

**Changes From Revision 01 to Revision 02
for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases**

Item	Section	Subsection	Description of Change	Brief Reason for Change
1	16B.00 TOC	ALL	All Bases revised to Revision 2 with the exception of B 3.3.3.2, B 3.4.3, B 3.9.3, B 3.10.2, and B 3.10.6, which remain at Revision 1.	Consistent with Bases revision status
2	16B.00 TOC	B 3.7.1	Bases renumbered from B 3.7.1 to B 3.7.2.	Bases rearranged to match numbering sequence in NUREG-1434, Revision 3.1
3	16B.00 TOC	B 3.7.2	Bases renumbered from B 3.7.2 to B 3.7.3.	Bases rearranged to match numbering sequence in NUREG-1434, Revision 3.1
4	16B.00 TOC	B 3.7.3	Bases renumbered from B 3.7.3 to B 3.7.4.	Bases rearranged to match numbering sequence in NUREG-1434, Revision 3.1
5	16B.00 TOC	B 3.7.4	Bases renumbered from B 3.7.4 to B 3.7.5.	Bases rearranged to match numbering sequence in NUREG-1434, Revision 3.1
6	16B.00 TOC	B 3.7.5	Bases renumbered from B 3.7.5 to B 3.7.1.	Bases rearranged to match numbering sequence in NUREG-1434, Revision 3.1
7	16B.00 TOC	B 3.8.1	Title revised from "24 hour DC Sources - Operating" to "DC Sources - Operating."	Consistent with Bases title change due to N-2 Design Change
8	16B.00 TOC	B 3.8.2	Bases deleted.	Consistent with Bases deletion due to N-2 Design Change
9	16B.00 TOC	B 3.8.3	Bases renumbered from B 3.8.3 to B 3.8.2, and title revised from "24 hour DC Sources - Shutdown" to "DC Sources - Shutdown."	Consistent with Bases number and title change due to N-2 Design Change
10	16B.00 TOC	B 3.8.4	Bases renumbered from B 3.8.4 to B 3.8.3.	Consistent with Bases number change due to N-2 Design Change
11	16B.00 TOC	B 3.8.5	Bases renumbered from B 3.8.5 to B 3.8.4.	Consistent with Bases number change due to N-2 Design Change
12	16B.00 TOC	B 3.8.6	Bases renumbered from B 3.8.6 to B 3.8.5.	Consistent with Bases number change due to N-2 Design Change
13	16B.00 TOC	B 3.8.7	Bases renumbered from B 3.8.7 to B 3.8.6.	Consistent with Bases number change due to N-2 Design Change
14	16B.00 TOC	B 3.8.8	Bases renumbered from B 3.8.8 to B 3.8.7.	Consistent with Bases number change due to N-2 Design Change

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Item	Section	Subsection	Description of Change	Brief Reason for Change
15	16B.02.01.01	ASA	Replaced second sentence of the first paragraph with “To ensure damage does not occur, the Fuel Cladding Integrity Safety Limit (FCISL) is established as greater than 99.9% of the fuel rods in the core would be expected to avoid boiling transition”.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
16	16B.02.01.01	ASA	Replaced the phrase “MCPR limit” with “FCISL” in the last sentence of the first paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
17	16B.02.01.01	ASA 2.1.1.1	Revised brackets from square brackets to curly brackets in four places.	RAI 16.0-2 (MFN 06-431)
18	16B.02.01.01	ASA 2.1.1.2	Replaced the 2.1.1.2 header “MCPR” with “FCISL”.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
19	16B.02.01.01	ASA 2.1.1.2	Replaced the phrase “The fuel cladding integrity SL” with “The FCISL” in the first sentence of the first paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
20	16B.02.01.01	ASA 2.1.1.2	Replaced the word “SL” with “FCISL” in the last sentence of the first paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
21	16B.02.01.01	ASA 2.1.1.2	Replaced the phrase “the fuel cladding integrity SL” with “the FCISL” in the second sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
22	16B.02.01.01	ASA 2.1.1.2	Removed brackets from Reference [5] in the second and third sentences of the second paragraph.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
23	16B.02.01.01	REFERENCES	Removed brackets from Reference [5], corrected report name and title to match issued document, and deleted "scheduled" to reflect the document issue date.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
24	16B.02.01.02	ASA	Revised brackets from square brackets to curly brackets in four places in second paragraph.	RAI 16.0-2 (MFN 06-431)
25	16B.02.01.02	SAFETY LIMITS	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
26	16B.02.01.02	REFERENCES	Revised brackets from square brackets to curly brackets in two places in Reference 5.	RAI 16.0-2 (MFN 06-431)
27	16B.03.00	LCO 3.0.3	Bases brought into closer alignment with NUREG-1434 by removing basis for not having a firm Completion Time to MODE 5.	Revised Completion Times based on RAI 16.2-16 response.
28	16B.03.00	LCO 3.0.3	Reference to "Fuel Pool Water Level" Specification number revised.	Change made consistent with other changes resulting in Specification renumbering.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
29	16B.03.00	LCO 3.0.4	Removed brackets from statements referencing plant processes that will be performed in accordance with RG 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants."	The Technical Specifications reflect certain risk-informed generic changes that pre-suppose processes will conform to the guidance in RG 1.182 as stated in the NUREG-1434 Standard Technical Specification Bases.
30	16B.03.00	SR 3.0.3	Removed brackets from statements referencing plant processes that will be performed in accordance with RG 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants."	The Technical Specifications reflect certain risk-informed generic changes that pre-suppose processes will conform to the guidance in RG 1.182 as stated in the NUREG-1434 Standard Technical Specification Bases.
31	16B.03.01.01	LCO and REFERENCES	Removed brackets from the last sentence describing analysis in Reference 3.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
32	16B.03.01.01	REFERENCES	Removed brackets from Reference 3, corrected report name and title to match issued document, and deleted "scheduled" to reflect the document issue date.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
33	16B.03.01.02	SR 3.1.2.1	Removed brackets from [1000 MWD/T] Frequency.	Consistent with NUREG-1434, Revision 3.1, and because ESBWR fuel design and core management is not significantly different than that of the BWR/6.
34	16B.03.01.03	BACKGROUND	Removed brackets from Reference [2] in last sentence of third paragraph.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
35	16B.03.01.03	ASA	Removed brackets from Reference [2] in first sentence.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
36	16B.03.01.03	ASA	Replaced the phrase "MCPR" with "Fuel Cladding Integrity" in the second sentence of the third paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
37	16B.03.01.03	ACTIONS A.1, A.2, A.3, & A.4	Revised brackets from square brackets to curly brackets in two places in first paragraph.	RAI 16.0-2 (MFN 06-431)
38	16B.03.01.03	ACTIONS C.1 and C.2	Revised brackets from square brackets to curly brackets in one place in first paragraph.	RAI 16.0-2 (MFN 06-431)
39	16B.03.01.03	ACTIONS D.1 and D.2	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
40	16B.03.01.03	ACTIONS E.1 and E.2	Revised brackets from square brackets to curly brackets in one place.	RAI 16.0-2 (MFN 06-431)

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Item	Section	Subsection	Description of Change	Brief Reason for Change
41	16B.03.01.03	SR 3.1.3.4	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
42	16B.03.01.03	REFERENCES	Removed brackets from Reference [2], corrected report name and title to match issued document, deleted "scheduled," and revised issue date to reflect the document issue date.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
43	16B.03.01.04	ASA	Replaced the phrase "MCPR" with "Fuel Cladding Integrity" in the first sentence of the second paragraph, and the phrase "actual MCPR from becoming less than the MCPR SL" with "Fuel Cladding Integrity SL being exceeded" in the second sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
44	16B.03.01.04	LCO	Revised brackets from square brackets to curly brackets in four places.	RAI 16.0-2 (MFN 06-431)
45	16B.03.01.04	SR 3.1.4.1	Revised brackets from square brackets to curly brackets in two places, and revised metric unit value significant digits.	RAI 16.0-2 (MFN 06-431), and consistency with English unit value significant digits
46	16B.03.01.04	SR 3.1.4.3	Revised brackets from square brackets to curly brackets in three places, and revised metric unit value significant digits. Deleted specific bracketed limit from Table 3.1.4-1, Note 2.	RAI 16.0-2 (MFN 06-431), consistency with English unit value significant digits, and because redundantly stating bracketed limit not necessary
47	16B.03.01.04	SR 3.1.4.4	Revised brackets from square brackets to curly brackets in one place, and revised metric unit value significant digits.	RAI 16.0-2 (MFN 06-431), and consistency with English unit value significant digits
48	16B.03.01.04	SRs	The phrase "single control rod" was replaced with "single control rod or control rod pair" in two places in the first paragraph.	RAI 16.2-21 (MFN 06-431)
49	16B.03.01.05	ASA	Replaced the phrase "MCPR" with "Fuel Cladding Integrity" in the first sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
50	16B.03.01.05	SR 3.1.5.1	Revised brackets from square brackets to curly brackets in two places in last sentence of the first paragraph, and revised two metric unit value significant digits.	RAI 16.0-2 (MFN 06-431), and consistency with English unit value significant digits
51	16B.03.01.06	BACKGROUND	Revised brackets from square brackets to curly brackets in one place.	RAI 16.0-2 (MFN 06-431)
52	16B.03.01.06	ASA	Revised brackets from square brackets to curly brackets in one place in the second sentence of the second paragraph.	RAI 16.0-2 (MFN 06-431)
53	16B.03.01.06	APPLICABILITY	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)

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Item	Section	Subsection	Description of Change	Brief Reason for Change
54	16B.03.01.06	ACTIONS A.1 & A.2	Revised brackets from square brackets to curly brackets in one place in second sentence of the first paragraph.	RAI 16.0-2 (MFN 06-431)
55	16B.03.01.06	SR 3.1.6.1	Revised brackets from square brackets to curly brackets in one place.	RAI 16.0-2 (MFN 06-431)
56	16B.03.01.07	APPLICABILITY	Changed brackets from [] to { } for requirements in MODES 3, 4 and 5.	GE to resolve prior to Certification. (RAI 16.0-2)
57	16B.03.01.07	SR 3.1.7.6	Revised Frequency for SR 3.1.7.6 per RAI 16.2-106.	RAI 16.2-106
58	16B.03.01.07	SR 3.1.7.8	Added Bases for SR 3.1.7.8 per RAI 16.2-93.	RAI 16.2-93
59	16B.03.02.01	ASA	Replaced the phrase “MCPR” with “Fuel Cladding Integrity” in the last sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
60	16B.03.02.01	APPLICABILITY	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
61	16B.03.02.01	ACTIONS B.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
62	16B.03.02.01	SR 3.2.1.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
63	16B.03.02.02	BACKGROUND	Replaced the second sentence of the first paragraph with “The Fuel Cladding Integrity Safety Limit (FCISL) is established as greater than 99.9% of the fuel rods in the core would be expected to avoid boiling transition (refer to the Bases for SL 2.1.1.2)”.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
64	16B.03.02.02	ASA	Replaced the second sentence of the first paragraph with “To ensure that the FCISL is not exceeded during any transient event that occurs with moderate frequency, limiting transients have been analyzed to determine the critical power ratio (CPR) transient uncertainty”.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
65	16B.03.02.02	ASA	Replaced the last two sentences of the first paragraph with “The steady-state and CPR transient uncertainties and the uncertainties in monitoring and simulating the core operating state are incorporated by the statistical model (Ref. 2) to determine the required operating limit MCPR”.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
66	16B.03.02.02	APPLICABILITY	Revised brackets from square brackets to curly brackets in two places in the first paragraph and two places in the second paragraph.	RAI 16.0-2 (MFN 06-431)

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Item	Section	Subsection	Description of Change	Brief Reason for Change
67	16B.03.02.02	APPLICABILITY	Replaced the phrase “MCPR SL” with “FCISL” in the last sentence of the first paragraph, and deleted the first sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475), and Reference 2 does not contain the analysis described and the information is not necessary
68	16B.03.02.02	ACTIONS B.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
69	16B.03.02.02	SR 3.2.2.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
70	16B.03.02.02	REFERENCES	Removed brackets from Reference 2, corrected report name and title to match issued document, and deleted "scheduled" to reflect the document issue date.	Referenced document has been issued for NRC review, and verified to contain information as described in the Bases.
71	16B.03.03.01.01	BACKGROUND	Deleted discussion of backup scram.	Not a TS requirement.
72	16B.03.03.01.01	BACKGROUND	Revised 3rd, 4th, 5th, 6th, 7th, and 8th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
73	16B.03.03.01.01	BACKGROUND	Inserted descriptions of Instrument (sensor) Channel, Divisions of Trip Logic, Divisions of Trip Actuators, Divisions of Manual Scram Controls, Divisions of Scram Logic Circuitry.	Clarification of how RPS components are specified.
74	16B.03.03.01.01	BACKGROUND	Inserted description of single failure capability and AC power supplies (paragraphs 22 and 23).	N-2 Design Change
75	16B.03.03.01.01	BACKGROUND	Deleted information in Paragraphs 24, 25, and 26 with respect to RPS configuration.	Duplicate of information added by insertion of descriptions of Instrument (sensor) Channel, Divisions of Trip Logic, Divisions of Trip Actuators, Divisions of Manual Scram Controls, Divisions of Scram Logic Circuitry.
76	16B.03.03.01.01	BACKGROUND	Paragraph 27 - corrected presentation by defining NMS, titling LCO 3.3.1.4 and 3.3.1.5, and correcting TLU to DTLU.	Editorial Changes
77	16B.03.03.01.01	BACKGROUND	Deleted paragraph 28 - discussion of trip actuation logic.	Duplicate of information added by insertion of descriptions of Instrument (sensor) Channel, Divisions of Trip Logic, Divisions of Trip Actuators, Divisions of Manual Scram Controls, Divisions of Scram Logic Circuitry.
78	16B.03.03.01.01	BACKGROUND	Deleted paragraph 29 - Manual Scram description.	Manual scram specified in LCO 3.3.1.3 and is fully described there.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
79	16B.03.03.01.01	BACKGROUND	Relocated paragraph 29 - scram pilot valve discussion to Divisions of Scram Logic Circuitry discussion.	Editorial presentation
80	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Revised first paragraph to reflect TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
81	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Revised third paragraph to reflect implementation of SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
82	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Revised 4th and 5th paragraphs to reflect TSTF-493 discussions.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
83	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Revised 6th paragraph to insert RPS Actuation in the list of items not covered by LCO 3.3.1.1.	Editorial
84	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Revised 10th paragraph to correct TLUs as DTLUs and replaced "covers" with "encompasses."	Editorial
85	16B.03.03.01.01	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" channels and provide details on determining which are "required."	N-2 Design Change
86	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 01	Revised third paragraph to state that three channels are required.	N-2 Design Change
87	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 02	Revised 2nd paragraph to state that three channels are required.	N-2 Design Change
88	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 03	Revised 2nd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
89	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 03	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
90	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 04	Revised 2nd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
91	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 04	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
92	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 05	Revised 4th paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
93	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 05	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
94	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 05	Revised 4th paragraph Remove brackets and state that the core will not be uncovered instead of preventing initiation of ECCS.	Information in DCD Chapter 15 determined to be sufficient to validate statement.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
95	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 06	Revised 2nd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
96	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 06	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
97	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 06	Replaced square brackets surrounding "25%" in 3rd paragraph with curly brackets.	RAI 16.0-2
98	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 07	Replaced square brackets with curly brackets in 2nd paragraph.	RAI 16.0-2
99	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 07	Revised 3rd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
100	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 07	Revised 4th paragraph to state that three channels are required.	N-2 Design Change
101	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 08	Revised 1st paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
102	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 08	Revised 2nd paragraph to state that three channels are required.	N-2 Design Change
103	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 09	Revised 3rd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
104	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 09	Revised 3rd paragraph to delete brackets surrounding basis for value.	Validated statement based on engineering judgment and review of LCO 3.6.2.1
105	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 09	Revised 4th paragraph to replace square brackets surrounding "12" with curly brackets.	RAI 16.0-2
106	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Revised 2nd paragraph to replace square brackets surrounding "three or more" with curly brackets.	RAI 16.0-2
107	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Revised 2nd paragraph to replace square brackets surrounding "40"% RTP with curly brackets.	RAI 16.0-2
108	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Revised 3rd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
109	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Revised 4th paragraph to replace square brackets surrounding "40"% RTP with curly brackets.	RAI 16.0-2
110	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Revised 4th paragraph to state that three channels are required.	N-2 Design Change
111	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 10	Replaced "MCPR SL" in last sentence of 1st paragraph with "fuel cladding integrity Safety Limit."	RAI 15.0-16

