

ESBWR DCD Tier 1

26A6641AB Revision 5 to Revision 6 Change List

Item	Location	Description of Change
1.	Entire Tier 1	Several editorial changes are made, but are not identified by a change bar, for consistency throughout the document or for consistency within the ITAAC or the subsections, or to make the wording clear and concise. Some of these changes address NRC staff feedback in public meetings. Some changes include spelling out a term for first time use. Some changes remove internal subheadings that are not necessary and might have created confusion. Some changes are to make the ITAAC columns consistent internally.
2.	Entire Tier 1	Updated system titles to be consistent with Tier 2 entries in response to RAI 14.3-405.
3.	Entire Tier 1	Removed “Report exists and concludes” or “Report exists and documents” in most ITAAC to reflect that the verification of meeting the acceptance criteria points to the actual criteria rather than to a report (except that the ASME Code ITAAC may continue to refer to a report because the existence of an ASME Code report is a requirement of the ASME Code in certain cases. This change is not shown with a revision bar, as it is considered an editorial change that was already discussed with NRC staff.
4.	Entire Tier 1	Changed “and/or” to “and” or “or” or changed the phrase to be “or a combination of” the inspection, test, and analyses, as appropriate, for consistency to avoid confusion over the meaning of “and/or” in the ITAAC or descriptions. Note, however, that “or” may also include “and” per the standard legal definition of “or.” In addition, there may be instances of “and/or” that remain if it is consistent with NRC guidance or otherwise appropriate in that particular instance.

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5.	Entire Tier 1	Removed references to the ASME Code Reports in the Functional Arrangement ITAAC Acceptance Criteria column because these Functional Arrangement ITAAC were not intended to address the ASME requirements; these are covered by other ITAAC in the ASME Code systems. This is considered an administrative change for consistency throughout Tier 1 and does not represent a technical change. The change was discussed with the NRC staff in a meeting 8/27/2008. A reference to this was added to the definition of "Report" in S1.1.1.
6.	Entire Tier 1	The ASME Code Section III ITAAC have been modified for consistency within the document and within each ITAAC, based on feedback from NRC staff in public meetings. Subheadings of ASME topics in ITAAC were removed (e.g., "ASME Code Section III" heading). This change included adding "non-destructive examination" to the DD and ITAAC DC col. on pressure boundary welds to be consistent with the AC col.
7.	Entire Tier 1	Changed the seismic ITAAC in the various systems subject to seismic capability to refer to "Seismic Category I equipment" and defined "equipment" to include both components and piping in order to clarify that the seismic capability applies to equipment that includes both components and piping. The NRC staff provided feedback related to these specific ITAAC in NRC public meetings. The changes are generic and may not include revision bars.
8.	Entire Tier 1	Deleted the various "reference" ITAAC from the ITAAC tables at the suggestion of the NRC Construction Inspection Program reviewers. Because the reference to another ITAAC is important to maintain in the various sections, the text of the ITAAC Design Commitment is retained in the Design Description, but is not a numbered item.
9.	Entire Tier 1	Where dual units (SI and English) were not both previously included, tables and text have been revised to include dual units (e.g., structural tables for buildings).

Item	Location	Description of Change
10.	Various Tier 1 sections	The ITAAC for electrical separation is now covered in Section 2.2.15 under the IEEE-603 conformance. Certain ITAAC have been deleted based on this change for consistency and to minimize duplication of ITAAC requirements.
11.	Various ITAAC	For ITAAC related to check valve testing in those systems that include check valves, the ITAAC wording is changed to reflect that the check valves will be tested for both opening and closing to be consistent with DCD Tier 2, Section 3.9.6.1 check valve exercise testing and for consistency from one Tier 1 subsection to another.
12.	Various ITAAC	Removed reference to testing “at a facility” for those type or vendor tests, as it is redundant to the definition of a “type test” or vendor testing.
13.	S1.1.1, “As-built”	Modified the definition of “as-built” per RAI 14.3-454, MFN 09-495.
14.	S1.1.1, “Component” definition	Added definition for clarification and to bring consistency for the ASME Code ITAAC and the Seismic Category I ITAAC.
15.	S1.1.1, “Containment” definition	Revised definition for consistency with DCD Tier 2 definition.
16.	S1.1.1, “Equipment” definition	Added definition for clarification and to bring consistency for the ASME Code ITAAC and the Seismic Category I ITAAC.
17.	S1.1.1, “Equipment Identification Number” definition	Updated definition for clarification.
18.	S1.1.1, “Environmental Qualification,” 4 th para., new last sent. “Seismic qualification,” last sentences.	Updated definition for clarification by adding reference to Section 3.8 for both environmental and seismic qualification. The environmental and seismic qualification of instrumentation and controls equipment is addressed in Section 3.8 rather than in the various systems sections, and environmental qualification of mechanical and electrical equipment is covered by Section 3.8.
19.	S1.1.1, “Hot standby” definition	Deleted definition as it is not used in Tier 1.

Item	Location	Description of Change
20.	S.1.1.1, "Report" definition	Added language to the definition of "Report" to clarify the how an ASME Code report may be used for verification of the Functional Arrangement ITAAC Acceptance Criteria for the ASME Code Section III systems.
21.	S1.1.1, "Stable Shutdown" definition	Move reference to SECY-94-084 to after the definition and added reference to ESBWR Generic Technical Specifications.
22.	S1.1.1, "Safe shutdown for station blackout" definition	Deleted "Hot Standby" from shutdown conditions as is consistent with ESBWR Generic Technical Specifications.
23.	S1.1.1, "Train" definition	Removed the term "train" from describing instrumentation and control equipment for consistency and to add information regarding nonsafety-related equipment.
24.	F1.1.1-1	Updated the wide range level lower tap to bellow at the bottom of the active fuel to be consistent with the changes in NBS. Removed Level 1.5, which was eliminated from the ESBWR safety analysis.
25.	S1.1.2.2, Text	Removed discussion about "report exists and concludes" concept based on NRC feedback (see above for generic change to Tier 1 ITAAC), and removed discussion about references to ITAAC in other subsections.
26.	S1.2 and F1.2-2	Added electrical system diagrams legend and added reference to it in S1.2.
27.	F1.2-1	Change legend to remove globe valve open and closed to simple valve open and closed, based on consistency with Tier 2 of DCD regarding globe valves.
28.	S1.3	New section added to discuss the table legend.
29.	S1.4	New section added to explain notations for Design Acceptance Criteria ITAAC.
30.	S2.1.1	Changed to include internals in title and description of the RPV system.

Item	Location	Description of Change
31.	S2.1.1, Design Description #6	Updated Seismic Category I equipment entry in response to RAI 14.3-368 (but the seismic ITAAC have been modified for consistency throughout Tier 1 (see above).
32.	S2.1.1, Design Description #10	Modified the wording of item 10 according to feedback from NRC staff.
33.	S2.1.1, Design Description #11	Updated reactor internals arrangement entry in response to RAIs 14.3-399 and 14.3-204 S02.
34.	S2.1.1, Design Descriptions #12, 13, and 14	Added Design Descriptions 12, 13 and 14 in response to RAI 3.9-138 S02.
35.	T2.1.1-1	Clarified in Footnote 1 that certain internal equipment is subject to “only” certain ASME Code Section III requirements in Subsection NG-1122(c).
36.	T2.1.1-3, ITAAC #6	Updated Seismic Category I equipment entry in response to RAI 14.3-368.
37.	T2.1.1-3, ITAAC #9. AC	Updated Reactor Pressure Vessel & Internals initial fuel Acceptance Criteria in response to RAI 14.3-398.
38.	T2.1.1-3, ITAAC #10, DC, ITA, and AC	Modified the wording of ITAAC 10 according to feedback from NRC staff to reflect receipt inspection of the fuel and control rods.
39.	T2.1.1-3, ITAAC #11, DC and AC	Updated Reactor Pressure Vessel & Internals arrangements Design Commitment in response to RAIs 14.3-204 and 14.3-399; Updated Acceptance Criteria in response to RAI 14.3-399.
40.	T2.1.1-3., ITAACs #12, 13, and 14	Added ITAAC entries in response to RAI 3.9-138 S02.
41.	F2.1.1-1	Updated figure in response to RAI 14.3-405.
42.	F2.1.1-2	Updated figure in response to RAI 14.3-397.
43.	S2.1.2, Design Description #6	

Item	Location	Description of Change
44.	S2.1.2, Design Description, #7	Added NBS mechanical train Design Description in response to RAI 14.3-301 S01.
45.	S2.1.2, Design Description, #8	Removed heading “Isolation Capability” for consistency. Added “Feedwater Isolation Valves” to item for first time use of acronym.
46.	S2.1.2, Design Description #11	Updated # 11 Design Description as there is not a column in the mechanical equipment table that identifies specifically an active safety function, except for a note in the Containment Isolation Valve column. The testing will be performed to demonstrate full stroking (i.e., both opening and closing) of the check valves based on system flow conditions. The change to remove reference to active safety function table entries was discussed with the NRC staff in a meeting 8/27/2008 and is also related to a generic Tier 1 change for check valves (see above).
47.	S2.1.2, Design Description #14	Deleted. Relocated the information to the Design Description for steam line combined volume because it referenced another section and ITAAC in Tier 1.
48.	S2.1.2, Design Description #24	Removed the text regarding the initiator because it is not necessary. The item relates to the booster assembly.
49.	S2.1.2, Design Description #36	Added main steam line and SRV/SV branch piping Design Description in response to RAI 3.9-134.
50.	T2.1.2-2, Active Safety Function column	Deleted column for “Active Safety Function” to be consistent with other Tier 1 sections. Column was originally related to seismic capability and was not intended to identify an open or close functional requirement. The column was changed in Rev. 5 rather than deleting it.
51.	T2.1.2-2, Equipment Name col., Reactor Pressure Transmitters entry	Added language to clarify there is at least one pressure transmitter per division.
52.	T2.1.2-2, Equipment col., reactor water level transmitters entry	Added language to clarify there is at least one water level transmitter per division.

