

April 23, 2009

Mr. Scott Head, Manager
Regulatory Affairs
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 101 RELATED TO
SRP SECTION 16 FOR THE SOUTH TEXAS PROJECT COMBINED LICENSE
APPLICATION

Dear Mr. Head:

By letter dated September 20, 2007, STP Nuclear Operating Company (STP) submitted for approval a combined license application pursuant to 10 CFR Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, I can be reached at 301-415-2849 or by e-mail at Stacy.Joseph@nrc.gov or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

/RA/

Stacy K. Joseph, Project Manager
ESBWR/ABWR Projects Branch 2
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-012
52-013

eRAI Tracking No. 2515

Enclosure:
Request for Additional Information

cc:
Mr. William Mookhoek
Mr. Steve Cashell

If you have any questions or comments concerning this matter, I can be reached at 301-415-2849 or by e-mail at Stacy.Joseph@nrc.gov or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

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Docket Nos. 52-012
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cc:
Mr. William Mookhoek
Mr. Steve Cashell

Distribution:
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NRO-002

OFFICE	DCIP/CTSB/TR	DCIP/CTSB/BC	NGE2/PM	OGC	NGE2/L-PM
NAME	CHarbuck	RLaura	SJoseph	SKirkwood	GWunder
DATE	4/1/2009	4/1/2009	4/2/2009	4/7/2009	4/22/2009

***Approval captured electronically in the electronic RAI system.**

OFFICIAL RECORD COPY

Request for Additional Information No. 2515 Revision 2

4/22/2009

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 16 - Technical Specifications
Application Section: Part 2 - FSAR Ch 16; Part 4 - Plant-specific TS

QUESTIONS for Technical Specification Branch (CTSB)

16-1

In its combined license (COL) application for STP 3 & 4, the applicant must complete all site-specific information necessary to resolve COL Action Item 16-1. This site-specific information mostly consists of numerical values of technical specification (TS) limits and is indicated by the use of brackets, reviewer's notes, footnotes, or other "placeholder" indicators in the generic technical specifications (GTS), and also in the proposed plant-specific technical specifications (PTS). This site-specific information must be provided or confirmed by the COL applicant in the COL application to be consistent with applicable regulations and statutes (see DC/COL-ISG-8, "Technical Specification Information that Combined License Applicants Must Provide in Combined License Applications"). Accordingly, for each site-specific information item, provide or confirm, in order of preference, (1) the site-specific information, (2) useable information that bounds the site specific information, or (3) a reference to an associated TS in PTS administrative controls Section 5.5, "Programs and Manuals," or 5.6, "Reporting Requirements," that requires using an NRC-approved methodology to determine the site-specific information and establishes a program or report in which the site-specific information will be documented external to the PTS. For each site-specific information item, the applicant shall describe in its COL application, including in the PTS bases as applicable (i.e., TS, TS Bases and FSAR), the following:

- For site-specific information, the method used to determine the information and why the information is useable for facility operation in all applicable operational modes including power operation up to the proposed thermal power limit.
- For bounding information, the method used to determine the information and that the information is bounding to the site-specific information, and why the information is useable for facility operation in all applicable operational modes including power operation up to the proposed thermal power limit.
- Regarding the methodology approach, the administrative control TS shall (a) explicitly reference by title and date the NRC-approved methodology that is specified for determining the site-specific information, and the NRC safety evaluation approving the methodology (b) require establishing an associated document or report in which to record and maintain the site-specific information external to the PTS, and (c) specify any other information or restrictions necessary and appropriate to satisfy 10 CFR 50.36. This would satisfy 10 CFR 50.36 with respect to the relocated site-specific information by virtue of the approved methodology and the

Enclosure

restrictions spelled out in the administrative control TS; this is consistent with the standard technical specification administrative controls that require maintaining specified plant operating limits in the core operating limits report and the reactor coolant system pressure and temperature limits report.

To facilitate a comprehensive response to this information request, a listing of all COL action, or information, items identified in chapter 16 of the ABWR design control document and Revision 2 of the STP 3&4 COL application is attached. The applicant is requested to verify that the list is complete and accurate and in addition identify which of three options listed above will be used to satisfy the requirements of 10 CFR 50.36 for each numbered item. If the methodology approach is taken, then the applicant should explain why one of the other two options was not taken. Please see the attached table for the list of items.

Enclosure

South Texas Project Units 3 and 4 Reference Combined License Application (RCOLA), Revision 2
Site-Specific Information Identified in ABWR Generic Technical Specifications (GTS) to be Provided by COL Applicant in the
Plant-Specific Technical Specifications (PTS) - COL Action Item 16-1

Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
1	B 2.1.2	PTS	Edition of the ASME, Boiler and Pressure Vessel Code, Section III	Bases for 2.1.2 RCS Pressure SL, ASA paragraph 2, and Reference 5
2	B 3.0	PTS	Reactor steam dome pressure for performing control rod scram time testing	Bases for PTS SR 3.0.1, Discussion on post-maintenance testing: Example a, "[5.51 MPaG]" is replaced with "6.55 MPaG;" reference to SR 3.1.4.3 is corrected per STD DEP 16.3-2. Example b, "HPCF" is replaced by "RCIC" per STD DEP 16.3-2.
3	3.1.3	PTS	Limit on Control rod scram time from fully withdrawn to 60% rod insertion position	SR 3.1.3.4, Verify each control rod scram time from fully withdrawn to 60% rod insertion position is \leq [1.44] seconds. GTS SR 3.1.3.4 bases, "[] seconds" is replaced by "[1.44] seconds"
4	3.1.4	PTS	Maximum number of slow OPERABLE control rods	LCO 3.1.4.a, No more than [8] OPERABLE control rods shall be "slow," in accordance with Table 3.1.4-1. Bases for LCO 3.1.4, "The scram times have a margin to allow up to [8.0] of the control rods to have scram times that exceed the specified limits"
5	3.1.4	PTS	Scram time criterion for inoperable control rod.	Table 3.1.4-1, Control Rod Scram Times, Note 2: Enter applicable Conditions and Required Actions of LCO 3.1.3, "Control Rod Operability," for control rods with scram times $>$ [1.44] seconds to 60% rod insertion position. These control rods are inoperable, in accordance with SR 3.1.3.4, and are not considered "slow." Bases for LCO 3.1.4, "[] seconds" is replaced by "[1.44] seconds"
6	3.1.4	PTS	Six scram time values at 10%, 40%, and 60% rod insertion for 6.55 MPaG and 7.24 MPaG reactor steam dome pressure	Table 3.1.4-1 Control Rod Scram Times Bases for GTS and PTS 3.1.4 contain no scram time values.
7	3.1.7	PTS	Temperature limit values for SLC pump operation; remove reviewer's note.	Figure 3.1.7-1, Sodium Pentaborate Solution Temperature / Concentration Requirements
8	B 3.2.3	PTS	Reference to non GE fuel analysis document.	Bases for PTS 3.2.3, LINEAR HEAT GENERATION RATE (LHGR), Reference 1, [Non GE Fuel Analysis]. Background and Applicable Safety Analyses sections of Bases for PTS 3.2.3, LHGR, list Reference 1.

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
9	B 3.3.1.1	PTS	Minimum number of local power range monitor (LPRM) inputs for each average power range monitor (APRM) division.	Bases for PTS 3.3.1.1, in Table 3.3.1.1-1, Function 2.a, APRM Neutron flux – High, Setdown, requires at least [20] LPRM inputs for each APRM division.
10	3.3.1.1	PTS	Applicability conditions for SSLC Sensor Instrumentation in percent RTP	Table 3.3.1.1-1, Functions 2.e, Rapid Core Flow Decrease, \geq [80]% RTP; 13, Turbine Stop Valve - Closure, \geq [40]% RTP; and 14, Turbine Control Valve Fast Closure, Trip oil Pressure - Low, \geq [40]% RTP Bases for Function 2.e states "Rapid Core Flow Decrease Function is required . . . when thermal power is greater than [80] % RTP . . ."
11	3.3.1.1	PTS	Applicability condition for SSLC Sensor Instrumentation in percent RTP	Table 3.3.1.1-1, Function 1.b, SRNM Neutron Flux - Short Period, MODE 2 and MODE 5, Table Note (b) Trip automatically bypassed within each SRNM and not required to be OPERABLE at reactor power levels \leq [0.0001]% RTP
12	3.3.1.1	PTS	Oscillation Power Range Monitor Allowable Values in terms of neutron flux oscillation limits	SR 3.3.1.1.10 SENSOR CHANNEL CALIBRATION for Safety System Logic and Control Sensor Instrumentation -Table 3.3.1.1-1, Function 2.f, Oscillation Power Range Monitor, Allowable Values listed in Footnote (c); allowable values given in terms of (1) upper and lower period values in seconds, and (2) number of cycles with peak to peak amplitude \geq limit in percent of point, or increase in amplitude over specified number of cycles \geq limit in percent of point per cycle
13	3.3.1.1	PTS	SR 3.3.1.1.2 Frequency	SR 3.3.1.1.2 Frequency of [7] days for: Verify the absolute difference between the average power range monitor (APRM) channels and the calculated power is \leq 2% RTP. Bases for PTS SR 3.3.1.1.2 Frequency
14	3.3.1.1	PTS	SR 3.3.1.1.3 Frequency	SR 3.3.1.1.3 Frequency of [7] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 1 a (MODE 2), 1 b (MODE 2), 1 d (MODES 1 & 2), and 2 a. Bases for PTS SR 3.3.1.1.3 Frequency
15	3.3.1.1	PTS	SR 3.3.1.1.4 Frequency	SR 3.3.1.1.4 Frequency of [31] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 1 a (MODE 5), 1 b (MODE 5), and 1 d (MODE 5). Bases for PTS SR 3.3.1.1.4 Frequency
16	3.3.1.1	PTS	SR 3.3.1.1.5 Frequency	SR 3.3.1.1.5 Frequency of [92] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 1 c, 2 b c d e f g, 3 a b, 4, 5, 6 a b, 7 a b, 8 a b c, 9 a b c, 10, 11 a b c d, 12 (MODES 1 and 2), 13, 14, 15, 16 a b, 17, 18, 19, 20, 21, 22, 23, 24 a b, 25, 26, 27, 28, 29, 30, 31, 32, and 33. NOTE: Functions 11 d and 15 were added in PTS, in accordance with STD DEP T1 2.4-2. Bases for PTS SR 3.3.1.1.5 Frequency
17	3.3.1.1	GTS and PTS	SR 3.3.1.1.5 Frequency	GTS SR 3.3.1.1.5 Frequency of [92] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 15 a & 15 b. NOTE: These functions are deleted in PTS, in accordance with STD DEP T1 2.3-1 Bases for GTS SR 3.3.1.1.5 Frequency

