to be removed (separate comment). The result is that there should be no bracketed options presented in the AP1000 STS NUREG for TS 3.8.7.</p>	<p>Remove the GTST Section IV additional change #1 proposed for TS 3.8.7 and Bases for Required Actions B.1 and B.2 where brackets are added.</p> <p>Note that the Bases change included with change #1 to add "current" is acceptable; however, the change to make plural "indicates" is not appropriate. The noun "batteries" should have singular verb "indicate"</p>
3.8.07 Pg 21	<p>The Condition C Note should be to the right of the "C" designator, as shown in NUREG-1431, and as revised by TSTF-519.</p>	<p>Revise the Note placement.</p>
3.8.07 Pg 38	<p>These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases. Supplying additional information, deleting statements inconsistent with the TS, or correcting obvious misstatements reduces potential for misunderstanding and misapplication.</p>	<p>Make the following changes for Background:</p> <p>LC0 3.8.7, Battery Parameters, delineates the limits on electrolyte temperature, <u>electrolyte level, float voltage, and float current</u> and specific gravity for the DC power source batteries.</p>

GTST Section Pg #	Comment	Proposed Action
3.8.07 Pg 45	Two paragraphs were combined into one. Paragraph should be split before the sentence, "The Surveillance Frequency for this test is normally 60 months."	Add paragraph break before the sentence, "The Surveillance Frequency for this test is normally 60 months."
3.8.07 Pg 45	Revise SR 3.8.7.6 Bases sixth paragraph from "≥ 10% below of the manufacturer's rating" to "below 90% of the manufacturer's rating" to match wording from IEEE 450, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications."	Make the following changes for SR 3.8.7.6 Surveillance Requirements: ... drops by more than 10% relative to its capacity on the previous performance test or when it is ≥ 10% below <u>below 90% of</u> the manufacturer' s rating.
3.9.01 Pg 13	An Applicability Note is missing from the Technical Specifications. The Note to the Applicability should state: "Applicable to the fuel transfer canal and the refueling cavity only when connected to the RCS." The Bases clearly describes this missing Note and VEGP LAR DOC A114 discusses a change to the Note.	Add the Applicability Note to the Technical Specifications (both markup and clean typed version).
3.9.01 Pg 20	Revise TS 3.9.1 Bases to replace two occurrences of "transfer tube" with "fuel transfer canal" to match the TS. The nomenclature "transfer tube" is not utilized as the requirement by the TS, and the TS requirement for "fuel transfer canal" is not explicitly discussed in the Bases. As such, TS Bases (Background and LCO) nomenclature is clarified to replace two occurrences of "transfer tube" with "fuel transfer canal" to match the TS.	Make the following changes for Background: The limit on the boron concentration of the Reactor Coolant System (RCS), the refueling cavity, and the transfer tube <u>fuel transfer canal</u> during refueling ensures . . .

GTST Section Pg #	Comment	Proposed Action
3.9.01 Pg 20	<p>Editorial change is recommended to include a Reference citation (and add "FSAR" per Generic comment earlier). These non-technical changes provide improved clarity, consistency, and operator usability.</p>	<p>Make the following changes for Background:</p> <p>One of these systems, the Passive Core Cooling System (PXS), is capable of holding the core subcritical under safe shutdown conditions as described in FSAR Section 7.4 (Ref. 4).</p>
3.9.01 Pg 21	<p>Revise TS 3.9.1 Bases LCO discussion for better editorial consistency with the TS LCO. The LCO does not require a minimum boron concentration to be maintained, but requires boron concentration to be within limits.</p> <p>Also, revise TS 3.9.1 Bases to replace "transfer tube" with "fuel transfer canal" to match the TS. The nomenclature "transfer tube" is not utilized as the requirement by the TS, and the TS requirement for "fuel transfer canal" is not explicitly discussed in the Bases. As such, TS Bases (Background and LCO) nomenclature is clarified to replace two occurrences of "transfer tube" with "fuel transfer canal" to match the TS.</p>	<p>Make the following changes to LCO:</p> <p>The LCO requires that a minimum boron concentration be maintained within limit in the RCS, the refueling cavity and the transfer tube fuel transfer canal while in MODE 6.</p>

