Advanced Passive 1000 (AP1000)
Generic Technical Specification Traveler (GTST)

Title: Revision of AP1000 GTS Sections 5.6, Reporting Requirements

I. Technical Specifications Task Force (TSTF) Travelers, Approved Since Revision 2 of STS NUREG-1431, and Used to Develop this GTST

TSTF Number and Title:

Section 5.6: Reporting Requirements

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

Subsection 5.6.1: Annual Radiological Environmental Operating Report

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

Subsection 5.6.2: Radioactive Effluent Release Report

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

Subsection 5.6.3: CORE OPERATING LIMITS REPORT (COLR)

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

TSTF-419-A, Rev. 0: Revise PTLR Definition and References in ISTS 5.6.6, RCS PTLR

Subsection 5.6.5: Post Accident Monitoring Report

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

TSTF-447-A, Rev. 1: Elimination of Hydrogen Recombiners and Change to Hydrogen and Oxygen Monitors

Subsection 5.6.6: Steam Generator Tube Inspection Report

TSTF-369-A, Rev. 1: Removal of Monthly Operating Report and Occupational Radiation Exposure Report

TSTF-449-A, Rev. 4: Steam Generator Tube Integrity

TSTF-510, Rev. 2: Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection

STS NUREGs Affected:

TSTF-369-A, Rev. 1: NUREG-1430, -1431, -1432, -1433, -1434
TSTF-419-A, Rev. 0: NUREG-1430, -1431, -1433, -1434
TSTF-447-A, Rev. 1: NUREG-1430, -1431, -1432, -1433, -1434
TSTF-449-A, Rev. 4: NUREG-1430, -1431, -1432
TSTF-510, Rev. 2: NUREG-1430, -1431, -1432

NRC Approval Date:

TSTF-369-A, Rev. 1: 23-Jun-04
TSTF-419-A, Rev. 0: 21-Mar-02
TSTF-447-A, Rev. 1: 09-Apr-03
TSTF-449-A, Rev. 4: 06-May-05
TSTF-510, Rev. 2: 27-Oct-11

TSTF Classification:

TSTF-369-A, Rev. 1: Technical Change
TSTF-419-A, Rev. 0: Technical Change
TSTF-447-A, Rev. 1: Technical Change
TSTF-449-A, Rev. 4: Technical Change
TSTF-510, Rev. 2: Technical Change

II. Reference Combined License (RCOL) Standard Departures (Std. Dep.), RCOL COL Items, and RCOL Plant-Specific Technical Specifications (PTS) Changes Used to Develop this GTST

RCOL Std. Dep. Number and Title:

None

RCOL COL Item Number and Title:

VEGP GTS 5.6.1, Rev. 3 bracketed information (See Reference 3 in Section X of this traveler)
VEGP GTS 5.6.2, Rev. 3 bracketed information (See Reference 3 in Section X of this traveler)

RCOL PTS Change Number and Title:

The Vogtle Electric Generating Plant Units 3 and 4 License Amendment Request (VEGP LAR) proposed the following changes to the initial version of the PTS (referred to as the current TS by the VEGP LAR). These changes include the following Administrative Changes (A) and Less Restrictive Change (L).

VEGP LAR A028:	Administrative editorial/clarification changes
VEGP LAR A060:	Administrative editorial/clarification changes
VEGP LAR A125:	Administrative editorial/clarification changes
VEGP LAR L02:	Deletion of subsections GTS 5.6.1 and 5.6.4

III. Comments on Relations Among TSTFs, RCOL Std. Dep., RCOL COL Items, and RCOL PTS Changes

This section discusses the considered changes that are: (1) applicable to operating reactor designs, but not to the AP1000 design; (2) already incorporated in the GTS; or (3) superseded by another change.

GTS Section 5.6: Reporting Requirements (addressing subsections that are added or deleted)

TSTF-369-A, Rev. 1 deleted subsection 5.6.1, "Occupational Radiation Exposure Report," and subsection 5.6.4, "Monthly Operating Reports," from WOG STS Rev. 2.1. AP1000 GTS Rev. 19 kept these two subsections. This traveler will omit these two subsections from the AP1000 STS and will renumber the other Section 5.6 subsections accordingly.

VEGP LAR DOC L02 makes the same changes, as discussed above for TSTF-369-A, Rev. 1 by deleting subsections GTS 5.6.1 and GTS 5.6.4.

Southern Nuclear Operating Company (SNC) completed COL item 'VEGP GTS 5.6.1' in Rev. 3 of the VEGP Units 3 and 4 COL application (VEGP COLA) by removing the brackets and retaining the bracketed information of GTS subsection 5.6.1 in PTS subsection 5.6.1. However, based on TSTF-369-A and DOC L02, this GTST removes this subsection, making this COL item irrelevant to AP1000 STS Section 5.6.

STS Subsection 5.6.1: Annual Radiological Environmental Operating Report

This subsection is numbered as subsection 5.6.2 in AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsection 5.6.1 is omitted from AP1000 STS Section 5.6. GTS subsection 5.6.2 is designated subsection 5.6.1 in the AP1000 STS Section 5.6 by this GTST, which is consistent with subsection 5.6.1 of WOG STS, Rev. 4.

The COL items in GTS 5.6.2 were resolved by VEGP COLA by removing the brackets and adopting the bracketed information in the middle of the second paragraph of GTS subsection 5.6.2. This change to retain the GTS information, but without the brackets, is adopted by this GTST in AP1000 STS subsection 5.6.1.

STS Subsection 5.6.2: Radioactive Effluent Release Report

This subsection is numbered as subsection 5.6.3 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsection 5.6.1 is omitted from AP1000 STS Section 5.6. GTS subsection 5.6.3 is designated subsection 5.6.2 in AP1000 STS Section 5.6. This change in subsection designation is included by this GTST in AP1000 STS subsection 5.6.2, which is consistent with subsection 5.6.2 of WOG STS, Rev. 4.

For editorial clarification, the "Note" at the beginning of this subsection will be changed from:

> "A single submittal may be made for a multiple unit station" to:
>
> "A single submittal may be made for a multiple unit station. The submittal shall combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit."

The text for the “Note” with this editorial change offers more clarity regarding the content of the required submittal and is consistent with the text of the “Reviewer’s Note” in WOG STS subsection 5.6.2, Rev. 4. This change will be implemented in AP1000 STS subsection 5.6.2.