Item	Location	Description of Change
53.	T2.1.2-3, ITAAC #2.b1, 2.b2, 2.b3	Added ITAAC entries that were inadvertently omitted from Revision 5.
54.	T2.1.2-3, ITAAC #6	
55.	T2.1.2-3, ITAAC #7.	Added NBS mechanical train ITAAC entries in response to RAI 14.3-301 S01.
56.	T2.1.2-3, ITAAC #11	Updated # 11 ITAAC entry as there is not a column in the mechanical equipment table that identifies specifically an active safety function, except for a note in the Containment Isolation Valve column. The testing will be performed to demonstrate full stroking (i.e., both opening and closing) of the check valves based on system flow conditions. The change to remove reference to active safety function table entries was discussed with the NRC staff in a meeting 8/27/2008 and is also related to a generic Tier 1 change for check valves (see above).
57.	T2.1.2-3, ITAAC #14	Deleted. Relocated the ITAAC information to the Design Description for steam line combined volume because it references another section.
58.	T2.1.2-3, ITAAC #16a, AC col.	Changed “(~3.333 ft ³ /minute)” to “(3.33 ft ³ /minute)” in the AC col. to reflect the appropriate number of significant digits in dual units.
59.	T2.1.2-3, ITAAC #24	Removed the text regarding the initiator because it is not necessary. The ITAAC relates to the booster assembly.
60.	T2.1.2-3, ITAAC #36	Added main steam line and SRV/SV branch piping ITAAC in response to RAI 3.9-134.
61.	F2.1.2-2	The figure is changed to correct the system interfaces locations (dotted lines). The figure is also changed to remove V10 and V11, which are maintenance valves only in the feedwater lines and are not Tier 1 equipment. These changes were identified through an integrated review of the DCD.
62.	S2.2.1, Design Description s#3, 4, and 5	Updated RC&IS automatic functions and initiators; rod block functions; and controls, interlocks and bypasses entries in response to RAI 14.3-450.
63.	S2.2.1, New Design Descriptions #7, 8 and 9	Added Design Descriptions in response to RAI 14.3-449 S01.

Item	Location	Description of Change
64.	T2.2.1-1, 1 st , 4 th , 5 th and 6 th entries	Deleted rows 1, 4, 5 and 6 in response to RAIs 14.3-449 and 14.3-449 S01.
65.	T2.2.1-2, “Functions” col.	Removed all occurrences of “CRDS” in response to RAI 16.2-186.
66.	T2.2.1-2, “RAPI Auxiliary Panels” entry	Updated “CRDS HCU” to “scram” in response to RAI 16.2-186.
67.	T2.2.1-3, “Initiator” col.	Updated “CRD” to “Scram accumulator”; “low pressure” to “header pressure – low”; and “low pressure trip bypass” to “header pressure – low-low trip bypass” in response to RAI 16.2-186.
68.	T2.2.1-5, “Bypass” row, Description col.	Added RC&IS description to Bypass function entry in response to RAI 14.3-449.
69.	T2.2.1-6, ITAAC #3, 4 and 5	Updated RC&IS automatic functions and initiators; rod block functions; and controls, interlocks and bypasses entries in response to RAI 14.3-450.
70.	T2.2.1-6, New ITAAC #7, 8, and 9	Added ITAAC entries in response to RAI 14.3-449 S01.
71.	S2.2.2, Design Description, 1 st para., 1 st sentence	Updated sentence in response to RAI 14.3-450.
72.	S2.2.2, Design Description, new 5 th para.	Added language in response to RAI 14.3-450.
73.	S2.2.2, Design Description, Item 7	Revised Item 7 to reflect that the ITAAC is limited to check valves, as other valves have specific ITAAC, and to modify the ITAAC to the standard check valve wording. This relates to changes in RAI 14.3-352 S01 which were made in other systems, but for which the CRD system was missed.
74.	S2.2.2, Design Description #8	Updated CRD hydraulic subsystem Design Description in response to RAI 21.6-103.
75.	S2.2.2, Design Description #9	Updated CRD system functions, initiators and associated interfacing systems functional requirement in response to RAI 14.3-450.
76.	S2.2.2, Design Description #10	Updated CRD system CR insertion functional requirement in response to RAI 14.3-450.

Item	Location	Description of Change
77.	S2.2.2, Design Description #12	Updated CRD system functions, initiators and associated interfacing systems functional requirement in response to RAI 14.3-450.
78.	S2.2.2, New Design Description #16	Added Design Description in response to RAI 14.3-405.
79.	S2.2.2, New Design Descriptions #17 and 18	Added Design Descriptions in response to RAI 21.6-103.
80.	S2.2.2, New Design Descriptions #19 thru 31	Added Design Descriptions in response to RAI 14.3-449 S01. Note that Item 24 has been changed for consistency with the Design Commitment in the corresponding ITAAC.
81.	T2.2.2-1, Rows 1-15	Deleted rows in response to RAIs 14.3-449 and 14.3-449 S01.
82.	T2.2.2-1, Row 12	Entry updated in response to RAI 14.3-449. This change was superseded by RAI 14.3-449 S01.
83.	T2.2.2-1, Row 17	Updated in response to RAI 16.2-186. This change was superseded by RAI 14.3-449 S01.
84.	T2.2.2-1, Row 19	Updated entry in response to RAI 16.2-135 S01. This change was superseded by RAI 14.3-449 S01.
85.	T2.2.2-1, Row 20	Added entry regarding ARI valves in response to RAI 16.2-135 S01. This change was superseded (deleted) by RAI 14.3-449 S01.
86.	T2.2.2-1, Rows 17-21	Deleted entries in response to RAIs 14.3-449 and 14.3-449 S01.
87.	T2.2.2-1, 21 st entry	Updated in response to RAI 16.2-186. This change was superseded by RAI 14.3-449 S01.
88.	T2.2.2-1, Row 23	Updated in response to RAI 16.2-186. This change was superseded by RAI 14.3-449 S01.
89.	T2.2.2-1, Row 23	Deleted entry in response to RAI 14.3-449 S01.
90.	T2.2.2-1, Row 25.	Updated in response to RAI 16.2-186. This change was superseded by RAI 14.3-449 S01.
91.	T2.2.2-1, Rows 25 and 26	Deleted entries in response to RAI 14.3-449 S01.
92.	T2.2.2-1, New last row	Added FMCRDs entry in response to RAI 14.3-449 S01.
93.	T2.2.2-3, New 7 th row	Added “Isolate makeup water to RPV” and “Isolation Bypass” functions in response to RAI 21.6-103.

Item	Location	Description of Change
94.	T2.2.2-4, “Interlock” parameter, “High pressure makeup mode” description, 3 rd bullet	Updated description in response to RAI 16.2-186.
95.	T2.2.2-4, “Interlock” parameter, “High pressure makeup mode” description, 4 th , 8 th and 9 th bullets	Updated description in response to RAI 21.6-103.
96.	T2.2.2-4, “Interlock” parameter, “Normal operation mode (scram charging header pressure low)” description	Updated description in response to RAI 16.2-186.
97.	T2.2.2-4, “Interlock” parameter, “High pressure makeup mode (at least 2 GDCS pool levels low)” description	Updated description in response to RAI 21.6-103.
98.	T2.2.2-4, “Interlock” parameter, “High pressure makeup mode (at least 2 GDCS pool levels low)”, 1st bullet	Revised and expanded description in response to RAI 21.6-103.
99.	T2.2.2-4, “Interlock” parameter, New “High pressure makeup mode Isolation Bypass” description and new bullet	Added mode and description in response to RAI 21.6-103
100.	T2.2.2-5, 3 rd row, “MCR Alarms” col.	Updated MCR alarms information in response to RAI 16.2-186.
101.	T2.2.2-5, New 10 th and 11 th rows	Added Equipment Name (Description) entries in response to RAI 21.6-103.
102.	T2.2.2-5, Column	Deleted “Functional Capability” column to be consistent with other Tier 1 sections. Column was originally related to seismic capability and was not intended to identify an open or close functional requirement. See GEH response to RAI 14.3-352 S01.