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Item	Section	Subsection	Description of Change	Brief Reason for Change
112	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 11	Replaced "MCPR SL" in 1st sentence of 1st paragraph with "fuel cladding integrity Safety Limit."	RAI 15.0-16
113	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 11	Revised 2nd paragraph to replace square brackets surrounding "40"% RTP with curly brackets.	RAI 16.0-2
114	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 11	Revised 3rd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
115	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 11	Revised 4th paragraph to state that three channels are required.	N-2 Design Change
116	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 11	Revised 4th paragraph to replace square brackets surrounding "40"% RTP with curly brackets.	RAI 16.0-2
117	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 12	Replaced "MCPR SL" in 3rd sentence of 1st paragraph with "fuel cladding integrity Safety Limit."	RAI 15.0-16
118	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 12	Replaced "MCPR SL" in last sentence of 1st paragraph with "fuel cladding integrity Safety Limit."	RAI 15.0-16
119	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 12	Revised 2nd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
120	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 12	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
121	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 13	Revised 1st paragraph to reword logic description.	N-2 Design Change (editorial clarification)
122	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 13	Deleted description of logic from 2nd paragraph.	N-2 Design Change (editorial clarification)
123	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 13	Revised 2nd paragraph to replace "Allowable Value" with "Analytical/Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
124	16B.03.03.01.01	ASA, LCO, and APPLICABILITY Function 13	Revised 3rd paragraph to state that three channels are required.	N-2 Design Change
125	16B.03.03.01.01	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change
126	16B.03.03.01.01	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
127	16B.03.03.01.01	ACTIONS A.1 & A.2	Revised 1st and 2nd paragraph to replace action to "place" division in trip with action to "verify" division in trip.	RPS design does not include allowance for operator to place a division in trip.
128	16B.03.03.01.01	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
129	16B.03.03.01.01	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change
130	16B.03.03.01.01	ACTIONS C.1	Removed brackets surrounding "1" hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2
131	16B.03.03.01.01	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
132	16B.03.03.01.01	ACTIONS E.1, F.1, G.1, H.1 & I.1	Renumbered as D.1, E.1, F.1, G.1, and H.1.	N-2 Design Change
133	16B.03.03.01.01	SR 3.3.1.1.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
134	16B.03.03.01.01	SR 3.3.1.1.1	Removed brackets surrounding "24 hours" in 1st paragraph and in second paragraph and referenced PRA topical as basis.	RAI 16.0-2
135	16B.03.03.01.01	SR 3.3.1.1.1	Discussion revised to refer to "required" channel.	N-2 Design Change
136	16B.03.03.01.01	SR 3.3.1.1.2	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
137	16B.03.03.01.01	SR 3.3.1.1.2	Revised 2nd paragraph to refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
138	16B.03.03.01.01	SR 3.3.1.1.2	Removed brackets surrounding "184 days" in 3rd paragraph and referenced PRA topical as basis.	RAI 16.0-2
139	16B.03.03.01.01	SR 3.3.1.1.3	Revised 1st paragraph to reflect TSTF-493 discussions and refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
140	16B.03.03.01.01	SR 3.3.1.1.3	Removed brackets surrounding "24 month" Frequency in 2nd paragraph and referenced PRA topical as basis.	RAI 16.0-2
141	16B.03.03.01.01	SR 3.3.1.1.3	Added paragraph to discuss as-found/as-left and selected instruments consistent with TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
142	16B.03.03.01.01	SR 3.3.1.1.3	Discussion revised to refer to "required" channel.	N-2 Design Change
143	16B.03.03.01.01	SR 3.3.1.1.4	Revised SR to refer to "required" channel.	N-2 Design Change
144	16B.03.03.01.01	SR 3.3.1.1.4	Revised all references in the SR to reflect incorporation of PRA topical as Reference 13.	PRA Topical is expected to provide evaluation supporting this Frequency.
145	16B.03.03.01.01	SR 3.3.1.1.4	Revised second paragraph to state that this SR overlaps that of SR 3.3.1.2.2.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
146	16B.03.03.01.01	SR 3.3.1.1.4	Revised last paragraph to replace justification of Frequency based on industry experience with reference to PRA Topical.	PRA Topical is expected to provide evaluation supporting this Frequency.

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
147	16B.03.03.01.01	SR 3.3.1.1.4	Revised last paragraph to delete discussion of Frequency basis for output logic.	Added RPS Response Time Test to LCO 3.3.1.2 ensure all portions of RPS circuitry are adequately tested.
148	16B.03.03.01.01	SR 3.3.1.1.4	Revised 4th paragraph to clarify that Staggered Test Basis is based on 4 channels.	N-2 Design Change
149	16B.03.03.01.01	REFERENCES	Added NEDO-33201 as reference 13 and renumbered subsequent references as 14, 15, and 16.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
150	16B.03.03.01.02	BACKGROUND	Revised 3rd paragraph replace component listing with Divisions of Trip Logic and Divisions of Trip Actuation.	Consistency with DCD terminology and presentation in LCO 3.3.1.1 Bases
151	16B.03.03.01.02	ASA	Deleted last sentence of 1st paragraph.	Editorial - Unnecessary duplication of information presented in Background
152	16B.03.03.01.02	ASA	Deleted last paragraph.	Editorial - Unnecessary duplication of information presented in LCO Bases.
153	16B.03.03.01.02	LCO	Revised 1st paragraph to discuss three "required" channels and provide details on determining which are "required."	N-2 Design Change
154	16B.03.03.01.02	LCO	Revised 1st paragraph replace component listing with Divisions of Trip Logic and Divisions of Trip Actuation.	Consistency with DCD terminology and presentation in LCO 3.3.1.1 Bases
155	16B.03.03.01.02	APPLICABILITY	Revised to state that three divisions are required.	N-2 Design Change
156	16B.03.03.01.02	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change
157	16B.03.03.01.02	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
158	16B.03.03.01.02	ACTIONS A.1 & A.2	Revised 1st paragraph to replace action to "place" division in trip with action to "verify" division in trip.	RPS design does not include allowance for operator to place a division in trip.
159	16B.03.03.01.02	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change
160	16B.03.03.01.02	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change
161	16B.03.03.01.02	ACTIONS C.1	Removed brackets surrounding "1" hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2
162	16B.03.03.01.02	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
163	16B.03.03.01.02	ACTIONS D.1	Referenced PRA topical as basis for 12 hour Completion Time.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
164	16B.03.03.01.02	ACTIONS E.1	Renumbered as D.1.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
165	16B.03.03.01.02	SR 3.3.1.2.1	Revised 1st paragraph, first sentence component listing to define acronyms and correct terminology.	Consistency with DCD terminology and presentation in LCO 3.3.1.1 Bases
166	16B.03.03.01.02	SR 3.3.1.2.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
167	16B.03.03.01.02	SR 3.3.1.2.1	Revised 1st sentence of 2nd paragraph to clarify SR Frequency. Inserted "for four divisions" in place of the discussion of output logic units. Added second sentence for additional clarification.	N-2 Design Change and consistency with DCD Rev 2 descriptions.
168	16B.03.03.01.02	SR 3.3.1.2.1	Referenced PRA topical as basis for Frequency in 3rd paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
169	16B.03.03.01.02	SR 3.3.1.2.1	Replaced reference to "channels" in 1st paragraph with "divisions."	Editorial - Consistency with LCO wording.
170	16B.03.03.01.02	SR 3.3.1.2.2	Added discussion of RPS Response Time Testing.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
171	16B.03.03.01.02	REFERENCES	Added PRA topical to list of references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
172	16B.03.03.01.02	REFERENCES	Added reference for RPS Response Time Testing acceptance criteria.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
173	16B.03.03.01.03	BACKGROUND	Inserted curly brackets around description of reactor mode switch details in 2nd paragraph.	DCD does not contain sufficient information to allow validation of the information.
174	16B.03.03.01.03	BACKGROUND	Relocated discussion of components addressed in the specification from ASA.	Editorial - Consistency of presentation with other Bases.
175	16B.03.03.01.03	ASA	Removed brackets surrounding justification for including manual trip in TS in 1st paragraph.	Sufficient information exists to validate.
176	16B.03.03.01.03	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
177	16B.03.03.01.03	SR 3.3.1.3.1	Removed brackets surrounding "92 day" Frequency and referenced PRA topical as basis.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
178	16B.03.03.01.03	REFERENCES	Added NEDO-33201 as reference 1.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
179	16B.03.03.01.04	BACKGROUND	Revised 2nd, 3rd, 4th, 5th, 6th, and 7th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
180	16B.03.03.01.04	BACKGROUND	Inserted description of SRNM power supplies at end of SRNM description.	N-2 Design Change

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
181	16B.03.03.01.04	BACKGROUND	Inserted sentence indicating that “The OPRM function resides in the APRM equipment and receives the same redundant APRM power.”	N-2 Design Change
182	16B.03.03.01.04	BACKGROUND	Inserted description of that OPRM resides in APRM equipment for description of power supply.	N-2 Design Change
183	16B.03.03.01.04	BACKGROUND	Revised 4th paragraph from end to revise TLU to DTLU.	Consistency with DCD
184	16B.03.03.01.04	BACKGROUND	Inserted discussion of single failure with one channel bypassed or out of service as next-to-last paragraph.	N-2 Design Change
185	16B.03.03.01.04	BACKGROUND	Revised last paragraph to correct semantics.	Editorial - Specifications address Operability requirements, they do not cover components.
186	16B.03.03.01.04	ASA	Revised 1st paragraph to refer to SCP instead of to setpoints derived from Allowable Values in Table 3.3.1.4-1.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
187	16B.03.03.01.04	ASA	Revised 3rd, 4th, and 5th paragraphs to implement TSTF-493 discussions.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
188	16B.03.03.01.04	ASA	Inserted discussion of basis for three channel requirements as next-to-last paragraph.	N-2 Design Change
189	16B.03.03.01.04	ASA Function 1a, 1b	Revised 4th paragraph to require three channels instead of four.	N-2 Design Change
190	16B.03.03.01.04	ASA Function 1a, 1b	Revised 5th to refer to Analytical/Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
191	16B.03.03.01.04	ASA Function 1c	Revised 3rd paragraph to require three channels instead of four.	N-2 Design Change
192	16B.03.03.01.04	ASA Function 2a	Replaced square brackets surrounding "25%" with curly brackets (2 locations) in 3rd paragraph	RAI 16.0-2
193	16B.03.03.01.04	ASA Function 2a	Revised 4th paragraph to require three channels instead of four.	N-2 Design Change
194	16B.03.03.01.04	ASA Function 2a	Replaced square brackets surrounding "40" LPRM inputs with curly brackets in 4th paragraph.	RAI 16.0-2
195	16B.03.03.01.04	ASA Function 2a	Replaced reference to Allowable Values with reference to Analytical/Design Limit in 5th paragraph.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
196	16B.03.03.01.04	ASA Function 2a	Replaced square brackets surrounding "25%" with curly brackets (2 locations) in 5th paragraph.	RAI 16.0-2

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
197	16B.03.03.01.04	ASA Function 2b	Revised description of APRM function in 1st paragraph to delete brackets "electronically filtered" and reflect description in DCD.	Consistency with DCD
198	16B.03.03.01.04	ASA Function 2b	Revised 2nd paragraph to require three channels instead of four.	N-2 Design Change
199	16B.03.03.01.04	ASA Function 2b	Replaced reference to Allowable Values with reference to Analytical/Design Limit in 2nd paragraph.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
200	16B.03.03.01.04	ASA Function 2b	Replaced "MCPR SL" in 1st sentence of last paragraph with "fuel cladding integrity Safety Limit."	RAI 15.0-16
201	16B.03.03.01.04	ASA Function 2c	Revised 2nd paragraph to require three channels instead of four.	N-2 Design Change
202	16B.03.03.01.04	ASA Function 2c	Replaced square brackets surrounding "40" LPRM inputs with curly brackets in 2nd paragraph.	RAI 16.0-2
203	16B.03.03.01.04	ASA Function 2c	Removed brackets surrounding 3rd paragraph and replaced reference to Allowable Values with reference to Analytical/Design Limit.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
204	16B.03.03.01.04	ASA Function 2d	Replaced square brackets with curly brackets in 1st paragraph.	RAI 16.0-2
205	16B.03.03.01.04	ASA Function 2d	Revised 3rd paragraph to require three channels instead of four.	N-2 Design Change
206	16B.03.03.01.04	ASA Function 2d	Replaced reference to Allowable Values with reference to Analytical/Design Limit in 4th paragraph.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
207	16B.03.03.01.04	ASA Function 3	Replaced square brackets in Function Title with curly brackets.	RAI 16.0-2
208	16B.03.03.01.04	ASA Function 3	Revised 2nd paragraph to require three channels instead of four.	N-2 Design Change
209	16B.03.03.01.04	ASA Function 3	Replaced square brackets surrounding "40" LPRM inputs with curly brackets in 2nd paragraph.	RAI 16.0-2
210	16B.03.03.01.04	ASA Function 3	Replaced reference to Allowable Values with reference to Analytical/Design Limit in 3rd paragraph.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
211	16B.03.03.01.04	ASA Function 3	Deleted bracketed "Later" in 3rd paragraph and inserted discussion for basis of the function.	Consistency with the DCD
212	16B.03.03.01.04	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
213	16B.03.03.01.04	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2 & NEDO-33201
214	16B.03.03.01.04	ACTIONS A.1 & A.2	Revised discussions to replace action to "place" division in trip with action to "verify" division in trip.	NMS/RPS design does not include allowance for operator to place a division in trip.
215	16B.03.03.01.04	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change
216	16B.03.03.01.04	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change
217	16B.03.03.01.04	ACTIONS C.1	Removed brackets surrounding "1" hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2 & NEDO-33201
218	16B.03.03.01.04	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
219	16B.03.03.01.04	ACTIONS E.1 & F.1	Renumbered as D.1 and E.1. Revised to delete reference to "bypass" and replaced "placed in trip" with "is not in trip."	N-2 Design Change and NMS/RPS design does not include allowance for operator to place a division in trip.
220	16B.03.03.01.04	ACTIONS G.1 and G.2	Renumbered as F.1 and F.2. Revised discussion to delete reference to "bypass" and simplified wording by deleting "OPRM" and "or the affected instrumentation division."	N-2 Design Change and Editorial (consistency with other similar discussions)
221	16B.03.03.01.04	ACTIONS G.1 and G.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2 & NEDO-33201
222	16B.03.03.01.04	ACTIONS G.1 and G.2	Removed brackets surrounding "120 day" Completion Time and referenced PRA topical as basis.	RAI 16.0-2 & NEDO-33201
223	16B.03.03.01.04	ACTIONS H.1	Revised to delete reference to "bypass."	N-2 Design Change
224	16B.03.03.01.04	SR 3.3.1.4.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
225	16B.03.03.01.04	SR 3.3.1.4.1	Referenced PRA topical as basis for Frequency in last paragraph.	RAI 16.0-2 & NEDO-33201
226	16B.03.03.01.04	SR 3.3.1.4.1	Discussion revised to refer to "required" channel.	N-2 Design Change
227	16B.03.03.01.04	SR 3.3.1.4.2	Removed brackets surrounding "7 days" in both paragraphs. Referenced PRA topical as basis.	PRA Topical is expected to provide evaluation supporting this Frequency.
228	16B.03.03.01.04	SR 3.3.1.4.2	Inserted curly brackets surrounding discussion of minor changes in LPRM sensitivity in 1st paragraph.	Not currently supported in DCD
229	16B.03.03.01.04	SR 3.3.1.4.2	Replaced square brackets surrounding "25%" with curly brackets.	16.0-2
230	16B.03.03.01.04	SR 3.3.1.4.2	Removed brackets surrounding "12 hours" in 2nd paragraph.	16.0-3

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
231	16B.03.03.01.04	SR 3.3.1.4.3	Discussion revised to refer to "required" channel.	N-2 Design Change
232	16B.03.03.01.04	SR 3.3.1.4.3	Revised 2nd paragraph to refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
233	16B.03.03.01.04	SR 3.3.1.4.3	Removed brackets surrounding "92 days" in paragraphs 3 and 4 and referenced PRA topical as basis.	RAI 16-0-2
234	16B.03.03.01.04	SR 3.3.1.4.3	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
235	16B.03.03.01.04	SR 3.3.1.4.5	Revised 1st paragraph to reflect TSTF-493 discussions and refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
236	16B.03.03.01.04	SR 3.3.1.4.5	Removed brackets surrounding "24 month" Frequency in 2nd paragraph and referenced PRA topical as basis.	RAI 16.0-2
237	16B.03.03.01.04	SR 3.3.1.4.5	Added paragraph to discuss as-found/as-left and selected instruments consistent with TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
238	16B.03.03.01.04	SR 3.3.1.4.5	Revised SR to refer to "required " channel.	N-2 Design Change
239	16B.03.03.01.04	SR 3.3.1.4.5	Replaced square brackets surrounding discussion of Note 1 with curly brackets in 2nd paragraph.	RAI 16.0-2
240	16B.03.03.01.04	SR 3.3.1.4.6	Replaced discussion of electronic filter circuit with time constant.	Consistency with DCD
241	16B.03.03.01.04	SR 3.3.1.4.6	Removed brackets surrounding "24 month" Frequency in 2nd paragraph and referenced PRA topical as basis.	RAI 16.0-2
242	16B.03.03.01.04	SR 3.3.1.4.7	Revised last paragraph to replace justification of Frequency based on industry experience with reference to PRA Topical.	PRA Topical is expected to provide evaluation supporting this Frequency.
243	16B.03.03.01.04	SR 3.3.1.4.7	Revised SR to refer to "required " channel.	N-2 Design Change
244	16B.03.03.01.04	SR 3.3.1.4.7	Renumbered all reference in SR as a result of adding PRA Topical to Reference list.	Editorial
245	16B.03.03.01.04	SR 3.3.1.4.7	Revised 1st and 2nd paragraphs to remove brackets surrounding References and discussions that some sensors may be excluded.	Wording is consistent with NUREG-1434. Expect Response Time Testing for ESBWR to include same allowances. If not supported, then will be deleted.
246	16B.03.03.01.04	SR 3.3.1.4.7	Revised 1st paragraph to state that this SR overlaps that of SR 3.3.1.5.2.	Added RPS Response Time Test to LCO 3.3.1.5 ensure all portions of RPS circuitry are adequately tested.