STS Subsection 5.6.3: CORE OPERATING LIMITS REPORT (COLR)

This subsection is numbered as subsection 5.6.5 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from the AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.3 in AP1000 STS Section 5.6. This change is consistent with WOG STS subsection 5.6.3, Rev. 4.

The AP1000 GTS Rev. 19 included the following information in this subsection:

- At the end of paragraph ‘a’: the individual Technical Specifications that address core operating limits.

- At the end of paragraph ‘b’: the Topical Reports or staff Safety Evaluation Report for a plant specific analytical methods used to determine the core operating limits.

The above information is appropriate as indicated in WOG STS subsection 5.6.3, Rev. 4 and therefore is retained in the AP1000 STS subsection 5.6.3.

STS Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

This subsection is numbered as subsection 5.6.6 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from the AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.4 in AP1000 STS Section 5.6. This change is consistent with WOG STS subsection 5.6.4, Rev. 4.

TSTF-419-A, Rev. 0 revised the bracketed text after paragraph 5.6.6.b of WOG STS, Rev. 2 to include the date for approved documents and to identify the complete citation in the PTLR for each Topical Report by the report number, title, revision, and date. Detailed bracketed information that identifies the cited reports is included in paragraph 5.6.4.b of WOG STS, Rev. 4.

The AP1000 GTS Rev. 19 included the following information in this subsection:

- The individual Technical Specifications that address RCS pressure and temperature limits at the end of paragraph 5.6.6.a.

- The specific Topical Report used to prepare the pressure and temperature limits at the end of paragraph 5.6.6.b.

The above information is appropriate as indicated in WOG STS subsection 5.6.4, Rev. 4 and therefore is retained in AP1000 STS subsection 5.6.4.

The “Reviewer’s Note” included at the end of this subsection in the WOG STS Rev. 4 is not included in the AP1000 GTS Rev. 19. The “Reviewer’s Note” describes the provisions required for determining the methodology for the calculation of the pressure and temperature limits. The listed Topical Report in AP1000 GTS subsection 5.6.6 must have included such provisions. Accordingly, there is no need to include the “Reviewer’s Note” in AP1000 STS subsection 5.6.4.

STS Subsection 5.6.5: Post Accident Monitoring (PAM) Report

This subsection is numbered as subsection 5.6.7 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.5 in AP1000 STS Section 5.6. This change is consistent with WOG STS subsection 5.6.5, Rev. 4.

TSTF-447-A, Rev. 1 made a change to this subsection to reflect the revised ACTION numbering in the PAM Specification. It changed the reference to Condition 'G' to Condition 'F' of WOG STS LCO 3.3.[3]. However, this change is irrelevant to AP1000 STS subsection 5.6.5 because Condition 'F' does not exist in GTS LCO 3.3.3 (STS LCO 3.3.17).

STS Subsection 5.6.6: Steam Generator Tube Inspection Report

This subsection is numbered as subsection 5.6.8 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.6 in AP1000 STS Section 5.6. This change is consistent with subsection 5.6.7 of WOG STS Rev. 4.

TSTF-449-A, Rev. 4 deleted the "Reviewer's Note" from the corresponding subsection 5.6.9 of WOG STS Rev. 3 and provided the requirements for and contents of the SG tube inspection report. The reporting requirements were revised to require a report within 180 days of initial entry into MODE 4 following a steam generator inspection. These changes were implemented in subsection 5.6.7 of WOG STS Rev. 4.

These changes are included in the AP1000 GTS subsection 5.6.8, except that the brackets around item 'g' and the last bracketed item 'h' are omitted from among the report items. These changes will be retained in AP1000 STS subsection 5.6.6.

TSTF-510, Rev. 2 made several changes to paragraphs 'b', 'e', 'f', and 'h' in corresponding subsection 5.6.7 of the WOG STS, Rev. 3.1. However, these changes were not included in subsection 5.6.7 of WOG STS, Rev. 4 or in corresponding subsection 5.6.8 of AP1000 GTS, Rev. 19. These changes are discussed later in section VI "Traveler Information - Description of TSTF changes" of this GTST. These changes are partially implemented by this traveler in AP1000 STS subsection 5.6.6.

NRC staff issued a request for additional information (an RAI), specifically, RAI No. 16-17, (as indicated in Reference 4) regarding a formatting error in VEGP plant-specific TS subsection 5.6.6 that required separating report items d and e, which had been incorrectly merged. Southern Nuclear Operating Company (SNC) concurred with NRC's request and modified items d and e accordingly as presented in their response in Reference 5. Based on the response, RAI 16-17 was closed. This RAI is not an issue with this GTST according to Reference 5 (VEGP TSU LAR Enclosure 2) because items d and e are not merged in the AP1000 GTS Section 5.6. TSTF-510, Rev. 2 made a change to item e of TS 5.6.6 as discussed later in section VI "Traveler Information - Description of TSTF changes" of this GTST. That change is incorporated by this GTST in AP1000 STS subsection 5.6.6.

IV. Additional Changes Proposed as Part of this GTST (modifications proposed by NRC staff and/or clear editorial changes or deviations identified by preparer of GTST)

None

V. Applicability

Affected Generic Technical Specifications and Bases:

Section 5.6, Reporting Requirements

Changes to the Generic Technical Specifications and Bases:

Section 5.6: Reporting Requirements (addressing subsections that are added or deleted)

Remove subsection 5.6.1 “Occupational Radiation Exposure Report” and subsection 5.6.4 “Monthly Operating Reports” from PTS Section 5.6. Other subsections are renumbered accordingly. (TSTF-369-A and DOC L02)

STS Subsection 5.6.1: Annual Radiological Environmental Operating Report

Remove the brackets around the text in the middle of the second paragraph of GTS subsection 5.6.2. (COL Item GTS 5.6.2, VEGP COLA, Rev. 3)

STS Subsection 5.6.2: Radioactive Effluent Release Report

Modify the “Reviewer’s Note” at the beginning of this subsection. New text is added for clarification. (WOG STS 5.6.2, Rev. 4)

STS Subsection 5.6.3: CORE OPERATING LIMITS REPORT (COLR)

Revise the referenced titles and numbers in PTS 5.6.3.a and PTS 5.6.3.b. (DOC A125)

STS Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

Delete the word “System” from the title listing for LCO 3.3.14 in PTS 5.6.4.a. (DOC A060)

STS Subsection 5.6.5: Post Accident Monitoring (PAM) Report

Revise the numbering of LCO 3.3.3 to LCO 3.3.17. (DOC A028)

STS Subsection 5.6.6: Steam Generator Tube Inspection Report

Remove the word ‘active’ from paragraphs 5.6.6.b and 5.6.6.e. (TSTF-510)

Revise paragraph ‘f’ to include reporting the effective plugging percentage. (TSTF-510)

Delete paragraph ‘h’ at the end of this subsection. (TSTF-510)

VI. Traveler Information

Description of TSTF changes:

Section 5.6: Reporting Requirements (addressing sections that are added or deleted)

Based on TSTF-369-A, Rev. 1, GTS subsection 5.6.1 “Occupational Radiation Exposure Report” and GTS subsection 5.6.4 “Monthly Operating Reports” are omitted by this GTST from AP1000 STS Section 5.6. The other subsections are renumbered accordingly. These changes are consistent with Section 5.6 of WOG STS Rev. 4.