GTST Section Pg #	Comment	Proposed Action
3.9.01 Pg 21	Revise TS 3.9.1 Bases to replace two occurrences of “refueling canal” with “fuel transfer canal” to match the TS. The nomenclature “refueling canal” is not utilized as the requirement by the TS, and the TS requirement for “fuel transfer canal” is not explicitly discussed in the Bases. As such, TS Bases nomenclature is clarified to replace two occurrences of “refueling canal” with “fuel transfer canal” to match the TS.	<p>Make the following changes to Applicability:</p> <p>The Applicability is modified by a Note. The Note states that the limits on boron concentration are applicable to the refueling fuel transfer canal and the refueling cavity only when those volumes are connected to the RCS. When the refueling fuel transfer canal and the refueling cavity are isolated from the RCS, no potential path for boron dilution exists from those volumes.</p>
3.9.01 Pg 22	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to SR 3.9.1.1 Surveillance Requirements:</p> <p>A minimum Frequency of once every 72 hours is a sufficient interval reasonable amount of time between verifications of to verify the boron concentration.</p>
3.9.01 Pg 23	Editorial change is recommended to include a Reference citation. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Add the following to References:</p> <p>4. FSAR Section 7.4. “Systems Required for Safe Shutdown.”</p>

GTST Section Pg #	Comment	Proposed Action
3.9.02 Pg 22	TSTF-440 should be applied to Required Action A.1 and A.2 Bases, last paragraph, to eliminate the phrase "through a system walkdown"	<p>Make the following changes to SR 3.9.2.1 Surveillance Requirements:</p> <p>This surveillance demonstrates that the valves are closed through a system walkdown.</p>
3.9.03 Pg 22	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Background:</p> <p>The instrument range covers six decades of neutron flux (<u>1 to</u> 1x10+6 cps) with a 5% instrument accuracy.</p>
3.9.03 Pg 24	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to B.2 Actions:</p> <p>The Completion Time of <u>412</u> hours is sufficient to obtain and analyze a reactor coolant sample for boron concentration.</p>
3.9.03 Pg 24	These changes are made for consistency with the TS requirement(s) being discussed in the TS Bases.	<p>Make the following changes to SR 3.9.3.2 Surveillance Requirements:</p> <p>Operating experience has shown these components usually pass the Surveillance when performed during the refueling outage <u>at a 24 month Frequency</u>.</p>

GTST Section Pg #	Comment	Proposed Action
3.9.03 Pg 25	Bases 3.9.3 Reference 2 should be 14.2.7.1 rather than 14.2.6.1. DCD/FSAR Section 14.2.7.1 discusses Initial Fuel Loading.	Change Reference 2 from "14.2.6.1" to "14.2.7.1"
3.9.04 Pg 18	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Background:</p> <p>During refueling, this maintains sufficient water level in containment, refueling cavity, refueling canal, fuel transfer canal, and spent fuel pool to retain iodine fission product</p> <p>. . .</p> <p>Sufficient iodine activity would be retained to limit offsite doses from the accident to within the values reported in FSAR Chapter 15 (Ref. 1).</p>
3.9.04 Pg 18	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Applicable Safety Analyses:</p> <p>. . . parameter in the analysis of a fuel-handling accident in containment, as postulated by Regulatory Guide 1.183 (Ref. 21).</p> <p>The fuel handling accident analysis inside containment is described in Reference 32.</p>

GTST Section Pg #	Comment	Proposed Action
3.9.04 Pg 18	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to Applicability:</p> <p>Refueling Cavity Water Level is applicable when moving irradiated fuel assemblies <u>with</u>in containment.</p>
3.9.04 Pg 19	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to SR 3.9.4.1 Surveillance Requirements:</p> <p>Water at the required level above the top of the reactor vessel flange limits the consequences of damaged fuel rods that are postulated to result from a fuel handling accident inside containment (Ref. 32).</p>
3.9.04 Pg 19	Editorial change is recommended. These non-technical changes provide improved clarity, consistency, and operator usability.	<p>Make the following changes to References:</p> <p>1. FSAR Chapter 15, "Accident Analysis." 24. Regulatory Guide 1.183, "Alternate Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors." 32. FSAR Section 15.7.4, "Fuel Handling Accident."</p>

