

Changes From Revision 00 to Revision 01

DCD Tier 2, Chapter 8

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Table, Global Abbreviation and Acronyms List.	Typo/grammar to: EHC, FCI, LOFW, LPSP, NDE, and SP
2	Subsection 8.1.2.2, page 8.1-1 second paragraph and third paragraph. (10-24-05)	Removed reference to “main generator, main generator transformer and the main generator breaker” from Off-Site and moved to later section on On-Site Power section. Typo, added space at 3 rd paragraph between “and” and “13.8”.
3	Subsection 8.1.3.1, page 8.1-2, first paragraph.	Added to system description of On-Site AC Power “main generator, main transformer, and the generator breaker” removed from the description of the Off-Site AC Power. This reflects the system boundary description of the third paragraph of section 8.1.2.2.
4	Subsection 8.1.5.1, page 8.1-4, Second to last paragraph.	Removed entire paragraph. The Generator, generator transformer, and generator breaker are On-site Power, not Off-site Power.
5	Subsection 8.1.5.2.1, page 8.1-4, first paragraph.	Inserted the entire paragraph describing the main generator, transformer, and breaker as part of On-Site Power.
6	Subsection 8.1.5.2.1, page 8.1-5, first and second paragraphs and last sentence of third paragraph.	Rewrote marked sentences for clarity and added second sentence to first paragraph and last sentence of third paragraph for added detail.
7	Subsection 8.1.5.2.2.1, page 8.1-6, second paragraph.	Added last sentence for clarification to section.
8	Subsection 8.1.5.2.2.2, page 8.1-6, first and second paragraphs.	Typo/grammatical corrections.

9	Subsection 8.1.5.2.3, page 8.1-6, first sentence of first paragraph.	Spelling correction.
10	Subsection 8.1.5.2.4, page 8.1-7, NRC RG 1.9.	Minor typo correction.

11	Subsection 8.1.5.2.4, page 8.1-9, Other SRP Criteria.	Editorial addition: Added NUREG-0718 inadvertently missed from SRP's but included in later Table 8.1-1.
12	Table 8.1-1, page 8.1-10 & 11.	Added note "3" at BTP ICSB 18 and added two "TMI Actions" at end of table for reference as note "2", PWR applicable only. Editorial editions for clarification.
13	Subsection 8.2.1.2, Off-site Power System, paragraphs 4,5 and 7.	Rewrote for clarity and system boundary accuracy. Clarified where off-site and on-site started and ended. On-site means the last breaker that the Control Room Operates.
14	Subsection 8.2.4.13, page 8.2-6.	Corrected for grammatical clarity.
15	Subsection 8.3.1.1.1, page 8.3-2, last two paragraphs.	Minor grammar/typo corrections (2). Replaced "annunciates" with "is provided" to describe the Control Room alarm in 5 th paragraph. Reason: Throughout the chapter the word annunciate and annunciated were incorrectly used to describe an alarm being received in the Main Control Room.
16	Subsection 8.3.1.1.2, page 8.3-2, second and third paragraph.	Minor grammar/typo corrections and added detail provided for clarity.
17	Section 8.3.1.1.2, page 8.3-3, Isolation Power Centers, third paragraph.	Typo/Corrected reference section 8.3.4.
18	Subsection 8.3.1.1.2, page 8.3-4, Motor Control Centers.	Made two typo/grammar corrections.
19	Subsection 8.3.1.1.5, pages 8.3-7 & 8, Class 1E Electric Equipment Design Bases and Criteria.	Typo, deleted word "room" twice at 5 th bullet, page 7. Corrected spelling at first bullet, "pull-in" on page 8.