STS Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

This subsection is numbered as subsection 5.6.6 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from the AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.4 in AP1000 STS Section 5.6. This change is consistent with WOG STS subsection 5.6.4, Rev. 4.

TSTF-419-A, Rev. 0 revised the bracketed text after paragraph 5.6.6.b of WOG STS, Rev. 2 to include the date for approved documents and to identify the complete citation in the PTLR for each Topical Report by the report number, title, revision, and date. Detailed bracketed information that identifies the cited reports is included in paragraph 5.6.4.b of WOG STS, Rev. 4.

The AP1000 GTS Rev. 19 does not include the bracketed text in paragraph 5.6.4.b of WOG STS, Rev. 4. Instead, it includes the specific Topical Report (un-bracketed) used to prepare the pressure and temperature limits. This information is kept by this GTST in AP1000 subsection STS 5.6.4.

STS Subsection 5.6.5: Post Accident Monitoring Report

This subsection is numbered as subsection 5.6.7 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.5 in AP1000 STS Section 5.6. This change is consistent with WOG STS subsection 5.6.5, Rev. 4.

TSTF-447-A, Rev. 1 made a change to this subsection to reflect the revised ACTION numbering in the PAM Specification. It changed the reference to Condition ‘G’ to Condition ‘F’ of WOG STS LCO 3.3.[3]. However, this change is irrelevant to AP1000 STS subsection 5.6.5 because Condition ‘F’ does not exist in GTS LCO 3.3.3 (STS LCO 3.3.17).

STS Subsection 5.6.6: Steam Generator (SG) Tube Inspection Report

This subsection is numbered as subsection 5.6.8 in the AP1000 GTS Rev. 19. However, as discussed before, according to TSTF-369-A, GTS subsections 5.6.1 and 5.6.4 are omitted from AP1000 STS Section 5.6. Accordingly, this subsection is designated as subsection 5.6.6 in AP1000 STS Section 5.6. This change is consistent with subsection 5.6.7 of WOG STS Rev. 4.

TSTF-449-A, Rev. 4 deleted the “Reviewer’s Note” from the corresponding subsection 5.6.9 of WOG STS Rev. 3 and provided the requirements for and contents of the SG tube inspection report. The reporting requirements were revised to require a report within 180 days of initial

entry into MODE 4 following a steam generator inspection. These changes were implemented in subsection 5.6.7 of WOG STS Rev. 4.

These changes are included in the AP1000 GTS subsection 5.6.8, except that the brackets around item ‘g’ and the last bracketed item ‘h’ are omitted from among the report items. These changes will be retained in AP1000 STS subsection 5.6.6.

TSTF-510, Rev. 2 made the following changes to paragraphs ‘b’, ‘e’, ‘f’, and ‘h’ in the corresponding subsection WOG STS 5.6.7, Rev. 3.1.

* The word ‘active’ is removed from paragraphs 5.6.7.b and 5.6.7.e. According to TSTF-510, Rev. 2, this term is not defined in the specifications.

* Paragraph ‘f’ is revised to require reporting the effective plugging percentage. Accordingly, the text of this paragraph is changed from:

  “Total number and percentage of tubes plugged to date” to:

  “The number and percentage of tubes plugged to date, and the effective plugging percentage in each steam generator.”

* GTS 5.6.6.h, which required reporting the effective plugging percentage, is deleted because revised paragraph ‘f’ includes this requirement.

* This TSTF proposed a bracketed (optional) paragraph which states “[h. Repair method utilized and the number of tubes repaired by each repair method.]”

  This provision is not included in AP1000 STS subsection 5.6.6 because such optional repair methods do not exist for AP1000 plants at this time. APOG commented (#292) that at the time of a future submittal for NRC approval of repair criteria, the appropriate STS changes would be included.

These changes are not included in WOG STS 5.6.7, Rev. 4 or in the corresponding subsection AP1000 GTS 5.6.8, Rev. 19. Based on this TSTF, applicable changes, as noted above, will be implemented by this GTST in AP1000 STS subsection 5.6.6.

Rationale for TSTF changes:

Section 5.6: Reporting Requirements

TSTF-369-A deletes subsection 5.6.1, “Occupational Radiation Exposure Report (ORER),” from WOG STS Rev. 2.1. According to this TSTF, “10 CFR 20 provides the personnel radiation exposure reporting requirements for nuclear power plants and other licensees. 10 CFR 20.2206(c) specifically requires that each licensee file a report of radiation exposures and radioactive material intake for monitored personnel no later than April 30 of each year, covering the previous year. NRC Form 5 or electronic media including the equivalent of NRC Form 5 is used for this purpose… Based on this, it is appropriate that Licensees should not be required to continue to submit the ORER data to NRC. The proposed reduction in reporting requirements provides an administrative burden reduction and associated cost savings without creating an adverse impact on plant or radiation protection safety.”

TSTF-369-A also deletes subsection 5.6.4, “Monthly Operating Reports (MOR),” from WOG STS Rev. 2.1. According to this TSTF, “At present, all Licensees provide a letter report

submittal to NRC each month which includes the MOR data. As noted previously, the majority of plants use the GL 97-02 recommended dataset. To take advantage of efficiencies afforded by electronic reporting and use of standardized reporting templates, the industry has been involved in the establishment of a shared database, which compiles the MOR data as an electronic GL 97-02 dataset…" Furthermore, TSTF-369-A, Rev. 1 indicates that "Electronic reporting of operating data provides NRC with the same MOR dataset prescribed by GL 97-02, yet relieves Licensees of the administrative burdens of preparing monthly letter-based report submittals. Efficiencies should also be realized by NRC in that use of a standard database for submittal of operating statistics will facilitate NRC's ability to compile and permute the data. Hence, this proposed alternative reporting process would provide administrative burden reduction for Licensees, without an adverse impact on reactor safety or plant operation."

Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

TSTF-419-A revised the bracketed text after WOG STS 5.6.6.b, Rev. 2 to include the date for approved documents and to identify the complete citation in the PTLR for each Topical Report by the report number, title, revision, and date. According to this TSTF, "This method of referencing Topical Reports would allow the use of current Topical Reports to support limits in the PTLR without having to submit an amendment to the operating license. Implementation of revisions to Topical Reports would still be reviewed in accordance with 10 CFR 50.59 and where required receive NRC review and approval."

Subsection 5.6.5: Post Accident Monitoring Report

TSTF-447-A made a change to this subsection to reflect the revised ACTION numbering in the PAM Specification. It changed the Condition 'G' to Condition 'F' of LCO 3.3.[3]. According to this TSTF, "Hydrogen monitors are eliminated from the Post Accident Monitoring (PAM) Instrumentation specification. The hydrogen monitors are relocated to the plant-specific controls for PAM instruments which are not in the Technical Specifications. This elimination results in several changes to the PAM Specification."

However, this change of Condition 'G' to Condition 'F' of LCO 3.3.[3] is irrelevant to the AP1000 as Condition 'F' does not exist in the AP1000 GTS.

Subsection 5.6.6: Steam Generator Tube Inspection Report

TSTF-449-A deletes the "Reviewer's Note" from the corresponding subsection 5.6.9 of the WOG STS Rev. 3 and provides the requirements for and contents of the SG tube inspection report. According to this TSTF, "the proposed changes are necessary in order to implement the guidance for the industry initiative on NEI 97-06, "Steam Generator Program Guidelines" … "The proposed reporting requirements are more useful in identifying the degradation mechanisms and determining their effects. In the unlikely event that a performance criterion is not met, NEI 97-06 directs the licensee to submit additional information on the root cause of the condition and the basis for the next operating cycle."

Based on this TSTF, the proposed changes were implemented in subsection 5.6.7 of WOG STS Rev. 4 and these changes are partially adopted by this GTST in AP1000 STS subsection 5.6.6.

TSTF-510, Rev. 2 removed the term 'active' from paragraphs 5.6.7.b and 5.6.7.e of WOG STS Rev. 3.1. According to this TSTF, this term is not defined in the specifications. Also TSTF-510, Rev. 2 revised paragraph 'f' to include the requirement of reporting the effective plugging percentage.

Furthermore, this TSTF deleted paragraph 'h' which required reporting the effective plugging percentage because the revised paragraph 'f' includes this requirement.

These changes were not included in subsection 5.6.7 of WOG STS Rev. 4 or in the corresponding GTS subsection 5.6.8. Applicable TSTF-510 changes are implemented by this GTST in AP1000 STS subsection 5.6.6.

Description of changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes:

COL Items:

VEGP COLA, Rev. 3 removed the brackets and adopted the bracketed information in the COL items in GTS subsection 5.6.1. However, as this subsection is removed according to TSTF-369-A, Rev. 1, these two COL items become irrelevant to the AP1000 STS.

VEGP COLA, Rev. 3 removed the brackets and adopted the bracketed information of the COL item in the last paragraph of GTS subsection 5.6.2. These changes are adopted by this GTST in AP1000 STS subsection 5.6.1.

VEGP LAR 12-02 Administrative Changes (A) incorporated in AP1000 STS Section 5.6:

DOC A028 renumbered "LCO 3.3.3" to "LCO 3.3.17" in PTS 5.6.7 "Post Accident Monitoring (PAM) Instrumentation." (AP1000 STS 5.6.5)

DOC A060 deleted the word "System" from the title listing for Specification 3.3.14 in PTS 5.6.6.a. (AP1000 STS 5.6.4.a)

DOC A125 revised the referenced titles and numbers in PTS 5.6.5. (AP1000 STS 5.6.3)

According to DOC A125, the following editorial changes were made to PTS 5.6.5.a (AP1000 STS 5.6.3.a):

- Change "3.1.3, "Moderator Temperature Coefficient" to "3.1.3, "Moderator Temperature Coefficient (MTC)"
- Change "3.2.1, "Heat Flux Hot Channel Factor" to "3.2.1, "Heat Flux Hot Channel Factor ($F_Q(Z)$) (F_Q Methodology)"
- Change "3.2.2, "Nuclear Enthalpy Rise Hot Channel Factor" to "3.2.2, "Nuclear Enthalpy Rise Hot Channel Factor ($F^N_{\Delta H}$)"
- Change "3.2.3, "AXIAL FLUX DIFFERENCE" to "3.2.3, "AXIAL FLUX DIFFERENCE (AFD) (Relaxed Axial Offset Control (RAOC) Methodology)"
- Change "3.2.5, "OPDMS monitored Power Distribution Parameters" to "On-line Power Distribution Monitoring System (OPDMS) Monitored Parameters"
- Change "3.4.1, "RCS Pressure, Temperature, and DNB Flow Limits" to "3.4.1, "RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits"

Also according to DOC A125, the following editorial changes were made to PTS 5.6.5.b (AP1000 STS 5.6.3.b):

- Change in document 1 "(Methodology for Specifications 3.1.4 - Moderator Temperature Coefficient, 3.1.6 - Shutdown Bank Insertion Limits, 3.1.7)" to "(Methodology for Specifications 3.1.3 - Moderator Temperature Coefficient, 3.1.5 - Shutdown Bank Insertion Limits, 3.1.6.)"

- Change in document 5 “(Methodology for Specification 3.2.5 - OPDMS - Monitored Power Distribution Parameters.)” to “(Methodology for Specification 3.2.5 - OPDMS - Monitored Parameters.)”
- Change “3.3.1 - Reactor Trip System (RTD) Instrumentation” to “3.3.1 - Reactor Trip System (RTS) Instrumentation”

VEGP LAR 12-02 Less Restrictive Change (L) incorporated in AP1000 STS Section 5.6:

DOC L02 removed subsection 5.6.1 “Occupational Radiation Exposure Report” and subsection 5.6.4 “Monthly Operating Reports” from the PTS Section 5.6, and renumbered the other subsections accordingly. These changes conform to the changes made by TSTF-369-A, Rev. 1.

The above changes are implemented by this GTST in the AP1000 STS Section 5.6.

Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes:

COL Items:

VEGP COLA, Rev. 3 removed the brackets and adopted the bracketed information of the COL item in the last paragraph of subsection 5.6.2 of the AP1000 GTS. The VEGP COLA stated that this GTS bracketed information is applicable to the AP1000 design. Therefore, this change is adopted by this GTST in AP1000 STS subsection 5.6.1.

VEGP LAR 12-02 Administrative Changes (A) incorporated in AP1000 STS Section 5.6:

DOC A028 renumbered “LCO 3.3.3” in PTS subsection 5.6.7 to “LCO 3.3.17” in AP1000 STS subsection 5.6.5. According to DOC A028, “the reformatting of current TS 3.3.1 and current TS 3.3.2 of AP1000 GTS Rev. 19, results in renumbering subsequent TS” … “The reformatting addresses inconsistencies in formatting and approach between current TS 3.3.1 and current TS 3.3.2. Simplification and clarification are proposed for each. In breaking down each current Specification into specific subsets of the Protection and Safety Monitoring System (PMS) function, improved human factored operator usability results.” Accordingly, “these changes are designated as administrative changes and are acceptable because they do not result in technical changes to the TS.”

DOC A060 deleted the word “System” from the title listing for LCO 3.3.14 in PTS 5.6.6.a. According to DOC A060, “Reference to a Low Temperature Overpressure Protection (LTOP) System is misleading. There is no ‘system’ for overpressure protection; instead, there are methods of overpressure protection, or conditions that must be met to prevent overpressurization, as provided in the TS 3.4.14 LCO. This change is designated as an administrative change and is acceptable because it does not result in technical changes to the TS.”

DOC A125 revised the referenced titles and numbers in PTS subsection 5.6.5. According to DOC A125, “These changes (revised numbering and correcting titles) are made to provide clarification and consistency with the remainder of the TS. These changes are designated as administrative changes and are acceptable because they do not result in technical changes to the TS.”

VEGP LAR 12-02 Less Restrictive Change (L) incorporated in AP1000 STS Section 5.6:

DOC L02 deleted PTS subsections 5.6.1 and 5.6.4 from PTS Section 5.6 and renumbered the other subsections. The changes revised no technical or administrative requirements. The

changes are consistent with NRC approved TSTF-369-A, Rev. 1. Furthermore, according to DOC L02, “This change is consistent with the March 8, 2005, Amendment No. 135 to Facility Operating License NPF-68 and Amendment No. 114 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2.”

Description of additional changes proposed by NRC staff/preparer of GTST:

None

Rationale for additional changes proposed by NRC staff/preparer of GTST:

None

VII. GTST Safety Evaluation

Technical Analysis:

Section 5.6: Reporting Requirements

Based on TSTF-369-A, Rev. 1, subsection 5.6.1"Occupational Radiation Exposure Report" of the AP1000 GTS Rev. 19 (WOG STS 5.6.1, Rev. 2.1)," is deleted. According to this TSTF, "10 CFR 20 provides the personnel radiation exposure reporting requirements for nuclear power plants and other licensees. 10 CFR 20.2206(c) specifically requires that each licensee file a report of radiation exposures and radioactive material intake for monitored personnel no later than April 30 of each year, covering the previous year. NRC Form 5 or electronic media including the equivalent of NRC Form 5 is used for this purpose… Based on this, it is appropriate that Licensees should not be required to continue to submit the ORER data to NRC. The proposed reduction in reporting requirements provides an administrative burden reduction and associated cost savings without creating an adverse impact on plant or radiation protection safety."

Also based on TSTF-369-A, Rev. 1, subsection 5.6.4 "Monthly Operating Reports" of the AP1000 GTS Rev. 19 (WOG STS 5.6.4, Rev. 2.1)," is deleted. According to this TSTF, "At present, all Licensees provide a letter report submittal to NRC each month which includes the MOR data. As noted previously, the majority of plants use the GL 97-02 recommended dataset. To take advantage of efficiencies afforded by electronic reporting and use of standardized reporting templates, the industry has been involved in the establishment of a shared database, which compiles the MOR data as an electronic GL 97-02 dataset…" Furthermore, TSTF-369-A, Rev. 1 indicates that "Electronic reporting of operating data provides NRC with the same MOR dataset prescribed by GL 97-02, yet relieves Licensees of the administrative burdens of preparing monthly letter-based report submittals. Efficiencies should also be realized by NRC in that use of a standard database for submittal of operating statistics will facilitate NRC's ability to compile and permute the data. Hence, this proposed alternative reporting process would provide administrative burden reduction for Licensees, without an adverse impact on reactor safety or plant operation."

Accordingly, the removal of subsections 5.6.1 and 5.6.4 from the AP1000 GTS is acceptable as this will have no adverse impact on plant or radiation protection safety, reactor safety or plant operation.

Subsection 5.6.4: Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

TSTF-419-A, Rev. 0 revised the bracketed text after the corresponding subsection WOG STS 5.6.6.b, Rev. 2 to include the date for approved documents and to identify the complete citation in the PTLR for each Topical Report by the report number, title, revision, and date. According to this TSTF, "This method of referencing Topical Reports would allow the use of current Topical Reports to support limits in the PTLR without having to submit an amendment to the operating license. Implementation of revisions to Topical Reports would still be reviewed in accordance with 10 CFR 50.59 and where required receive NRC review and approval."

These changes improve clarity of AP1000 specifications and are acceptable.

Subsection 5.6.6: Steam Generator Tube Inspection Report

TSTF-449-A, Rev. 4 deleted the “Reviewer’s Note” from the corresponding subsection 5.6.9 of the WOG STS Rev. 3 and provided the requirements for and contents of the SG tube inspection report. According to this TSTF, “The proposed reporting requirements are an improvement as compared to those required by the current technical specifications. The proposed reporting requirements are more useful in identifying the degradation mechanisms and determining their effects. In the unlikely event that a performance criterion is not met, NEI 97-06 directs the licensee to submit additional information on the root cause of the condition and the basis for the next operating cycle…. This provision expands the report to provide more substantive information and will be sent earlier (180 days versus 12 months)”. The proposed reporting requirements for SG tube inspection provide more useful and substantive information for the AP1000 specifications and are acceptable.