GTST Section Pg #	Comment	Proposed Action
3.9.07 Pg 04	The DOC A038 discussion on the page says it makes an editorial change to SR 3.9.4.1. The correct reference is to a change to SR 3.9.7.1.	Change "SR 3.9.4.1" to "SR 3.9.7.1"
3.9.07 Pg 11	Reference 1 contains a typo in the ADAMS Accession Number. The reference reads: "AP1000 DCD, Revision 19, Section 16, "Technical Specifications," June 2011 (ML@11171A500)"	Correct the Accession number to ML11171A500.
3.9.07 Pg 18	Rewrite TS 3.9.5 Bases for Background, Applicability, Required Action A.1, and SR 3.9.5.1 for consistency with the TS Applicability. These sections discuss movement of irradiated fuel assemblies in the containment or the auxiliary building. The TS applies to irradiated fuel movement in the reactor pressure vessel and not these other two areas. The Background more generally covers any irradiated fuel handling, while the Applicability discusses the rationale for the TS being applied only to movement within the RPV.	Make the following changes to Background: The movement of irradiated fuel assemblies within containment or in the fuel handling area inside the auxiliary building requires allowing at least 48 hours for radioactive decay time before fuel assembly handling can be initiated.

GTST Section Pg #	Comment	Proposed Action
3.9.07 Pg 18	Rewrite TS 3.9.5 Bases for Background, Applicability, Required Action A.1, and SR 3.9.5.1 for consistency with the TS Applicability. These sections discuss movement of irradiated fuel assemblies in the containment or the auxiliary building. The TS applies to irradiated fuel movement in the reactor pressure vessel and not these other two areas.	<p>Make the following changes to Applicability:</p> <p>Radioactive decay time is applicable when moving irradiated fuel assemblies <u>in the reactor pressure vessel</u>in containment or in the fuel handling area inside the auxiliary building. The LCO minimizes the possibility . . . as a result of a postulated fuel handling accident. <u>If irradiated fuel assemblies are being moved outside of the reactor pressure vessel, then they were previously assured of having been subcritical for more than 48 hours before being moved from the reactor pressure vessel.</u> Requirements for fuel handling accidents in the spent fuel pool . . .</p>
3.9.07 Pg 19	Rewrite TS 3.9.5 Bases for Background, Applicability, Required Action A.1, and SR 3.9.5.1 for consistency with the TS Applicability. These sections discuss movement of irradiated fuel assemblies in the containment or the auxiliary building. The TS applies to irradiated fuel movement in the reactor pressure vessel and not these other two areas.	<p>Make the following changes to A.1 Actions:</p> <p>With a decay time of less than 48 hours, all operations involving movement of irradiated fuel assemblies within containment or in the fuel handling area inside the auxiliary building <u>the reactor pressure vessel</u> shall be suspended immediately to ensure that a fuel handling accident cannot occur <u>without the assume fission product decay time.</u></p>