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103.	T2.2.2-6, 3 rd row	Updated Equipment Name (Description) in response to RAI 16.2-186.
104.	T2.2.2-6, New 5 th and 6 th rows	Added Equipment Name (Description) entries in response to RAI 21.6-103.
105.	T2.2.2-6, New 7 th row	Added Equipment Name (Description) entry in response to RAI 16.2-135 S01.
106.	T2.2.2-6. Column	Deleted column for “Active Safety Function” to be consistent with other Tier 1 sections. Column was originally related to seismic capability and was not intended to identify an open or close functional requirement.
107.	T2.2.2-7, ITAAC #1, AC col.	Updated Acceptance Criteria in response to RAI 14.3-449.
108.	T2.2.2-7, ITAAC #2.a2, DC and ITA cols.	Updated Design Commitment and Inspections, Tests, Analyses columns in response to RAI 14.3-414.
109.	T2.2.2-7, ITAAC #2.a3	Added ITAAC entry that was inadvertently omitted from Revision 5.
110.	T2.2.2-7, ITAAC #6, AC col.	Updated Acceptance Criteria for consistency with Tier 2.
111.	2.2.2-7, ITAAC #7, DC, ITA, and AC cols.	Revised ITAAC 7 to reflect that the ITAAC is limited to check valves, as other valves have specific ITAAC, and to modify the ITAAC to the standard check valve wording. This relates to changes in RAI 14.3-352 S01 which were made in other systems, but for which the CRD system was missed.
112.	T2.2.2-7, ITAAC #8	Updated CRD hydraulic subsystem ITAAC in response to RAI 21.6-103.
113.	T2.2.2-7, ITAAC #9	Updated CRD system functions, initiators and associated interfacing systems ITAAC in response to RAI 14.3-450.
114.	T2.2.2-7, ITAAC #9, AC	Updated Acceptance Criteria in response to RAI 14.3-449.
115.	T2.2.2-7, ITAAC #10	Updated CRD system CR insertion ITAAC in response to RAI 14.3-450.
116.	T2.2.2-7, ITAAC #12	Updated CRD system functions, initiators and associated interfacing systems ITAAC in response to RAI 14.3-450.

Item	Location	Description of Change
117.	T2.2.2-7, ITAAC #16	Added ITAAC entry in response to RAI 14.3-405.
118.	T2.2.2-7, ITAACs #17 and 18	Added ITAAC entries in response to RAI 21.6-103.
119.	T2.2.2-7, ITAACs #19-31	Added ITAAC entries in response to RAI 14.3-449 S01.
120.	F2.2.2-1	Updated figure in response to RAIs 21.6-103 and 16.2-135 S01.
121.	S2.2.3, Design Descriptions #2 and 3	Updated Design Descriptions in response to RAI 14.3-450.
122.	S2.2.3, Design Description # 5	Updated Design Description in response to RAI 14.3-449 S01. Also modified to reflect appropriate testing approach for items “iii” and “iv” in this ITAAC col. ITA and AC to correct the wording, which would have resulted in an inappropriate verification of the lockups.
123.	T2.2.3-1, old 1 st and 2 nd rows	Deleted entries in response to RAI 14.3-449 S01.
124.	T2.2.3-1, New 1 st row	Added entry in response to RAI 14.3-449 S01.
125.	T2.2.3-4, ITTAC #2 and 3	Updated ITAAC in response to RAI 14.3-450.
126.	T2.2.3-4, ITAAC #5	Updated ITTAC in response to RAI 14.3-449 S01.
127.	S2.2.4, 4 th para.	Updated paragraph in response to RAI 14.3-449 and 14.3-449 S01.
128.	S2.2.4, 5 th para.	Updated paragraph in response to RAI 14.3-449.
129.	S2.2.4, Design Description #1	Updated Design Description in response to RAI 14.3-449 S01.
130.	S2.2.4, Design Descriptions #2 and 3	Updated Design Descriptions in response to RAI 14.3.450.
131.	S2.2.4, Design Description #17	Added “mechanical train” functional requirement in response to RAI 14.3-301 S01. This item has been modified to reflect that both trains are required for SLCS function.
132.	S2.2.4-6, Design Description #18	Removed reference to active safety function, as that col. was removed from equipment table (see RAI 14.3-352 S01).
133.	S2.2.4, New Design Description #24	Added Design Description in response to RAI 14.3-405.

Item	Location	Description of Change
134.	S2.2.4, New Design Descriptions #25 thru 27	Added Design Descriptions in response to RAI 14.3-449 S01. Subsequently, Item #28 has been removed due to the SLC system having power to only I&C equipment (not electrical equipment by train).
135.	S2.2.4-1, Design Description #18	Modified for consistency and as discussed in RAI 14.3-352 S01, because the active safety function col. from the equipment table was deleted.
136.	T2.2.4-1	Deleted table in response to RAIs 14.3-449 and 14.3-449 S01.
137.	T2.2.4-3, Description col.	For the control function row, removed “ATWS/SLC” to reflect manual initiation of SLC injection valves from VDU. For the interlock function row, third item, added “from” before ATWS/SLC. The changes more appropriately reflect the functions.
138.	T2.2.4-6, ITAAC #1	Updated ITAAC in response to RAI 14.3-449 S01.
139.	T2.2.4-6, ITAAC #2 DC col.	Updated Design Commitment in response to RAI 14.3-450.
140.	T2.2.4-6, ITAAC #2 ITA and AC cols.	Updated Inspection, Test, Analyses and Acceptance criteria in response to RAI 14.3-449.
141.	T2.2.4-6, ITAAC #3 DC col.	Updated Design Commitment in response to RAI 14.3-450.
142.	T2.2.4-6, ITAAC #3 ITA and AC cols.	Updated Inspection, Test, Analyses and Acceptance criteria in response to RAI 14.3-449.
143.	T2.2.4-6, ITAAC #3, AC col.	Updated Acceptance Criteria in response to RAI 14.3-450.
144.	T2.2.4-6, New ITAAC #10.b2	Added ITAAC entry that was inadvertently omitted from Revision 5.
145.	T2.2.4-6, ITAAC #17	Added “mechanical train” ITAAC in response to RAI 14.3-301 S01. This item has been modified to reflect that both trains are required for SLCS function.
146.	T2.2.4-6, ITAAC #18	Removed reference to active safety function, as that col. was removed from equipment table (see RAI 14.3-352 S01).
147.	T2.2.4-6, New ITAAC #24	Added ITAAC entry in response to RAI 14.3-405.

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148.	T2.2.4-6, New ITAAC #25 thru 27	Added ITAAC entries in response to RAI 14.3-449 S01. Subsequently, ITAAC #28 has been removed due to the SLC system having power to only I&C equipment (not electrical equipment by train).
149.	S2.2.5, Design Descriptions #2 and 3	Updated Design Descriptions in response to RAI 14.3-450.
150.	S2.2.5, New Design Descriptions #8 thru 10	Added Design Descriptions in response to RAI 14.3-449.
151.	S2.2.5, New Design Descriptions #11 thru 13	Added Design Descriptions in response to RAI 14.3-449 S01.
152.	T2.2.5-1	Updated table in response to RAIs 14.3-449 and 14.3-449 S01.
153.	T2.2.5-4, ITAAC #1, ITA col.	Updated ITA in response to RAI 14.3-449.
154.	T2.2.5-4, ITAAC #2, DC col.	Updated Design Commitment in response to RAI 14.3-450.
155.	T2.2.5-4, ITAAC #2, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-449.
156.	T2.2.5-4, ITAAC #3, DC col.	Updated Design Commitment in response to RAI 14.3-450.
157.	T2.2.5-4, ITAAC #3, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-449.
158.	T2.2.5-4, New ITAAC #8 thru 10	Added ITAAC in response to RAI 14.3-449.
159.	T2.2.5-4, New ITAAC #11 thru 13.	Added ITAAC in response to RAI 14.3-449 S01.
160.	S2.2.6, Design Description, 4 th and 5 th para.	Updated paragraphs in response to RAI 14.3-449.
161.	S2.2.6, Design Description #2	Updated Design Description in response to RAI 14.3-450.
162.	S2.2.6, New Design Descriptions #7 and 8	Added Design Descriptions in response to RAI 14.3-449 S01.