20	Subsection 8.3.1.1.6, page 8.3-9, Bus Protection, first bullet.	Corrected typo at first bullet to “under voltage”.
21	Subsection 8.3.1.1.7, page 8.3-10, LOPP	Corrected grammar and split first sentence into two sentences. Corrected grammar at second from last sentence.
22	Subsection 8.3.1.1.7, page 8.3-10.	Rewrote “Loss-of-Coolant Accident (LOCA)” and “LOPP Following LOCA” descriptions for clarity and correction of details per ESBWR design bases.
23	Subsection 8.3.1.1.7, page 8.3-11, LOCA Following LOPP.	LOCA Following LOPP, added last sentence for clarity. Reason: No action, since the LOPP already started the On-site AC source and DC power performs safe-shutdown.
24	Subsection 8.3.1.1.7, page 8.3-11.	Corrected grammar in last line of description of “LOCA When the Standby On-site AC Power Source Is Parallel to the Power Source During Testing”.
25	Subsection 8.3.1.1.7, page 8.3-11, Protection Against Degraded Voltage.	Grammar and clarity corrected in second, forth, and fifth sentences and changed “annunciate” to “alarm”. Reason: Throughout the chapter the word annunciate and annunciated were incorrectly used to describe an alarm being received in the Main Control Room.
26	Subsection 8.3.1.1.8, page 8.3-12, Standby On-site AC Power Supply System.	Added the word “normal” to describe the power supply from off-site that is not the alternate supply.
27	Subsection 8.3.1.1.8, page 8.3-12, fifth bullet.	Changed spelling to “cool down” from cooldown.
28	Subsection 8.3.1.1.8, page 8.3-13, Standby Circuits and Systems, Protection Systems..	Changed spelling to “under voltage” from undervoltage. Changed annunciated to “alarmed. Reason: Throughout the chapter the word annunciate and annunciated were incorrectly used to describe an alarm being received in the Main Control Room.
29	Subsection 8.3.1.1.8, page 8.3-14, Protection Systems.	Minor grammar, added “and” to first bullet.
30	Subsection 8.3.1.1.8, page 8.3-14, Interlocks and Testability.	Added two comas to first sentence.
31	Subsection 8.3.1.2, page 16, GDC-17.	Spelling, second to last sentence, “un-switched”.

32	Subsection 8.3.1.2, page 16 and 17, GDC 18.	Capitalized first word of the three bullets/grammar.
33	Subsection 8.3.1.3.1, page 8.3-16, first paragraph, second sentence and page 8.3-18, third paragraph, last sentence.	Grammar, added hyphen at “color-coding”.
34	Subsection 8.3.1.4.1, page 8.3-19, second and third row in table after third paragraph.	Spelling, changed to “contactor” from contacter. Added details for clarity are provided to include ethernet cables in the instrument cables discussed in the V1 raceway.
35	Subsection 8.3.1.4.1, page 8.3-20, Electric penetration assembly, second paragraph	Spelling, “over current” twice and “subsection”.
36	Subsection 8.3.1.4.1, page 8.3-20, Control of Compliance with Separation Criteria During Design and Installation, first paragraph.	Capitalize the first word of each bullet.
37	Subsection 8.3.1.4.1, page 8.3-22, (2), (4), and first paragraph of Isolation Devices.	Added “384” after IEEE twice and corrected spelling of “wire ways”.
38	Subsection 8.3.2.1.1, page 8.3-25, first paragraph	Spelling/grammar, changed consists to “consist”.
39	Subsection 8.3.2.1.1, page 8.3-26, first paragraph, second sentence and last paragraph of page 8.3-18.	Spelling, twice, “over voltage” in both paragraphs.
40	Subsection 8.3.3.2, page 8.3-32, second paragraph.	Spelling/grammar, “subsection”.

41	Subsection 8.3.3.3, page 8.3-32, last paragraph.	Spelling/grammar, changed embedments to “embedment”.
42	Subsection 8.3.4.4, page 8.3-33, second paragraph.	Spelling/grammar, “under voltage”, (twice).
43	Table 8.3-2, page 8.3-38, Metal Clad Switchgear and Transformers.	Capitalized “Clad” and changed 10mVA to “10MVA”.
44	Subsection 8A.1.1, page 8A-1, first, second, third, forth and fifth paragraphs.	Placed hyphens between “equipment-grounding”, “plant-grounding” and “station-grounding”. And deleted reference to (figure 8A-1) as no figure shows the buried ground loop or grid.
45	Subsection 8A.1.1, page 8A-1, second paragraph.	Added new last sentence to introduce new reference (IEEE-1050-2004) (additional details).
46	Subsection 8A.1.1, page 8A-1, last paragraph, last sentence.	Deleted subject sentence, tagging and grounding does not apply to this section.