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
247	16B.03.03.01.04	SR 3.3.1.4.7	Removed brackets surrounding "24 month" Frequency in last paragraph and referenced PRA topical as basis.	RAI 16.0-2
248	16B.03.03.01.04	SR 3.3.1.4.7	Revised last paragraph to clarify that the Staggered Test Basis is based on four channels and deleted discussion of Frequency basis for output logic.	N-2 Design Change and added RPS Response Time Test to LCO 3.3.1.5 ensure all portions of RPS circuitry are adequately tested.
249	16B.03.03.01.04	REFERENCES	Added Reference for NEDO-33201 as Reference 6 and renumbered subsequent references.	Expected basis for Completion Times and SR Frequencies
250	16B.03.03.01.04	REFERENCES	Revised Reference 7 from "Chapter 7, Table 7.2-x" to "Reference for RPS RESPONSE TIME acceptance criteria." Replaced square brackets in References 7 and 8 with curly brackets.	Editorial (consistency) and RAI-16.0-2
251	16B.03.03.01.05	BACKGROUND	Revised 3rd paragraph to define acronyms and provide title for LCO 3.3.1.1.	Consistency with DCD terminology and presentation in LCO 3.3.1.1 Bases
252	16B.03.03.01.05	LCO	Revised 1st paragraph to discuss three "required" channels and provide details on determining which are "required."	N-2 Design Change
253	16B.03.03.01.05	LCO	Revised last sentence to state that the Operability requirements are addressed in the Specification rather than being covered.	Editorial
254	16B.03.03.01.05	APPLICABILITY	Revised to state that three automatic actuation channels are required in each paragraph.	N-2 Design Change
255	16B.03.03.01.05	ACTIONS A.1 & A.2	Revised to discuss "required" channels.	N-2 Design Change
256	16B.03.03.01.05	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
257	16B.03.03.01.05	ACTIONS A.1 & A.2	Revised 1st paragraph to replace action to require verifying division in trip in 12 hours instead of restoring to Operable status within 14 days.	N-2 Design Change
258	16B.03.03.01.05	ACTIONS A.1 & A.2	Added paragraph to discuss acceptability of operating in 1 out of 2 configuration and to justify 12 hour Completion Time.	N-2 Design Change and NEDO-33201
259	16B.03.03.01.05	ACTIONS B.1	Actions deleted.	N-2 Design Change
260	16B.03.03.01.05	ACTIONS C.1	Renumbered as B.1.	N-2 Design Change
261	16B.03.03.01.05	ACTIONS C.1	Removed brackets surrounding "1" hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2 and NEDO-33201
262	16B.03.03.01.05	ACTIONS D.1	Renumbered as C.1. Revised references to other Conditions to reflect renumbering.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
263	16B.03.03.01.05	ACTIONS E.1 & F.1	Renumbered as D.1 and E.1 and revised to delete "placed" in trip.	N-2 Design Change and NMS/RPS design does not include allowance for operator to place a division in trip.
264	16B.03.03.01.05	SR 3.3.1.5.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
265	16B.03.03.01.05	SR 3.3.1.5.1	Revised 1st sentence of 2nd paragraph to clarify SR Frequency. Inserted "for four divisions" in place of the discussion of output logic units. Added second sentence for additional clarification.	N-2 Design Change and consistency with DCD Chapter 7, Rev 2
266	16B.03.03.01.05	SR 3.3.1.5.1	Referenced PRA topical as basis for Frequency in 3rd paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
267	16B.03.03.01.05	SR 3.3.1.5.2	Added discussion of RPS Response Time Testing.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
268	16B.03.03.01.05	REFERENCES	Added PRA topical to list of references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
269	16B.03.03.01.05	REFERENCES	Added reference for RPS Response Time Testing acceptance criteria.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
270	16B.03.03.01.06	BACKGROUND	Replaced square brackets surrounding discussion of special movable detectors with curly brackets in 3rd paragraph.	RAI 16.0-2
271	16B.03.03.01.06	LCO	Replaced square brackets surrounding 2nd paragraph with curly brackets.	RAI 16.0-2
272	16B.03.03.01.06	LCO	Replaced square brackets surrounding 3rd paragraph with curly brackets.	RAI 16.0-2
273	16B.03.03.01.06	LCO	Replaced square brackets surrounding 4th paragraph with curly brackets.	RAI 16.0-2
274	16B.03.03.01.06	ACTIONS A.1 & A.2	Replaced Completion Time justification based on probability of an event with reference to PRA Topical.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
275	16B.03.03.01.06	SR 3.3.1.6.1 & SR 3.3.1.6.3	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph.	RAI 16.0-2
276	16B.03.03.01.06	SR 3.3.1.6.2	Replaced square brackets surrounding discussion of number of SRNMs required in 1st paragraph with curly brackets.	RAI 16.0-2
277	16B.03.03.01.06	SR 3.3.1.6.4	Replaced square brackets surrounding discussion of signal to noise ratio in 1st paragraph with curly brackets.	RAI 16.0-2

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Item	Section	Subsection	Description of Change	Brief Reason for Change
278	16B.03.03.01.06	SR 3.3.1.6.5 & SR 3.3.1.6.6	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 2nd paragraph.	RAI 16.0-2
279	16B.03.03.01.06	SR 3.3.1.6.7	Removed brackets surrounding "24 month" Frequency and referenced PRA topical as basis.	RAI 16.0-2 & NEDO-33201
280	16B.03.03.01.06	REFERENCES	Added NEDO-33201 as a reference.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
281	16B.03.03.02.01	BACKGROUND	Replaced phrase "operating and Safety Limit MCPR and LHGR" with "operating limit minimum critical power ratio (MCPR), the Fuel Cladding Integrity Safety Limit (FCISL), and operating limit minimum linear heat generation rate (MLHGR)" in the second sentence of the second paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
282	16B.03.03.02.01	BACKGROUND	Removed "at or" in the third sentence of the second paragraph.	For consistency between ATLM and RWM LPSP descriptions
283	16B.03.03.02.01	BACKGROUND	Removed the bracketed seventh sentence and the tenth sentence of the second paragraph.	Design detail not necessary to be described in the Bases
284	16B.03.03.02.01	BACKGROUND	Revised the eighth and ninth sentences of the second paragraph to "Control rod position, local power range monitor (LPRM), and Average Power Range Monitor (APRM) data are the primary data input for the ATLM. APRM signals are used to determine when THERMAL POWER is greater than or equal to the LPSP to enable the ATLM rod block function."	Correctly identify that APRM data is a primary data input to the ATLM, and additional editorial changes to aid clarity
285	16B.03.03.02.01	BACKGROUND	Revised the fifth sentence of the third paragraph to "The RC&IS also uses the APRM signals to determine when THERMAL POWER is less than or equal to the LPSP to enable the RWM rod block function."	Editorial changes to aid clarity, and consistency with ATLM similar discussions
286	16B.03.03.02.01	BACKGROUND	Removed the bracketed third sentence and revised the bracketed fourth sentence of the fourth paragraph to "A rod block in either of the two channels of RC&IS will provide a control rod block to all control rods."	Design detail not necessary to be described in the Bases, and editorial changes to aid clarity
287	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, replaced phrase "operating and Safety Limit MCPR" with "operating limit MCPR, the FCISL," in the first sentence of the first paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
288	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, revised various phrases in the first through seventh sentences of the first paragraph.	Editorial changes to aid clarity

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Item	Section	Subsection	Description of Change	Brief Reason for Change
289	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, removed brackets in one place in first paragraph, and revised brackets from square brackets to curly brackets in one place in fifth paragraph.	RAI 16.0-2 (MFN 06-431)
290	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, deleted the fourth paragraph.	Discussion not applicable to the ATLM setpoints
291	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, revised the phrase "when operating > [30%] RTP. " to "when THERMAL POWER is greater than or equal to the LPSP (\geq {30}% RTP)" in the fifth paragraph.	Editorial changes to aid clarity, and for consistency between ATLM and RWM LPSP descriptions
292	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.a, replaced phrase "safety limit MCPR" with "FCISL" in the fifth paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
293	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.b, revised brackets from square brackets to curly brackets in one place in first paragraph, and two places in fourth paragraph.	RAI 16.0-2 (MFN 06-431)
294	16B.03.03.02.01	ASA, LCO, and APPLICABILITY	For Function 1.b, revised phrase "when THERMAL POWER is \leq [10% RTP]" to "when THERMAL POWER is less than or equal to the LPSP (\leq {10}% RTP" and phrase "When THERMAL POWER is > [10% RTP]" to "Above this power level" in the fourth paragraph.	Editorial changes to aid clarity, and for consistency between ATLM and RWM LPSP descriptions
295	16B.03.03.02.01	ACTIONS A.1	Removed square brackets from COMPLETION TIME in two places, and from second paragraph, adding the phrase ", has been shown to be acceptable by Reference 4" in the second sentence of the second paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
296	16B.03.03.02.01	ACTIONS B.1	Removed square brackets from COMPLETION TIME in two places, and from second paragraph, adding the phrase ", has been shown to be acceptable by Reference 4" in the second sentence of the second paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
297	16B.03.03.02.01	ACTIONS D.1 and D.2	Revised brackets from square brackets to curly brackets in one place in second paragraph.	RAI 16.0-2 (MFN 06-431)
298	16B.03.03.02.01	SR 3.3.2.1.1	Deleted the third sentence of the first paragraph.	Discussion not applicable to the ATLM setpoints
299	16B.03.03.02.01	SR 3.3.2.1.1	Revised the fourth sentence of the first paragraph from "The Frequency of [92 days] is based on reliability analyses [(Ref. 4).]" to "The Frequency of 92 days is based on the reliability of the channels and has been shown to be acceptable by Reference 4."	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies, and editorial change for clarity

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Item	Section	Subsection	Description of Change	Brief Reason for Change
300	16B.03.03.02.01	SR 3.3.2.1.1	Revised square brackets to curly brackets in two places in second paragraph.	RAI 16.0-2 (MFN 06-431)
301	16B.03.03.02.01	SR 3.3.2.1.1	Revised ">" to "≥" in two places in second paragraph.	For consistency between ATLM and RWM LPSP descriptions
302	16B.03.03.02.01	SR 3.3.2.1.1	Removed square brackets from FREQUENCY in second sentence of the second paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
303	16B.03.03.02.01	SR 3.3.2.1.1	Deleted the last sentence of the second paragraph.	Sentence not necessary, duplicate of last sentence of the first paragraph
304	16B.03.03.02.01	SR 3.3.2.1.2 and SR 3.3.2.1.3	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
305	16B.03.03.02.01	SR 3.3.2.1.2 and SR 3.3.2.1.3	Revised various phrases in the third through fifth sentences.	Editorial changes to aid clarity
306	16B.03.03.02.01	SR 3.3.2.1.2 and SR 3.3.2.1.3	Revised the last sentence from "The Frequencies are based on reliability analysis [(Ref. 4).]" to "The Frequencies of 92 days are based on the reliability of the channels and has been shown to be acceptable by Reference 4."	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies, and editorial change for clarity
307	16B.03.03.02.01	SR 3.3.2.1.4	Removed square brackets in two places.	RAI 16.0-2 (MFN 06-431)
308	16B.03.03.02.01	SR 3.3.2.1.4	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
309	16B.03.03.02.01	SR 3.3.2.1.4	Revised various phrases throughout the paragraph.	Editorial changes to aid clarity
310	16B.03.03.02.01	SR 3.3.2.1.4	Deleted the last sentence.	Discussion not applicable to the RWM setpoints
311	16B.03.03.02.01	SR 3.3.2.1.5	Removed square brackets in two places.	RAI 16.0-2 (MFN 06-431)
312	16B.03.03.02.01	SR 3.3.2.1.5	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
313	16B.03.03.02.01	SR 3.3.2.1.5	Revised various phrases throughout the paragraph.	Editorial changes to aid clarity
314	16B.03.03.02.01	SR 3.3.2.1.5	Deleted the last sentence.	Discussion not applicable to the ATLM setpoints
315	16B.03.03.02.01	SRs	Removed square brackets from delaying entry into associated Conditions and Required Actions in three places, and revised the phrase "This Note is based on the reliability analysis [(Ref. 4)], assumption of the average time required to perform channel Surveillance" to "The allowance of this Note is based on the reliability of the channels and the average time required to perform the channel Surveillance, and has been shown to be acceptable by Reference 4" in second paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies, and editorial change for clarity

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Item	Section	Subsection	Description of Change	Brief Reason for Change
316	16B.03.03.02.01	REFERENCES	Replaced Reference 4 with {"NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment."}.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
317	16B.03.03.03.01	BACKGROUND	Revised definition of Type A PAM instrumentation variables, and deleted discussion of "Category 1, non-Type A" PAM instrumentation variables. Added Reviewer's Note regarding possibility that no Type A PAM Functions may be required.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications. Regulatory Guide 1.97, Revision 4, eliminated Categories of PAM Instrumentation, and any non-Type A PAM Instrumentation identified for the ESBWR will, by definition, not be necessary for protection of the public health and safety. Therefore, consistent with the ESBWR passive design, only Type A PAM Functions will be included in the Technical Specifications.
318	16B.03.03.03.01	ASA	Deleted discussion of "Category 1, non-Type A" PAM instrumentation variables, and added curly brackets to complete text.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications. Regulatory Guide 1.97, Revision 4, eliminated Categories of PAM Instrumentation, and any non-Type A PAM Instrumentation identified for the ESBWR will, by definition, not be necessary for protection of the public health and safety. Therefore, consistent with the ESBWR passive design, only Type A PAM Functions will be included in the Technical Specifications.
319	16B.03.03.03.01	LCO	Deleted discussion of specific PAM instrumentation Functions, and reference to Table 3.3.3.1-1.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications. Therefore, the Table is deleted since the listing of Type A PAM Functions will be defined elsewhere in the ESBWR licensing basis.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
320	16B.03.03.03.01	APPLICABILITY	Added "Type A" to designate the applicable instrument Functions required by the Specification.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications.
321	16B.03.03.03.01	ACTIONS	Removed discussion of NOTE that "LCO 3.0.4.c is applicable," and added "Type A" to designate the applicable instrument Functions required by the Specification.	Per response to RAI 16.2-72 (MFN 06-431)
322	16B.03.03.03.01	ACTIONS A.1	Added "required Type A PAM" before "Functions" in CONDITION.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications.
323	16B.03.03.03.01	ACTIONS B.1	Deleted ACTION B.	Condition, Required Actions, and Completion Time addressed in revised ACTION C.
324	16B.03.03.03.01	ACTIONS C.1	Added "required Type A PAM" before "Functions" in CONDITION, and renumbered as ACTION B.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications.
325	16B.03.03.03.01	ACTIONS D.1	Deleted reference to Table 3.3.3.1-1, and added discussion that the revised Required Action is to comply with Specification 5.6.5, and renumbered as ACTION C.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications. Also, consistent with position that shutdown is not required for inoperable PAM Instrumentation Functions since monitoring of the ESBWR passive safety-related systems is not as critical of a function for ensuring adequate system response as monitoring of an active, operating safety-related system in a non-passive design.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
326	16B.03.03.03.01	ACTIONS E.1 and F.1	Deleted ACTION E and ACTION F.	Consistent with position that shutdown is not required for inoperable PAM Instrumentation Functions since monitoring of the ESBWR passive safety-related systems is not as critical of a function for ensuring adequate system response as monitoring of an active, operating safety-related system in a non-passive design.
327	16B.03.03.03.01	SRs	Deleted discussion of Note to Surveillance Requirements.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications. Therefore, the Table is deleted since the listing of Type A PAM Functions will be defined elsewhere in the ESBWR licensing basis.
328	16B.03.03.03.01	REFERENCES	Revised Reference 1 to Regulatory Guide 1.97, Revision 4.	Consistent with position that only 2 channels of Type A Functions as defined in Regulatory Guide 1.97, Revision 4, and further identified in the ESBWR DCD or supporting documentation will be required PAM instrumentation in the Technical Specifications.
329	16B.03.03.04.01	BACKGROUND	Fourth and seventh paragraphs revised to be specific to the particulate channel consistency with change to LCO removing credit for gaseous channel of the drywell fission product monitoring system.	RAI 6.2-1
330	16B.03.03.04.01	ACTIONS	First paragraph discussion of the LCO 3.0.4.c Note has been deleted.	RAI 6.2-8
331	16B.03.03.04.01	ACTIONS B.1	Revised Condition B for consistency with change to LCO removing credit for gaseous channel of the drywell fission product monitoring system. Condition is now specific to particulate channel.	RAI 6.2-1
332	16B.03.03.04.01	ACTIONS C.1	Revised Required Action C.1 Note for consistency with change to LCO removing credit for gaseous channel of the drywell fission product monitoring system. Note is now specific to particulate channel.	RAI 6.2-1