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
18	3.3.1.1	PTS	SR 3.3.1.1.6 Frequency	SR 3.3.1.1.6 Frequency of [92] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 3 c and 7 c, Bases for PTS SR 3.3.1.1.6 Frequency
19	3.3.1.1	PTS	SR 3.3.1.1.8 Frequency	SR 3.3.1.1.8 Frequency of [7] days for: Perform DIVISION FUNCTIONAL TEST for Table 3.3.1.1-1, Functions 1 a (MODE 2), 1 b (MODE 2), and 2 a Bases for PTS SR 3.3.1.1.8 Frequency
20	3.3.1.1	PTS	SSLC Sensor Instrumentation Allowable Values	SR 3.3.1.1.10 SENSOR CHANNEL CALIBRATION for Safety System Logic and Control Sensor Instrumentation Function Allowable Values listed in Table 3.3.1.1-1, Functions 1 a b, 2 a b c e f, 3 a b, 4, 5, 6 a b, 7 a b, 8 a b c, 9 a b c, 10, 11 a b c d, 12 (MODE 5), 13, 14, 15, 16 a b, 17, 18, 19, 20, 21, 22, 23, 24 a b, 25, 27, 28, 29, 30, 31, 32, 33. NOTE: Functions 11 d and 15 were added in PTS, in accordance with STD DEP T1 2.4-2.
21	3.3.1.1	GTS and PTS	SSLC Sensor Instrumentation Allowable Values	SR 3.3.1.1.10 SENSOR CHANNEL CALIBRATION for Safety System Logic and Control Sensor Instrumentation Function Allowable Values listed in Table 3.3.1.1-1, Functions 15 a & 15 b. NOTE: These functions are deleted in PTS, in accordance with STD DEP T1 2.3-1
22	3.3.1.1	PTS	SSLC Sensor Instrumentation Allowable Values	SR 3.3.1.1.11 CHANNEL CALIBRATION for Safety System Logic and Control (SSLC) Sensor Instrumentation Function channel trip setting Allowable Values listed in Table 3.3.1.1-1, Functions 3 c and 7 c
23	B 3.3.1.1	PTS	Thermal power time constant for APRM Simulated Thermal power – High, Flow Biased, SSLC Sensor Function	Bases for PTS 3.3.1.1, Table 3.3.1.1-1 Function 2.b, APRM Simulated Thermal Power – High, Flow Biased, states “The thermal power time constant of < [7] seconds is based on the fuel heat transfer dynamics.”
24	B 3.3.1.1	PTS	SSLC Sensor Instrumentation Function Applicability	Bases for PTS 3.3.1.1, Table 3.3.1.1-1 Function 17, Condensate Storage Tank Level – Low Function, and Function 18, Suppression pool Water level – High, state, “This Function must also be OPERABLE in MODES 4 and 5 when HPCF is used to satisfy the requirement that at least 2 ECCS system be OPERABLE with RPV Level less than [23] feet above the vessel flange.
25	B 3.3.1.1	PTS	Minimum main steam line leak rate in main steam tunnel to reach the temperature instrumentation setting allowable value.	Bases for PTS 3.3.1.1, Table 3.3.1.1-1 Function 22, Main Steam Tunnel Temperature – High, states “The Main Steam Tunnel Temperature – High Allowable Value is chosen to detect a leak equivalent to [95] L/min.”
26	3.3.1.2	PTS	SR 3.3.1.2.1 Frequency	SR 3.3.1.2.1, Perform CHANNEL FUNCTIONAL TEST with a Frequency of [7] days for RPS and MSIV Actuation Instrumentation listed in Table 3.3.1.2-1, Function 3, Manual RPS Scram Bases for PTS SR 3.3.1.2.1 Frequency

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
27	3.3.1.2	PTS	SR 3.3.1.2.2 Frequency	SR 3.3.1.2.2, Perform DIVISION FUNCTIONAL TEST with a Frequency of [92] days for RPS and MSIV Actuation Instrumentation listed in Table 3.3.1.2-1, Function 1.a, RPS Actuation LOGIC CHANNELs, and Function 2.a, MSIVs and MSL Drain Valves Actuation LOGIC CHANNELs Bases for PTS SR 3.3.1.2.2 Frequency
28	3.3.1.2	PTS	SR 3.3.1.2.3 Frequency	SR 3.3.1.2.3, Perform CHANNEL FUNCTIONAL TEST with a Frequency of [92] days for RPS and MSIV Actuation Instrumentation listed in Table 3.3.1.2-1, Function 5, Manual MSIV Actuation Bases for PTS SR 3.3.1.2.3 Frequency
29	3.3.1.3	PTS	SR 3.3.1.3.1 Frequency	SR 3.3.1.3.1, Perform DIVISION FUNCTIONAL TEST with a Frequency of [92] days for SLC and FWRB Actuation Instrumentation as listed in Table 3.3.1.3-1, Function 1.a, SLC LOGIC CHANNELSs: Function 2.a, FWRB LOGIC CHANNELSs, and Function 3, Manual ATWS-ARI/SLCS Initiation Bases for SR 3.3.1.3.1 Frequency
30	3.3.1.4	PTS	SR 3.3.1.4.3 Frequency	SR 3.3.1.4.3, Perform DIVISION FUNCTIONAL TEST with a Frequency of [92] days for ESF Actuation Instrumentation as listed in Table 3.3.1.4-1, Functions 1 a b c e, 2 a b c d f g, 3 a b c e, 4 a c d e f, 5 a b c e, 6 a, 7 a c d e, 8 a, 9 a c, 10 a c d e g, 11, 12 a c d, 13 a, 14 a, and 15 a Bases for SR 3.3.1.4.3 Frequency
31	3.3.1.4	PTS	ESF Actuation, Sensor Instrumentation Allowable Values	SR 3.3.1.4.6 SENSOR CHANNEL CALIBRATION for ESF Actuation, Sensor Instrumentation Function channel trip setting Allowable Values listed in Table 3.3.1.4-1, Functions 1 a b, 2 a b c, 3 a b, 4 d e, 5 a b, 7 d e, 10 c d
32	B 3.3.2.1	PTS	Bases for Required Action E.1 Completion Time	Bases for GTS and PTS 3.3.2.1 Required Action E.1 Completion Time is stated as "[7] days."
33	B 3.3.2.1	PTS	Bases for SR 3.3.2.1.1 Frequency	GTS and PTS bases for SR 3.3.2.1.1 state the frequency as "[12] hours."
34	3.3.2.1	PTS	SR 3.3.2.1.4 Frequency	SR 3.3.2.1.4, Perform CHANNEL FUNCTIONAL TEST with a Frequency of [7] days for SRNM Instrumentation as listed in Table 3.3.2.1-1, Function 1 (MODE 5) Bases for SR 3.3.2.1.4 Frequency
35	3.3.2.1	PTS	SR 3.3.2.1.5 Frequency	SR 3.3.2.1.5, Perform CHANNEL FUNCTIONAL TEST with a Frequency of [31] days for SRNM Instrumentation as listed in Table 3.3.2.1-1, Function 1 (MODEs 2, 3, and 4) Bases for SR 3.3.2.1.5 Frequency

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
36	3.3.3.1	PTS	Completion Time for Required Action B.1	<p>PTS 3.3.3.1 Required Action B.1, Restore all data transmission segments in at least three ECF divisions to OPERABLE status in [30] days. Note that "ECF" replaced "EMS" per STD DEP T1 3.4-1.</p> <p>The bases for PTS 3.3.3.1 Required Action B.1 do not state a value for the completion time.</p>
37	3.3.3.1	PTS	SR 3.3.3.1.1 Frequency	<p>PTS SR 3.3.3.1.1, Verify the required data transmission path segments are OPERABLE, with a frequency of [92] days.</p> <p>Bases for SR 3.3.3.1.1 Frequency</p>
38	3.3.4.1	PTS	Completion Time for Required Action E.1	<p>GTS 3.3.4.1 Required Action E.1, restore at least one channel to OPERABLE status in [24] hours, for ATWS and EOC-RPT Instrumentation Functions listed in the associated note and in Table 3.3.4.1-1. Functions 2, 4, and 9</p> <p>The bases for PTS 3.3.4.1 Required Action E.1 do not bracket the value for the completion time.</p>
39	3.3.4.1	PTS	Completion Times for Required Actions F.1 and F.2	<p>PTS 3.3.4.1 Required Action F.1, Apply the MCPR limit for inoperable EOC-RPT as specified in the COLR in [2] hours, or F.2, Reduce power to $\leq 40\%$ RTP in [2] hours, for ATWS and EOC-RPT Instrumentation Function listed in the associated note and in Table 3.3.4.1-1. Function 4</p> <p>Bases for PTS 3.3.4.1 Required Actions F.1 and F.2.</p>
40	3.3.4.1	PTS	Completion Time for Required Action G.1	<p>GTS 3.3.4.1 Required Action G.1, restore channels to OPERABLE status, in [24] hours, for ATWS and EOC-RPT Instrumentation Functions listed in the associated note and in Table 3.3.4.1-1. Functions 6, 7, 8, 10, 12, 13, 15, and 16.</p> <p>Bases for PTS 3.3.4.1 Required Action G.1.</p>
41	3.3.4.1	PTS	SR 3.3.4.1.2 Frequency	<p>SR 3.3.4.1.2 Frequency of [92] days for: Perform CHANNEL FUNCTIONAL TEST for ATWS and EOC-RPT Instrumentation listed in Table 3.3.4.1-1, Functions 1, 2, 3, 4, 5, and 9.</p> <p>Bases for SR 3.3.4.1.2 Frequency</p>
42	3.3.4.1	PTS	ATWS and EOC-RPT, Sensor Instrumentation Allowable Values	<p>SR 3.3.4.1.3 SENSOR CHANNEL CALIBRATION for ATWS and EOC-RPT Instrumentation Function channel trip setting Allowable Values listed in Table 3.3.4.1-1, Functions 1, 2, 3, and 7 (footnote (a))</p>
43	B 3.3.4.1	PTS	Bases for SR 3.3.4.1.7 Frequency	<p>Bases for SR 3.3.4.1.7, Perform CHANNEL FUNCTIONAL TEST for Function 10, Manual ATWS-ARI/SLCS Initiation, state, "However, a relatively short surveillance interval of [7] days is used since availability of manual ATWS-ARI is important for providing a diverse means of inserting all of the control rods and the logic is 2/2. Note: The Frequency is not bracketed in PTS SR 3.3.4.1.7.</p>