GTST Section Pg #	Comment	Proposed Action
3.9.07 Pg 19	<p>Editorial change is recommended.</p> <p>Also, rewrite TS 3.9.5 Bases for Background, Applicability, Required Action A.1, and SR 3.9.5.1 for consistency with the TS Applicability. These sections discuss movement of irradiated fuel assemblies in the containment or the auxiliary building. The TS applies to irradiated fuel movement in the reactor pressure vessel and not these other two areas.</p>	<p>Make the following changes to SR 3.9.5.1 Surveillance Requirements:</p> <p>Verification that the reactor has been subcritical for \geq at least 48 hours prior to movement of irradiated fuel in the reactor pressure vessel to the refueling cavity in containment or to the fuel handling area inside the auxiliary building ensures that the design basis for the analysis</p>
5.1 Pg 03 5.2 Pg 03	<p>GTST describes the change to the COL Item regarding the position title “[Plant Manager],” which was completed in the VEGP PTS, Rev. 0, by removing the brackets and changing the title to lower case; this is the same as the change made by TSTF-65-A, Rev. 1.</p> <p>This COL Item should not be removed in the AP1000 STS NUREG with disposition as done in VEGP COL. Note that the V.C. Summer COL TS completed this COL Item slightly different with its own plant-specific title. The intent of the TSTF-65 Reviewer's Note (being added to the AP1000 STS NUREG) imposes a new or revised COL Item, which is not appropriately coordinated with the AP1000 DCD. This change should be evaluated at a future time.</p>	<p>Retain brackets (i.e., COL Item) associated with the [plant manager] title. Remove the Reviewer's Notes added to 5.1.</p>

GTST Section Pg #	Comment	Proposed Action
5.2 Pg 05	<p>GTST proposes to add a Reviewer's Note from WOG STS 5.2.2.a, Rev. 4; however, this Reviewer's Note is not associated with any COL Item or bracketed options. Both VEGP and V.C. Summer COL TS are issued with no "reviewer's note" or change to the content of 5.5.2 as otherwise proposed in the GTST, and is therefore not applicable to VEGP.</p> <p>Consistency with TSTF-511 and WOG STS Rev. 4 is not an appropriate basis for adding this Reviewer's Note.</p> <p>As an aside, this change is not derived from the VEGP LAR or an approved TSTF, but was not identified as a Section IV additional change proposed by the NRC staff.</p>	Remove Reviewer's Note being added to AP1000 STS NUREG 5.5.2.a
5.2 Pg 18	Section 5.2.2 is missing the introductory sentence, "The unit staff organization shall include the following:"	Add the missing lead-in
5.3 Pg 16	"ANS/ANSI 3.1" should be "ANSI/ANS 3.1"	Revise "ANS/ANSI 3.1" to "ANSI/ANS 3.1"

GTST Section Pg #	Comment	Proposed Action
5.4 Pg 05	<p>As stated: This GTST inserts the square brackets around the reference in AP1000 STS 5.4.1.b, Rev. 0 to be consistent with WOG STS 5.4.1.b, Rev. 4. This allows for the possibility of updating this reference in the future.</p> <p>The possibility for future changes does not rely on the existence of brackets. There is no COL Item, and no Reviewer's Note defining the use of the optional bracketed material. As such, this change is inappropriate.</p> <p>Since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove proposed brackets in AP1000 STS NUREG Specification 5.4.1.b.
5.5.01 -5.5.5 Pg 43	Heading "5.4 Steam Generator (SG) Program (continued)" should be" 5.5.4 Steam Generator (SG) Program (continued)"	Change 5.4 to 5.5.4
5.5.01 Pg 07	<p>The GTST proposed a change to GTS 5.5.1.c from the phrase "copy of the changed portion of the ODCM" to include an optional phrase from the WOG STS 5.5.1 "copy of the entire ODCM"</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include this option, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove the proposed brackets and optional phrasing from AP1000 STS NUREG Specification 5.5.1.c.3.

GTST Section Pg #	Comment	Proposed Action
5.5.01 Pg 09	The GTST placement of square brackets around the report specification numbers in AP1000 STS 5.5.1 (to be consistent with Subsection 5.5.1 of WOG STS Rev. 4) is inappropriate. These referenced Specifications are not optionally numbered (i.e., bracketed) in GTST 5.6.	Remove proposed brackets in AP1000 STS NUREG Specification 5.5.1.
5.5.01 Pg 38 5.5.06 Pg 19 5.5.11 Pg 27	Each "continued" Section title is not underlined. The Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, Section 2.6.2.c.2, details the use of underlines for Section Titles. NUREG-1431 provides consistent use of underlines for "continued" Section titles.	Add underlining for "continued" Section titles
5.5.04 Pg 10	<p>The GTST proposes eight (8) changes based on TSTF-449-A to GTS Subsection 5.5.4 in AP1000 STS Subsection 5.5.4. These changes reflect optional (i.e., bracketed) material applicable to SG repair criteria that does not currently exist for AP1000 plants.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include this option, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove the eight proposed changes based on TSTF-449 from AP1000 STS NUREG Specification 5.5.4.