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Item	Section	Subsection	Description of Change	Brief Reason for Change
333	16B.03.03.04.01	ACTIONS D.1 & D.2	Revised Condition D and Required Action D.1 for consistency with change to LCO removing credit for gaseous channel of the drywell fission product monitoring system. Condition and Required Action are now specific to particulate channel.	RAI 6.2-1
334	16B.03.03.04.01	ACTIONS E.1	Removed brackets in first paragraph and surrounding second paragraph and revised end state discussion.	RAI 16.0-7
335	16B.03.03.04.01	SR 3.3.4.1.1	Revised Channel Check to be specific to particulate channel for consistency with change to LCO removing credit for gaseous channel of the drywell fission product monitoring system. SR is now specific to particulate channel.	RAI 6.2-1
336	16B.03.03.04.01	REFERENCES	Revised Reference 4 and added Reference 5 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
337	16B.03.03.05.01	BACKGROUND	Added 3rd,4th,5th, 6th, 7th, and 8th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
338	16B.03.03.05.01	BACKGROUND	Deleted discussion "Reactor Vessel Water Level - Low, Level 1.5" actuation signals and renumbered subsequent Functions.	Initiation on this parameter deleted in DCD 7.3, Rev 2
339	16B.03.03.05.01	BACKGROUND	Revised format of discussion of ECCS instrumentation architecture by deleting headings of Input Logic Processing and Output Logic Processing.	Editorial
340	16B.03.03.05.01	BACKGROUND	Deleted brackets surrounding discussion of the number of instrumentation channels used to monitor RPV water level.	DCD contains sufficient information to validate statement.
341	16B.03.03.05.01	BACKGROUND	Deleted brackets surrounding paragraph on load driver arrangement.	DCD contains sufficient information to validate statement.
342	16B.03.03.05.01	BACKGROUND	Added paragraph discussing division power source.	N-2 Design Change
343	16B.03.03.05.01	BACKGROUND	Revised paragraph discussing how Operability of components is addressed within TS.	Editorial
344	16B.03.03.05.01	ASA, LCO, and APPLICABILITY	Revised 2nd, 3rd, and 4th paragraphs to reflect TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
345	16B.03.03.05.01	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" channels and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
346	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 01	Deleted discussion of "Reactor Vessel Water Level - Low, Level 1.5," renumbered subsequent functions.	Initiation on this parameter deleted in DCD 7.3, Rev 2

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Item	Section	Subsection	Description of Change	Brief Reason for Change
347	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 02	Renumbered as Function 1 and revised 2nd paragraph to state that three channels are required to be Operable instead of 4 channels.	Editorial and N-2 Design Change
348	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 03	Renumbered as Function 1 and revised 2nd paragraph to state that three channels are required to be Operable instead of 4 channels.	Editorial and N-2 Design Change
349	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 04	Deleted discussion of "Drywell Pressure - High."	Initiation on this parameter deleted in DCD 7.3, Rev 2
350	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 05	Deleted discussion of "Initiation Timer - Reactor Vessel Water Level Low, Level 1.5."	Initiation on this parameter deleted in DCD 7.3, Rev 2
351	16B.03.03.05.01	ASA, LCO, and APPLICABILITY Function 06	Deleted discussion of Initiation Timer.	RAI 16.2-97 - Revised Spec Bases to incorporate timers in actuation logic as Response Time Test.
352	16B.03.03.05.01	ACTIONS A.1	Revised to discuss "required" channels and to replace actions to place in bypass with action to restore to Operable status.	N-2 Design Change
353	16B.03.03.05.01	ACTIONS A.1	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
354	16B.03.03.05.01	ACTIONS B.1	Actions deleted.	N-2 Design Change
355	16B.03.03.05.01	ACTIONS C.1	Renumbered as Actions B.1 and revised to reflect "required" channels.	N-2 Design Change
356	16B.03.03.05.01	ACTIONS C.1	Removed brackets surrounding "1" hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2
357	16B.03.03.05.01	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
358	16B.03.03.05.01	SR 3.3.5.1.1	Removed brackets in 1st and 3rd paragraphs surrounding Frequency and discussion of basis for Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
359	16B.03.03.05.01	SR 3.3.5.1.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 2nd paragraph. Revised discussion of self-test feature to replace "RPS" with SSLC.	RAI 16.0-2 and DCD consistency
360	16B.03.03.05.01	SR 3.3.5.1.2	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "RPS" with SSLC.	RAI 16.0-2 and DCD consistency
361	16B.03.03.05.01	SR 3.3.5.1.2	Revised 2nd paragraph to include reference to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
362	16B.03.03.05.01	SR 3.3.5.1.2	Deleted brackets surrounding 184 day Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.

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Item	Section	Subsection	Description of Change	Brief Reason for Change
363	16B.03.03.05.01	SR 3.3.5.1.3	Revised first paragraph to refer to "required" channels.	N-2 Design Change
364	16B.03.03.05.01	SR 3.3.5.1.3	Revised first sentence and inserted paragraph 3 concerning additional SCP requirements for evaluations.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
365	16B.03.03.05.01	SR 3.3.5.1.3	Revised 2nd paragraph to include PRA topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
366	16B.03.03.05.01	SR 3.3.5.1.4	Revised first paragraph to refer to "required" channels.	N-2 Design Change
367	16B.03.03.05.01	SR 3.3.5.1.4	Renumbered all reference in SR as a result of adding PRA Topical to Reference list.	Editorial
368	16B.03.03.05.01	SR 3.3.5.1.4	Revised 1st and 2nd paragraphs to remove brackets surrounding References and discussions that some sensors may be excluded.	Wording is consistent with NUREG-1434. Expect Response Time Testing for ESBWR to include same allowances. If not supported, then will be deleted.
369	16B.03.03.05.01	SR 3.3.5.1.4	Revised 2nd paragraph to state that this SR overlaps that of SR 3.3.5.2.2.	Added ECCS Response Time Test to LCO 3.3.5.2 ensure all portions of RPS circuitry are adequately tested.
370	16B.03.03.05.01	SR 3.3.5.1.4	Revised 3rd paragraph to clarify that the Staggered Test Basis is based on four channels.	N-2 Design Change
371	16B.03.03.05.01	SR 3.3.5.1.4	Referenced PRA topical as basis for Frequency instead of operating experience.	RAI 16.0-2
372	16B.03.03.05.01	REFERENCES	Added NEDO-33201 as Reference 4 and renumbered subsequent references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
373	16B.03.03.05.02	BACKGROUND	Replaced [transient] or accident with event.	Consistency with DCD. Mitigates some non-accidents (LOFW)
374	16B.03.03.05.02	BACKGROUND	Revised 2nd paragraph to clarify where Operability requirements for components are addressed within TS.	Editorial and DCD Consistency
375	16B.03.03.05.02	ASA, LCO, and APPLICABILITY	Revised 3rd paragraph to clarify where Operability requirements for components are addressed within TS.	Editorial and DCD Consistency
376	16B.03.03.05.02	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" divisions and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
377	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 01	Revised discussion to delete reference to RV Water Level Low - Level 1.5 and Drywell Pressure - High.	Initiation on these parameters deleted in DCD 7.3, Rev 2
378	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 01	Revised to refer to three divisions instead of four.	N-2 Design Change

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Item	Section	Subsection	Description of Change	Brief Reason for Change
379	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 02	Revised discussion to delete reference to RV Water Level Low - Level 1.5 and Drywell Pressure - High.	Initiation on these parameters deleted in DCD 7.3, Rev 2
380	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 02	Revised to refer to three divisions instead of four.	N-2 Design Change
381	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 02	Removed brackets surrounding "7.01 meters (23 feet)".	Consistent with LCO 3.5.3 and LCO 3.9.6
382	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 03	Revised discussion to delete reference to RV Water Level Low - Level 1.5 and Drywell Pressure - High.	Initiation on these parameters deleted in DCD 7.3, Rev 2
383	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 03	Revised to refer to three divisions instead of four.	N-2 Design Change
384	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 04	Revised discussion to delete reference to RV Water Level Low - Level 1.5 and Drywell Pressure - High.	Initiation on these parameters deleted in DCD 7.3, Rev 2
385	16B.03.03.05.02	ASA, LCO, and APPLICABILITY Function 04	Revised to refer to three divisions instead of four.	N-2 Design Change
386	16B.03.03.05.02	ACTIONS A.1	Revised A.1 to refer to "required" divisions and revised Completion Time from 14 days to 12 hours and referenced PRA topical as basis.	N-2 Design Change and NEDO-33201
387	16B.03.03.05.02	ACTIONS B.1	Revised B.1 to incorporate 3 "required" divisions, provide additional detail on actuation capability, and referenced PRA topical as basis for Completion Time.	N-2 Design Change and NEDO-33201
388	16B.03.03.05.02	SR 3.3.5.2.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "ECCS digital control system" with SSLC.	RAI 16.0-2 and DCD consistency
389	16B.03.03.05.02	SR 3.3.5.2.1	Revised 2nd paragraph to replace discussion of Staggered Test Basis for each pair of voter logic trips to state that the Staggered Test Basis is for four divisions.	N-2 Design Change and consistency with DCD Chapter 7, Rev 2
390	16B.03.03.05.02	SR 3.3.5.2.1	Revised last paragraph to reference PRA Topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
391	16B.03.03.05.02	SR 3.3.5.2.2	Added ECCS Response Time Test.	RAI 16.2-97 - Added ECCS Response Time Test to ensure all portions of ECCS circuitry are adequately tested.
392	16B.03.03.05.02	REFERENCES	Added reference for ECCS Response Time Testing acceptance criteria.	Added RPS Response Time Test to ensure all portions of RPS circuitry are adequately tested.

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
393	16B.03.03.05.02	REFERENCES	Added NEDO-33201 to references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
394	16B.03.03.05.03	BACKGROUND	Added 2nd, 3rd,4th,5th, 6th, and 7th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
395	16B.03.03.05.03	BACKGROUND	Revised "Reactor Vessel Water Level - Low, Level 1.5" actuation signal to "Reactor Vessel Water Level - Low, Level 1."	Consistent with DCD 5.4.6.2.3, Rev 2.
396	16B.03.03.05.03	BACKGROUND	Revised format of discussion of SSLC instrumentation architecture by deleting headings of Input Logic Processing and Output Logic Processing.	Editorial
397	16B.03.03.05.03	BACKGROUND	Added "a four division, separated protection logic system" to description of SSLC.	DCD consistency
398	16B.03.03.05.03	BACKGROUND	Deleted brackets surrounding paragraph on load driver arrangement and revised to state that two divisions of actuation logic are necessary to actuate a condensate return flow path.	DCD contains sufficient information to validate statement.
399	16B.03.03.05.03	BACKGROUND	Added paragraph discussing division power source.	N-2 Design Change
400	16B.03.03.05.03	BACKGROUND	Revised paragraph discussing how Operability of components is addressed within TS.	Editorial
401	16B.03.03.05.03	ASA, LCO, and APPLICABILITY	Revised 3rd, 4th, and 5th paragraphs to reflect TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
402	16B.03.03.05.03	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" channels and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
403	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 01	Revised 1st paragraph to include additional information on time delay associated with actuation signal.	DCD Consistency
404	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 01	Revised 2nd paragraph to replace "Allowable Value" with "Analytical / Design Limit" and revised description to match.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
405	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 01	Revised 3rd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
406	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 02	Deleted brackets surrounding "10-second" in 1st paragraph and replaced "10-second" with "30-second."	DCD consistency
407	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 02	Revised 3rd paragraph from four channel to three channels required to be Operable.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
408	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 03	Revised discussion of "Reactor Vessel Water Level - Low, Level 1.5," to "Reactor Vessel Water Level - Low, Level," throughout discussion.	Consistent with DCD 5.4.6.2.3, Rev 2
409	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 03	Revised 3rd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
410	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 04	Deleted brackets surrounding description of position switches in 2nd paragraph.	DCD contains sufficient information to validate.
411	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 04	Replaced "Allowable Value" in 3rd paragraph with "Analytical / Design Limit."	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
412	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 04	Revised 4th paragraph to state that three channels are required instead of four. Revised brackets to exclude statement on number of channels required and replaced square brackets with curly brackets.	N-2 Design Change and RAI 16.0-2
413	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 05	Deleted discussion of "Initiation Timer - Low, Level 2," renumbered subsequent functions.	RAI 16.2-97 - Revised Spec Bases to incorporate timers in actuation logic as Response Time Test.
414	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 06	Renumbered as Function 5 and revised last paragraph to state that three channels are required to be Operable instead of 4 channels.	Editorial and N-2 Design Change
415	16B.03.03.05.03	ASA, LCO, and APPLICABILITY Function 06	Deleted brackets surrounding discussion of voltage sensors in 1st paragraph.	DCD contains sufficient information to validate statement.
416	16B.03.03.05.03	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change
417	16B.03.03.05.03	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
418	16B.03.03.05.03	ACTIONS A.1 & A.2	Revised 1st and 2nd paragraph to replace action to "place" division in trip with action to "verify" division in trip.	ECCS design does not include allowance for operator to place a division in trip.
419	16B.03.03.05.03	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change
420	16B.03.03.05.03	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change
421	16B.03.03.05.03	ACTIONS C.1	Revised 1st sentence to delete "inoperable."	With the N-2 Design change, the option to be in bypass is not available. Channel must be tripped.
422	16B.03.03.05.03	ACTIONS C.1	Referenced PRA topical as basis for 1 hour Completion Time.	RAI 16.0-2
423	16B.03.03.05.03	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
424	16B.03.03.05.03	SR 3.3.5.3.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "RPS" with SSLC.	RAI 16.0-2 and DCD consistency
425	16B.03.03.05.03	SR 3.3.5.3.1	Removed brackets surrounding "24 hours" in 1st paragraph and in 3rd paragraph and referenced PRA topical as basis.	RAI 16.0-2
426	16B.03.03.05.03	SR 3.3.5.3.1	Discussion revised to refer to "required" channel.	N-2 Design Change
427	16B.03.03.05.03	SR 3.3.5.3.2	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "RPS" with SSLC.	RAI 16.0-2 and DCD consistency
428	16B.03.03.05.03	SR 3.3.5.3.2	Revised 2nd paragraph to refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
429	16B.03.03.05.03	SR 3.3.5.3.2	Removed brackets surrounding "184 days" in 3rd paragraph and referenced PRA topical as basis.	RAI 16-0-2
430	16B.03.03.05.03	SR 3.3.5.3.3	Revised 1st paragraph to reflect TSTF-493 discussions and refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
431	16B.03.03.05.03	SR 3.3.5.3.3	Referenced PRA topical as basis for Frequency.	RAI 16.0-2
432	16B.03.03.05.03	SR 3.3.5.3.3	Added paragraph to discuss as-found/as-left and selected instruments consistent with TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
433	16B.03.03.05.03	SR 3.3.5.3.3	Discussion revised to refer to "required" channel.	N-2 Design Change
434	16B.03.03.05.03	SR 3.3.5.3.4	Revised SR to refer to "required " channel.	N-2 Design Change
435	16B.03.03.05.03	SR 3.3.5.3.4	Revised all references in the SR to reflect incorporation of PRA topical as Reference 2.	PRA Topical is expected to provide evaluation supporting this Frequency.
436	16B.03.03.05.03	SR 3.3.5.3.4	Revised 1st paragraph to state that this SR overlaps that of SR 3.3.5.4.2.	Added ICS Response Time Test to LCO 3.3.5.2 ensure all portions of RPS circuitry are adequately tested.
437	16B.03.03.05.03	SR 3.3.5.3.4	Revised last paragraph to replace justification of Frequency based on industry experience with reference to PRA Topical.	PRA Topical is expected to provide evaluation supporting this Frequency.
438	16B.03.03.05.03	SR 3.3.5.3.4	Revised 2nd paragraph to state "STAGGERED TEST BASIS for four channels" and deleted discussion of Frequency for output logic pairs.	N-2 Design Change and Incorporation of ICS Response Time Test in TS 3.3.5.4.
439	16B.03.03.05.03	SR 3.3.5.3.4	Revised 1st paragraph to remove brackets surrounding References.	Wording is consistent with NUREG-1434. Expect Response Time Testing acceptance criteria to be provided. If not supported, then will be deleted.