Item	Location	Description of Change
163.	T2.2.6-1	Updated table in response to RAIs 14.3-449 and 14.3-449 S01. Modified statement regarding RSS panels to reflect nonsafety-related VDUs and associated functions.
164.	T2.2.6-3, ITAAC #1, ITA col.	Updated Inspections, Tests, Analyses column in response to RAI 14.3-449.
165.	T2.2.6-3, ITAAC #2, DC col.	Updated Design Commitment in response to RAI 14.3-450.
166.	T2.2.6-3, ITAAC #2, ITA col.	Updated Inspections, Tests, Analyses column in response to RAI 14.3-449.
167.	T2.2.6-3, New ITAAC #7 and 8.	Added ITAAC in response to RAI 14.3-449 S01.
168.	S2.2.7, Design Description #1	Added references to new Figure 2.2.7-1 for verifying functional arrangement.
169.	S2.2.7, Design Description, 4 th para.	Updated paragraph in response to RAI 14.3-449.
170.	S2.2.7, Design Description, New 5 th para.	Added paragraph in response to RAI 14.3-449.
171.	S2.2.7, New Design Descriptions #8 and 9	Added Design Descriptions in response to RAI 14.3-449. Item #8 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions.
172.	S2.2.7, New Design Descriptions #10 and 11	Added Design Descriptions in response to RAI 14.3-449 S01.
173.	S2.2.7, Design Descriptions # 12 and 13.	New DDs are added to address NRC staff comments provided in a public meeting 7/20/2009 that there should be ITAAC on the backup scram function.
174.	T2.2.7-1	Table updated in response to RAIs 14.3-449 and 14.3-449 S01.
175.	T2.2.7-2, “Initiator” col., 3 rd row	Updated entry in response to RAI 16.2-186.
176.	T2.2.7-2, “Initiator” col., 7 th row	Updated entry in response to RAI 14.3-403.
177.	T2.2.7-3, “Interlock (System Interface)” parameter, “Description” col., 6 th row	Updated entry in response to RAI 16.2-186.

Item	Location	Description of Change
178.	T2.2.7-3, "Bypass" parameter, "Description" col., 3 rd row	Updated entry in response to RAI 16.2-186.
179.	T2.2.7-4, ITAAC #1, ITA col.	Updated Inspections, Tests, Analyses column in response to RAI 14.3-449.
180.	T2.2.7-4, ITAAC #1	Added references to new Figure 2.2.7-1 for verifying functional arrangement.
181.	T2.2.7-4, ITAAC #2, DC col.	Updated Design Commitment in response to RAI 14.3-450.
182.	T2.2.7-4, ITAAC #2, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria columns in response to RAI 14.3-449.
183.	T2.2.7-4, ITAAC #3, DC col.	Updated Design Commitment in response to RAI 14.3-450.
184.	T2.2.7-4, ITAAC #3, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria columns in response to RAI 14.3-449.
185.	T2.2.7-4, New ITAAC #8 and 9	Added ITAAC in response to RAI 14.3-449. ITAAC #8 is modified to clarify that the coincident trip is of "like, unbypassed parameters" in at least two divisions.
186.	T2.2.7-4, New ITAAC #10 and 11	Added ITAAC in response to RAI 14.3-449 S01.
187.	T2.2.7-4, ITAAC #12 and 13	New ITAAC are added to address NRC staff comments provided in a public meeting 7/20/2009 that there should be ITAAC on the backup scram function.
188.	F2.2.7-1	Added a new figure to show the functional arrangement.
189.	S2.2.9, Design Description #2	Updated Design Description in response to RAI 14.3-450.
190.	S2.2.9, Design Description #4	Updated Design Description in response to RAI 14.3-449 S01.
191.	S2.2.9, New Design Description #5	Added Design Description in response to RAI 14.3-449 S01.
192.	T2.2.9-1	Updated table in response to RAIs 14.3-449 and 14.3-449 S01.

Item	Location	Description of Change
193.	T2.2.9-3, ITAAC #2, DC	Updated Design Commitment in response to RAI 14.3-405.
194.	T2.2.9-3, ITAAC #4, DC	Updated Design Commitment in response to RAI 14.3-449 S01.
195.	T2.2.9-3, New ITAAC #5	Added ITAAC in response to RAI 14.3-449 S01.
196.	S2.2.10, Design Commitment	Updated paragraph in response to RAI 14.3-402.
197.	S2.2.10, Inspections, Tests, Analyses and Acceptance Criteria	Updated paragraph in response to RAI 14.3-402.
198.	T2.2.10-1	Updated table in response to RAI 14.3-402.
199.	S2.2.11, Design Description	Updated paragraph in response to RAI 14.3-402.
200.	S2.2.11, Inspections, Tests, Analyses and Acceptance Criteria	Updated paragraph in response to RAI 14.3-402.
201.	T2.2.11-1	Updated table in response to RAI 14.3-402.
202.	S2.2.12, Design Description, 5 th para.	Updated paragraph in response to RAI 14.3-449 S01.
203.	S2.2.12, Design Descriptions #2, 3 and 4.	Updated Design Descriptions in response to RAI 14.3-449.
204.	S2.2.12, New Design Descriptions #10 thru 12	Added new Design Descriptions in response to RAI 14.3-449. Item #10 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions. Item #11 is modified to refer to MSIV LDIS and RTIF (not SSLC/ESF) for MSIV LD&IS logic (DPS deenergize to isolate).
205.	T2.2.12-1	Deleted table in response to RAIs 14.3-449 and 14.3-449 S01.
206.	T2.2.12-2	Changed header to reflect the difference between RTIF and SSLC/ESF platforms for performing the ITAAC.
207.	T2.2.12-2, New “HP CRD Makeup Water Injection Isolation” col.	Added column in response to RAI 21.6-103.

Item	Location	Description of Change
208.	T2.2.12-2, New “Drywell Pressure High-High” entry	Added “Drywell Pressure High-High” as a Monitored Variable in response to RAI 21.6-103.
209.	T2.2.12-2, New “GDCS Pool Level Low” entry	Added “GDCS Pool Level Low” as a Monitored Variable in response to RAI 21.6-103.
210.	T2.2.12-2, Note 3	Updated note in response to RAI 21.6-103.
211.	T2.2.12-2, New Note 4	Added note in response to RAI 21.6-103.
212.	T2.2.12-3, “MSL Tunnel or Turbine Building Area Ambient Temperature High” entry, “Misc. Leaks” col.	Updated column entry for “O” under “Misc. Leaks” for consistency.
213.	T2.2.12-3, “RB Equip. / Floor Drain Sump Pump Activity” entry, “IC Condensate Lines” col.	Updated column entry for consistency.
214.	T2.2.12-3, “DW Temperature High”, “CWS Lines” and “FAPCS Lines” cols.	Updated column entry for “I” under “CWS Lines” and “FAPCS Lines” for consistency.
215.	T2.2.12-3, “DW Equip. Drain Sump Level Change High”, “Misc. Leaks” col.	Updated column entry for “I” under “Misc. Leaks” for consistency
216.	T2.2.12-3. “RPV Water Level Low,” “CWS Lines” and “FACPS Lines” cols.	Removed water level references and updated column entry for “I” under “CWS Lines” and “FAPCS Lines” for consistency.
217.	T2.2.12-3, New Note 3	Added note for clarification on Monitored Variables with qualitative modifiers.
218.	T2.2.12-4, “Interlock” parameter, New 7 th Description	Added ADS inhibit description in response to RAI 21.6-103.
219.	T2.2.12-4, “Bypass” parameter, New 5 th Description	Added Feedwater Isolation Bypass description in response to RAI 21.6-103.
220.	T2.2.12-5, ITAAC #2a	Updated ITAAC in response to RAI 14.3-449.

Item	Location	Description of Change
221.	T2.2.12-5, ITAAC #2b	Added ITAAC in response to RAI 14.3-449.
222.	T2.2.12-5, ITAAC #3 and 4	Updated ITAAC in response to RAI 14.3-449.
223.	T2.2.12-5, New ITAAC #10, 11 and 12	Added ITAAC in response to RAI 14.3-449. Item #10 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions. Item #11 is modified to refer to MSIV LDIS and RTIF (not SSLC/ESF) for MSIV LD&IS logic (DPS deenergize to isolate).
224.	S2.2.13, Design Description, 4 th para.	Updated paragraph in response to RAI 14.3-449.
225.	S2.2.13, Design Description, 5 th para.	Added paragraph in response to RAI 14.3-449.
226.	S2.2.13, Design Descriptions #2 and 3	Updated Design Descriptions in response to RAI 14.3-405
227.	S2.2.13, Design Description #8	Added Design Description in response to RAI 7.1-101. Item #8 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions.
228.	S2.2.13, Design Description #9	Added Design Description in response to RAI 14.3-449.
229.	S2.2.13, Design Description #10	Added Design Description in response to RAI 14.3-449 S01.
230.	T2.2.13-1	Table updated in response to RAIs 7.1-101, 14.3-449 and 14.3-449 S01.
231.	T2.2.13-2, “ADS” function, “Initiator” and “Interfacing System” cols., New entry	Added “Drywell pressure high” initiator and corresponding interfacing system in response to RAI 21.6-103.
232.	T2.2.13-2, “GDSC Injection” function, “Initiator” and “Interfacing System” cols., New entry	Added “GDSC Injection” initiator and corresponding interfacing system in response to RAI 21.6-103.
233.	T2.2.13.-2, New “CRHAVS temperature control” entry	Added new entry in response to RAI 7.1-132.