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
44	3.3.4.2	PTS	SR 3.3.4.2.2 Frequency	SR 3.3.4.2.2 Frequency of [92] days for: Perform CHANNEL FUNCTIONAL TEST for Feedwater Pump and Main Turbine Trip Instrumentation (three instrumentation channels and three digital controllers). Bases for SR 3.3.4.2.2 Frequency
45	3.3.4.2	PTS	Feedwater Pump and Main Turbine Trip Sensor Instrumentation Allowable Value	SR 3.3.4.2.3 Perform SENSOR CHANNEL CALIBRATION for Feedwater Pump and Main Turbine Trip Instrumentation Function channel trip setting Allowable Value for Reactor Vessel Water Level – High, Level 8
46	3.3.4.2	GTS	Type of component actuation	GTS SR 3.3.4.2.4 Perform LOGIC SYSTEM FUNCTIONAL TEST including [valve] actuation. (PTS Rev 2 has "trip" in place of "[valve]")
47	3.3.5.1	PTS	Completion Time for Required Action A.1	PTS 3.3.5.1 Required Action A.1, Restore {automated thermal limit monitor} channel to OPERABLE status in [72] hours. Bases for Completion Time of Required Action A.1
48	3.3.5.1	PTS	Completion Time of Required Action C.1	PTS 3.3.5.1 Required Action C.1, Restore {RWM} channel to OPERABLE status in [72] hours. Bases for Completion Time of Required Action C.1
49	3.3.5.1	PTS	Applicability of automated thermal limit monitor (ATLM) control rod block function	SR 3.3.5.1.1 Note: CHANNEL FUNCTIONAL TEST for ATLM control rod block function "Not required to be performed until 1 hour after THERMAL POWER is > [30] % RTP." Applicability of Function 1.a, ATLM control rod block function in Table 3.3.5.1-1 Footnote (a) "THERMAL POWER > [30] % RTP." GTS has [10] % RTP. SR 3.3.5.1.4 "Verify the ATLM is not bypassed when THERMAL POWER ≥ [30] % RTP." Bases for Applicability of PTS 3.3.5.1 Function 1.a, ATLM
50	3.3.5.1	PTS	SR 3.3.5.1.1 Frequency	SR 3.3.5.1.1 Frequency of [92] days for: Perform CHANNEL FUNCTIONAL TEST for automated thermal limit monitor (ATLM) control rod block function, Function 1.a of Table 3.3.5.1-1. Bases for SR 3.3.5.1.1 Frequency
51	3.3.5.1	PTS	SR 3.3.5.1.2 Frequency	SR 3.3.5.1.2 Frequency of [92] days for: Perform CHANNEL FUNCTIONAL TEST for Rod Worth Minimizer (RWM) control rod block function, Function 1.b Table 3.3.5.1-1 Bases for SR 3.3.5.1.2 Frequency
52	B 3.3.5.1	PTS	Range for allowable values for low power setpoint (LPSP) control rod block instrumentation functions, ATLM and RWM	Bases for PTS SR 3.3.5.1.3 and SR 3.3.5.1.4, state "The LPSP is the point where the transition is made between the ATLM and RWM functions. The Allowable Value for the low power setpoint (LPSP) is in the range of [10] % to [30] % RTP."

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
53	3.3.5.1	PTS	Applicability of Rod Worth Minimizer (RWM) control rod block function	Applicability of Function 1.b, Rod Worth Minimizer (RWM) control rod block function in Table 3.3.5.1-1 Footnote (b) "With THERMAL POWER \leq [10] % RTP." SR 3.3.5.1.3, "Verify the RWM is not bypassed when THERMAL POWER \leq [10] % RTP." Bases for Applicability of PTS 3.3.5.1 Function 1.b, RWM
54	3.3.5.1	PTS	SR 3.3.5.1.6 Frequency	SR 3.3.5.1.6 Frequency of [24] hours for: Perform CHANNEL CHECK of process parameter and setpoint inputs to the automated thermal limit monitor (ATLM) control rod block function, Function 1.a of Table 3.3.5.1-1. Bases for SR 3.3.5.1.6 Frequency
55	B 3.3.6.1	PTS	Design description of primary containment isolation valve position post accident monitoring instrumentation	Bases for PTS 3.3.6.1, Table 3.3.6.1-1, Function 8, Primary Containment Isolation Valve (PCIV) Position, contains the following bracketed paragraph: "[For this plant, the PCIV position PAM instrumentation consists of position switches, associated connections and control room indication for active PCIVs. Check valves and manual valves are not required to have position indication.]"
56	3.3.6.1	PTS	SR 3.3.6.1.1 Frequency	SR 3.3.6.1.1 Frequency of [31] days for post accident monitoring (PAM) instrumentation Functions 1 through 7, 9 through 13: Perform CHANNEL CHECK. Bases for SR 3.3.6.1.1 Frequency
57	3.3.6.1	PTS	Applicability of Startup Range Neutron Monitor - Neutron Flux post-accident monitoring (PAM) function	Applicability of Function 9, Startup Range Neutron Monitor - Neutron Flux PAM function in Table 3.3.6.1-1 footnote (c) "When power is \leq [10] % RTP." Bases for PTS 3.3.6.1 Function 9 does not discuss Table 3.3.6.1-1 footnote (c).
58	3.3.6.1	PTS	Applicability of Average Power Range Monitor - Neutron Flux post-accident monitoring (PAM) function	Applicability of Function 10, Average Power Range Monitor - Neutron Flux PAM function in Table 3.3.6.1-1 footnote (d) "When power is $>$ [10] % RTP." Bases for PTS 3.3.6.1 Function 10 does not discuss Table 3.3.6.1-1 footnote (d).
59	B 3.3.6.2	PTS	Bases for Completion Time of Required Action A.1	Bases for Completion Time of Required Action A.1 of PTS 3.3.6.2, states "The Required Action is to restore the inoperable division of the Function to OPERABLE status within [90] days." The 90-day Completion Time of Required Action A.1 is not bracketed in PTS 3.3.6.2.
60	3.3.6.2	PTS	SR 3.3.6.2.1 Frequency	SR 3.3.6.2.1 Frequency of [31] days for Remote Shutdown System instrumentation Functions 1 through 23: Perform CHANNEL CHECK for each required instrumentation channel. The bases for SR 3.3.6.2.1 do not bracket the 31-day frequency.
61	3.3.7.1	PTS	CRHA EF System Instrumentation Allowable values	SR 3.3.7.1.3 CHANNEL CALIBRATION for CRHA EF System Instrumentation Function channel trip setting Allowable Values listed in Table 3.3.7.1-1, Functions 1 and 2

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62	3.3.7.1	PTS	SR 3.3.7.1.1 Frequency	SR 3.3.7.1.1 Frequency of [24] hours for CRHA EF instrumentation Function 1, Control Room Ventilation Radiation Monitors: Perform CHANNEL CHECK. Bases for SR 3.3.7.1.1 Frequency
63	3.3.7.1	PTS	SR 3.3.7.1.2 Frequency	SR 3.3.7.1.2 Frequency of [92] days for CRHA EF instrumentation Functions 2 and 3: Perform CHANNEL FUNCTIONAL TEST. Bases for SR 3.3.7.1.2 Frequency
64	3.3.8.1	PTS	Electrical Power Monitoring Instrumentation Allowable Values	SR 3.3.8.1.2 CHANNEL CALIBRATION for Electrical Power Monitoring Instrumentation Function channel trip setting Allowable Values for Divisions I, II, III, and IV shall be: a. Undervoltage: \leq [108] VAC, b. Overvoltage: \geq [132] VAC, c. Underfrequency: \leq [57] Hz, d. Overfrequency: \geq [63] Hz Bases for PTS LCO 3.3.8.1 state "The Allowable Values for the instrument settings are based on the power supply providing 60 Hz \pm 5%, and 120 V \pm 10%."
65	3.3.8.1	PTS	SR 3.3.8.1.1 Frequency	SR 3.3.8.1.1 Frequency of [92] days for Electrical Power Monitoring Instrumentation: Perform CHANNEL FUNCTIONAL TEST. Bases for SR 3.3.8.1.1 Frequency
66	3.3.8.1	PTS	SR 3.3.8.1.2 Frequency	SR 3.3.8.1.2 Frequency of [92] days for Electrical Power Monitoring Instrumentation: Perform CHANNEL CALIBRATION. The bracketed value does not match the frequency given in the associated bases. Bases for SR 3.3.8.1.2 Frequency states, "The Frequency is based upon the assumption of an 18 month calibration interval in the determination of the magnitude of equipment drift in the setpoint analysis."
67	3.3.8.2	PTS	SR 3.3.8.2.1 Frequency	SR 3.3.8.2.1 Frequency of [7] days for Reactor Coolant Temperature Monitoring - Shutdown Instrumentation: Perform CHANNEL CHECK. Bases for SR 3.3.8.2.1 Frequency
68	3.3.8.2	PTS	SR 3.3.8.2.2 Frequency	SR 3.3.8.2.2 Frequency of [92] days for Reactor Coolant Temperature Monitoring - Shutdown Instrumentation: Perform CHANNEL FUNCTIONAL TEST. Bases for SR 3.3.8.2.1 Frequency