TSTF-510, Rev. 2 removed the word ‘active’ from paragraphs 5.6.7.b and 5.6.7.e of WOG STS Rev. 3.1 because this term is not defined in the specifications. TSTF-510, Rev. 2 also revised paragraph ‘f’ to require reporting the effective plugging percentage. Paragraph ‘h,’ which required reporting the effective plugging percentage, is deleted because revised paragraph ‘f’ includes this requirement. These changes for the SG tube inspection report improve the clarity of specifications and are acceptable.

Technical discussions for the changes proposed by VEGP LAR DOCs A028, A060, A125, and L02 are covered in the previous section VI of this traveler under “Rationale for changes in RCOL Std. Dep., RCOL COL Item(s), and RCOL PTS Changes.”

References to Previous NRC Safety Evaluation Reports (SERs):

None

VIII. Review Information

Evaluator Comments:

Based on TSTF-369-A, Rev. 1, GTS subsections 5.6.1 and 5.6.4 are omitted from AP1000 STS Section 5.6. For completeness, the current planning for the AP1000 STS Section 5.6 numbering scheme is as follows:

GTS subsection 5.6.1, Occupational Radiation Exposure Report, is omitted from AP1000 STS Section 5.6.

GTS subsection 5.6.2, Annual Radiological Environmental Operating Reports, becomes AP1000 STS subsection 5.6.1.

GTS subsection 5.6.3, Radiation Effluent Release Report, becomes AP1000 STS subsection 5.6.2.

GTS subsection 5.6.4, Monthly Operating Reports, is omitted from AP1000 STS Section 5.6.

GTS subsection 5.6.5, CORE OPERATING LIMITS REPORT (COLR), becomes AP1000 STS subsection 5.6.3.

GTS subsection 5.6.6, Reactor Coolant System PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR), becomes AP1000 STS subsection 5.6.4.

GTS subsection 5.6.7, Post Accident Monitoring Report, becomes AP1000 STS subsection 5.6.5.

GTS subsection 5.6.8, Steam Generator Tube Inspection Report, becomes AP1000 STS subsection 5.6.6 (equivalent to subsection 5.6.7 of WOG STS, Rev. 4).

Note that subsection 5.6.6 of the WOG STS Rev. 4, Tendon Surveillance Report, is not included in the AP1000 GTS Rev. 19 because it is not applicable to the AP1000 containment design.

E. Danial Doss
Argonne National Laboratory
630-252-5967
doss@anl.gov

Review Information:

Availability for public review and comment on Revision 0 of this traveler approved by NRC staff on 5/6/2014.

APOG Comments (Ref. 7) and Resolutions:

1. (Internal #530) 5.6: APOG commented that the typed pages for the AP1000 NUREG STS have the label “Note” for Specifications 5.6.1 and 5.6.2 incorrectly typed as “Reviewer's Note.” Staff corrected the error by replacing “Reviewer’s Note” with “Note.”

2 (Internal #531) 5.6.1: Corrected the format spacing in the second paragraph of STS subsection 5.6.1.

3. (Internal #532) 5.6: APOG commented that each “continued” Section title should be underlined. APOG referred to the Writer’s Guide for Plant-Specific Improved Technical Specifications, TSTF-GG-05-01, Revision 1, Section 2.6.2.c.2, which details the use of underlines for Chapter 5 Specification Subsection Titles. NUREG-1431 provides consistent use of underlines for “continued” Section titles. This comment is resolved by underlining the missed “continued” Section titles.

4. (Internal #533) 5.6.3: APOG requested the addition of a space between the word “DIFFERENCE” and parenthetical “(AFD)” in 3.6.3.a.3.2.3. This error was inadvertent and is corrected.

NRC Final Approval Date: 6/19/2015

NRC Contact:

C. Craig Harbuck
U.S. Nuclear Regulatory Commission
301-415-3140
Craig.Harbuck@nrc.gov

IX. Evaluator Comments for Consideration in Finalizing Technical Specifications and Bases

None

X. References Used in GTST

1. AP1000 DCD, Revision 19, Section 16, “Technical Specifications,” June 2011 (ML11171A500).

2. Vogtle Electric Generating Plant (VEGP) Units 3 and 4 - Final Safety Evaluation Report (ML110450302, 08/10/2011)

3. Southern Nuclear Operating Company, Vogtle Electric Generating Plant, Unit 3 and 4, Technical Specifications Upgrade License Amendment Request, February 24, 2011 (ML12065A057).

4. RAI Letter No. 01 Related to License Amendment Request (LAR) 12-002 for the Vogtle Electric Generating Plant Units 3 and 4 Combined Licenses, September 07, 2012 (ML12251A355).

5. Southern Nuclear Operating Company, Vogtle Electric Generating Plant, Units 3 and 4, Response to Request for Additional Information Letter No. 01 Related to License Amendment Request LAR-12-002, ND-12-2015, October 04, 2012 (ML12286A363 and ML12286A360)

6. NRC Safety Evaluation (SE) for Amendment No. 13 to Combined License (COL) No. NPF-91 for Vogtle Electric Generating Plant (VEGP) Unit 3, and Amendment No. 13 to COL No. NPF-92 for VEGP Unit 4, September 9, 2013 (ADAMS Package Accession No. ML13238A337), which contains:

ML13238A355	Cover Letter - Issuance of License Amendment No. 13 for Vogtle Units 3 and 4 (LAR 12-002).
ML13238A359	Enclosure 1 - Amendment No. 13 to COL No. NPF-91
ML13239A256	Enclosure 2 - Amendment No. 13 to COL No. NPF-92
ML13239A284	Enclosure 3 - Revised plant-specific TS pages (Attachment to Amendment No. 13)
ML13239A287	Enclosure 4 - Safety Evaluation (SE), and Attachment 1 - Acronyms
ML13239A288	SE Attachment 2 - Table A - Administrative Changes
ML13239A319	SE Attachment 3 - Table M - More Restrictive Changes
ML13239A333	SE Attachment 4 - Table R - Relocated Specifications
ML13239A331	SE Attachment 5 - Table D - Detail Removed Changes
ML13239A316	SE Attachment 6 - Table L - Less Restrictive Changes

   The following documents were subsequently issued to correct an administrative error in Enclosure 3:

ML13277A616	Letter - Correction To The Attachment (Replacement Pages) - Vogtle Electric Generating Plant Units 3 and 4- Issuance of Amendment Re: Technical Specifications Upgrade (LAR 12-002) (TAC No. RP9402)
ML13277A637	Enclosure 3 - Revised plant-specific TS pages (Attachment to Amendment No. 13) (corrected)

7. APOG-2014-008, APOG (AP1000 Utilities) Comments on AP1000 Standardized Technical Specifications (STS) Generic Technical Specification Travelers (GTSTs), Docket ID NRC-2014-0147, September 22, 2014 (ML14265A493).