Item	Location	Description of Change
234.	T2.2.13-3, “Interlock” parameter, New description	Added CRHAVS CHRA description in response to RAI 7.1-132.
235.	T2.2.13-4, ITAAC #2 and 3, DC col.	Updated Design Commitment in response to RAI 14.3-405.
236.	T2.2.13-4, ITAAC #2 and 3, ITA col.	Updated Inspections, Tests, Analyses in response to RAI 14.3-449.
237.	T2.2.13-4, ITAAC # 8	Added ITAAC in response to RAI 7.1-101. Item #8 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions.
238.	T2.2.13-4, New ITAAC #9	Added ITAAC in response to RAI 14.3-449.
239.	T2.2.13-4, New ITAAC #10	Added ITAAC in response to RAI 14.3-449 S01.
240.	S2.2.14, Design Description, 1 st para.	Updated paragraph in response to RAI 14.3-449 S01.
241.	S2.2.14, Design Description, 7 th para.	Updated paragraph in response to RAI 14.3-449.
242.	S2.2.14, Design Description #1	Updated Design Description in response to RAI 14.3-450.
243.	S2.2.14, Design Descriptions #2 and 3	Updated Design Descriptions in response to RAI 14.3-450.
244.	S2.2.14, Design Description #8	Added “and the fire separation criteria” to address the containment vacuum breaker valves cabinets.
245.	S2.2.14, New Design Description #11	Added Design Description in response to RAI 14.3-405. Added “controller” for DPC controller cabinets.
246.	S2.2.14, New Design Descriptions #12 thru 16	Added Design Descriptions in response to RAI 14.3-449. Item #12 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions.
247.	S2.2.14, New Design Descriptions #17 and 18	Added Design Descriptions in response to RAI 14.3-449 S01.
248.	T2.2.14-1	Updated table in response to RAIs 14.3-449 and 14.3-449 S01. Changed “DPS is housed in a cabinet located in the CB” to “DPS controllers are housed in a cabinet located in the CB” to be more concise.

Item	Location	Description of Change
249.	T2.2.14-2	Updated table and note in response to RAI 7.8-9.
250.	T2.2.14-3	Updated table and notes in response to RAI 7.8-9.
251.	T2.2.14-4, ITAAC #, DC col.	Updated Design Commitment in response to RAI 14.3-450.
252.	T2.2.14-4, ITAAC # 2 and 3	Updated ITAAC in response to RAIs 14.3-450 and 14.3-449.
253.	T2.2.14-4, ITAAC #8, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria columns in response to RAI 14.3-405. Added fire protection separation criteria for containment vacuum breaker valves cabinets.
254.	T2.2.14-4, ITAAC #11	Added ITAAC in response to RAI 14.3-405. Added “controller” for DPC controller cabinets.
255.	T2.2.14-4, ITAAC # 12 thru 16	Added ITAAC in response to RAI 14.3-449. Item #12 is modified to clarify that the coincident trip is of “like, unbypassed parameters” in at least two divisions (DC and AC col.).
256.	T2.2.14-4, ITAAC # 17 and 18	Added ITAAC in response to RAI 14.3-449 S01.
257.	T2.2.14-4, ITAAC #2 and 3, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-449.
258.	S2.2.15	Rewrote entire Section to include tables in response to RAI 14.3-265 S01. RAIs 14.3-265 S02, 14.3-449 and 21.6-103 updated small portions of the section..
259.	S2.2.16, New Section	Added Section in response to RAI 21.6-103. RAIs 14.3-449 S01 and 14.3-450 updated a small portion of the section.
260.	T2.3.1.-1	Added “Seismic Category I” to the table column for safety-related equipment.
261.	T2.3.1-1, Rows 4 and 5	Revised Control Building air intakes: Deleted 1 normal air intake and added two emergency air intakes. This is for consistency with other chapters/sections.
262.	F2.3.1-1	Added “CRHAVS” and “EFU” to the figure legend.
263.	T2.3.2-1, Fuel Building Area	Updated Description and Location to include “Fuel Prep Machine” for design consistency.

Item	Location	Description of Change
264.	S2.4.1, Design Description, New 6 th para.	Added paragraph in response to RAI 14.3-401.
265.	S2.4.1, Design Description #2.a2	Updated Design Description in response to RAI 14.3-414.
266.	S2.4.1, Design Description #5a	Updated Design Description in response to RAI 14.3-353 S01.
267.	S2.4.1, Design Description #7	Added Design Description “mechanical train” entry in response to RAI 14.3-301 S01.
268.	S2.4.1, Design Description #9	Removed reference to active safety function, as that col. was removed from equipment table (see RAI 14.3-352 S01).
269.	S2.4.1, Design Description Item #17	Deleted “(92%)” as it is not necessary for defining full open for the MSIVs.
270.	S2.4.1, New Design Description #29	Added Design Description “valves on lines” entry in response to RAI 14.3-405.
271.	T2.4.1-1, “Pool Cross-Connect Valve (Squib)”	Added Pool Cross-Connect Valve(Squib) in response to RAI 7.1-140.
272.	T2.4.1-1, “Pool Cross-Connect Valve (Pneumatic)”	Added Pool Cross-Connect Valve(Squib) in response to RAI 7.1-140.
273.	T2.4.1-3, ITAAC #5	Updated ITAAC in response to RAI 14.3-353 S01.
274.	T2.4.1-3, ITAAC #7	Added ITAAC for “mechanical trains” in response to RAI 14.3-301 S01.
275.	T2.4.1-3, ITAAC #9, Design Commitment	Removed reference to active safety function, as that col. was removed from equipment table (see RAI 14.3-352 S01).
276.	T2.4.1-3, ITAAC #17	Deleted “(92%)” as it is not necessary for defining full open for the MSIVs.
277.	T2.4.1-3, ITAAC #29	Added ITAAC for “valves on lines” in response to RAI 14.3-405.
278.	F2.4.1-1	Updated figure in response to RAI 7.1-140.
279.	S2.4.2, Design Description # 5	Updated design description in response to RAI 14.3-354 S01.
280.	S2.4.2, Design Description #16	Added “mechanical train” entry in response to RAI 14.3-301 S01.

Item	Location	Description of Change
281.	S2.4.2, Design Descriptions #25-29d	Added design descriptions in response to RAI 14.3-405.
282.	S2.4.2, Design Description #29e	Added design description in response to RAI 19.1-127.
283.	T2.4.2-1	Changed RCPB col. to “yes” for valves V-1, V-4, and V-6 in each division (A, B, C, D).
284.	T2.4.2-3, ITAAC #5	Updated ITAAC in response to RAI 14.3-354 S01.
285.	T2.4.2-3, ITAAC #16	Added “mechanical train” ITAAC entry in response to RAI 14.3-301 S01.
286.	T2.4.2-3, ITAAC #28-29d	Added ITAAC in response to RAI 14.3-405.
287.	T2.4.2-3, ITAAC #20e	Added ITAAC in response to RAI 19.1-127.
288.	S2.5.5, Design Descriptions #9 and 10	Added design descriptions in response to RAI 14.3-447.
289.	S2.5.5, Design Descriptions #9 and 10	Updated design descriptions in response to RAI 14.3-441 S01.
290.	S2.5.5, Design Descriptions #11 and 12	Added design descriptions in response to RAI 14.3-447.
291.	T2.5.5-1, ITAAC #9 and 10	Added ITAAC in response to RAI 14.3-447.
292.	T2.5.5-1, ITAAC #9 and 10, DC	Updated ITAAC in response to RAI 14.3-441 S01.
293.	T2.5.5.-1, ITAAC #11 and 12	Added design descriptions in response to RAI 14.3-447.
294.	T2.5.5.-1, ITAAC #11 and 12	Updated ITAAC in response to RAI 14.3-441 S01.
295.	S2.5.6, Design Description #5	Updated rack flow temperature in response to RAI 9.1-120.
296.	T2.5.6-1, ITAAC #5,DC and AC cols.	Updated rack flow temperature in response to RAI 9.1-120.
297.	S2.6.1, Design Description #6	Changed the description to indicate that the components that have safety-related power are the containment isolation valves identified in the equipment table.
298.	S2.6.1, New Design Description #10	Added design description in response to RAI 14.3-405.