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
69	3.4.1	PTS	Alternative number of reactor internal pumps (RIPs) required to be in operation.	<p>LCO 3.4.1 alternative part: [OR [] RIPs may be in operation provided the following limits are applied when the associated LCO is applicable: a. LCO 3.2.1 APLHGR limits specified in the COLR for [] RIPs in operation; and b. LCO 3.2.2 MCPR limits specified in the COLR for [] RIPs in operation; and c. LCO 3.3.1.1 SSLC Sensor Instrumentation, Function 2.b, Allowable Value is reset for operation with [] RIPs.]</p> <p>The phrase “[] RIPs” occurs in Bases for PTS 3.4.1, Applicable Safety Analyses, LCO, and Reference sections.</p>
70	B 3.4.1	PTS	Plant specific analysis for alternative number of RIPs operating.	Bases for PTS 3.4.1, Applicable Safety Analyses, refer to Reference 3. Reference 3 states: “[Plant specific analysis for [] RIPs operating.]”
71	B 3.4.2	PTS	Surveillance performance condition on minimum steam dome pressure for opening of S/RV when manually actuated.	Bases for SR 3.4.2.2 state, “Adequate pressure at which this test is to be performed is [6.55] MPaG (the pressure recommended by the valve manufacturer). ... this SR is modified by a Note that states the Surveillance is not required to be performed until 12 hours after reactor steam dome pressure is \geq ([6.55] MPaG).” Note that this pressure value is not bracketed in PTS SR 3.4.2.2.
72	B 3.4.3	GTS and PTS	Unidentified LEAKAGE flow limit value.	Bases for GTS 3.4.3, Applicable Safety Analyses section states, “The 3.785 L/min limit is a small fraction of the calculated flow from a critical crack in the primary system piping (Ref. 6).” Bases for PTS 3.4.3 replaces “3.785” with “19” per STD DEP 7.3-12, and removes the brackets from the sentence. Note that GTS LCO 3.4.3.b does not bracket the “3.785”, which PTS LCO 3.4.3.b replaces with “19.”
73	B 3.4.3	GTS and PTS	COL Application for Leak-Before-Break Qualification for Piping Systems	Bases for GTS 3.4.3, Reference section, Reference 6 states, “[COL Application for Leak-Before-Break Qualification for Piping Systems.]” The bases Reference section for PTS 3.4.3 states Reference 6 as “FSAR, Section 5.2.5.5.1.”
74	3.4.9	GTS and PTS	Temperature criterion for performing surveillance.	<p>GTS SR 3.4.9.4 Note: Not required to be performed until 30 minutes after RCS temperature \leq [27°C] in MODE 4. Verify reactor vessel flange and head flange temperatures are within the limits specified in the PTLR once every 30 minutes. Note: brackets are removed in PTS.</p> <p>Bases for GTS and PTS SR 3.4.9.4; Note: brackets are removed in PTS bases.</p>
75	3.4.9	GTS and PTS	Temperature criterion for performing surveillance.	<p>SR 3.4.9.5 Note: Not required to be performed until 12 hours after RCS temperature \leq [38°C] in MODE 4. Verify reactor vessel flange and head flange temperatures are within the limits specified in the PTLR once every 12 hours. Note: brackets are removed in PTS.</p> <p>Bases for GTS and PTS SR 3.4.9.5; Note: brackets are removed in PTS bases.</p>

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
76	B 3.5.1.9	GTS and PTS	Surveillance test condition for each automatic depressurization system (ADS) valve	Bases for PTS SR 3.5.1.9, Verify each ADS valve opens when manually actuated, state, "Adequate pressure at which this test is to be performed is [6.55 MPaG] (the pressure recommended by the valve manufacturer)] ... Therefore, this SR is modified by a Note that states the Surveillance is not required to be performed until 12 hours after reactor steam dome pressure is \geq [6.55 MPaG]." Note that this pressure value is not bracketed in GTS and PTS SR 3.5.1.9.
77	3.5.2	PTS	Minimum water volume and tank level in condensate storage tank for the high pressure core flooders (HPCF) subsystem	SR 3.5.2.2 Verify, for the required High Pressure Core Flooder (HPCF) subsystem, the b. Condensate storage tank water level is \geq [] once per 12 hours. Bases for SR 3.5.2.2 state, "verification that ... the HPCF System is aligned to take suction from the CST and the CST contains \geq [] liters of water, equivalent to [] m, ensures that the HPCF System can supply makeup water to the RPV."
78	B 3.6.1.1	PTS	Maximum allowable leakage rate for the primary containment at reduced pressure.	Applicable Safety Analyses section of bases for PTS 3.6.1.1 states, "The maximum allowable leakage rate for the primary containment (L_a) is ... [0.259] % by weight of the containment air per 24 hours at the reduced pressure of Pt of [124.1] kPaG (Ref. 1)."
79	B 3.6.1.1	GTS	Reference to bracketed surveillance requirement	Bases for GTS SR 3.6.1.1.1 state, "Failure to meet air lock leakage testing (SR 3.6.1.2.1), [resilient seal primary containment purge valve leakage testing (SR 3.6.1.3.7),] main steam isolation valve leakage (SR 3.6.1.3.13), or hydrostatically tested valve leakage (SR 3.6.1.3.12) does not necessarily result in a failure of this SR. Note that PTS SR 3.6.1.3.6 is bracketed, even though the reference to it in PTS SR 3.6.1.1.1 bases is no longer bracketed. See item number 82 Note that the bases for PTS SR 3.6.1.1.1 also omit "main steam isolation valve leakage (SR 3.6.1.3.13)". The reference would be SR 3.6.1.3.12 in the PTS.
80	3.6.1.2	GTS and PTS	Air lock door seal gap pressure criterion for air lock leak test surveillance.	GTS SR 3.6.1.2.1 states "The acceptance criteria for air lock testing are: ...For each door, leakage rate is \leq 0.01 L_a when the gap between the door seals is pressurized to \geq [] MPaG for at least 15 minutes." PTS gives the gap pressure as [0.0689] MPaG. Bases for GTS and PTS SR 3.6.1.2.1 do not state the gap pressure criterion, but do state: "The acceptance criteria were established [during initial air lock and primary containment OPERABILITY testing]."

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
81	3.6.1.3	GTS and PTS	Required Action completion time.	<p>GTS 3.6.1.3 [Required Action D.3, Perform SR 3.6.1.3.7 for resilient seal purge valves closed to comply with required Action D.1, Once per [92] days.]</p> <p>Per STD DEP 16.3-71, PTS 3.6.1.3 replaced GTS 3.6.1.3 ACTION D with: Condition D. Purge valve leakage rate, main steam isolation valve leakage or hydrostatically tested line leakage rate not within limit. Required Action D.1, Restore leakage to within limit. Completion Time: [4 hours except for main steam line isolation valve leakage <u>AND</u> 8 hours for main steam line isolation valve leakage.]</p> <p>Per STD DEP 16.3-71, PTS 3.6.1.3 also deleted GTS SR 3.6.1.3.1, which applied only when in GTS 3.6.1.3 Condition D. The other PTS 3.6.1.3 surveillances were renumbered.</p> <p>Fourth paragraph of bases for GTS 3.6.1.3 Required Actions D.1, D.2, and D.3, is bracketed. Per STD DEP 16.3-71, all four GTS bases paragraphs were replaced by one paragraph in bases for PTS 3.6.1.3 Required Action D.1, which do not state the completion times in brackets.</p>
82	3.6.1.3	GTS and PTS	Bracketed surveillance requirement - leak rate testing for primary containment purge valve with resilient seals.	<p>GTS SR 3.6.1.3.7 and PTS SR 3.6.1.3.6 are bracketed.</p> <p>Bases for GTS and PTS SR 3.6.1.3.6 are not in brackets.</p>
83	3.6.1.3	GTS and PTS	Bracketed surveillance requirement to verify percent open restriction on each 550 mm primary containment purge valve and its value.	<p>GTS 3.6.1.3.14 and PTS SR 3.6.1.3.13, Verify each 550 mm primary containment purge valve is blocked to restrict the valve from opening > [50] %, once per 18 months, are bracketed.</p> <p>Bases for PTS SR 3.6.1.3.13 states "Verifying each 550 mm primary containment purge valve is blocked to restrict opening to ≤ [50] % is required to ensure that the valves can close under DBA conditions within the times assumed in the analysis of References 2 and 4."</p>
84	B 3.6.1.3	GTS	Disposition of Reviewer's Note in bases for surveillance requirement to verify percent open restriction on each 550 mm primary containment purge valve	<p>Bases for GTS 3.6.1.3.14 Reviewer's Note states, "This SR is only required for those plants with purge valves with resilient seals allowed to be open during [MODE 1, 2, 3, or 4] and having blocking devices that are not permanently installed on the valves."</p> <p>Bases for PTS SR 3.6.1.3.13 omit the reviewer's note.</p>
85	B 3.6.1.3	GTS	Bases for surveillance note regarding Applicability of surveillance	<p>Bases for GTS 3.6.1.3.14 state, "[The SR is modified by a Note stating that this SR is only required to be met in MODES 1, 2, and 3.]"</p> <p>Bases for PTS 3.6.1.3.13 omit the brackets.</p>