GTST Section Pg #	Comment	Proposed Action
5.5.04 Pg 12	<p>The GTST proposes changes based on TSTF-510. Listed changes "(4)" and "(5)" reflect optional (i.e., bracketed) material applicable to SG repair criteria that does not currently exist for AP1000 plants.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include an NRC accepted licensing basis for SG "repair," and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that includes "or repair" options. At the time of a future submittal for NRC approval of repair criteria, the STS changes would also be appropriate to include at that time.</p>	Remove the "or repair" options based on TSTF-510, Items "(4)" and "(5)" from AP1000 STS NUREG Specification 5.5.4.
5.5.04 Pg 12	<p>The GTST proposes changes based on TSTF-510. Listed change "(6)" reflects acceptable changes from the GTS; however, the "Reviewer's Note" suggests optional content.</p> <p>Since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that suggests alternatives differing from the STS.</p>	Remove the Reviewer's Note from AP1000 STS NUREG Specification 5.5.4.d.2.
5.5.05 Pg 36	GTST proposes that the Specification 5.5.1, references to Specification 5.6.1 and Specification 5.6.2 be modified by square brackets "to be consistent with Subsection 5.5.1 of WOG STS Rev. 4." However, there is no optional numbering of Specifications 5.6.1 and 5.6.2 in the AP1000 GTS or in GTST 5.6. Bracketed options are not applicable to the AP1000 STS.	Remove brackets from Specification 5.5.1 references to "5.6.1" and "5.6.2"

GTST Section Pg #	Comment	Proposed Action
5.5.07 Pg 05	<p>This GTST adds the phrase “or no concurrent loss of offsite power” based on TSTF-273. However, as discussed in the AP1000 Final Safety Evaluation Report, NUREG-1793, Section 8.2.3.2:</p> <p style="padding-left: 40px;">The AP1000 design does not rely on power from the offsite system to accomplish safety functions”</p> <p>As such this change from TSTF-273 is not applicable to the AP1000 design. Since neither issued COL TS for VEGP or V.C. Summer include this option, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove the phrase “or no concurrent loss of offsite power” that is being proposed based on TSTF 273.
5.5.07 Pg 07	VEGP LAR DOC A120 change is not included in either the Description of changes in RCOL Std. section (on Page 7) or in the Rationale for changes in the RCOL Std. section.	Include a description and rationale for VEGP LAR DOC A120.
5.5.08 Pg 05	<p>The GTST proposes to delete the word ‘primary’ when referring to ‘containment’ in AP1000 STS Subsection 5.5.8. However, “primary containment” is utilized in the AP1000 DCD (and COL FSARs); refer to subsection 6.5.3.1 for example.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include this change, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove the change to delete the word ‘primary’ when referring to ‘containment’ in AP1000 STS Subsection 5.5.8.