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
440	16B.03.03.05.03	REFERENCES	Added NEDO-33201 as Reference 2.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
441	16B.03.03.05.03	REFERENCES	Revised Reference 3 by deleting "to be entered".	Editorial
442	16B.03.03.05.04	BACKGROUND	Revised 3rd paragraph to clarify where Operability requirements for components are addressed within TS.	Editorial and DCD Consistency
443	16B.03.03.05.04	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" divisions and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
444	16B.03.03.05.04	ACTIONS A.1	Revised A.1 to refer to "required" divisions and revised Completion Time from 14 days to 12 hours and referenced PRA topical as basis.	N-2 Design Change and NEDO-33201
445	16B.03.03.05.04	ACTIONS A.1	Revised discussion to describe alternative to restoration.	N-2 Design Change
446	16B.03.03.05.04	ACTIONS B.1	Deleted B.1.	N-2 Design Change
447	16B.03.03.05.04	ACTIONS C.1	Renumbered as B.1 and revised to incorporate 3 "required" divisions provide additional detail on actuation capability, and referenced PRA topical as basis for Completion Time.	N-2 Design Change and NEDO-33201
448	16B.03.03.05.04	ACTIONS D.1	Renumbered as C.1.	Editorial
449	16B.03.03.05.04	SR 3.3.5.4.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "ECCS" with SSLC.	RAI 16.0-2 and DCD consistency
450	16B.03.03.05.04	SR 3.3.5.4.1	Revised 2nd paragraph to replace discussion of Staggered Test Basis for each pair of voter logic trips to state that the Staggered Test Basis is for four divisions.	N-2 Design Change and consistency with DCD Chapter 7, Rev 2
451	16B.03.03.05.04	SR 3.3.5.4.1	Revised last paragraph to reference PRA Topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
452	16B.03.03.05.04	SR 3.3.5.4.2	Added ICS Response Time Test.	RAI 16.2-97 - Added ICS Response Time Test to ensure all portions of ICS circuitry are adequately tested.
453	16B.03.03.05.04	REFERENCES	Added reference for ICS Response Time Testing acceptance criteria.	Added ICS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
454	16B.03.03.05.04	REFERENCES	Added NEDO-33201 to references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
455	16B.03.03.06.01	BACKGROUND	Added 2nd, 3rd, 4th, 5th, 6th, and 7th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
456	16B.03.03.06.01	BACKGROUND	Revised 8th paragraph to refer to isolation circuitry instead of just logic.	Editorial
457	16B.03.03.06.01	BACKGROUND	Revised reference to condenser vacuum to condenser pressure in 8th paragraph.	DCD Rev 2 Table 7.3-5
458	16B.03.03.06.01	BACKGROUND	Revised 8th, 9th, and 10th paragraph discussion of SSLC architecture.	Consistency with DCD Chapter 7, Rev 2
459	16B.03.03.06.01	BACKGROUND	Added paragraph discussing division power source.	N-2 Design Change
460	16B.03.03.06.01	BACKGROUND	Added paragraph discussing how Operability of components is addressed within TS.	Editorial
461	16B.03.03.06.01	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" channels and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
462	16B.03.03.06.01	ASA, LCO, and APPLICABILITY	Revised 3rd, 4th, and 5th paragraphs to reflect TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
463	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 01	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
464	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 01	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
465	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 02	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
466	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 02	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
467	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 03	Revised 2nd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
468	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 03	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
469	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 04	Revised 2nd paragraph from four channel to three channels required to be Operable.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
470	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 04	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	N-2 Design Change
471	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 05	Revised discussion to refer to Condenser Pressure - High instead of Condenser Vacuum - Low.	DCD Rev 2 Table 7.3-5
472	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 05	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
473	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 05	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
474	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 06 & 07	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
475	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 06 & 07	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
476	16B.03.03.06.01	ASA, LCO, and APPLICABILITY Function 06 & 07	Replaced square brackets surrounding last paragraph with curly brackets.	RAI 16.0-2
477	16B.03.03.06.01	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change
478	16B.03.03.06.01	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
479	16B.03.03.06.01	ACTIONS A.1 & A.2	Revised 1st and 3rd paragraph to replace action to "place" division in trip with action to "verify" division in trip.	MSIV Isolation design does not include allowance for operator to place a division in trip.
480	16B.03.03.06.01	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change
481	16B.03.03.06.01	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change
482	16B.03.03.06.01	ACTIONS C.1	Removed brackets surrounding 1 hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2
483	16B.03.03.06.01	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
484	16B.03.03.06.01	ACTIONS E.1	Renumbered as D.1 and deleted reference to bypass.	N-2 Design Change
485	16B.03.03.06.01	ACTIONS E.1	Replaced reference to "placed" in trip with "verify" in trip.	MSIV Isolation design does not include allowance for operator to place a division in trip.
486	16B.03.03.06.01	ACTIONS E.1	Referenced PRA topical as basis for 6 hour Completion Time.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
487	16B.03.03.06.01	ACTIONS F.1 & F.2	Deleted reference to actions required by F.2. Revised Actions to require declaring affected MSIV inoperable immediately.	RAI 16.0-7
488	16B.03.03.06.01	SR 3.3.6.1.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "Isolation Instrumentation" with SSLC.	RAI 16.0-2 and DCD consistency

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
489	16B.03.03.06.01	SR 3.3.6.1.1	Removed brackets surrounding "24 hours" in 1st paragraph and in 3rd paragraph and referenced PRA topical as basis.	RAI 16.0-2
490	16B.03.03.06.01	SR 3.3.6.1.1	Discussion revised to refer to "required" channel.	N-2 Design Change
491	16B.03.03.06.01	SR 3.3.6.1.2	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "Isolation Instrumentation" with SSLC.	RAI 16.0-2 and DCD consistency
492	16B.03.03.06.01	SR 3.3.6.1.2	Revised 2nd paragraph to refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
493	16B.03.03.06.01	SR 3.3.6.1.2	Removed brackets surrounding "184 days" in 3rd paragraph and referenced PRA topical as basis.	RAI 16-0-2
494	16B.03.03.06.01	SR 3.3.6.1.3	Removed brackets surrounding "24 month" in 2nd paragraph and referenced PRA topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting this Frequency.
495	16B.03.03.06.01	SR 3.3.6.1.3	Revised 1st paragraph to reflect TSTF-493 discussions and refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
496	16B.03.03.06.01	SR 3.3.6.1.3	Referenced PRA topical as basis for Frequency.	RAI 16.0-2
497	16B.03.03.06.01	SR 3.3.6.1.3	Added paragraph to discuss as-found/as-left and selected instruments consistent with TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
498	16B.03.03.06.01	SR 3.3.6.1.3	Discussion revised to refer to "required" channel.	N-2 Design Change
499	16B.03.03.06.01	SR 3.3.6.1.4	Revised "SR 3.3.1.6.4" in heading to "SR 3.3.6.1.4."	Editorial
500	16B.03.03.06.01	SR 3.3.6.1.4	Revised SR to refer to "required" channel.	N-2 Design Change
501	16B.03.03.06.01	SR 3.3.6.1.4	Revised all references in the SR to reflect incorporation of PRA topical as Reference 9.	PRA Topical is expected to provide evaluation supporting this Frequency.
502	16B.03.03.06.01	SR 3.3.6.1.4	Revised 1st paragraph to state that this SR overlaps that of SR 3.3.6.2.2.	Added ECCS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
503	16B.03.03.06.01	SR 3.3.6.1.4	Revised last paragraph to replace justification of Frequency based on industry experience with reference to PRA Topical.	PRA Topical is expected to provide evaluation supporting this Frequency.
504	16B.03.03.06.01	SR 3.3.6.1.4	Revised 1st and 2nd paragraphs to remove brackets surrounding References.	Wording is consistent with NUREG-1434. Expect Response Time Testing acceptance criteria to be provided. If not supported, then will be deleted.

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
505	16B.03.03.06.01	SR 3.3.6.1.4	Revised 1st and 2nd paragraphs to remove brackets surrounding References and discussions of "some sensors".	Wording is consistent with NUREG-1434. Expect Response Time Testing acceptance criteria to be provided. If not supported, then will be deleted.
506	16B.03.03.06.01	SR 3.3.6.1.4	Revised last paragraph to state "STAGGERED TEST BASIS for four channels" and deleted discussion of Frequency basis for output logic.	N-2 Design Change and Added Isolation Response Time Test to LCO 3.3.6.2 to ensure all portions of RPS circuitry are adequately tested.
507	16B.03.03.06.01	REFERENCES	Replaced existing reference to FSAR 19.2.3 with NEDO-33201 as Reference 9.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
508	16B.03.03.06.01	REFERENCES	Revised Reference 10 from "Chapter 7, Table 7.2-x" to "Reference for ISOLATION SYSTEM RESPONSE TIME acceptance criteria."	Consistency with other similar TS Bases references.
509	16B.03.03.06.01	REFERENCES	Replaced square brackets surrounding References 10, 11, and 12 with curly brackets.	RAI 16.0-2
510	16B.03.03.06.02	BACKGROUND	Deleted 2nd paragraph and incorporated in 4th paragraph.	Editorial
511	16B.03.03.06.02	BACKGROUND	Revised 4th paragraph to clarify where Operability requirements for components are addressed within TS.	Editorial and DCD Consistency
512	16B.03.03.06.02	LCO	Revised 1st paragraph to discuss three "required" divisions and provide details on determining which are "required," and why this is acceptable. Deleted last sentence.	N-2 Design Change and editorial
513	16B.03.03.06.02	ACTIONS A.1 & A.2	Revised A.1 to refer to "required" divisions, removed brackets surrounding Completion Time of 12 hours and referenced PRA topical as basis.	N-2 Design Change and NEDO-33201
514	16B.03.03.06.02	ACTIONS A.1 & A.2	Deleted A.2 action to bypass and parenthetical statement that placing the division in trip would result in MSIV actuation.	N-2 Design Change and MSIV Isolation design does not include allowance for operator to place a division in trip.
515	16B.03.03.06.02	ACTIONS B.1	Deleted B.1 & B.2.	N-2 Design Change
516	16B.03.03.06.02	ACTIONS C.1	Renumbered as B.1 and revised to incorporate 3 "required" divisions.	N-2 Design Change
517	16B.03.03.06.02	ACTIONS C.1	Deleted discussion of isolation capability.	Extraneous detail to information already presented in the Action discussion.
518	16B.03.03.06.02	ACTIONS C.1	Removed brackets surrounding 1 hour Completion Time and referenced PRA topical as basis.	NEDO-33201
519	16B.03.03.06.02	ACTIONS D.1 & D.2	Renumbered as C.1. Revised Actions to require declaring affected MSIV inoperable immediately.	N-2 Design Change and RAI 16.0-7

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
520	16B.03.03.06.02	SR 3.3.6.2.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to define SSLC.	RAI 16.0-2 and editorial
521	16B.03.03.06.02	SR 3.3.6.2.1	Revised 1st paragraph to provide details of components tested.	Consistency with DCD
522	16B.03.03.06.02	SR 3.3.6.2.1	Revised 2nd paragraph to replace discussion of Staggered Test Basis for each pair of output logic trips to state that the Staggered Test Basis is for four divisions.	N-2 Design Change and consistency with DCD Chapter 7, Rev 2
523	16B.03.03.06.02	SR 3.3.6.2.1	Revised last paragraph to reference PRA Topical as basis for Frequency	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
524	16B.03.03.06.02	SR 3.3.6.2.2	Added Isolation Response Time Test.	RAI 16.2-97 - Added ICS Response Time Test to ensure all portions of ICS circuitry are adequately tested.
525	16B.03.03.06.02	REFERENCES	Added reference for Isolation Response Time Testing acceptance criteria.	Added ICS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
526	16B.03.03.06.02	REFERENCES	Added NEDO-33201 to references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
527	16B.03.03.06.03	BACKGROUND	Added 2nd, 3rd,4th,5th, 6th, and 7th paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
528	16B.03.03.06.03	BACKGROUND	Revised Function list following 7th paragraph to delete Functions 13 and 14.	Evaluation performed for response to RAI 16.0-1 determined that this Function did not meet criteria for inclusion in TS.
529	16B.03.03.06.03	BACKGROUND	Revised 8th paragraph to Delete discussion of DTMs.	Editorial relocated discussion to subsequent paragraphs.
530	16B.03.03.06.03	BACKGROUND	Revised 8th paragraph to clarify how isolation signals are initiated and by what system.	Editorial - Consistent with DC
531	16B.03.03.06.03	BACKGROUND	Revised reference to condenser vacuum to condenser pressure in 8th paragraph.	DCD Rev 2 Table 7.3-5
532	16B.03.03.06.03	BACKGROUND	Revised 8th paragraph discussion of SSLC architecture and added paragraphs 9, 10, 11, and 12.	Consistency with DCD Chapter 7, Rev 2
533	16B.03.03.06.03	BACKGROUND	Added paragraph discussing division power source.	N-2 Design Change
534	16B.03.03.06.03	BACKGROUND	Added paragraph discussing how Operability of components is addressed within TS.	Editorial

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
535	16B.03.03.06.03	ASA, LCO, and APPLICABILITY	Added new paragraph to discuss three "required" channels and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
536	16B.03.03.06.03	ASA, LCO, and APPLICABILITY	Revised 3rd, 4th, and 5th paragraphs to reflect TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
537	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 01	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
538	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 01	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
539	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 02	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
540	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 02	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
541	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 03	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
542	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 03	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
543	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 04	Revised 2nd paragraph from four channel to three channels required to be Operable.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
544	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 04	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	N-2 Design Change
545	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 05	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
546	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 05	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
547	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 06	Revised discussion to refer to Condenser Pressure - High instead of Condenser Vacuum - Low.	DCD Rev 2 Table 7.3-5
548	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 06	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
549	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 06	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
550	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 07 & 08	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
551	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 07 & 08	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
552	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 07 & 08	Replaced square brackets surrounding 3rd paragraph with curly brackets.	RAI 16.0-2
553	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 09	Replaced square brackets surrounding discussion of time delay in 2nd paragraph with curly brackets.	RAI 16.0-2
554	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 09	Revised 3rd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
555	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 09	Revised 4th paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
556	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 10, 11, & 12	Revised "Condensate Line Flow" to "Condensate Return Line Flow" in heading and discussion.	Consistency with DCD
557	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 10, 11, & 12	Revised 2nd paragraph from four channel to three channels required to be Operable.	N-2 Design Change
558	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 10, 11, & 12	Revised 3rd paragraph to discuss Analytical / Design Limit instead of Allowable Value.	Editorial and N-2 Design Change
559	16B.03.03.06.03	ASA, LCO, and APPLICABILITY Function 13 & 14	Deleted Functions 13 and 14.	Evaluation performed for response to RAI 16.0-1 determined that this Function did not meet criteria for inclusion in TS.
560	16B.03.03.06.03	ACTIONS A.1 & A.2	Revised to discuss "required" channels and to reflect deletion of A.2.	N-2 Design Change
561	16B.03.03.06.03	ACTIONS A.1 & A.2	Removed brackets surrounding "12 hour" Completion Time and referenced PRA topical as basis.	RAI 16.0-2
562	16B.03.03.06.03	ACTIONS A.1 & A.2	Revised 1st and 3rd paragraphs to replace action to "place" division in trip with action to "verify" division in trip and deleted parenthetical statement that placing the division in trip would result in MSIV actuation.	N-2 Design change and Isolation design does not include allowance for operator to place a division in trip.
563	16B.03.03.06.03	ACTIONS B.1 & B.2	Actions deleted.	N-2 Design Change
564	16B.03.03.06.03	ACTIONS C.1	Renumbered as B.1 and revised to reflect "required" channels.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
565	16B.03.03.06.03	ACTIONS C.1	Removed brackets surrounding 1 hour Completion Time and referenced PRA topical as basis.	RAI 16.0-2
566	16B.03.03.06.03	ACTIONS C.1	Deleted discussion of isolation capability.	Extraneous detail to information already presented in the Action discussion.
567	16B.03.03.06.03	ACTIONS D.1	Renumbered as C.1.	N-2 Design Change
568	16B.03.03.06.03	ACTIONS E.1	Renumbered as D.1.	N-2 Design Change
569	16B.03.03.06.03	ACTIONS E.1	Referenced PRA topical as basis for 6 hour Completion Time.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
570	16B.03.03.06.03	ACTIONS F.1	Renumbered as E.1. Revised Actions to require declaring affected MSIV inoperable within 1 hour.	N-2 Design Change and RAI 16.0-7
571	16B.03.03.06.03	SR 3.3.6.3.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "Isolation Instrumentation" with SSLC.	RAI 16.0-2 and DCD consistency
572	16B.03.03.06.03	SR 3.3.6.3.1	Removed brackets surrounding "24 hours" in 1st paragraph and in 3rd paragraph and referenced PRA topical as basis.	RAI 16.0-2
573	16B.03.03.06.03	SR 3.3.6.3.1	Discussion revised to refer to "required" channel.	N-2 Design Change
574	16B.03.03.06.03	SR 3.3.6.3.2	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Revised discussion of self-test feature to replace "Isolation Instrumentation" with SSLC.	RAI 16.0-2 and DCD consistency
575	16B.03.03.06.03	SR 3.3.6.3.2	Revised 2nd paragraph to refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
576	16B.03.03.06.03	SR 3.3.6.3.2	Removed brackets surrounding "184 days" in 3rd paragraph and referenced PRA topical as basis.	RAI 16-0-2
577	16B.03.03.06.03	SR 3.3.6.3.3	Removed brackets surrounding "24 month" in 2nd paragraph and referenced PRA topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting this Frequency.
578	16B.03.03.06.03	SR 3.3.6.3.3	Revised 1st paragraph to reflect TSTF-493 discussions and refer to SCP.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
579	16B.03.03.06.03	SR 3.3.6.3.3	Added paragraph to discuss as-found/as-left and selected instruments consistent with TSTF-493.	RAI 16.2-25 - ESBWR incorporation of TSTF-493.
580	16B.03.03.06.03	SR 3.3.6.3.3	Discussion revised to refer to "required" channel.	N-2 Design Change
581	16B.03.03.06.03	SR 3.3.6.3.4	Revised SR to refer to "required " channel.	N-2 Design Change