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
86	3.6.3.1	GTS	Surveillance acceptance criteria for hydrogen recombiners.	GTS SR 3.6.3.1.1, SR 3.6.3.1.2 and SR 3.6.3.1.4, and bases, contain bracketed acceptance criteria. But PTS Section 3.6 omits GTS 3.6.3.1 and bases per STD DEP T1 2.14-1.
87	B 3.6.4.3	GTS	Revision number of bases reference.	Bases reference 5 for GTS 3.6.4.3 is stated as "Regulatory Guide 1.5.2, Rev. [2]. The PTS bases remove the brackets.
88	3.7.1	GTS and PTS	Ultimate heat sink design detail	<p>GTS 3.7.1 ACTIONS A, B, C and D list "[spray network(s)]" as a part of the UHS system. PTS 3.7.1 ACTIONS A and B replace this with "cooling tower cell(s)" PTS 3.7.1 ACTIONS C and D replace this with "cooling tower". Note that GTS 3.7.1 Required Action C.2 is omitted from PTS 3.7.1 ACTION C per STD DEP 16.3-16.</p> <p>PTS 3.7.1 bases for ACTIONS A, B, and C replace "[spray network(s)]" with "cooling tower cell(s)"; bases for ACTION D replace "[spray network] divisions" with "cooling tower divisions".</p>
89	B 3.7.1	GTS and PTS	Ultimate heat sink design details	<p>Background section of bases for GTS 3.7.1, third paragraph, states,</p> <p>"The UHS is [a spray pond with six spray networks. Two spray networks are assigned to each UHS division and are mechanically separated from other divisional networks. The networks and their supply piping are suspended above the pond surface on reinforced concrete columns]. The [spray pond] is sized such that sufficient water inventory is available for all RCW/RSW System post LOCA cooling requirements for a 30 day period with no external makeup water source available (Regulatory Guide 1.27, Ref. 1). Normal makeup for the [spray pond] is provided automatically by the [power cycle heat sink makeup line].</p> <p>Background section of bases for PTS 3.7.1, third paragraph, replaces the GTS bases paragraph with the following, with differences denoted in italics, and contains no brackets.</p> <p><i>"The UHS includes a dedicated water storage basin for each unit. The UHS consists of three mechanically and electrically independent cooling tower divisions designed to remove heat from the respective RCW/RSW division. Each unit's UHS structure consists of six cooling tower cells, of which two cells are dedicated to each of the three UHS divisions. During normal plant operation, all three divisions are in service with one cooling tower cell per division in operation. Each unit's UHS basin is sized such that sufficient water inventory is available for all RCW/RSW System post LOCA cooling requirements for a 30 day period with no external makeup water source available (Regulatory Guide 1.27, Ref. 1). Normal makeup for each UHS basin is provided automatically by the onsite well water.</i></p> <p>In the first sentence of the fourth paragraph of the Background section of the bases for GTS 3.7.1, the PTS bases replace "[spray pond]" with "UHS basin".</p>

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
				The last paragraph of the Background section of the bases for GTS 3.7.1 is revised in PTS bases by adding a bracketed phrase in the first sentence, as follows: "Following a DBA or transient, the RCW/RSW System [and UHS cooling tower fans] will operate automatically without operator action."
90	3.7.1	GTS and PTS	Ultimate heat sink design detail	GTS SR 3.7.1.1 lists "[spray pond]" as a part of the UHS system. PTS SR 3.7.1.1 replaces "[spray pond]" with "basin". PTS and GTS bases for SR 3.7.1.1 do not include these UHS design details.
91	3.7.1	GTS and PTS	Minimum water level of UHS [spray pond]	GTS SR 3.7.1.1, Verify the water level of each UHS [spray pond] is \geq [] m. PTS SR 3.7.1.1, Verify the water level in the UHS basin is \geq [19.28] m. PTS and GTS bases for SR 3.7.1.1 do not include these UHS design details.
92	3.7.1	GTS and PTS	Minimum water level of reactor service water (RSW) pump well of the intake structure.	GTS SR 3.7.1.2, Verify the water level in each RSW pump well of the intake structure is \geq [] m. PTS SR 3.7.1.2, Verify the water level in the UHS basin is \geq [0.91] m. GTS bases for LCO 3.7.1 state "OPERABILITY of the UHS is based on ... with OPERABILITY of each division requiring a minimum water level at or above elevation [mean sea level (equivalent to an indicated level of \geq [] m) and six OPERABLE spray networks]. PTS bases for LCO 3.7.1 state "OPERABILITY of the UHS is based on ... with OPERABILITY of each division requiring a minimum water level at or above elevation [23.55] m MSL (equivalent to an indicated level of [19.28] m) and six OPERABLE cooling tower cells.
93	3.7.1	PTS	Maximum reactor service water (RSW) water temperature at the inlet to the reactor building cooling water (RCW) / RSW heat exchangers	GTS & PTS SR 3.7.1.3, Verify the RSW water temperature at the inlet to the RCW / RSW heat exchangers is \leq [33.3] °C. GTS and PTS bases for LCO 3.7.1 state "OPERABILITY of the UHS is based on a maximum RSW water temperature of [33.3] °C ... The maximum RSW water temperature of [33.3]°C will insure that the peak temperature at the inlet to the RCW/RSW heat exchangers will not exceed the designed value of 35°C during a LOCA.

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
94	3.7.1	PTS	Ultimate heat sink design detail	<p>GTS SR 3.7.1.1 refers to "UHS [spray pond]" and GTS SR 3.7.1.4 and SR 3.7.1.5 refer to "UHS [spray network] division", but STP 3&4 uses a cooling tower with a UHS basin. Therefore, corresponding PTS SR 3.7.1.1 refers to "UHS basin" and PTS SR 3.7.1.5 and SR 3.7.1.6 refer to "UHS cooling tower division." In addition, PTS SR 3.7.1.4 is added to test each cooling tower cell fan; however, there seems to be no associated STD DEP in Part 7 of the COLA.</p> <p>PTS 3.7.1 bases for SR 3.7.1.5 replaces "UHS [spray network] division" in GTS bases for SR 3.7.1.4 with "UHS cooling tower division".</p> <p>PTS 3.7.1 bases for SR 3.7.1.6 replaces "UHS [spray network] in each division" in GTS bases for SR 3.7.1.5 with "UHS [cooling tower cell] in each division".</p>
95	3.7.2	PTS	Ultimate heat sink design detail	<p>GTS SR 3.7.2.1 refers to "UHS [spray pond]" and GTS 3.7.2 Condition A and Required Action A.1, Condition B and Required Actions B.1 and B.2, Condition C, SR 3.7.2.4 and SR 3.7.2.5 refer to "UHS [spray network] division". But STP 3&4 uses a cooling tower with a UHS basin, so</p> <p>PTS SR 3.7.2.1 refers to "UHS basin", and PTS 3.7.2 Condition A and Required Action A.1, Condition B and Required Action B.1, Condition C, SR 3.7.2.5 and SR 3.7.2.6 refer to "UHS cooling tower division". Note that PTS SR 3.7.2.6 mistakenly places brackets around "cooling tower."</p> <p>Note that PTS SR 3.7.2.4 is added to test each cooling tower cell fan; however, there seems to be no associated STD DEP in Part 7 of the COLA. GTS 3.7.2 Required Action B.2 is omitted from PTS 3.7.2 ACTION B per STD DEP 16.3-16.</p> <p>PTS 3.7.2 bases replaces design details in GTS 3.7.2 bases as follows: <u>ACTIONS A and B:</u> "[spray network]" replaced with "cooling tower cell" <u>ACTION C:</u> "[spray network]" replaced with "cooling tower" <u>GTS SR 3.7.2.4 (PTS SR 3.7.2.5):</u> "[spray network]" replaced with "cooling tower" <u>GTS SR 3.7.2.5 (PTS SR 3.7.2.6):</u> "[spray network]" replaced with "[cooling tower cell]"</p>
96	3.7.2	GTS and PTS	Minimum water level of UHS [spray pond]	<p>GTS SR 3.7.2.1, Verify the water level of each UHS [spray pond] is \geq [] m.</p> <p>PTS SR 3.7.2.1, Verify the water level in the UHS basin is \geq [19.28] m.</p> <p>PTS and GTS bases for SR 3.7.2.1 do not include a value for this surveillance criterion.</p>
97	3.7.2	GTS and PTS	Minimum water level of reactor service water (RSW) pump well of the intake structure.	<p>GTS SR 3.7.2.2, Verify the water level in each RSW pump well of the intake structure is \geq [] m.</p> <p>PTS SR 3.7.2.2, Verify the water level in the UHS basin is \geq [0.91] m.</p> <p>PTS and GTS bases for SR 3.7.2.2 do not include a value for this surveillance criterion.</p>