Item	Location	Description of Change
299.	T2.6.1-1, Rows 23, 24, 25	Updated Equipment Identifier information for consistency.
300.	T2.6.1-2, ITAAC #6, DC, ITA, and AC cols.	Changed the description to indicate that the components that have safety-related power are the containment isolation valves identified in the equipment table. This clarifies the scope of equipment subject to the ITAAC.
301.	T2.6.1-2, ITAAC #10	Added ITAAC in response to RAI 14.3-405.
302.	F2.6.1-1	Updated figure for to be current with design change.
303.	S2.6.2, Design Description #7	Updated design description in response to RAI 9.1-20 S03.
304.	S2.6.2, New Design Description #13	Added design description in response to RAI 14.3-405.
305.	S2.6.2, New Design Description #14	Added design description in response to RAI 14.3-442.
306.	S2.6.2, New Design Description #15	Added design description in response to RAI 14.3-443.
307.	S2.6.2, New Design Description #16	Added design description in response to RAI 14.3-443 S01.
308.	T2.6.2-1, New rows 31-34	Added piping to equipment in response to RAI 14.3-444.
309.	T2.6.2-1, New rows 35-38	Added FACPS and Heat Exchanger to equipment in response to RAI 22.5-41.
310.	T2.6.2-2, ITAAC #2.a3	Added ITAAC entry that was inadvertently omitted from Revision 5.
311.	T2.6.2-2, ITAAC #7	Updated ITAAC in response to RAI 9.1-20 S03
312.	T2.6.2-2, New ITAAC #13	Added ITAAC in response to RAI 14.3-405.
313.	T2.6.2-2, New ITAAC #14	Added ITAAC in response to RAI 14.3-442.
314.	T2.6.2-2, New ITAAC #15	Added ITAAC in response to RAI 14.3-443.
315.	T2.6.2-2, ITAAC #7a.ii	Changed AC to indicate the values are less than or equal to or greater than or equal to values rather than a fixed value.

Item	Location	Description of Change
316.	T2.6.2-2, New ITAAC #16	Added ITAAC in response to RAI 14.3-443 S01.
317.	F2.6.2-1	Updated figure in response to RAI 22.5-41.
318.	S2.7, S2.7.1, S2.7.2 and S2.7.3	Deleted Section (including tables)bin response to RAI 7.1-101.
319.	T2.10.2-1, Row 4	Updated entry for consistency.
320.	T2.10.2-1, New Row 5	Added entry for consistency.
321.	S2.11.1, New Design Descriptions #2.a1, 2.a2, 2.a3	Added design descriptions in response to RAI 14.3-414.
322.	S2.11.1, Design Description #2.b1	Updated in response to RAI 14.3-414.
323.	S2.11.1, New Design Description #2.b2	Added design description in response to RAI 14.3-213 S02.
324.	S2.11.1, New Design Description #11	Added design description in response to RAI 14.3-414.
325.	T2.11.1-1, New ITAAC #2.a1, 2.a2, 2.a3	Added ITAAC in response to RAI 14.3-414.
326.	T2.11.1-1, ITAAC #2.b1, DC col.	Updated Design Commitment column in response to RAI 14.3-414.
327.	T2.11.1-1, New ITAAC #2.b2	Added ITAAC in response to RAI 14.3-213 S02.
328.	T2.11.1-1, New ITAAC #11	Added ITAAC in response to RAI 14.3-414.
329.	S2.11.2, New Design Description #9	Added design description in response to RAI 14.3-405.
330.	T2.11.2-1, ITAAC #2 and #3 ITA	Modified to reflect that type testing may support analysis.
331.	T2.11.2-1, New ITAAC #9	Added ITAAC in response to RAI 14.3-405.
332.	F2.12.5-1	Updated figure to be consistent with current design.
333.	S2.12.7, Design Description #3	Updated design description in response to RAI 14.3-374 S01.
334.	T2.12.7-1, ITAAC #3, DC and AC	Updated Design Commitment and Acceptance Criteria in response to RAI 14.3-374 S01.

Item	Location	Description of Change
335.	S2.13.1, New Design Descriptions #9 thru 12	Added design descriptions in response to RAI 14.3-394 S01.
336.	S2.13.1, New Design Descriptions #13	Added design descriptions in response to RAI 14.3-443.
337.	T2.13.1-1, New rows 29-40	Added System Equipment entries in response to RAI 14.3-108.
338.	T2.13.1-2, New ITAAC #9 thru 12	Added ITAAC in response to RAI 14.3-394 S01.
339.	T2.13.1-2, New ITAAC #13	Added ITAAC in response to RAI 14.3-443.
340.	F2.13.1-1, Sh 1	Updated figure in response to RAI 8.1-20.
341.	F2.13.1-1, Sh 2	Updated figure in response to RAI 8.1-20.
342.	S2.13.3, New Design Description, #12	Added design description in response to RAI 14.3-424.
343.	S2.13.3, New Design Description, #13	Added design description in response to RAI 14.3-425.
344.	S2.13.3, New Design Description, #14	Added design description in response to RAI 14.3-429.
345.	T2.13.3-3, New ITAAC #12	Added ITAAC in response to RAI 14.3-424.
346.	T2.13.3-3, New ITAAC #13	Added design description in response to RAI 14.3-425.
347.	T2.13.3-3, New ITAAC #14	Added ITAAC in response to RAI 14.3-429.
348.	F2.13.3-1	Updated figure to be consistent with current design.
349.	F2.13.3-2, Sh1 and Sh 2	Updated figures to be consistent with current design.
350.	S2.13.4, Design Description #2a	Updated design description in response to RAI 14.3-410.
351.	S2.13.4, New Design Description #2i	Added design description in response to RAI 14.3-410.
352.	S2.13.4, Design Description #5a and 5b	Updated design descriptions to be consistent with current design.
353.	S2.13.4, New Design Description #7	Added design description in response to RAI 14.3-410.

Item	Location	Description of Change
354.	T2.13.4-2, ITAAC #2a, DC and AC cols.	Updated Design Commitment and Acceptance Criteria in response to RAI 14.3-410.
355.	T2.13.4-2, ITAAC #2a, ITA col.	Updated Inspections, Tests, Analyses in response to RAI 14.3-410 S01.
356.	S2.13.4, New ITAAC #2i	Added ITAAC in response to RAI 14.3-410.
357.	S2.13.4, ITAAC #5a and 5b	Updated Design Commitment and Acceptance Criteria to be consistent with current design.
358.	S2.13.4, New ITAAC #7	Added ITAAC in response to RAI 14.3-410.
359.	S2.13.5, Design Description #6	Updated design description in response to RAI 14.3-411.
360.	S2.13.5, New Design Description #10	Added design description in response to RAI 14.3-313.
361.	S2.13.5, New Design Description #11	Added design description in response to RAI 14.3-431.
362.	S2.13.5, New Design Description #12	Added design description in response to RAI 14.3-424.
363.	S2.13.5, New Design Description #13	Added design description in response to RAI 14.3-425.
364.	S2.13.5, New Design Description #14	Added design description in response to RAI 14.3-429.
365.	T2.13.5-1, New rows 10, 12, 14 and 16	Added Equipment Descriptions to be consistent with current design.
366.	T2.13.5, ITAAC #6	Updated ITAAC in response to RAI 14.3-411.
367.	T2.13.5, New ITAAC #10	Added ITAAC in response to RAI 14.3-313.
368.	T2.13.5, New ITAAC #11	Added ITAAC in response to RAI 14.3-431.
369.	T2.13.5, New ITAAC #12	Added ITAAC in response to RAI 14.3-424.
370.	T2.13.5, New ITAAC #13	Added ITAAC in response to RAI 14.3-425.
371.	T2.13.5, New ITAAC #14	Added ITAAC in response to RAI 14.3-429.
372.	F2.13.5-1	Updated figure to be consistent with current design.
373.	F2.13.5-2 Sh 1 and Sh 2	Updated figures to be consistent with current design.
374.	S2.13.8, Design Description #4	Removed “in the main control room” for consistency with Tier 2.

Item	Location	Description of Change
375.	S2.13.8, New Design Description #7	Added Design Description in response to RAI 14.3-405.
376.	T2.13.8-1, Design Description #4	Removed reference to “main control room” for consistency with Tier 2.
377.	T2.13.8-1, Design Description #7	Added ITAAC in response to RAI 14.3-405.
378.	New S2.13.9	Added Subsection (including tables) in response to RAI 14.3-427.
379.	S2.15.1, Design Description, 1 st para., 2 nd sent.	Updated sentence in response to RAI 14.3-407.
380.	S2.15.1, Design Description #6a	Updated design description in response to RAI 14.3-379 S01.
381.	S2.15.1, New Design Description #22	Added design description in response to RAI 6.2-157 S02.
382.	S2.15.1, New Design Description #23	Added design description in response to RAI 14.3-407.
383.	T2.15.1-1a	Updated table in response to RAI 3.8-24 S04.
384.	T2.15.1-1a	Changed note about associated piping between containment isolation valves to be in Equipment column header rather than in a footnote.
385.	T2.15.1-1b	Deleted “Suppression Pool Stainless Steel Liner” entry in response to RAI 3.8-24 S04.
386.	T2.15.1-1b	Added to Equipment column header “(includes associated piping)”.
387.	T2.15.1-1c, “Control Q-DCIS/DPS” col.	Updated column in response to RAI 7.1-110.
388.	T2.15.1-1c, “Active Safety Function” col.	Updated column in response to RAIs 14.3-430 S01 and 7.1-101.
389.	T2.15.1-1c, “Equipment Name (Description)” col., last row	Updated “Equipment Name (Description)” in response to RAI 7.1-101.
390.	T2.15.1-1c, Note	Deleted note in response to RAI 7.1-110.
391.	T2.15.1-1d, “Containment Monitoring” section	Updated section in response to RAI 6.2-200.