XI. MARKUP of the Applicable GTS Subsection for Preparation of the STS NUREG

The entire section of the Specifications and the Bases associated with this GTST is presented next.

Changes to the Specifications and Bases are denoted as follows: Deleted portions are marked in strikethrough red font, and inserted portions in bold blue font.

5.0 ADMINISTRATIVE CONTROLS

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.6.1 Annual Radiological Environmental Operating Report

----------NOTE----------
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements ~~[~~in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979~~]~~. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.2 Radioactive Effluent Release Report

----------NOTE----------
A single submittal may be made for a multiple unit station. **The submittal shall combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.**

The Radioactive Effluent Release Report covering the operation of the unit in the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit.

5.6 Reporting Requirements

5.6.2 Radioactive Effluent Release Report (continued)

The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.6.3 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

2.1.1, "Reactor Core SLs"
3.1.1, "SHUTDOWN MARGIN (SDM)"
3.1.3, "Moderator Temperature Coefficient **(MTC)**"
3.1.5, "Shutdown Bank Insertion Limits"
3.1.6, "Control Bank Insertion Limits"
3.2.1, "Heat Flux Hot Channel Factor **($F_Q(Z)$) (F_Q Methodology)**"
3.2.2, "Nuclear Enthalpy Rise Hot Channel Factor **($F^N_{\Delta H}$)**"
3.2.3, "AXIAL FLUX DIFFERENCE **(AFD) (Relaxed Axial Offset Control (RAOC) Methodology)**"
3.2.5, "~~OPDMS-monitored Power Distribution~~**On-line Power Distribution Monitoring System (OPDMS)-Monitored** Parameters"
3.3.1, "Reactor Trip System (RTS) Instrumentation"
3.4.1, "RCS Pressure, Temperature, and ~~DNB~~ **Flow Departure from Nucleate Boiling (DNB)** Limits"
3.9.1, "Boron Concentration"

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985 (Westinghouse Proprietary) and WCAP-9273-NP-A (Non-Proprietary).

(Methodology for Specifications 3.1.~~4~~**3** - Moderator Temperature Coefficient, 3.1.~~6~~**5** - Shutdown Bank Insertion Limits, 3.1.~~7~~**6** - Control Bank Insertion Limits, 3.2.1 - Heat Flux Hot Channel Factor, 3.2.2 - Nuclear Enthalpy Rise Hot Channel Factor, 3.2.3 - AXIAL FLUX DIFFERENCE, and 3.9.1 - Boron Concentration.)

5.6 Reporting Requirements

5.6.3 CORE OPERATING LIMITS REPORT (COLR) (continued)

2a. WCAP-8385, “Power Distribution Control and Load Following Procedures - Topical Report,” September 1974 (Westinghouse Proprietary) and WCAP-8403 (Non-Proprietary).

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

2b. T. M. Anderson to K. Kniel (Chief of Core Performance Branch, NRC) January 31, 1980 - Attachment: Operation and Safety Analysis Aspects of an Improved Load Follow Package.

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

2c. NUREG-0800, Standard Review Plan, U.S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981. Branch Technical Position CPB 4.3-1, Westinghouse Constant Axial Offset Control (CAOC), Rev. 2, July 1981.

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

3. WCAP-10216-P-A, Revision 1A, “Relaxation of Constant Axial Offset Control FQ Surveillance Technical Specification,” February 1994 (Westinghouse Proprietary) and WCAP-10217-A (Non-Proprietary).

(Methodology for Specifications 3.2.3 - AXIAL FLUX DIFFERENCE (Relaxed Axial Offset Control) and 3.2.1 - Heat Flux Hot Channel Factor (W(Z) surveillance requirements for FQ Methodology).)

4. WCAP-12945-P-A, Volumes 1-5, “Westinghouse Code Qualification Document for Best Estimate Loss of Coolant Accident Analysis,” Revision 2, March 1998 (Westinghouse Proprietary) and WCAP-14747 (Non-Proprietary).

(Methodology for Specification 3.2.1 - Heat Flux Hot Channel Factor.)

5. WCAP-12472-P-A, “BEACON Core Monitoring and Operations Support System,” August 1994, Addendum 1, May 1996 (Westinghouse Proprietary), and Addendum 2, March 2001 (Westinghouse Proprietary) and WCAP-12473-A (Non-Proprietary).

5.6 Reporting Requirements

5.6.3 CORE OPERATING LIMITS REPORT (COLR) (continued)

(Methodology for Specification 3.2.5 - OPDMS - Monitored~~Power Distribution~~ Parameters.)

6. APP-GW-GLR-137, Revision 1, "Bases of Digital Overpower and Overtemperature Delta-T (OPΔT/OTΔT) Reactor Trips," Westinghouse Electric Company LLC.

(Methodology for Specification 2.1.1 - Reactor Core Safety Limits, and 3.3.1 - Reactor Trip System (RT~~D~~**S**) Instrumentation.)

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Passive Core Cooling Systems limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.4 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

a. RCS pressure and temperature limits for heat up, cooldown, low temperature operation, criticality, and hydrostatic testing as well as heatup and cooldown rates shall be established and documented in the PTLR for the following:

3.4.3, "RCS Pressure and Temperature (P/T) Limits"
3.4.14, "Low Temperature Overpressure Protection (LTOP)~~ System~~"

b. The analytical methods used to determine the RCS pressure and temperature limits shall be those previously reviewed and approved by the NRC, specifically those described in the following document:

WCAP-14040-A, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves." (Limits for LCO 3.4.3 and LCO 3.4.14).

c. The PTLR shall be provided to the NRC upon issuance for each reactor vessel fluency period and for any revision or supplement thereto.

5.6 Reporting Requirements

5.6.5 Post Accident Monitoring Report

When a report is required by Condition B of LCO 3.3.~~3~~**17**, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.6 Steam Generator Tube Inspection Report

A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with the Specification 5.5.4, "Steam Generator (SG) Program." The report shall include:

a. The scope of inspections performed on each SG,

b. ~~Active~~ **D**~~d~~egradation mechanisms found,

c. Nondestructive examination techniques utilized for each degradation mechanism,

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,

e. Number of tubes plugged during the inspection outage for each ~~active~~ degradation **mechanism**,

f. **The number and percentage of tubes plugged to date, and the effective plugging percentage in each steam generator** ~~Total number and percentage of tubes plugged to date~~, **and**

g. The results of condition monitoring, including the results of tube pulls and in-situ testing~~, and~~**.**

~~h. The effective plugging percentage for all plugging in each SG.~~

XII. Applicable STS Subsection After Incorporation of this GTST's Modifications

The entire subsection of the Specifications and the Bases associated with this GTST, following incorporation of the modifications, is presented next.