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98	3.7.2	PTS	Maximum reactor service water (RSW) water temperature at the inlet to the reactor building cooling water (RCW) / RSW heat exchangers	<p>GTS & PTS SR 3.7.2.3, Verify the RSW water temperature at the inlet to the RCW / RSW heat exchangers is \leq [33.3] deg C.</p> <p>PTS and GTS bases for SR 3.7.2.3 do not include a value for this surveillance criterion.</p>
99	3.7.3	PTS	Ultimate heat sink design detail	<p>GTS SR 3.7.3.1 refers to "UHS [spray pond]" and GTS 3.7.3 Condition A, SR 3.7.3.4, and SR 3.7.3.5 refer to "UHS [spray network] division". But STP 3&4 uses a cooling tower with a UHS basin, so</p> <p>PTS SR 3.7.3.1 refers to "UHS basin", and PTS 3.7.3 Condition A, SR 3.7.3.5 and SR 3.7.3.6 refer to "UHS cooling tower division". Note that SR 3.7.3.6 mistakenly places brackets around "cooling tower."</p> <p>Note that PTS SR 3.7.3.4 is added to test each cooling tower cell fan; however, there seems to be no associated STD DEP in Part 7 of the COLA.</p> <p>PTS 3.7.3 bases replaces design details in GTS 3.7.3 bases as follows: <u>ACTION A:</u> "associated divisional [spray networks]" replaced with "associated UHS cooling tower cells" <u>GTS SR 3.7.3.4 (PTS SR 3.7.3.5):</u> "[spray network]" replaced with "cooling tower" <u>GTS SR 3.7.3.5 (PTS SR 3.7.3.6):</u> "[spray network]" replaced with "[cooling tower cell]"</p>
100	3.7.3	GTS and PTS	Minimum water level of UHS [spray pond]	<p>GTS SR 3.7.3.1, Verify the water level of each UHS [spray pond] is \geq [] m.</p> <p>PTS SR 3.7.3.1, Verify the water level in the UHS basin is \geq [19.28] m.</p> <p>PTS and GTS bases for SR 3.7.3.1 do not include a value for this surveillance criterion.</p>
101	3.7.3	GTS and PTS	Minimum water level of reactor service water (RSW) pump well of the intake structure.	<p>GTS SR 3.7.3.2, Verify the water level in each RSW pump well of the intake structure is \geq [] m.</p> <p>PTS SR 3.7.3.2, Verify the water level in the UHS basin is \geq [0.91] m.</p> <p>PTS and GTS bases for SR 3.7.3.2 do not include a value for this surveillance criterion.</p>
102	3.7.3	PTS	Maximum reactor service water (RSW) water temperature at the inlet to the reactor building cooling water (RCW) / RSW heat exchangers	<p>GTS & PTS SR 3.7.3.3, Verify the RSW water temperature at the inlet to the RCW / RSW heat exchangers is \leq [33.3] deg C.</p> <p>PTS and GTS bases for SR 3.7.3.3 do not include a value for this surveillance criterion.</p>
103	B 3.7.7	GTS and PTS	Unit specific documentation containing response time limits for main turbine bypass system	Bases for GTS and PTS SR 3.7.7.3 state, "The response time limits are specified in [unit specific documentation]."

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Item No.	PTS Subsection	Source	Site-Specific Information	PTS Requirement(s)
104	3.8.1	PTS	Acceptance criteria for diesel generator testing - frequency.	<p>GTS and PTS frequency criteria are \geq [58.8] Hz and \leq [61.2] Hz. SR 3.8.1.2, SR 3.8.1.7, SR 3.8.1.11, SR 3.8.1.12, SR 3.8.1.15, SR 3.8.1.19, and SR 3.8.1.20</p> <p>PTS and GTS 3.8.1 bases for these SRs do not include values for these surveillance criteria.</p>
105	3.8.1	PTS	Acceptance criteria for diesel generator testing - voltage.	<p>GTS voltage criteria are \geq [6210] V and \leq [7590] V. PTS voltage criteria are \geq [3744] V and \leq [4576] V. SR 3.8.1.2, SR 3.8.1.7, SR 3.8.1.11, SR 3.8.1.12, SR 3.8.1.15, SR 3.8.1.19, and SR 3.8.1.20</p> <p>PTS and GTS 3.8.1 bases for these SRs do not include values for these surveillance criteria.</p>
106	3.8.1	PTS	Acceptance criteria for diesel generator testing - power.	<p>GTS power criteria are \geq 5000 kW and \leq [] kW. PTS power criteria are \geq [6480] kW and \leq [7200] kW. SR 3.8.1.3, and SR 3.8.1.15 Note 1 (per STD DEP 8.3-1)</p> <p>Last paragraph of Background section of bases of PTS 3.8.1 replaces GTS value of "5000 kW" with "7200 kW" for diesel generator continuous service rating</p>
107	3.8.1	PTS	Minimum fuel oil volume in each day tank.	<p>GTS SR 3.8.1.4, Verify each day tank contains \geq [] liters of fuel oil. PTS SR 3.8.1.4, Verify each day tank contains \geq [16,900] liters of fuel oil.</p> <p>Bases for PTS 3.8.1 do not contain a value for this acceptance criterion.</p>
108	3.8.1	PTS	Unit power supply - design detail	<p>GTS and PTS SR 3.8.1.8, Verify manual transfer of the [unit power supply] from normal offsite circuit to each required alternate offsite circuit.</p> <p>Bases for PTS SR 3.8.1.8 states, "Manual transfer of each 4.16 kV ESF bus power supply from the normal offsite circuit to the alternate offsite circuit demonstrates the OPERABILITY of the alternate circuit distribution network to power the shutdown loads."</p>
109	3.8.1	PTS	Test conditions for loads to be rejected. Acceptance criteria for diesel generator load rejection test - maximum frequency following load rejection, and frequency and voltage 3 seconds after load rejection.	<p>SR 3.8.1.9 - Loads to be rejected are revised per STD DEP 8.3-1 :</p> <p>GTS loads to be rejected are: Division 1 " \geq 540 kW", Divisions 2 and 3 " \geq 1400 kW" PTS loads to be rejected are: Division 1 " \geq 589 kW", Divisions 2 and 3 " \geq 1689 kW" PTS SR 3.8.1.9a. Following load rejection, the frequency is \leq [66.7] Hz PTS SR 3.8.1.9b. Within 3 seconds following load rejection, the voltage is \geq [3744] V and \leq [4576] V. PTS SR 3.8.1.9c. Within 3 seconds following load rejection, the frequency is \geq [58.8] Hz and \leq [61.2] Hz.</p> <p>Bases for PTS 3.8.1 do not contain values for the acceptance criteria.</p>

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110	3.8.1	PTS	Acceptance criterion for diesel generator testing - maximum voltage during and following load rejection	<p>GTS SR 3.8.1.10, Verify each DG operating at a power factor ≤ 0.9 does not trip and voltage is maintained $\leq []$ V during and following a load rejection of a load $\geq [5000]$ V and $\leq []$ kW.</p> <p>PTS SR 3.8.1.10, Verify each DG operating at a power factor ≤ 0.9 does not trip and voltage is maintained $\leq [4784]$ V during and following a load rejection of a load $\geq [6480]$ kW and $\leq [7200]$ kW.</p> <p>Bases for PTS 3.8.1 do not contain values for the acceptance criteria.</p>
111	3.8.1	GTS and PTS	Acceptance criteria for diesel generator testing - load profile for 24-hour run	<p>GTS SR 3.8.1.14, Verify each DG operating at a power factor ≤ 0.9, operates for ≥ 24 hours: a. For ≥ 2 hours loaded, ≥ 5225 kW and ≤ 5500 kW; and b. For the remaining hours of the test loaded ≥ 5000 kW and $\leq []$.</p> <p>Per STD DEP 8.3-1, unbracketed load values are revised:</p> <p>PTS SR 3.8.1.14, Verify each DG operating at a power factor ≤ 0.9, operates for ≥ 24 hours: a. For ≥ 2 hours loaded, ≥ 7560 kW and ≤ 7920 kW; and b. For the remaining hours of the test loaded $\geq [6480]$ kW and $\leq [7200]$ kW.</p> <p>Bases for PTS 3.8.1 do not contain values for the acceptance criteria.</p>
112	3.8.1	GTS	Reference to Regulatory position in RG 1.9, Revision 3	<p>GTS Table 3.8.1-1, DG Test Schedule, Note (b) states "This is consistent with Regulatory Position [], of RG 1.9, Revision 3." PTS Table 3.8.1-1 Note (b) omits this statement.</p> <p>Bases for Table 3.8.1-1 do not reference specific regulatory positions in RG 1.9, Rev. 3.</p>
113	B 3.8.1	GTS and PTS	Performance criteria for a functional combustion turbine generator (CTG), steady state voltage and frequency	<p>Bases for PTS 3.8.1 Required Actions B.3, C.4, E.1, and F.1 replace CTG performance criteria in the Bases for GTS 3.8.1 Required Actions B.3, C.4, E.1, and F.1 as follows (See STD DEP 8.3-1):</p> <p><u>Steady state voltage</u>: "$\geq [6210]$ V and $\leq [7590]$ V" is replaced with "$\geq [12.42]$ kV and $\leq [15.18]$ kV"</p> <p><u>Frequency</u>: "$\geq [58.8]$ Hz and $\leq [61.2]$ Hz in less than 2 minutes" is replaced with "$\geq [58.8]$ Hz and $\leq [61.2]$ Hz in less than 10 minutes".</p> <p>Bases for PTS 3.8.1 Required Actions B.3, C.4, E.1, and F.1</p>
114	B 3.8.1	GTS and PTS	Bases for voltage and frequency tolerances for diesel generators	<p>Second paragraph of bases for surveillance requirements for GTS and PTS 3.8.1 regarding voltage and frequency tolerances for AC sources is bracketed. PTS revised numbers based on STD DEP 8.3-1.</p>