GTST Section Pg #	Comment	Proposed Action
5.5.08 Pg 06	<p>The GTST proposes to replace the phrase "as modified by approved exceptions" with a bracketed phrase to list the specific exemptions.</p> <p>Since neither issued COL TS for VEGP or V.C. Summer include this change, and since each represented AP1000 Utility is committed to maintaining standardization, there currently is no basis for an AP1000 STS that differs from the GTS and the issued COLs.</p>	Remove the change to replace the phrase "as modified by approved exceptions" with a bracketed phrase to list the specific exemptions.
5.5.08 Pg 15	TS 5.5.8, Paragraph a, last line. Move end quote to before the document date. This typographical error occurs in the GTS and was not corrected in VEGP TSU LAR.	Revise to "Performance-Based Containment Leak-Test Program," dated September 1995
5.5.08 Pg 21	VEGP LAR DOC A122 changed Specification 5.5.8.d.1 Type B and Type C leakage rate acceptance criteria from " \leq " 0.60 to "<" 0.60. However the TS was not changed. While this change is discussed in the GTST, the GTST Section XI and Section XII pages do not reflect the change.	Change " \leq " 0.60 to "<" 0.60 in Sections XI and XII 5.5.8.1.d.1
5.5.11-5.5.14 Pg 10	In the Description of changes in RCOL section, the second discussion of DOC 118, provides two references in parentheses. Specifically Reference 4 is identified as the NRC RAIs and Reference 5 is identified as the Southern Nuclear responses. These two references should be Ref. 6 and Ref. 7, respectively.	Change "(Ref. 4)" to "(Ref. 6)" and "(Ref. 5)" to "(Ref. 7)"
5.5.13 Pg 04	The editorial change "(1)" to GTS Subsection 5.5.13 adds references to RG 1.52 and ASME N510, which are adequately and more specifically presented in each of the individual tests.	Remove the proposed editorial change "(1)" to GTS Subsection 5.5.13

GTST Section Pg #	Comment	Proposed Action
5.5.13 Pg 04	<p>The editorial change "(2)" to GTS Subsection 5.5.13 adds defining "HEPA" for the first occurrence, but fails to delete the definition that occurs in Subsection 5.5.13.a.1.</p> <p>Furthermore, the GTST Section XI and Section XII mark-up and clean-typed NUREG pages did not reflect this change.</p>	Include the editorial change "(2)" in GTST Sections XI and XII NUREG pages. Also include a change to delete the definition of "HEPA" from 5.5.13.a.1.
5.5.13 Pg 04	<p>The editorial change "(3)" to GTS Subsection 5.5.13 adds a definition for "ESF" that creates awkward wording ("the Engineering Safety Feature (ESF) of the VES"). The necessity for defining "ESF" can be eliminated with deleting the modifier "ESF" from each of the 5.5.13.a subsection column headings, leaving the heading as "Ventilation System." This makes for a more logical editorial change.</p>	Remove the proposed addition of a definition for "ESF" and delete the "ESF" modifier from each of the 5.5.13.a subsection column headings.
5.5.14 Pg 11	<p>The GTST Section VII, Technical Analysis (page 14) points to the Section VI description for the analysis. However, the DOC M01 description does not technically justify why the change to 5.5.14 was made; it describes only the change to Section 1.1, Definitions. More appropriate: revise the Section VI description of DOC M01 to state:</p> <p>"The current TS 5.5.14 reference to RTCOT is not appropriate, because the current Section 1.1 definition of RTCOT does not include a requirement for a Channel Calibration. Therefore reference to RTCOT is deleted. This is acceptable because testing requirements for RTCOT that are intended to involve Channel Calibration have been revised to COT, as appropriate, and Setpoint Program requirements for COT are retained."</p>	Revise the Section VI description of DOC M01 as commented.

GTST Section Pg #	Comment	Proposed Action
5.6 Pg 23 & 24	The typed pages for the AP1000 NUREG STS have the "Note" for Specifications 5.6.1 and 5.6.2 incorrectly typed as a "Reviewer's Note"	Change the "Reviewer's Note" label to "Note" for both Specifications 5.6.1 and 5.6.2.
5.6 Pg 30	Last paragraph, fifth line, move the space from after to before the bracket.	Correct the spacing.
5.6 Pg 32	Each "continued" Section title is not underlined. The Writer's Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, Section 2.6.2.c.2, details the use of underlines for Section Titles. NUREG-1431 provides consistent use of underlines for "continued" Section titles.	Add underlining for "continued" Section titles
5.6.03 Pg 25	TS 5.6.3, "CORE OPERATING LIMITS REPORT," Section 5.6.3.a includes a reference to TS 3.2.3. The added parenthetical "(AFD)" needs a space between the word "DIFFERENCE" and added parenthetical "(AFD)." This is a typo in the clean typed version also.	In Section 5.6.3 add a space between the word "DIFFERENCE" and parenthetical "(AFD)"