Item	Location	Description of Change
392.	T2.15.1-2, ITAAC #2.c1, AC col.	Updated Acceptance Criteria in response to RAI 14.3-414.
393.	T2.15.1-2, ITAAC #6a	Updated ITAAC in response to RAI 14.3-379 S01.
394.	T2.15.1-2, ITAAC #9, ITA and AC cols.	Added lower drywell and personnel hatches Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-405.
395.	T2.15.1-2, ITAAC #13, AC col.	The acceptance criteria now reflects verification of a proper tolerance on drywell and wetwell free gas volume to be within the analyzed limit for the containment performance safety analysis.
396.	T2.15.1-2, ITAAC #16b, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 6.2-148 S01.
397.	T2.15.1-2, New ITAAC #22	Added ITAAC in response to RAI 6.2-157 S02.
398.	T2.15.1-2. New ITAAC #23	Added ITAAC in response to RAI 14.3-407.
399.	F2.15.1-1	Updated figure in response to RAI 6.2-148 S01.
400.	S2.15.3, New Design Description #9	Added design description in response to RAI 14.3-405.
401.	T2.15.3-2, New ITAAC #9	Added ITAAC in response to RAI 14.3-405.
402.	S2.15.4, Design Description #5	Updated design description in response to RAI 14.3-384 S01.
403.	S2.15.4, Design Description #6	Added “mechanical train” design description in response to RAI 14.3-301 S01.
404.	S2.15.4, Design Description #11	Updated design description in response to RAI 6.2-190 S01.
405.	S2.15.4, New Design Description #13	Added design description in response to RAI 6.2-181 S01.
406.	S2.15.4, New Design Description #14	Added design description in response to RAI 6.2-190 S01.
407.	T2.15.4-2, ITAAC #6	Added “mechanical train” ITAAC in response to RAI 14.3-301 S01.
408.	T2.15.4-2, ITAAC #10, AC col.	Updated Acceptance Criteria to be consistent with current design.

Item	Location	Description of Change
409.	T2.15.4-2, ITAAC #11	Updated ITAAC in response to RAI 6.2-190 S01.
410.	T2.15.4-2, New ITAAC #13	Added ITAAC in response to RAI 6.2-181 S01.
411.	T2.15.4-2, New ITAAC #14	Added ITAAC in response to RAI 6.2-190 S01.
412.	F2.15.4-1	Updated figure in response to RAI 21.6-98 S01.
413.	S2.15.5, Design Description #2	Deleted design description in response to 14.3-449.
414.	S2.15.5, Design Description #4	Updated design description to clarify the CMS can be operated and that it will operate on a simulated signal.
415.	T2.15.5-2, ITAAC #2	Deleted ITAAC in response to RAI 14.3-449.
416.	S2.15.7, Design Description, 2 nd para.	Updated paragraph in response to RAI 14.3-449.
417.	S2.15.7, Design Description, 4 th para.	Updated paragraph in response to RAI 14.3-449.
418.	T2.15.7-2, ITAAC	Updated ITAAC to clarify the CMS can be operated and that it will operate on a simulated signal.
419.	F2.15.7-1	Updated figure in response to RAI 6.2-200.
420.	New S2.15.8	Added Subsection (including table) in response to RAI 6.2-183 S02.
421.	S2.16.1, New Design Descriptions #7, 8, 9 and 12	Added design descriptions in response to RAI 14.3-447.
422.	S2.16.1, New Design Descriptions #10 and 11	Added design descriptions in response to RAI 14.3-441.
423.	T2.16.1-1, New ITAAC #7, 8, 9 and 12	Added ITAAC in response to RAI 14.3-447.
424.	T2.16.1-1, New ITAAC #10 and 11	Added ITAAC in response to RAI 14.3-441.
425.	S2.16.2.1, New Design Description #12	Added design description in response to RAI 9.4-53.
426.	S2.16.2.3, Design Description, 1 st para., 4 th sent.	Deleted “for 72 hours” in response to RAI 9.4-31 S01.

Item	Location	Description of Change
427.	S2.16.2.3, Design Description #10	Updated design description in response to RAI 14.3-217 S02.
428.	S2.16.2.3, Design Description #12	Deleted “for 72 hours” in response to RAI 14.3-217 S02.
429.	S2.16.2.5, New Design Description #3, 4 and 5	Added design descriptions in response to RAI 14.3-61 S02
430.	T2.16.2-2, New ITAAC #12	Added ITAAC in response to RAI 9.4-53.
431.	T2.16.2-4, ITAAC #4i, ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-218 S01.
432.	T2.16.2-4, ITAAC #4i, AC col.	Updated temperatures to be consistent with current design.
433.	T2.16.4-4, New ITAAC #4ii, ITA and AC cols.	Added Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-218 S01.
434.	T2.16.2-4, ITAAC #8, AC col.	Updated flow rate to be consistent with current design.
435.	T2.16.2-5, 1 st row, “Notes” col.	Updated flow rate to be consistent with current design.
436.	T2.16.2-6, ITAAC #10	Updated ITAAC in response to RAI 14.3-217 S02.
437.	T2.16.2-6, ITAAC #12, DC col.	Deleted “for 72 hours” in Design Commitment in response to RAI 14.3-217 S02.
438.	T2.16.2-6, ITAAC #12, ITA and AC cols.	Updated flow rate to be consistent with current design.
439.	T2.16.2-10, New ITAAC #3, 5 and 5	Added ITAAC in response to RAI 14.3-61 S02.
440.	F2.16.2-2	Updated figure in response to RAI 9.4-53.
441.	F2.16.2-4	Updated figure in response to RAIs 9.4-31 S01 and 9.4-31 S02.
442.	F2.16.2-6	Updated figure in response to RAI 11.3-13.
443.	S2.16.3, Design Description #3	Updated design description in response to RAI 14.3-396.
444.	T2.16.3-1, last row	Updated “Principal Component” entry in response to RAI 14.3-395.
445.	T2.16.3-2, ITAAC #3	Updated ITAAC in response to RAI 14.3-396.

Item	Location	Description of Change
446.	F2.16.3-1	Updated figure in response to RAI 9.5-73.
447.	S2.16.3.1, Design Description #2	Added to the item an exception that elevator doors will have a maximum fire rating of 1.5 hours to be consistent with Tier 2, Section 9A.2.4(4).
448.	S2.16.3.1, Design Description #4	Updated design description in response to RAI 14.3-396.
449.	S2.16.3.1, New Design Description #5	Added design description in response to RAI 14.3-405
450.	T2.16.3.1-1, ITAAC #1, DC, ITA, AC cols.	Changed the first sentence in ITAAC to be consistent with Item #1 in the Design Description. Modified ITA for consistency. Modified AC to repeat same wording at DC col.
451.	T2.16.3.1-1, ITAAC #2, DC, ITA, and AC cols.	Added to the ITAAC an exception that elevator doors will have a maximum fire rating of 1.5 hours to be consistent with Tier 2, Section 9A.2.4(4).
452.	T2.16.3.1-1, ITAAC #4	Updated ITAAC in response to RAI 14.3-396.
453.	T2.16.3.1-1, ITAAC #5	Added ITAAC in response to RAI 14.3-405.
454.	S2.16.5, Design Description, 1 st para., 2 nd sent.	Updated sentence in response to RAI 14.3-405.
455.	S2.16.5, Design Description #4	Updated design description in response to RAI 14.3-221 S01.
456.	S2.16.5, New Design Description #11	Added design description in response in RAI 22.5-5 S02.
457.	S2.16.5, New Design Description #11	Added design description in response in RAI 14.3-442.
458.	T2.16.5-1, “Concrete Thickness” and “Tolerance” cols.	Added dual dimensions to meet Department of Energy project requirements.
459.	T2.16.5-2, ITAAC #4	Updated ITAAC in response to RAI 14.3-221 S01.
460.	T2.16.5-2, New ITAAC #11	Added ITTAC in response to RAI 22.5-5 S02.
461.	T2.16.5-2, New ITAAC #12	Added ITTAC in response to RAI 14.3-442.