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115	3.8.1	GTS and PTS	Surveillance note regarding MODE restrictions for performing DG load rejection surveillance, and disposition of associated reviewer's note in bases	<p>GTS and PTS SR 3.8.1.9 Notes 1 and 2 are bracketed. The same Notes are contained in SR 3.8.1.10, but are not bracketed. Note 1 specifies "This Surveillance shall not be performed in MODE 1 or 2."</p> <p>Bases for GTS and PTS SR 3.8.1.9 and SR 3.8.1.10 contain a bracketed Reviewer's Note associated with surveillance Note 1 regarding MODE restrictions for performing DG load rejection surveillance.</p>
116	B 3.8.1	GTS and PTS	Surveillance note regarding MODE restrictions for performing DG automatic trip bypass on loss of voltage with an ECCS initiation signal surveillance; load sequence timer surveillance; and associated reviewer's notes in bases.	<p>GTS and PTS SR 3.8.1.13 Notes 1 and 2 are not bracketed, but the bases for SR 3.8.1.13 contain a bracketed Reviewer's Note associated with surveillance Note 1 regarding MODE restrictions for performing the DG surveillance.</p> <p>GTS and PTS SR 3.8.1.18 Notes 1 and 2 are not bracketed, but the bases for SR 3.8.1.18 contain a bracketed Reviewer's Note associated with surveillance Note 1 regarding MODE restrictions for performing the load sequencer timer surveillance.</p>
117	3.8.3	GTS and PTS	Limits on fuel oil storage tank level, lube oil inventory, and starting air receiver pressure	<p>PTS 3.8.3</p> <p>Condition A. One or more DGs with fuel oil level \leq [380,000] liters and \geq [350,000] liters in storage tank.</p> <p>Condition B. One or more DGs with lube oil inventory $<$ [7,300] liters and \geq [6,700] liters.</p> <p>Condition E. One or more DGs with pressure in at least one (STD DEP 16.3-51) starting air receiver $<$ [3,000] kPaG and \geq [2,700] kPaG.</p> <p>Required Action E.1, Restore starting air receiver pressure to \geq [3,000] kPaG.</p> <p>SR 3.8.3.1, Verify each fuel oil storage tank contains \geq [380,000] liters.</p> <p>SR 3.8.3.2, Verify lube oil inventory for each DG is \geq [7,300] liters.</p> <p>SR 3.8.3.4, Verify each ("required" deleted per STD DEP 16.3-51) DG air start receiver pressure is \geq [3,000] kPaG.</p> <p>Note that GTS 3.8.3 contains no values in the corresponding brackets.</p> <p>Bases for PTS 3.8.3:</p> <p>Required Action B.1 bases states, "With lube oil inventory $<$ [7,300] liters ..."</p> <p>Required Action E.1 bases states, "With starting air receiver pressure $<$ [3,000] MPaG, sufficient capacity for five successive DG start attempts does not exist. However, as long as the receiver pressure is $>$ [2,700] MPaG, there is adequate capacity for at least one start attempt ..."</p> <p>SR 3.8.3.2 bases states, "The [7,300] liter requirement is based on the DG manufacturer's consumption values for the run time of the DG."</p> <p>Note that the GTS 3.8.3 bases contain no values in the corresponding brackets.</p>
118	B 3.8.3	GTS and PTS	ASTM standards for new fuel oil	<p>Bases for PTS SR 3.8.3.3 state:</p> <p>"The tests, limits, and applicable ASTM Standards are as follows:</p>

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				<p>a. Sample the new fuel oil in accordance with ASTM D4057-[06] (Ref. 6);</p> <p>b. Verify in accordance with the tests specified in ASTM D975-[08] (Ref. 6) that the sample has an absolute specific gravity at [15.6/15.6°C of $\geq 0.83^\circ$ and $\leq 0.89^\circ$ (or an API gravity at 15.6°C of $\geq 27^\circ$ and $\leq 39^\circ$), a kinematic viscosity at 40°C of $\geq 1.9 \text{ mm}^2/\text{s}$ and $\leq 4.1 \text{ mm}^2/\text{s}$, and a flash point of $\geq 51.7^\circ\text{C}$]; and</p> <p>c. Verify that the new fuel oil has a clear and bright appearance with proper color when tested in accordance with ASTM D4176-[04] (Ref. 6)."</p> <p>"Within 31 days following the initial new fuel oil sample, the fuel oil is analyzed to establish that the other properties specified in Table 1 of ASTM D975-[08] (Ref. 6) are met for new fuel oil when tested in accordance with ASTM D975-[08] (Ref. 6), except that the analysis for sulfur may be performed in accordance with ASTM D1552-[07] (Ref. 6) or ASTM D2622-[08] (Ref. 6)."</p> <p>"Particulate concentrations should be determined in accordance with ASTM D2276-[06], Method A (Ref. 6)."</p> <p>"6. ASTM Standards: D4057-[06]; D975-[08]; D4176-[04]; D975-[08]; (D1552-[07]; D2622-[08]; D2276-[06]."</p> <p>Note that the GTS bases contain no values in the brackets for ASTM standards.</p>
119	3.8.4	PTS	Battery surveillance acceptance criteria for minimum battery terminal voltage on float charge and maximum connection resistance for inter-cell, inter-rack, and inter-tier connections, and for terminal connections.	<p>PTS SR 3.8.4.1, Verify battery terminal voltage is $\geq [129] \text{ V}$ on float charge.</p> <p>PTS SR 3.8.4.2, Verify no visible corrosion on terminals and connectors OR Verify connection resistance is $\leq [1.5\text{E-}4]$ ohms for inter-cell, inter-rack, and inter-tier connections, and $\leq [1.5\text{E-}4]$ ohms for terminal connections.</p> <p>PTS SR 3.8.4.5, Verify connection resistance is $\leq [1.5\text{E-}4]$ ohms for inter-cell, inter-rack, and inter-tier connections, and $\leq [1.5\text{E-}4]$ ohms for terminal connections.</p> <p>Bases for PTS 3.8.4 surveillances do not contain values for the acceptance criteria.</p>
120	3.8.4	PTS	Battery charger surveillance acceptance criterion for current.	<p>PTS SR 3.8.4.6, Verify each required battery charger supplies $\geq [400]$ amps at $\geq 125 \text{ V}$ for ≥ 12 hours.</p> <p>Bases for PTS 3.8.4 surveillances do not contain values for the acceptance criteria.</p>
121	3.8.6	PTS	Battery cell parameter verification surveillance conditional frequencies based on discharge and overcharge voltage limits.	<p>PTS SR 3.8.6.2 Frequency: Once within 24 hours after battery discharge $< [110] \text{ V}$ <u>AND</u> Once within 24 hours after battery overcharge $> [150] \text{ V}$</p> <p>Bases for PTS SR 3.8.6.2 state, "In addition, within 24 hours of a battery discharge $< [110] \text{ V}$ or a battery overcharge $> [150] \text{ V}$, the battery must be demonstrated to meet Category B limits."</p> <p>GTS bases contain no values in the brackets.</p>
122	3.8.6	PTS	Battery cell parameter limits on	PTS Table 3.8.6-1,

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			specific gravity, and limitations on use of maximum charging current in lieu of specific gravity.	<p>CATEGORY A: LIMITS FOR EACH DESIGNATED PILOT CELL, Specific Gravity \geq [1.195];</p> <p>CATEGORY B: LIMITS FOR EACH CONNECTED CELL, Specific Gravity \geq [1.190] AND Average of all connected cells $>$[1.200];</p> <p>CATEGORY C: LIMITS FOR EACH CONNECTED CELL, Specific Gravity - Not more than 0.020 below average of all connected cells AND Average of all connected cells $>$[1.190].</p> <p>Footnote (c) on Specific Gravity: Or battery charging current is $<$ [2] amps when on float charge. This is acceptable only during a maximum of [7] days following a battery recharge.</p> <p>GTS Table 3.8.6.1 contains no values in the brackets. Bases for PTS Table 3.8.6-1 state,</p> <p>“The Category A limit specified for specific gravity for each pilot cell is \geq [1.195] ...”</p> <p>“Footnote c to Table 3.8.6-1 allows the float charge current to be used as an alternate to specific gravity for up to [7] days following a battery recharge.”</p> <p>“The Category B limit specified for specific gravity for each connected cell is \geq [1.190] (0.020 below the manufacturer’s fully charged, nominal specific gravity) with the average of all connected cells $>$ [1.200] (0.010 below the manufacturer’s fully charged, nominal specific gravity).”</p> <p>“The Category C limit for average specific gravity (\geq [1.190]) ...”</p> <p>GTS bases contain no value in the brackets.</p>
123	B 3.8.11	GTS and PTS	Performance criteria for a functional combustion turbine generator (CTG), steady state voltage and frequency	<p>Bases for PTS 3.8.11 Required Action B.1 replace CTG performance criteria in the Bases for GTS 3.8.11 Required Action B.1 as follows (See STD DEP 8.3-1):</p> <p><u>Steady state voltage</u>: “\geq [6210] V and \leq [7590] V” is replaced with “\geq [12.42] kV and \leq [15.18] kV”</p> <p><u>Frequency</u>: “\geq [58.8] Hz and \leq [61.2] Hz in less than 2 minutes” is replaced with “\geq [58.8] Hz and \leq [61.2] Hz in less than 10 minutes”.</p>
124	3.9.5	GTS and PTS	Minimum pressure in control rod scram accumulator	<p>In accordance with STD DEP 16.3-15, PTS SR 3.9.5.2 replaces the GTS value of 10.49 MPaG for the minimum control rod scram accumulator pressure with 12.75 MPaG. (Note that this value is not designated as COL information in the GTS.)</p> <p>Bases for both PTS and GTS SR 3.9.5.2 state, “Because no explicit analysis exists for automatic shutdown during refueling, the shutdown function is satisfied if the withdrawn control rod is capable of automatic insertion and the associated CRD scram accumulator pressure is \geq 12.75 MPaG.”</p>