5.0 ADMINISTRATIVE CONTROLS

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.6.1 Annual Radiological Environmental Operating Report

----------NOTE----------
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.2 Radioactive Effluent Release Report

----------NOTE----------
A single submittal may be made for a multiple unit station. The submittal shall combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

The Radioactive Effluent Release Report covering the operation of the unit in the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit.

5.6 Reporting Requirements

5.6.2 Radioactive Effluent Release Report (continued)

The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.6.3 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

2.1.1, “Reactor Core SLs”
3.1.1, “SHUTDOWN MARGIN (SDM)”
3.1.3, “Moderator Temperature Coefficient (MTC)”
3.1.5, “Shutdown Bank Insertion Limits”
3.1.6, “Control Bank Insertion Limits”
3.2.1, “Heat Flux Hot Channel Factor ($F_Q(Z)$) (F_Q Methodology)”
3.2.2, “Nuclear Enthalpy Rise Hot Channel Factor ($F^N_{\Delta H}$)”
3.2.3, “AXIAL FLUX DIFFERENCE (AFD) (Relaxed Axial Offset Control (RAOC) Methodology)”
3.2.5, “On-line Power Distribution Monitoring System (OPDMS)-Monitored Parameters”
3.3.1, “Reactor Trip System (RTS) Instrumentation”
3.4.1, “RCS Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits”
3.9.1, “Boron Concentration”

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, “Westinghouse Reload Safety Evaluation Methodology,” July 1985 (Westinghouse Proprietary) and WCAP-9273-NP-A (Non-Proprietary).

(Methodology for Specifications 3.1.3 - Moderator Temperature Coefficient, 3.1.5 - Shutdown Bank Insertion Limits, 3.1.6 - Control Bank Insertion Limits, 3.2.1 - Heat Flux Hot Channel Factor, 3.2.2 - Nuclear Enthalpy Rise Hot Channel Factor, 3.2.3 - AXIAL FLUX DIFFERENCE, and 3.9.1 - Boron Concentration.)

5.6 Reporting Requirements

5.6.3 CORE OPERATING LIMITS REPORT (COLR) (continued)

2a. WCAP-8385, “Power Distribution Control and Load Following Procedures - Topical Report,” September 1974 (Westinghouse Proprietary) and WCAP-8403 (Non-Proprietary).

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

2b. T. M. Anderson to K. Kniel (Chief of Core Performance Branch, NRC) January 31, 1980 - Attachment: Operation and Safety Analysis Aspects of an Improved Load Follow Package.

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

2c. NUREG-0800, Standard Review Plan, U.S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981. Branch Technical Position CPB 4.3-1, Westinghouse Constant Axial Offset Control (CAOC), Rev. 2, July 1981.

(Methodology for Specification 3.2.3 - AXIAL FLUX DIFFERENCE (Constant Axial Offset Control).)

3. WCAP-10216-P-A, Revision 1A, “Relaxation of Constant Axial Offset Control FQ Surveillance Technical Specification,” February 1994 (Westinghouse Proprietary) and WCAP-10217-A (Non-Proprietary).

(Methodology for Specifications 3.2.3 - AXIAL FLUX DIFFERENCE (Relaxed Axial Offset Control) and 3.2.1 - Heat Flux Hot Channel Factor (W(Z) surveillance requirements for FQ Methodology).)

4. WCAP-12945-P-A, Volumes 1-5, “Westinghouse Code Qualification Document for Best Estimate Loss of Coolant Accident Analysis,” Revision 2, March 1998 (Westinghouse Proprietary) and WCAP-14747 (Non-Proprietary).

(Methodology for Specification 3.2.1 - Heat Flux Hot Channel Factor.)

5. WCAP-12472-P-A, “BEACON Core Monitoring and Operations Support System,” August 1994, Addendum 1, May 1996 (Westinghouse Proprietary), and Addendum 2, March 2001 (Westinghouse Proprietary) and WCAP-12473-A (Non-Proprietary).

5.6 Reporting Requirements

5.6.3 CORE OPERATING LIMITS REPORT (COLR) (continued)

(Methodology for Specification 3.2.5 - OPDMS - Monitored Parameters.)

6. APP-GW-GLR-137, Revision 1, “Bases of Digital Overpower and Overtemperature Delta-T (OPΔT/OTΔT) Reactor Trips,” Westinghouse Electric Company LLC.

(Methodology for Specification 2.1.1 - Reactor Core Safety Limits, and 3.3.1 - Reactor Trip System (RTS) Instrumentation.)

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Passive Core Cooling Systems limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.4 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

a. RCS pressure and temperature limits for heat up, cooldown, low temperature operation, criticality, and hydrostatic testing as well as heatup and cooldown rates shall be established and documented in the PTLR for the following:

3.4.3, “RCS Pressure and Temperature (P/T) Limits”
3.4.14, “Low Temperature Overpressure Protection (LTOP)”

b. The analytical methods used to determine the RCS pressure and temperature limits shall be those previously reviewed and approved by the NRC, specifically those described in the following document:

WCAP-14040-A, “Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves.” (Limits for LCO 3.4.3 and LCO 3.4.14).

c. The PTLR shall be provided to the NRC upon issuance for each reactor vessel fluency period and for any revision or supplement thereto.

5.6 Reporting Requirements

5.6.5 Post Accident Monitoring Report

When a report is required by Condition B of LCO 3.3.17, “Post Accident Monitoring (PAM) Instrumentation,” a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.6 Steam Generator Tube Inspection Report

A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with the Specification 5.5.4, “Steam Generator (SG) Program.” The report shall include:

a. The scope of inspections performed on each SG,

b. Degradation mechanisms found,

c. Nondestructive examination techniques utilized for each degradation mechanism,

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,

e. Number of tubes plugged during the inspection outage for each degradation mechanism,

f. The number and percentage of tubes plugged to date, and the effective plugging percentage in each steam generator, and

g. The results of condition monitoring, including the results of tube pulls and in-situ testing.