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
582	16B.03.03.06.03	SR 3.3.6.3.4	Revised 2nd paragraph to state that this SR overlaps that of SR 3.3.6.4.2.	Added ECCS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
583	16B.03.03.06.03	SR 3.3.6.3.4	Revised last paragraph to state "STAGGERED TEST BASIS for four channels" and to replace justification of Frequency based on industry experience with reference to PRA Topical.	N-2 Design change and PRA Topical is expected to provide evaluation supporting this Frequency.
584	16B.03.03.06.03	SR 3.3.6.3.4	Revised 1st and 4th paragraphs to remove brackets surrounding References.	Wording is consistent with NUREG-1434. Expect Response Time Testing acceptance criteria to be provided. If not supported, then will be deleted.
585	16B.03.03.06.03	SR 3.3.6.3.4	Revised 1st and 2nd paragraphs to remove brackets surrounding References and discussions of "some sensors".	Wording is consistent with NUREG-1434. Expect Response Time Testing acceptance criteria to be provided. If not supported, then will be deleted.
586	16B.03.03.06.03	REFERENCES	Replaced existing reference to FSAR 19.2.3 with NEDO-33201 as Reference 10.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
587	16B.03.03.06.03	REFERENCES	Replaced square brackets surrounding References 11, 12 and 13 with curly brackets.	RAI 16.0-2
588	16B.03.03.06.03	REFERENCES	Revised Reference 11 from "Chapter 7, Table 7.2-x" to "Reference for ISOLATION SYSTEM RESPONSE TIME acceptance criteria."	Consistency with other similar TS Bases references.
589	16B.03.03.06.04	BACKGROUND	Deleted brackets surrounding list of containment isolation flow paths and inserted Chilled Cooling Water System and High Pressure Nitrogen Gas Supply System and Process Radiation Monitoring System.	DCD Rev 2
590	16B.03.03.06.04	BACKGROUND	Deleted 2nd paragraph and incorporated in 4th paragraph.	Editorial
591	16B.03.03.06.04	BACKGROUND	Revised 4th paragraph to clarify where Operability requirements for components are addressed within TS.	Editorial and DCD Consistency
592	16B.03.03.06.04	ASA, LCO, and APPLICABILITY	Inserted paragraph to discuss three "required" divisions and provide details on determining which are "required," and why this is acceptable.	N-2 Design Change
593	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 01	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
594	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 02	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
595	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 03	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
596	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 04	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
597	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 05	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
598	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 06	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
599	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 07	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
600	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 08	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
601	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 09	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
602	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 10	Revised from four divisions to three divisions required to be Operable and removed brackets surrounding discussion.	N-2 Design Change
603	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 11	Inserted Chilled Cooling Water System isolation function.	Consistency with DCD Section 6.2
604	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 12	Inserted Process Radiation Monitoring System isolation Function.	Consistency with DCD Section 6.2
605	16B.03.03.06.04	ASA, LCO, and APPLICABILITY Function 13	Inserted High Pressure Nitrogen Gas Supply System isolation Function.	Consistency with DCD Section 6.2
606	16B.03.03.06.04	ACTIONS	Deleted brackets surrounding discussion of Note 2 allowing separate condition entry.	N-2 Design Change
607	16B.03.03.06.04	ACTIONS A.1	Revised A.1 to refer to "required" divisions, removed brackets surrounding Completion Time of 4 hours and referenced PRA topical as basis.	N-2 Design Change and NEDO-33201
608	16B.03.03.06.04	ACTIONS A.1	Deleted discussion of acceptability of out of service time based on existence of RA B.1, and single failure in 2nd paragraph.	Discussion of acceptability based on another required action is not discussed in other ESBWR TS Bases and is therefore not a consistent level of detail. N-2 Design Change.
609	16B.03.03.06.04	ACTIONS A.1	Deleted 2nd paragraph parenthetical statement that placing the division in trip would result in isolation.	N-2 Design change and Isolation design does not include allowance for operator to place a division in trip.

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
610	16B.03.03.06.04	ACTIONS B.1	Revised B.1 to refer to "required" division, removed brackets surrounding Completion Time of 1 hour and referenced PRA topical as basis.	N-2 Design Change
611	16B.03.03.06.04	ACTIONS C.1	Revised to incorporate 3 "required" divisions.	N-2 Design Change
612	16B.03.03.06.04	ACTIONS C.1	Referenced PRA topical as basis.	NEDO-33201
613	16B.03.03.06.04	ACTIONS C.1	Replaced "placed" in trip with "verified to be" in trip in 1st paragraph.	N-2 Design change and Isolation design does not include allowance for operator to place a division in trip.
614	16B.03.03.06.04	ACTIONS D.1	Revised Actions to require declaring affected CIV inoperable immediately.	N-2 Design Change and RAI 16.0-7
615	16B.03.03.06.04	SR 3.3.6.4.1	Replaced square brackets surrounding discussion of self-test feature with curly brackets in 1st paragraph. Defined "SSLC."	RAI 16.0-2 and editorial
616	16B.03.03.06.04	SR 3.3.6.4.1	Added statements describing STAGGERED TEST BASIS and split first paragraph into two paragraphs.	N-2 Design Change and editorial
617	16B.03.03.06.04	SR 3.3.6.4.1	Revised last paragraph to reference PRA Topical as basis for Frequency.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
618	16B.03.03.06.04	SR 3.3.6.4.2	Added Isolation Response Time Test.	RAI 16.2-97 - Added ICS Response Time Test to ensure all portions of ICS circuitry are adequately tested.
619	16B.03.03.06.04	REFERENCES	Added reference for Isolation Response Time Testing acceptance criteria.	Added ICS Response Time Test to ensure all portions of RPS circuitry are adequately tested.
620	16B.03.03.06.04	REFERENCES	Added NEDO-33201 to references.	PRA Topical is expected to provide evaluation supporting Completion Times and Frequencies.
621	16B.03.03.07.01	BACKGROUND	Revised various descriptions of the automatic actuation of the non-safety related CRHAHVS and the safety-related EBAS, including instrumentation changes, in the previous second through fourth paragraphs, and sixth through eighth paragraphs.	Technical changes for consistency with DCD Chapter 9, Revision 2
622	16B.03.03.07.01	BACKGROUND	Added new third through sixth paragraphs to implement TSTF-493 discussions for LSSS.	RAI 16.2-25 (TSTF-493, MFN 06-431)
623	16B.03.03.07.01	BACKGROUND	Added a new last paragraph defining the instrumentation boundaries of this Specification versus Specification 3.3.7.2, and the actuated components requirements in Specification 3.7.2.	Editorial change for consistency with similar instrumentation Bases

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
624	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	Revised the phrase "following a loss-of-coolant accident (LOCA) concurrent with a loss of onsite and offsite AC power" to "following a loss-of-coolant accident (LOCA) concurrent with availability of onsite or offsite AC power and failure of the non-safety related CRHAHVS in the emergency filtration mode (which also results in a CRHA isolation), and concurrent with a CRHA isolation caused by a loss of onsite and offsite AC power" in the first paragraph.	Technical change for consistency with DCD Chapter 9, Revision 2
625	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	Revised various descriptions of the automatic actuation of the non-safety related CRHAHVS and the safety-related EBAS, including instrumentation changes, and describing Setpoint Control Program, in the third through sixth paragraphs to implement TSTF-493 discussions for LSSS.	Technical changes for consistency with DCD Chapter 9, Revision 2, and RAI 16.2-25 (TSTF-493, MFN 06-431)
626	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	Added new seventh paragraph to describe that 4 channels are available, but that only 3 channels are required and tying required channels to required electrical systems.	N-2 Design Change
627	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	For Function 1, revised square brackets to curly brackets in four places.	RAI 16.0-2 (MFN 06-431)
628	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	For Function 1, replaced the phrase "Allowable Value" to "Analytical / Design Limit" in last sentence of the first paragraph.	RAI 16.2-25 (TSTF-493, MFN 06-431)
629	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	For Function 1, replaced "four" channels with "three" channels required.	N-2 Design Change
630	16B.03.03.07.01	ASA, LCO, and APPLICABILITY	Replaced Function 2 with three new Functions, with Bases consistent with descriptions for Function 1.	Technical changes for consistency with DCD Chapter 9, Revision 2
631	16B.03.03.07.01	ACTIONS A.1	Revised various descriptions of the REQUIRED ACTION A.1 to be consistent with the changes described for the Specification.	N-2 Design Change, PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies, and EBAS instrumentation design does not include allowance to place a division in trip
632	16B.03.03.07.01	ACTIONS B.1	Deleted, and renumbered subsequent CONDITIONS and REQUIRED ACTIONS.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
633	16B.03.03.07.01	ACTIONS C.1	Renumbered as CONDITION B and REQUIRED ACTION B.1, revised to specify "required" channels, deleted last sentence of first paragraph, removed bracket surrounding the "[1]" hour COMPLETION TIME, and added reference to PRA Topical for justifying COMPLETION TIME.	Editorial change, N-2 Design Change, and PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
634	16B.03.03.07.01	ACTIONS D.1.1, D.1.2, and D.2	Renumbered as CONDITION C and REQUIRED ACTION C.1.1, C.1.2, and C.2, and replaced "operator" with "occupants."	Editorial change, and RAI 16.2-54, TSTF-448 Revision 3
635	16B.03.03.07.01	SR 3.3.7.1.1	Removed square brackets from "[24] hours" FREQUENCY in first and last paragraphs, removed square brackets from around last paragraph, and added phrase "and has been shown to be acceptable by Reference 4" in the last paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
636	16B.03.03.07.01	SR 3.3.7.1.1	Added phrase "required" channel to SURVEILLANCE in first paragraph.	N-2 Design Change
637	16B.03.03.07.01	SR 3.3.7.1.1	Revised brackets from square brackets to curly brackets in one place in first paragraph.	RAI 16.0-2 (MFN 06-431)
638	16B.03.03.07.01	SR 3.3.7.1.1	Added "PRMS and" to "SSLC" in two places of first paragraph.	Technical changes for consistency with DCD Chapter 9, Revision 2
639	16B.03.03.07.01	SR 3.3.7.1.2	Added "PRMS and" to "SSLC" in two places of first paragraph.	Technical changes for consistency with DCD Chapter 9, Revision 2
640	16B.03.03.07.01	SR 3.3.7.1.2	Revised brackets from square brackets to curly brackets in one place in first paragraph.	RAI 16.0-2 (MFN 06-431)
641	16B.03.03.07.01	SR 3.3.7.1.2	Added the phrase "as specified in the SCP" at the end of the second paragraph.	RAI 16.2-25 (TSTF-493, MFN 06-431)
642	16B.03.03.07.01	SR 3.3.7.1.2	Removed square brackets from "[184 days]" FREQUENCY, removed phrase "and self monitoring capability," and added phrase "and has been shown to be acceptable by Reference 4" in the last paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
643	16B.03.03.07.01	SR 3.3.7.1.3	Added phrase "required" channel to SURVEILLANCE in two places of the first paragraph.	N-2 Design Change
644	16B.03.03.07.01	SR 3.3.7.1.3	Added the phrase "to the NTSP within the "leave alone" tolerance" and replaced the phrase "plant specific setpoint methodology" with "SCP" in the first paragraph, and added new third paragraph describing the SCP requirements.	RAI 16.2-25 (TSTF-493, MFN 06-431)

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
645	16B.03.03.07.01	SR 3.3.7.1.3	Added phrase "and has been shown to be acceptable by Reference 4" in the last paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
646	16B.03.03.07.01	REFERENCES	Added new Reference 4: {"NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment."}.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
647	16B.03.03.07.02	BACKGROUND	Revised last paragraph defining the instrumentation boundaries of this Specification versus Specification 3.3.7.1, and the actuated components requirements in Specification 3.7.2, and removing square brackets in one place.	Editorial changes for consistency with similar instrumentation Bases
648	16B.03.03.07.02	ASA, LCO, and APPLICABILITY	Replaced "personnel" with "occupants" in first paragraph, and "operator" with "occupant" in the original fourth paragraph.	RAI 16.2-54, TSTF-448 Revision 3
649	16B.03.03.07.02	ASA, LCO, and APPLICABILITY	Replaced third paragraph with 2 new paragraphs defining the instrumentation boundaries of this Specification versus Specification 3.3.7.1, and the actuated components requirements in Specification 3.7.2, and changing discussion of four channels to three required channels and tying required channels to required electrical divisions.	Editorial changes for consistency with similar instrumentation Bases, and N-2 Design Change
650	16B.03.03.07.02	ASA, LCO, and APPLICABILITY	Revised the phrase "following a LOCA concurrent with a loss of onsite and offsite AC power" to "following a LOCA concurrent with availability of onsite or offsite AC power and failure of the non-safety related CRHAHVS in the emergency filtration mode (which also results in a CRHA isolation), and concurrent with a CRHA isolation caused by a loss of onsite and offsite AC power" in the original fourth paragraph.	Technical change for consistency with DCD Chapter 9, Revision 2
651	16B.03.03.07.02	ASA, LCO, and APPLICABILITY	Revised square brackets to curly brackets in three places in last paragraph.	RAI 16.0-2 (MFN 06-431)
652	16B.03.03.07.02	ACTIONS A.1	Revised various descriptions of the REQUIRED ACTION A.1 to be consistent with the changes described for the Specification.	N-2 Design Change, and PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
653	16B.03.03.07.02	ACTIONS B.1	Deleted, and renumbered subsequent CONDITIONS and REQUIRED ACTIONS.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
654	16B.03.03.07.02	ACTIONS C.1	Renumbered as CONDITION B and REQUIRED ACTION B.1, revised first paragraph to be consistent with revised Specification intent and to specify "required" actuation divisions, deleted last sentence of first paragraph, removed two sets of brackets surrounding the "[1]" hour COMPLETION TIME, and added reference to PRA Topical for justifying COMPLETION TIME.	Editorial change, N-2 Design Change, and PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
655	16B.03.03.07.02	ACTIONS D.1.1, D.1.2, and D.2	Renumbered as CONDITION C and REQUIRED ACTION C.1.1, C.1.2, and C.2, and replaced "operators" with "occupants."	Editorial change, and RAI 16.2-54, TSTF-448 Revision 3
656	16B.03.03.07.02	SR 3.3.7.2.1	Removed square brackets surrounding SR 3.3.7.2.1, and added phrase "and has been shown to be acceptable by Reference 3" in the last paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
657	16B.03.03.07.02	SR 3.3.7.2.1	Added "Process Radiation Monitoring System (PRMS) and" to "Safety System Logic and Control (SSLC)," and added "PRMS and" to "SSLC" in the first paragraph, and added curly brackets around the discussion of the self-test features.	Technical changes for consistency with DCD Chapter 9, Revision 2, and consistency with other Bases discussions
658	16B.03.03.07.02	SR 3.3.7.2.1	Revised second paragraph to clarify the application of STAGGERED TEST BASIS for the total four actuation divisions.	N-2 Design Change
659	16B.03.03.07.02	SR 3.3.7.2.1	Added phrase "and has been shown to be acceptable by Reference 3" in the last paragraph.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
660	16B.03.03.07.02	REFERENCES	Added new Reference 3: {"NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment."}.	PRA Topical is expected to provide evaluation supporting Completion Times/Frequencies
661	16B.03.04.01	BACKGROUND	Added parentheses around (or pilot) in third sentence of third paragraph.	Editorial
662	16B.03.04.01	ASA	Revised discussion to clarify margin in overpressure analysis.	One SRV can prevent overpressurization, but analysis assumes flow rate of three. Responses to RAI 5.2-17 and 5.2-27.
663	16B.03.04.01	LCO	Revised number of SRVs required to be Operable in first paragraph and safety "function" to safety "mode."	Consistency with revision to LCO.
664	16B.03.04.01	LCO	Replaced discussion of distribution of setpoints with reference to the limits of SR 3.4.1.1.	Consistent with the DCD. Analysis shows acceptable results with one SRV. Distribution of setpoints is not an issue.

for

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Item	Section	Subsection	Description of Change	Brief Reason for Change
665	16B.03.04.01	APPLICABILITY	Revised to delete discussion of need to relieve energy until GDCS is in service.	Per DCD Section 5.2.2.2, this is an ADS function, not a safety mode function.
666	16B.03.04.01	ACTIONS A.1	Revised to discuss "required" SRVs. Deleted reference to "three" SRVs and replaced with use of required SRVs.	RAI 16.2-34
667	16B.03.04.01	ACTIONS B.1 & B.2	Split into Condition B for Condition A not met and Condition C for 2 or more required SRVs not operable. New Actions B.1 allows remaining in the Mode of Applicability. Removed brackets surrounding "MODE 5 within 36 hours" in the New Actions C.1 and C.2 discussion. Also revised New C.1 and C.2 discussion to replace discussion that transient may result in violation of ASME Code limit with statement that overpressure protection is significantly reduced.	RAI 16.0-7 and 16.2-34 responses and Discussions with NRC on June 7, 2006, related to end states, RAI 16.0-7, and DCD consistency.
668	16B.03.04.01	SR 3.4.1.1	Revised to incorporate SRV lift setpoint table and to state that any three SRVs can satisfy the LCO.	Overpressure analysis assumes any three SRVs will stop overpressure at the SRV setpoint. Any four of the 18 SRVs with any mixture of setpoints is adequate. Limits are determined in accordance with ASME requirements and setpoints are provided in DCD.
669	16B.03.04.01	SR 3.4.1.1	Replaced square brackets surrounding "0.8%" with curly brackets.	RAI 16.0-2
670	16B.03.04.01	REFERENCES	Added References 4 and 5 (NEDO 33201 and TSTF-IG-05-02, respectively).	Implementation of end-state discussion.
671	16B.03.04.02	BACKGROUND	Revised third paragraph to include discussion of GDC 30 and RG 1.45 with respect to leakage detection. Renumbered subsequent references.	RAI 5.2-3, Supplement 1
672	16B.03.04.02	ACTIONS B.1 & B.2	Removed brackets surrounding "MODE 5 within 36 hours."	Discussions with NRC on June 7, 2006, related to end states. Brackets removed consistent with NUREG-1434.
673	16B.03.04.04	BACKGROUND	Removed brackets surrounding second paragraph discussion of PTLR.	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
674	16B.03.04.04	BACKGROUND	Revised Brackets surrounding "The ASME Code, Section XI, Appendix E (Ref. 6), provides a recommended methodology for evaluating an operating event that causes an excursion outside the limits." in last paragraph from square brackets to curly brackets.	RAI 16.0-2