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125	B 3.10.9	GTS and PTS	Number of reactor internal pumps (RIPs) in operation.	GTS and PTS 3.10.9 Applicability is "MODES 1 and 2 with less than nine RIPs in operation." The bases for GTS and PTS 3.10.9, in sections for BACKGROUND, APPLICABLE SAFETY ANALYSES, LCO, APPLICABILITY, and ACTIONS, include the phrase "[nine] RIPs".
126	4.1.1	GTS and PTS	Reference to description of site and exclusion area boundaries	GTS 4.1.1, The site and exclusion area boundaries [shall be as described or as shown in Figure 4.1-1]. PTS 4.1.1, The site and exclusion area boundaries are as shown in FSAR Figure 2.1S-3. Also, PTS 4.0 omits GTS [Figure 4.1-1].
127	4.1.2	GTS and PTS	Reference to description of Low Population Zone (LPZ).	GTS 4.1.2, The LPZ [shall be as described or as shown in Figure 4.1-2]. PTS 4.1.2, The LPZ is as shown in FSAR Figure 2.1S-3. Also, PTS 4.0 omits GTS [Figure 4.1-2].
128	4.3.1.2	PTS	Nominal center to center distance between fuel assemblies placed in storage racks.	PTS 4.3.1.2.d, Nominal [approximately 16] cm center to center distance between fuel assemblies placed in storage racks.
129	5.1.1	GTS and PTS	Title of position responsible for overall unit operation.	PTS 5.1.1 replaces "[Plant Superintendent]" with "Plant General Manager."
130	5.1.2	GTS and PTS	Title of position responsible for control room command function, and title of person signing the notice of who has the control room command function.	PTS 5.1.2 replaces "[Shift Supervisor (SS)]" with "Shift Supervisor / Manager," and replaces "[highest level of corporate or site management]" with "President & Chief Executive Officer."
131	5.2.1	GTS and PTS	Reference to document where onsite and offsite organizational requirements are documented.	PTS 5.2.1.a replaces "[applicant's FSAR]" with "FSAR or the Quality Assurance Program Description (QAPD)"
132	5.2.1	GTS and PTS	Title of position responsible for overall safe operation of the plant.	PTS 5.2.1.b replaces "[Plant Superintendent]" with "Plant General Manager."
133	5.2.1	GTS and PTS	Title of corporate executive position with corporate responsibility for overall plant nuclear safety.	PTS 5.2.1.c replaces "[a specified corporate executive position]" with "President & Chief Executive Officer."
134	5.2.2	GTS and PTS	Unit staff titles.	PTS 5.2.2.a replaces "auxiliary operator" with "non-licensed operator" per STD DEP 16.5-2. PTS 5.2.2.c replaces "[Health Physics Technician]" with "Radiation Protection Technician."
135	5.2.2	GTS and PTS	Control room staffing requirements.	Per STD DEP 16.5-1, PTS 5.2.2.b requires one licensed Senior Reactor Operator (SRO) to be present in the control room while the unit is in MODE 1, 2, or 3. GTS 5.2.2.b also requires an SRO in MODE 4. Note that this is not designated as a COL information item in the GTS.

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136	5.2.2	GTS and PTS	Administrative requirements limiting working hours of unit staff performing safety related functions.	PTS 5.2.2.d contains proposed site-specific requirements. Note: These should be evaluated against approved TSTF-511 and 10 CFR Part 26.
137	5.2.2	GTS and PTS	Title of position requiring the person to hold an active SRO license.	PTS 5.2.2.e replaces "The Operations Manager or Assistant Operations Manager" with "The Operations Division Manager." Note that this is not designated as a COL information item in the GTS.
138	5.2.2	GTS and PTS	Title of position that the Shift Technical Advisor shall provide advisory technical support.	PTS 5.2.2.f replaces "[Shift Supervisor (SS)]" with "Shift Supervisor / Manager," Note that this is not designated as a COL information item in the GTS.
139	5.3.1	GTS and PTS	Unit staff qualification standard.	PTS 5.3.1 contains proposed site-specific requirement for unit staff qualifications. It states, "Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971."
140	5.5.1.1	GTS and PTS	Generic Letter reference.	PTS 5.5.1.1.b removed the brackets from "[Generic Letter 82-33]".
141	5.5.2.1	GTS and PTS	Title of position that approves licensee-initiated changes to the ODCM.	PTS 5.5.2.1.b replaces "[Plant Superintendent]" with "Plant General Manager."
142	5.5.2.7	GTS and PTS	Document providing basis for Ventilation Filter Test Program ESF filter ventilation system test frequencies.	PTS 5.5.2.7 replaces "frequencies specified in [Regulatory Guide], and in accordance with Regulatory Guide 1.52, Revision 2; ASME N510-1989; and AG-1-1991" with "frequencies specified in Regulatory Guide 1.52, Revision 2, and in accordance with Regulatory Guide 1.52, Revision 2 and ASME N510-1989 as specified below:" Note, omission of "AG-1-1991" does not appear to be addressed by a STD DEP.
143	5.5.2.7	GTS and PTS	VFTP inplace test criteria for ESF ventilation system HEPA filters.	PTS 5.5.2.7.a replaces "shows a penetration and system bypass < [0.05]% . . . at the system flowrate specified below [± 10] %: Control Room Habitability System Flowrate [] Standby Gas Treatment System Flowrate []" with "shows a penetration and system bypass < 0.05% . . . at the system flowrate specified below ± 10%: Control Room Habitability System Flowrate [5,100 m³/h] Standby Gas Treatment System Flowrate [6,800 m³/h]"

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144	5.5.2.7	GTS and PTS	VFTP inplace test criteria for ESF ventilation system charcoal adsorbers.	<p>PTS 5.5.2.7.b replaces "shows a penetration and system bypass < [0.05]% . . . at the system flowrate specified below [± 10]%: Control Room Habitability System Flowrate [] Standby Gas Treatment System Flowrate []" with "shows a penetration and system bypass < 0.05% . . . at the system flowrate specified below ± 10%: Control Room Habitability System Flowrate [5,100 m³/h] Standby Gas Treatment System Flowrate [6,800 m³/h]"</p>
145	5.5.2.7	GTS and PTS	VFTP laboratory test criteria for ESF ventilation system charcoal adsorber sample.	<p>PTS 5.5.2.7.c replaces "shows the methyl iodide penetration less than the value specified below when tested in accordance with [ASTM D3803-1989] at a temperature of $\leq 30^{\circ}\text{C}$ and greater than or equal to the relative humidity specified below: Control Room Habitability System Penetration [] RH [] Standby Gas Treatment System Penetration [] RH []" with "shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of $\leq 30^{\circ}\text{C}$ and greater than or equal to the relative humidity specified below: Control Room Habitability System Penetration 0.175 RH 70% Standby Gas Treatment System Penetration 0.175 RH 70%"</p>
146	5.5.2.7	GTS and PTS	Disposition of Reviewer's Note regarding allowable penetration.	GTS 5.5.2.7.c [Reviewer's Note: Allowable penetration = [100% methyl iodide efficiency for charcoal credited in staff safety evaluation] / (safety factor). Safety factor = [5] for systems with heaters.]
147	5.5.2.7	GTS and PTS	VFTP criteria for maximum pressure drop across combined HEPA filters, the prefilters, and the charcoal adsorbers.	<p>GTS 5.5.7.d specifies a pressure drop at the system flow rate specified below [± 10]%: Control Room Habitability System Delta P [] Flowrate [] Standby Gas Treatment System Delta P [] Flowrate []</p> <p>PTS 5.5.7.d specifies a pressure drop at the system flow rate specified below ± 10%: Control Room Habitability System Delta P [1,745.8 Pa] Flowrate [5,100 m³/h] Standby Gas Treatment System Delta P [2,174.9 Pa] Flowrate [6,800 m³/h]</p>

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148	5.5.2.7	GTS and PTS	VFTP criteria for energy dissipation by ESF ventilation system heaters.	GTS 5.5.7.e, Demonstrate that the heaters for each of the ESF systems dissipate the value specified below $\pm 10\%$ when tested in accordance with ASME N510-1989: Control Room Habitability System Wattage [] Standby Gas Treatment System Wattage [] PTS 5.5.7.e, Demonstrate that the heaters for each of the ESF systems dissipate the value specified below $\pm 10\%$ when tested in accordance with ASME N510-1989: Control Room Habitability System Wattage [65.6 kW] Standby Gas Treatment System Wattage [26.2 kW]
149	5.7.1.1	GTS and PTS	Note for multiple-unit site on Annual Report format; when to submit initial report.	PTS 5.7.1.1 removed the brackets from the note, and also from statement "The initial report shall be submitted by April 30 of the year following initial criticality." Note that the GTS stated Mar 31. This is changed to April 30 per STD DEP 16.5-4. PTS 5.7.1.1 also removed bracketed placeholder for other unit unique annual reports; none were listed.
150	5.7.1.2	GTS and PTS	Note for multiple unit site on Annual Radiological Environmental Operating Report format; other report bracketed details regarding format, and TLD location and exposure period.	PTS 5.7.1.2 removed the brackets from the note and instructions on format in GTS 5.7.1.2, but deleted the TLD requirement, apparently without explanation for the deletion.
151	5.7.1.2	GTS and PTS	Note for multiple unit site on annual Radiological Effluent Release Report format.	PTS 5.7.1.2 removed the brackets from the note in GTS 5.7.1.2 on format.
152	5.7.1.5	GTS and PTS	Individual specifications that address core operating limits.	PTS 5.7.1.5.a lists the specifications that address core operating limits.
153	5.7.1.5	PTS	Identify the Topical Report(s) by number, title, date, and NRC staff approval document, or identify the staff Safety Evaluation Report for a plant specific methodology by NRC letter and date.	PTS 5.7.1.5.b provides the following: "[10 CFR 50, Appendix G and Regulatory Guide 1.99]"
154	5.7.1.6	GTS and PTS	Individual specifications that address the reactor vessel pressure and temperature limits and the heatup and cooldown rates.	PTS 5.7.1.6 states, "LCO 3.4.9, RCS Pressure and Temperature (P/T) Limits addresses the reactor vessel pressure and temperature limits and the heatup and cooldown rates."

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155	5.7.1.6	PTS	Topical Report(s), number, title, date, and NRC staff approval document or staff safety evaluation report for a plant specific methodology by NRC letter and date.	PTS 5.7.1.6 states, "The analytical methods used to determine the pressure and temperature limits including the heatup and cooldown rates shall be those previously reviewed and approved by the NRC in [Regulatory Guide 1.99, Revision 2, and in accordance with 10 CFR 50, Appendix G]."
156	5.7.2	GTS and PTS	Bracketed statement regarding Special Reports	PTS 5.7.2 deleted the statement in GTS 5.7.2.