Item	Location	Description of Change
462.	F2.16.5-1 thru F2.16.5-11	Updated figures to include “Contains Security Related Information – Withhold Under 10 CFR 2.390” label.
463.	S2.16.6, New Design Description #6	Added design description in response to RAI 22.5-5 S02.
464.	T2.16.6-2, New ITAAC #6	Added ITAAC in response to RAI 22.5-5 S02.
465.	F2.16.6-1 thru F2.16.6-5	Updated figures to include “Contains Security Related Information – Withhold Under 10 CFR 2.390” label.
466.	S2.16.7, Design Description #1, new 4 th bullet	Added bullet in response to RAI 3.8-125.
467.	S2.16.7, New Design Descriptions #6 and 7	Added design description in response to RAI 22.5-5 S02.
468.	S2.16.7, New Design Descriptions #8 and 9	Added design description in response to RAI 14.3-442.
469.	T2.16.7-2, ITAAC #1, new 4 th bullet, DC and AC cols.	Added bullet in response to RAI 3.8-125.
470.	T2.16.7-2, New ITAAC #6 and 7	Added ITAAC in response to RAI 22.5-5 S02.
471.	T2.16.7-2, New ITAAC #8 and	Added ITAAC in response to RAI 14.3-442.
472.	F2.16.7-1 thru F2.16.7-6	Updated figures to include “Contains Security Related Information – Withhold Under 10 CFR 2.390” label.
473.	New S2.16.8	Added previously deleted Subsection (including table) in response to RAI 3.8-79 S03.
474.	S2.16.8, Design Description #1 and 1 st bullet	Updated design description in response to RAI 3.8-79 S04.
475.	T2.16.8-1, ITAAC #1, DC and AC	Updated Design Commitment and Acceptance Criteria in response to RAI 3.8-79 S04.
476.	New S2.16.9	Added previously deleted Subsection (including table) in response to RAI 3.8-79 S03.

Item	Location	Description of Change
477.	S2.16.9, Design Description #1 and 1 st bullet	Updated design description in response to RAI 3.8-79 S04.
478.	T2.16.9-1, ITAAC #1, DC and AC	Updated Design Commitment and Acceptance Criteria in response to RAI 3.8-79 S04.
479.	New S2.16.10	Added previously deleted Subsection (including table) in response to RAI 3.8-79 S03.
480.	S2.16.10, Design Description #1 and 1 st bullet	Updated design description in response to RAI 3.8-79 S04.
481.	T2.16.10-1, ITAAC #1, DC and AC	Updated Design Commitment and Acceptance Criteria in response to RAI 3.8-79 S04.
482.	New S2.16.11	Added Subsection (including table) in response to RAI 3.8-79 S03.
483.	S2.16.11, Design Description #1 and 1 st bullet	Updated design description in response to RAI 3.8-79 S04.
484.	T2.16.11-1, ITAAC #1, DC and AC	Updated Design Commitment and Acceptance Criteria in response to RAI 3.8-79 S04.
485.	New S2.16.12	Added Subsection (including table) in response to RAI 22.5-5 S02.
486.	New S2.16.13	Added Subsection (including table) in response to RAI 22.5-5 S02.
487.	New S2.16.14	Added Subsection (including table) in response to RAI 22.5-5 S02.
488.	S2.19, Design Description	Updated Subsection in response to RAI 14.3-440.
489.	T2.19-1	Updated table in response to RAI 14.3-440.
490.	T3.1-1, ITAAC #1, DC	Removed language to be consistent with “Deleted” entries in Design Description.
491.	T31-1, ITAAC #2, DC	Removed language to be consistent with “Deleted” entries in Design Description.
492.	T3.1-1, ITAAC #3 ITA and AC cols.	Updated Inspections, Tests, Analyses and Acceptance Criteria in response to RAI 14.3-131 S03.
493.	T3.1-1, ITAAC #6, ITA col.	Updated Inspections, Tests, Analyses in response to RAI 14.3-131 S03.

Item	Location	Description of Change
494.	S3.2	Rewrote Section 3.2 (including table) in response to RAI 14.3-402..
495.	S3.2	Updated Section 3.2 in response to RAIs 14.3-405 S01 and 21.6-103.
496.	S3.2, Inspections, Test, Analyses and Acceptance Criteria, old 2 nd para.	Removed 2 nd paragraph as Design Acceptance Criteria generic discussion is now in Section 1.
497.	S3.3, Design Description, 2 nd para.	Deleted “HFE Program Goals” in response to RAI 14.3-421.
498.	S3.3, Design Description, old 3 rd para.	Deleted paragraph in response to RAI 18.8-47 S03.
499.	S3.3, Design Description 3 rd para., 2 nd sent.	Deleted sentence in response to RAI 14.3-436 S01.
500.	S3.3, new 4 th para.	Added paragraph/opening statement in response to RAI 14.3-422.
501.	S3.3., Design Description, HFE elements #1-11	Updated HEF elements and associated implementation plans in response to RAI 14.3-436. This change was superseded by RAI 14.3-436 S01.
502.	S3.3, Design Description, New HFE element #12	Added HFE element and associated implementation plan in response to RAI 18.11-3 S03.
503.	S3.3, Design Description, new 5 th thru 10 th paras.	Added text in response to RAI 18.8-47 S03.
504.	S3.3, Inspections, Test, Analyses and Acceptance Criteria, old 1 st para.	Deleted paragraph in response to RAI 14.3-423.
505.	S3.3, Inspections, Test, Analyses and Acceptance Criteria, 2 nd para., 1 st sent.	Updated sentence in response to RAI 14.3-436. This change was superseded by RAI 14.3-436 S01.
506.	S3.3, Inspections, Test, Analyses and Acceptance Criteria, 1 st para., old 1 st sent.	Deleted sentence in response to RAI 14.3-436 S01.
507.	New T3.3-1	Added table in response to RAI 14.3-436. This change was superseded by RAI 14.3-436 S01.
508.	New T3.3-1a	Added table in response to RAI 14.3-436 S01.
509.	New T3.3-1b	Added table in response to RAI 14.3-436 S01.

Item	Location	Description of Change
510.	T3.3-2, ITAAC, DC col	Updated Design Commitment column in response to RAI 14.3-436. This change was superseded by RAI 14.3-436 S01.
511.	T3.3-2, ITAAC, AC col.	Updated Acceptance Criteria column in response to RAI 14.3-436.
512.	T3.3-2, ITAAC #2, new 7 th and 8 th bullets, AC col.	Added bullets in response to RAI 14.3-436 S02.
513.	T3.3-2, ITAAC #5ii, AC col., 1 st , 2 nd and 3 rd bullets,	Updated bullets in response to RAI 14.3-436 S02.
514.	T3.3-2, ITAAC #6i, AC col., 5 th bullet	Updated bullet for consistency.
515.	T3.3-2, ITAAC #6ii, AC col., new 3 rd bullet	Added bullet in response to RAI 18.8-47 S03.
516.	T3.3-2, ITAAC #7ii, AC col., 4 th bullet	Updated bullet in response to RAI 14.3-453.
517.	T3.3-2, ITAAC #7ii, AC col., 5 th bullet	Updated bullet in response to RAI 14.3-436 S02.
518.	T3.3-2, New ITAAC #12	Added ITAAC in response to RAI 18.11-3 S03.
519.	S3.4, New Design Description #4	Added design description in response to RAI 14.3-174 S01.
520.	T3.4-1, ITAAC #3, AC col.	Added a footnote to the units in the AC col. to indicate that 1 Sv = 100 rems.
521.	T3.4-1, New ITAAC #4	Added ITAAC in response to RAI 14.3-174 S01.
522.	S3.6, Design Description #1	Updated design description in response to RAI 14.3-437.
523.	T3.6-1, ITAAC #1	Updated ITAAC in response to RAI 14.3-437.
524.	S3.7, Design Description	At the end of the second paragraph, a reference to Regulatory Guide 1.97 is added for addressing the types of variables. RG 1.97 and its references explain the variable types (A, B, C, D, and E).
525.	S3.8, New Design Description #4	Added design description in response to RAI 7.1-101.
526.	T3.8-1, New ITAAC #4	Added ITAAC in response to RAI 7.1-101.

Item	Location	Description of Change
527.	S4.1, Design Description, 1 st para.	Updated paragraph in response to RAI 9.2-24.
528.	S4.1, Interface Requirements	Updated paragraph in response to RAI 9.2-24.
529.	New S4.2	Added Section in response to RAI 14.3-394 S01.
530.	S5.1, 3 rd para., 1 st sent.	Updated sentence in response to RAI 2.5-10.
531.	T5.1-1, Extreme Wind	Updated “Extreme Wind” entry for clarification.
532.	T5.1-1, Precipitation (for Roof Design)	Updated “Precipitation for Roof Design” entry in response to RAI 2.3-4 S06.
533.	T5.1-1, Soil Properties	Updated “Soil Properties” entry in response to RAIs 3.8-94 S03, 3.8-94 S04 and 3.8-96 S03.
534.	T5.1-1, Note 1	Deleted Note 1 in response to RAIs 3.8-79 S03 and 3.8-80 S03. This change was superseded by RAI 2.3-4 S06.
535.	T5.1-1, Note 1	Updated Note 1 in response to RAI 2.3-4 S06.
536.	T5.1-1. Note 2	Updated Note 2 in response to RAI 3.8-94 S04.
537.	T5.1-1. Note 3	Updated Note 3 in response to RAIs 2.5-10 and 2.5-10 S01
538.	T5.1-1, Note 4	Updated Note 4 in response to RAI 3.7-63 S01.
539.	T5.1-1, New Note 6	Added Note 6 in response to RAI 2.5-10.
540.	T5.1-1, New Note 7	Added Note 7 in response to RAI 2.3-4 S06.