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
675	16B.03.04.04	ASA	Removed brackets surrounding "Reference 7 establishes the methodology for determining the P/T limits."	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
676	16B.03.04.04	LCO a	Removed brackets surrounding "the PTLR."	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
677	16B.03.04.04	LCO b	Removed brackets surrounding "the PTLR."	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
678	16B.03.04.04	LCO c	Removed brackets surrounding "the PTLR."	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
679	16B.03.04.04	ACTIONS A.1 & A.2	Revised Brackets surrounding "ASME Section XI, Appendix E (Ref. 6), may be used to support the evaluation; however, its use is restricted to evaluation of the beltline." in second paragraph from square brackets to curly brackets.	RAI 16.0-2
680	16B.03.04.04	ACTIONS B.1 & B.2	Removed brackets surrounding "MODE 5 within 36 hours."	Discussions with NRC on June 7, 2006, related to end states. Brackets removed consistent with NUREG-1434.
681	16B.03.04.04	ACTIONS C.1 & C.2	Revised Brackets surrounding "ASME Section XI, Appendix E (Ref. 6), may be used to support the evaluation. However, its use is restricted to evaluation of the vessel beltline." in fourth paragraph from square brackets to curly brackets.	RAI 16.0-2
682	16B.03.04.04	SR 3.4.4.1	Removed brackets surrounding "PTLR" in first paragraph of discussion.	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
683	16B.03.04.04	SR 3.4.4.3, SR 3.4.4.4, & SR 3.4.4.5	Revised Brackets surrounding "26.7°C (80°F)" and "37.8°C (100°F)" in second paragraph from square brackets to curly brackets.	RAI 16.0-2
684	16B.03.04.04	SR 3.4.4.3, SR 3.4.4.4, & SR 3.4.4.5	Removed brackets surrounding "PTLR" in second paragraph of discussion.	RAIs 5.3-6, 5.3-7, and 5.3-8 (MFN 06-128) and RAI 5.3-13 (MFN 06-152)
685	16B.03.04.04	REFERENCES, 3	Revised Brackets surrounding "ASTM E 185-XX" in reference 3 from square brackets to curly brackets.	RAI 16.0-2
686	16B.03.04.04	REFERENCES, 6	Revised Brackets surrounding "6. ASME, Boiler and Pressure Vessel Code, Section XI, Appendix E" in reference 6 from square brackets to curly brackets.	RAI 16.0-2
687	16B.03.04.04	REFERENCES, 7	Replaced "Topical to be developed" in reference 7 with "P/T Limit Methodology Topical," and replaced square brackets with curly brackets.	Editorial Clarification and RAI 16.0-2

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
688	16B.03.04.05	ASA	Removed brackets and revised value to ≤ 7.07 MPaG (1025 psig).	DCD Subsection 5.2.2.3.2 provides values in absolute pressure. Converted to gauge pressure and rounded down.
689	16B.03.04.05	ASA	Removed brackets surrounding discussion of analysis assumptions and basis for limit.	Review of DCD Subsection 5.2.2.3.2 provides sufficient information to validate statement.
690	16B.03.04.05	LCO	Removed brackets and revised value to ≤ 7.07 MPaG (1025 psig).	DCD Subsection 5.2.2.3.2 provides values in absolute pressure. Converted to gauge pressure and rounded down.
691	16B.03.04.05	SR 3.4.5.1	Removed brackets and revised value to ≤ 7.07 MPaG (1025 psig).	DCD Subsection 5.2.2.3.2 provides values in absolute pressure. Converted to gauge pressure and rounded down.
692	16B.03.05.01	ASA	Deleted statement about ECCS redundancy & flexibility.	Not essential to discussion.
693	16B.03.05.01	ASA, REFERENCES	Deleted Reference to 10 CFR 50, appendix K.	Not applicable because ESBWR fuel not uncovered during LOCA.
694	16B.03.05.01	LCO	Deleted brackets around “ADS SRV nitrogen accumulator pressure be within the limit specified by SR 3.5.1.1” in LCO section of Bases.	Removed brackets from SR 3.5.1.1 based on DCD 9.3 and Table 9.3-8.
695	16B.03.05.01	ACTIONS, ASA, REFERENCES	Changed [] to { } for Analysis, RAs and Completion Times associated with ECCS N-2 Analysis.	GE to resolve prior to Certification. (RAI 16.0-2)
696	16B.03.05.01	ACTIONS, REFERENCES	Mode 3 end state will not be used for LCO 3.5.1 per RAI 16.0-7. Added RA E.2. Deleted reference and renumbered all other references.	RAI 16.0-7 (MFN 06-431).
697	16B.03.05.01	SR 3.5.1.2	Deleted SR 3.5.1.2 for ADS valve lineup verification. Renumbered subsequent SRs.	ESBWR ADS does not have valves in the flow path that require verification
698	16B.03.05.01	SR 3.5.1.4	Revised Bases per RAI 16.2-35.	RAI 16.2-35 (MFN 06-431)
699	16B.03.05.02	ASA	Deleted Reference to 10 CFR 50, appendix K.	Not applicable because ESBWR fuel not uncovered during LOCA.
700	16.03.05.02	ASA	Deleted statement about GDCS redundancy.	Not essential to discussion
701	16B.03.05.02	LCO	Revised Bases LCO section per RAI 16.2-38.	RAI 16.2-38 (MFN 06-431)
702	16B.03.05.02	ACTIONS	Revised Bases for Actions per RAI 16.2-98.	Proposed response to RAI 16.2-98
703	16B.03.05.02	ACTIONS, ASA, REFERENCES	Changed [] to { } for Analysis, RAs and Completion Times associated with ECCS N-2 Analysis.	GE to resolve prior to Certification. (RAI 16.0-2)
704	16B.03.05.02	ACTIONS, REFERENCES	Mode 3 end state will not be used for LCO 3.5.2 per RAI 16.0-7.	RAI 16.0-7 (MFN 06-431)

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
705	16B.03.05.02	SR 3.5.2.3	Revised Bases per RAI 16.2-35	RAI 16.2-35 (MFN 06-431)
706	16B.03.05.03	ALL	Changed [] to { } for LCO, RA, CT and SR requirements.	GE to resolve prior to Certification. (RAI 16.0-2)
707	16B.03.05.03	BACKGROUND	Changed last paragraph to eliminate statement that GDSCS supplies sufficient water to flood drywell above core.	Statement not essential for Bases.
708	16B.03.05.03	ASA	Changed to clarify that GDSCS is needed following loss of 'non-safety-related' DHR.	Clarification
709	16B.03.05.03	ASA	Added reference to Chapter 6 in ASA section.	Correct omission
710	16B.03.05.03	LCO	Deleted brackets from "The RPV must have or have the ability to establish sufficient RPV venting capacity..."	Engineering judgment
711	16B.03.05.03	ACTIONS	Brackets removed from "Alternate sources and methods for water injection are identified in the plant's Abnormal and Emergency Operating Procedures."	Statement is generic and consistent with standard industry practice.
712	16B.03.05.03	ACTIONS	Brackets removed from all Completion Times and revised to state CTs justified by NEDO 33201. Added bracketed reference to NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment."	NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment, will be revised to justify CTs."
713	16B.03.05.03	SR 3.5.3.1	Revised Bases for SR 3.5.3.1 per RAI 16.2-36 and 16.2-39.	RAI 16.2-36 and 16.2-39 (MFN 06-431)
714	16B.03.05.03	SR 3.5.3.2	Deleted SR 3.5.3.2 for GDSCS valve lineup verification. Re-numbered subsequent SRs.	ESBWR GDSCS does not have valves in the flow path that require verification
715	16B.03.05.04	BACKGROUND	Changed [] to { } for statement about ICS actuation on MSIV closure.	GE to resolve prior to Certification. (RAI 16.0-2)
716	16B.03.05.04	BACKGROUND and LCO	Revised cross reference to LCO for IC/PCC pools.	Editorial
717	16B.03.05.04	LCO	Changed [] to { } for statement about ICS subcompartment temperature limits.	GE to resolve prior to Certification. (RAI 16.0-2)
718	16B.03.05.04	ACTIONS	Changed [] to { } for RA and Completion Times associated with ECCS N-2 Analysis.	GE to resolve prior to Certification. (RAI 16.0-2)
719	16B.03.05.04	SR 3.5.4.1	Removed brackets from SR 3.5.4.1 for periodic valve lineup.	Review of P&ID indicated that criteria for lineup are met.
720	16B.03.05.04	SR 3.5.4.2	Removed brackets from SR 3.5.4.2 for HPNSS requirements.	DCD Table 6.2-1
721	16B.03.05.05	BACKGROUND	Removed brackets from statement that SDC 'cannot be assumed to remain available...'	Consistent with NEDO-33201 Rev 1

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Item	Section	Subsection	Description of Change	Brief Reason for Change
722	16B.03.05.05	BACKGROUND and LCO	Revised applicability per RAI 16.2-74. Deleted discussion about ICS requirements in Mode 6 from Background and LCO sections.	Consistent with NEDO-33201, Rev 1
723	16B.03.05.05	LCO	Revised last sentence of LCO section to "When in MODE 5, required IC loops will require functionality of associated IC/PCC expansion pools as heat sink for the ICS condensers."	Improve clarity.
724	16B.03.05.05	APPLICABILITY, ASA	Revised applicability per RAI 16.2-74.	RAI 16.2-74
725	16B.03.05.05	ACTIONS	Deleted brackets from Bases discussion for RA. B.1. Brackets should have been removed in Rev 1 when brackets were removed from RA. B.1 in the Specification.	Editorial
726	16B.03.05.05	SR 3.5.5.1	Removed brackets from SR 3.5.5.1 for periodic valve lineup.	Review of P&ID indicated that criteria for lineup are met.
727	16B.03.05.05	SR 3.5.5.2	Removed brackets from SR 3.5.5.2 for HPNSS requirements.	DCD Table 6.2-1
728	16B.03.06.01.01	BACKGROUND	Deleted reference to Appendix J, Option A and removed brackets surrounding Option B.	Discussions with applicants determined that there was no expectation that a utility building an ESBWR would want the option to perform Appendix J testing using the prescriptive requirements of Option A.
729	16B.03.06.01.01	ACTIONS B.1	Removed brackets surrounding second paragraph and revised end state discussion.	RAI 16.0-7
730	16B.03.06.01.01	SR 3.6.1.1.1	Deleted reference to Appendix J, Option A and removed brackets surrounding Option B.	Discussions with applicants determined that there was no expectation that a utility building an ESBWR would want the option to perform Appendix J testing using the prescriptive requirements of Option A.
731	16B.03.06.01.01	SR 3.6.1.1.2	Replaced square brackets surrounding "during a 10 minute period" with curly brackets in first paragraph.	RAI 16.0-2
732	16B.03.06.01.01	SR 3.6.1.1.2	Replaced square brackets surrounding third paragraph with curly brackets.	RAI 16.0-2
733	16B.03.06.01.01	REFERENCES	Added References 6 and 7 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7

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Item	Section	Subsection	Description of Change	Brief Reason for Change
734	16B.03.06.01.02	BACKGROUND	Deleted reference to Appendix J, Option A and removed brackets surrounding Option B.	Discussions with applicants determined that there was no expectation that a utility building an ESBWR would want the option to perform Appendix J testing using the prescriptive requirements of Option A.
735	16B.03.06.01.02	ACTIONS A.1, A.2, & A.3	Incorporated discussion of Note allowing air lock doors in high radiation areas to be verified locked closed by administrative means.	RAI 16.2-44
736	16B.03.06.01.02	ACTIONS B.1, B.2, & B.3	Incorporated discussion of Note allowing air lock doors in high radiation areas to be verified locked closed by administrative means.	RAI 16.2-44
737	16B.03.06.01.02	ACTIONS D.1	Removed brackets in first paragraph and surrounding second paragraph and revised end state discussion.	RAI 16.0-7
738	16B.03.06.01.02	REFERENCES	Added References 6 and 7 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
739	16B.03.06.01.03	ASA	Revised brackets in second and third paragraphs (all) from square brackets to curly brackets.	RAI 16.0-2
740	16B.03.06.01.03	ASA	Removed brackets surrounding "therefore, the 5-second closure time is assumed in the analysis."	Sufficient information available to validate statement.
741	16B.03.06.01.03	LCO	Revised brackets in third paragraph surrounding "The passive isolation valves/devices are those listed in Reference 5" from square brackets to curly brackets.	RAI 16.0-2
742	16B.03.06.01.03	ACTIONS D.1	Revised brackets in third paragraph (all) from square brackets to curly brackets.	RAI 16.0-2
743	16B.03.06.01.03	ACTIONS E.1	Removed brackets in first paragraph and surrounding second paragraph and revised end state discussion. Deleted reference to Condition B.	RAI 16.0-7
744	16B.03.06.01.03	ACTIONS F.1 & F.2	Added discussion to describe Condition and Required Actions incorporated in Specification.	RAI 16.0-7
745	16B.03.06.01.03	SR 3.6.1.3.10	Revised brackets surrounding SR 3.6.1.3.10 from square brackets to curly brackets.	RAI 16.0-2
746	16B.03.06.01.03	SR 3.6.1.3.7	Revised brackets surrounding "3.79 liters/hour (1 gph)" from square brackets to curly brackets.	RAI 16.0-2
747	16B.03.06.01.03	SR 3.6.1.3.9	Revised brackets surrounding SR 3.6.1.3.9 and "0.227 m ³ /hour (1 gpm)" in first paragraph from square brackets to curly brackets.	RAI 16.0-2

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
748	16B.03.06.01.03	REFERENCES	Revised References 6 and 7 (NEDO 33201 and TSTF-IG-05-02, respectively) and renumbered the existing Reference 7 as Reference 8.	RAI 16.0-7
749	16B.03.06.01.04	LCO	Revised brackets surrounding "less than or equal to 8.96 kPa gauge (1.3 psig)" from square brackets to curly brackets.	RAI 16.0-2
750	16B.03.06.01.04	ACTIONS B.1	Removed brackets surrounding second paragraph and revised end state discussion.	RAI 16.0-7
751	16B.03.06.01.04	REFERENCES	Revised References 2 and 3 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
752	16B.03.06.01.05	ASA	Revised brackets surrounding "46.1°C (115°F)" from square brackets to curly brackets.	RAI 16.0-2
753	16B.03.06.01.05	ASA	Revised "(Ref. 1)" in 2nd paragraph to "Reference 1."	Editorial
754	16B.03.06.01.05	LCO	Revised brackets surrounding "46.1°C (115°F)" from square brackets to curly brackets.	RAI 16.0-2
755	16B.03.06.01.05	ACTIONS A.1	Removed brackets surrounding discussion of analysis sensitivity.	Validated statement based on engineering judgment and existence of sensitivity studies (MFN 06-215)
756	16B.03.06.01.05	ACTIONS B.1	Removed brackets in first paragraph and surrounding second paragraph and revised end state discussion.	RAI 16.0-7
757	16B.03.06.01.05	REFERENCES	Revised References 3 and 4 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
758	16B.03.06.01.06	BACKGROUND	Revised first paragraph to add "flow paths" in two locations.	RAIs 16.2-48 & 16.2-49
759	16B.03.06.01.06	BACKGROUND	Revised fourth paragraph to delete "butterfly" (two places) as a descriptor of the isolation valve.	Type of valve is not important in the scope of the Bases discussion. Revised consistent with DCD Chapter 6, Rev 2.
760	16B.03.06.01.06	ASA	Revised first paragraph to add "flow paths" in two locations.	RAIs 16.2-48 & 16.2-49
761	16B.03.06.01.06	ASA	Revised third paragraph to include discussion of vacuum breaker flow path isolation with respect to the safety analyses.	RAIs 16.2-48 & 16.2-49
762	16B.03.06.01.06	LCO	Revised discussion to refer to vacuum breaker "flow paths."	RAIs 16.2-48 & 16.2-49

for

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Item	Section	Subsection	Description of Change	Brief Reason for Change
763	16B.03.06.01.06	APPLICABILITY	Revised discussion to refer to vacuum breaker "flow paths." (two locations).	RAIs 16.2-48 & 16.2-49
764	16B.03.06.01.06	ACTIONS A.1	Revised discussion to refer to "flow paths" as appropriate. Revised Completion Time from 72 hours to 7 days.	RAIs 16.2-48 & 16.2-49
765	16B.03.06.01.06	ACTIONS B.1	Revised discussion for consistency with Condition B. Describes Vacuum breaker flow path inoperability due to vacuum breaker not able to close or flow path isolation function is inoperable. Revised Completion Time from 4 hours to 8 hours.	RAIs 16.2-48 & 16.2-49
766	16B.03.06.01.06	ACTIONS C.1	Revised discussion to delete Condition of two vacuum breakers inoperable. Discussion also revised for end state issue.	RAI 16.0-7
767	16B.03.06.01.06	ACTIONS D.1	Added discussions to describe Conditions incorporated in Specification.	RAIs 16.2-48 & 16.2-49
768	16B.03.06.01.06	ACTIONS E.1	Added discussions to describe Conditions incorporated in Specification.	RAIs 16.2-48 & 16.2-49
769	16B.03.06.01.06	ACTIONS F.1 & F.2	Added discussions to describe Conditions incorporated in Specification.	RAIs 16.2-48 & 16.2-49
770	16B.03.06.01.06	SR 3.6.1.6.2	Revised brackets surrounding discussion of isolation status availability from square brackets to curly brackets.	RAI 16.0-2
771	16B.03.06.01.06	SR 3.6.1.6.2	Revised to add "flow path" in first paragraph.	RAIs 16.2-48 & 16.2-49
772	16B.03.06.01.06	SR 3.6.1.6.3	Revised SR 3.6.1.6.3 to include lift force as acceptance criteria for verification of freedom of movement.	RAIs 16.2-48 & 16.2-49
773	16B.03.06.01.06	SR 3.6.1.6.4	Added discussion of SR 3.6.1.6.4.	RAIs 16.2-48 & 16.2-49
774	16B.03.06.01.06	SR 3.6.1.6.5	Added discussion of SR 3.6.1.6.5.	RAIs 16.2-48 & 16.2-49
775	16B.03.06.01.06	REFERENCES	Revised References 2 and 3 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
776	16B.03.06.01.07	BACKGROUND and LCO	Renumbered cross reference to LCO for IC/PCC pools.	Editorial
777	16B.03.06.01.07	ASA	Deleted statement "...[only 4] of the 6 heat exchangers for the PCCS to perform..."	No longer needed because of elimination of tiered approach for inoperability
778	16B.03.06.01.07	LCO	Changed [] to { } for all bracketed items	GE to resolve prior to Certification. (RAI 16.0-2)
779	16B.03.06.01.07	ACTIONS	Deleted Conditions A thru D that provided a tiered approach to PCCS loop inoperability. Added new Condition A.	Tiered approach not necessary because no known mechanism to make PCC loop inoperable.

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
780	16B.03.06.01.07	ACTIONS	Revised RA A.1 to state CTs justified by NEDO 33201. Added bracketed reference to NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment."	NEDO-33201, "ESBWR Design Certification Probabilistic Risk Assessment, will be revised to justify CTs."
781	16B.03.06.01.07	ACTIONS, REFERENCES	Mode 3 end state will not be used for LCO 3.6.1.7 per RAI 16.0-7. Added RA B.2. Deleted reference.	RAI 16.0-7 (MFN 06-431)
782	16B.03.06.02.01	ASA, ACTIONS D.2	Deleted brackets for pool temperature	DCD Table 6.2-2
783	16B.03.06.02.01	LCO	Deleted statement "At 1% RTP, heat input is approximately equal to normal system heat losses."	Not essential element of the Bases.
784	16B.03.06.02.01	ACTIONS D.3	Revised Bases for RA D.3 per RAI 16.0-3.	RAI 16.0-3 (MFN 06-431)
785	16B.03.06.02.01	ACTIONS E.2	Deleted brackets for Completion Time.	Consistent with LCO 3.0.3
786	16B.03.06.02.02	APPLICABILITY	Changed [] to { } for extended applicability.	GE to resolve prior to Certification. (RAI 16.0-2)
787	16B.03.06.02.02	ACTIONS	Changed [] to { } for depressurization pressure.	GE to resolve prior to Certification. (RAI 16.0-2)
788	16B.03.06.02.02	ACTIONS, REFERENCES	Mode 3 end state will not be used for LCO 3.6.2.2 per RAI 16.0-7.	RAI 16.0-7 (MFN 06-431)
789	16B.03.06.03.01	ACTIONS D.1	Removed brackets surrounding second paragraph and revised end state discussion.	RAI 16.0-7
790	16B.03.06.03.01	REFERENCES	Added References 2 and 3 (NEDO 33201 and TSTF-IG-05-02, respectively).	RAI 16.0-7
791	16B.03.07.01	ALL	Re-numbered LCO from 3.7.5 to 3.7.1.	Editorial
792	16B.03.07.01	ALL	Changed 'equipment' pool to 'dryer/separator' pool.	Consistent with RAI 9.1-22 and DCD Chaps 6 and 9, R2
793	16B.03.07.01	ALL	Re-arranged brackets for description of pool and pool number designators based on RAI 9.1-22 (MFN 06-309) and RAI 6.2-74 (MFN 06-215).	Pool numbering differs between Figure in RAI 6.2-74 and DCD Figure 2.16.5-8. DCD is probably correct.
794	16B.03.07.01	ALL	Changed "reactor cavity" to "reactor well" in all sections of the Bases to be consistent with the Specification and DCD Chapter 9.	Changed to be consistent with the Specification and DCD Chapter 9.
795	16B.03.07.01	BACKGROUND	Revised Bases to clarify fire protections system can be used to supply makeup per RAI 16.2-79 (MFN 06-431).	RAI 16.2-79 (MFN 06-431)
796	16B.03.07.01	BACKGROUND	Added new brackets for "PCCS for {24} hours without operator action or the need to replenish the water in the expansion pools."	Validation not complete.

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
797	16B.03.07.01	BACKGROUND and LCO	Revised Background and LCO sections to include discussion of differences in pool level and actuation of interconnect valves per RAI 9.1-22 (MFN 06-309) and RAI 6.2-74 (MFN 06-215).	Consistent with RAI 9.1-22 (MFN 06-309) and RAI 6.2-74 (MFN 06-215)
798	16B.03.07.01	ACTIONS	Added Action B.2. Mode 3 end state will not be used for LCO 3.5.1 per RAI 16.0-7.	RAI 16.0-7 (MFN 06-431)
799	16B.03.07.01	ACTIONS, REFERENCES	Added Action B.2. Mode 3 end state will not be used for LCO 3.5.1 per RAI 16.0-7.	RAI 16.0-7 (MFN 06-431)
800	16B.03.07.01	SR 3.7.1.5	Added bracketed Note identical to SR 3.1.7.4.	Engineering judgment
801	16B.03.07.01	SRs	Changed brackets from [] to { } for SR 3.7.1.2 Note, SR 3.7.1.4 Note, and SR 3.7.1.5.	GE to resolve prior to Certification. (RAI 16.0-2)
802	16B.03.07.02	ALL	Bases were renumbered from B 3.7.1 to B 3.7.2.	Specifications rearranged to match numbering sequence in NUREG-1434, Revision 3.1.
803	16B.03.07.02	APPLICABILITY	Revised brackets from square brackets to curly brackets in three places in the last sentence of the last paragraph.	RAI 16.0-2 (MFN 06-431)
804	16B.03.07.02	ACTIONS C.1	Revised to add guidance and references to adopt TSTF-423-A allowances.	TSTF-423-A
805	16B.03.07.02	ACTIONS D.1 and D.2	Revised brackets from square brackets to curly brackets in four places.	RAI 16.0-2 (MFN 06-431)
806	16B.03.07.02	ACTIONS E.1	Revised to add guidance and references to adopt TSTF-423-A allowances.	TSTF-423-A
807	16B.03.07.02	ACTIONS F.1 and F.2	Revised brackets from square brackets to curly brackets in four places.	RAI 16.0-2 (MFN 06-431)
808	16B.03.07.02	SR 3.7.2.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
809	16B.03.07.02	REFERENCES	Revised Reference 4 and added new Reference 5 as a result of compliance with new requirements of TSTF-423-A.	TSTF-423-A
810	16B.03.07.03	ALL	Bases were renumbered from B 3.7.2 to B 3.7.3.	Specifications rearranged to match numbering sequence in NUREG-1434, Revision 3.1.
811	16B.03.07.04	ALL	Bases were renumbered from B 3.7.3 to B 3.7.4.	Specifications rearranged to match numbering sequence in NUREG-1434, Revision 3.1.
812	16B.03.07.04	ASA	Reviewer's Note was added after first paragraph to describe the requirements for adopting optional MCPR penalty for an inoperable Main Turbine Bypass System.	RAI 16.0-2 (MFN 06-431)

for
26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
813	16B.03.07.04	LCO	Replaced the phrase "Safety Limit MCPR" with "Fuel Cladding Integrity Safety Limit (FCISL)" in the first sentence of the first paragraph.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
814	16B.03.07.04	APPLICABILITY	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
815	16B.03.07.04	APPLICABILITY	Replaced the phrase "MCPR safety limit" with "FCISL" in the first sentence.	RAI 16.2-14 (MFN 06-431) and RAI 15.0-16 (MFN 06-475)
816	16B.03.07.04	ACTIONS B.1	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
817	16B.03.07.04	SR 3.7.4.1	Reviewer's Note was added prior to SR 3.7.4.1 to describe the requirements for adopting the optional Frequency greater than 31 days (e.g., 92 days) for testing the turbine bypass valves (TBVs), requiring a 31 day Frequency if insufficient industry, site-specific, or manufacturer's operating experience or reliability studies are available to justify the increased Frequency.	RAI 16.2-53 (MFN 06-431)
818	16B.03.07.05	ALL	Bases were renumbered from 3.7.4 to 3.7.5.	Specifications rearranged to match numbering sequence in NUREG-1434, Revision 3.1.
819	16B.03.07.05	ALL	Bases were renumbered from 3.7.4 to 3.7.5.	Specifications rearranged to match numbering sequence in NUREG-1434, Revision 3.1.
820	16B.03.08.01	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
821	16B.03.08.01	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change
822	16B.03.08.01	BACKGROUND and REFERENCES	Deleted all references to RG 1.93.	Not applicable to ESBWR electrical design.
823	16B.03.08.01	SR 3.8.1.2	Minor editorial change to SR 3.8.1.2 and Bases to correct bracket positing per RAI 16.2-84.	RAI 16.2-84
824	16B.03.08.01	SR 3.8.1.4	Deleted SR 3.8.1.4 requirement for periodic Channel Calibration or System Functional Test of the battery chargers per RAI 16.2-84.	RAI 16.2-84
825	16B.03.08.02	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
826	16B.03.08.02	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
827	16B.03.08.02	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change
828	16B.03.08.02	SR 3.8.1.2	Revised Bases per RAI 16.0-3.	RAI 16.0-3 (MFN 06-431)
829	16B.03.08.03	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
830	16B.03.08.03	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change
831	16B.03.08.03	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change
832	16B.03.08.03	BACKGROUND	Minor editorial improvements.	Editorial
833	16B.03.08.03	LCO and ACTIONS	Changed cross reference to Battery Monitoring Program.	Editorial
834	16B.03.08.03	SR 3.8.3.6	Deleted brackets around 80% for required battery capacity.	DCD 8.3.2.1.1, R2
835	16B.03.08.04	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change
836	16B.03.08.04	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change
837	16B.03.08.04	ACTIONS, REFERENCES	Mode 3 end state will not be used for LCO 3.5.1 per RAI 16.0-7. Added RA B.2. Deleted reference for Mode 3 end state justification.	RAI 16.0-7 (MFN 06-431).
838	16B.03.08.05	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
839	16B.03.08.05	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change
840	16B.03.08.05	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change
841	16B.03.08.05	APPLICABILITY, ACTIONS A.2.2	Expanded Applicability to include "During movement of {recently} irradiated fuel..." Included new RA A.2.2.	Consistency with LCO 3.8.2. Requirements are identical.
842	16B.03.08.06	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
843	16B.03.08.06	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change
844	16B.03.08.06	ALL	Major re-write to reflect N-2 design change and LCO that requires only 3 of 4 division operable.	N-2 Design Change

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
845	16B.03.08.07	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
846	16B.03.08.07	ALL	Deleted LCO 3.8.2, "72 Hour sources -Operating" and re-numbered LCO 3.8.3 through LCO 3.8.8 to reflect change in numbering.	N-2 Design Change
847	16B.03.08.07	APPLICABILITY, ACTIONS A.2.2	Expanded Applicability to include "During movement of {recently} irradiated fuel..." Included new RA A.2.2.	Consistency with LCO 3.8.2. Requirements are identical.
848	16B.03.09.01	BACKGROUND	Revised brackets from square brackets to curly brackets in one place around the third through sixth paragraphs.	RAI 16.0-2 (MFN 06-431)
849	16B.03.09.01	ASA	Revised brackets from square brackets to curly brackets in one place around the third paragraph.	RAI 16.0-2 (MFN 06-431)
850	16B.03.09.02	LCO	Revised brackets from square brackets to curly brackets in one place.	RAI 16.0-2 (MFN 06-431)
851	16B.03.09.02	SR 3.9.2.1	Replaced "MODE 5" with "MODE 6."	RAI 16.2-100
852	16B.03.09.04	BACKGROUND	Revised brackets from square brackets to curly brackets in two places in first paragraph.	RAI 16.0-2 (MFN 06-431)
853	16B.03.09.04	LCO	Revised brackets from square brackets to curly brackets in two places.	RAI 16.0-2 (MFN 06-431)
854	16B.03.09.04	APPLICABILITY	Revised brackets from square brackets to curly brackets in one place in first paragraph.	RAI 16.0-2 (MFN 06-431)
855	16B.03.09.04	ACTIONS A.1.1, A.1.2, A.1.3, A.2.1, & A.2.2	Revised brackets from square brackets to curly brackets in one place in last sentence of the last paragraph.	RAI 16.0-2 (MFN 06-431)
856	16B.03.09.05	LCO	Revised brackets from square brackets to curly brackets in one place, and revised metric unit value significant digits.	RAI 16.0-2 (MFN 06-431), and consistency with English unit value significant digits
857	16B.03.09.05	SR 3.9.5.1 and SR 3.9.5.2	Revised brackets from square brackets to curly brackets in one place, and revised metric unit value significant digits.	RAI 16.0-2 (MFN 06-431), and consistency with English unit value significant digits
858	16B.03.09.06	BACKGROUND	Revised English unit value significant digits.	RAI 16.2-64 (MFN 06-431)
859	16B.03.09.06	ASA	Revised English unit value significant digits in two places.	RAI 16.2-64 (MFN 06-431)
860	16B.03.09.06	LCO	Revised English unit value significant digits.	RAI 16.2-64 (MFN 06-431)
861	16B.03.09.06	ACTIONS A.1	Revised English unit value significant digits.	RAI 16.2-64 (MFN 06-431)
862	16B.03.09.06	SR 3.9.6.1	Revised English unit value significant digits.	RAI 16.2-64 (MFN 06-431)
863	16B.03.09.07	BACKGROUND	Replaced "10 CFR 10050.34(a)(1)" with "10 CFR 50.34(a)(1)."	Typographical error correction

Changes From Revision 01 to Revision 02

for

26A6642BY, ESBWR DCD Tier 2, Chapter 16B Bases

Item	Section	Subsection	Description of Change	Brief Reason for Change
864	16B.03.09.07	ASA	Revised English unit value significant digits in second paragraph.	RAI 16.2-64 (MFN 06-431)
865	16B.03.09.07	ASA	Replaced "10 CFR 10050.34(a)(1)" with "10 CFR 50.34(a)(1)" in second paragraph.	Typographical error correction
866	16B.03.09.07	REFERENCES	Replaced "10 CFR 10050.34(a)(1)" with "10 CFR 50.34(a)(1)" in Reference 2.	Typographical error correction
867	16B.03.10.01	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
868	16B.03.10.01	BACKGROUND	Removed brackets from "[Hydrostatic and leak testing may eventually be required ... > 93.3°C (200°F).]"	Engineering judgment.
869	16B.03.10.01	ASA	Removed brackets from: Hydrostatic tests are performed nearly "[water solid]."	Engineering judgment.
870	16B.03.10.01	LCO	Minor editorial per RAI 16.0-3.	RAI 16.0-3 (MFN 06-431)
871	16B.03.10.01	ACTIONS A.1	Revised Note to RA A.1 per RAI 16.2-65. Note now requires that Mode 5 actions must be completed even if supporting LCO has Mode 3 end state.	RAI 16.2-65
872	16B.03.10.03	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
873	16B.03.10.04	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
874	16B.03.10.05	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
875	16B.03.10.07	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
876	16B.03.10.08	ALL	Changed [] to { } for all bracketed items.	GE to resolve prior to Certification. (RAI 16.0-2)
877	16B.03.10.08	LCO and SR 3.10.8.1	Deleted requirement for LCO 3.3.6.3, Functions 13 and 14 and LCO 3.3.6.4, Function 10, because Functions 13 and 14 were deleted from LCO 3.3.6.3. Added requirement that Reactor Building dampers are isolated because requirement for isolation on Hi Rad deleted.	Evaluation performed for response to RAI 16.0-1 determined that this Function did not meet criteria for inclusion in TS.