47	Subsection 8A.1.1, page 8A-2, first paragraph.	Rewritten for clarity and technical accuracy.
48	Subsection 8A.1.1, page 8A-2, third paragraph.	Grammar, changed to “down comers”.
49	Subsection 8A.1.2, page 8A-2, (3), (4), & (5).	Deleted “and” at (3), And added “(4)” new reference for IEEE-1050-2004, & changed old (4) to “(5)”.
50	Subsection 8A.2.3, page 8A-3, (2(& (3).	Added hyphens twice for “station-grounding”.
51	Subsection 8A.3.1, page 8A-3 & 4, middle of forth sentence.	Deleted an inappropriate, run-on phrase between “...heat tracing” and “is supplied...”.
52	Subsection 8A.3.2, page 8A-4, first and second bullet references.	Deleted typo/grammar errors from within the reference descriptions.

53	Section 8A.4, page 8A-4, References 8A-3, 8A-6, 8A-7, & 8A-8.	Added new reference “8A-8” for IEEE-1050-2004, and corrected minor typo/grammar at “8A-3”, “8A-6”, & “8A-7”.
54	Section 8B.3, page 8B-2, (9)	Grammar, “cool down” as two words.
55	Section 8B.4, page 8B-2, third paragraph.	Grammar, “blow down” as two words.
56	TOC App. 8A & 8B.	License Verifier Comment: “Fix page numbers and title of 8B.2”. Revised to: “8B.2 Acceptance Criteria” from all capitals, to reflect format. Found page numbers to be correct as shown. JFS 10/13/05
57	Subsection 8.3.1.1.3, page 8.3-4, 3 rd paragraph.	Typo, deleted “s” from end of “distribution”.
58	Subsection 8.3.1.4.1, page 8.3-21, Main Control Room and Relay Room Panels.	Delete “Room” from the title, editorial correction. Title should be: “Main Control Room and Relay Panels”.
59	Subsection 8.3.1.4.1, page 8.3-24, Other Safety-Related Systems, (5) b.	Typo, change word “conduit” to “wiring”. Obvious error, conduits are not ran inside more conduits.
60	Subsection 8.3.1.4.1, page 8.3-26, Class 1E Battery Chargers, 3 rd sentence.	Typo, changed 460 to “480”, there is no 460 VAC power in the ESBWR, only 480 VAC.
61	Subsection 8.3.2.2.1, page 8.3-29, 2 nd paragraph, last sentence.	Editorial correction, replaced the word “annunciated” with “alarmed”. Reason: Throughout the chapter the word annunciate and annunciated were incorrectly used to describe an alarm being received in the Main Control Room.
62	Subsection 8.3.4.9, page 8.3-35, 2 nd and last sentences.	Typo in 2 nd sentence. Editorial/re-phrased the last sentence to correct the grammar/translation error that existed describing the alarm that is provided to indicate when the grounding breaker is racked-in.
63	Subsection 8.3.4.11, page 8.35, Second sentence.	Delete all of second sentence. Reason: (1) The assumption of the necessity to reduce the Control Room heat was based on the Lungman design. The ESBWR DC divisions of power do not cause excessive heat in the Control Room with complete loss of AC and HVAC. (2) The “additional SRV operations” are part of the ABWR design and not required for safe shutdown with the ESBWR design.

64	Table 8.3-1, page 8.3-37.	Editorial corrections: Changed “Annunciation to “Alarm” at “Alarm points” and changed “ANNUNCIATION” to “ALARM” in the table over Local/Remote. These are actual alarm points that indicate an abnormal condition, not annunciation points.
65	Table 8.3-1, page 8.3-37.	Editorial corrections: Changed “ANNUNCIATION” in the lower indication section of the table to “INDICATION”. These are actual local and remote indications used for normal power operation, not annunciation points.
66	Changes 21, 22, 23, & 24.	These changes were Editorial/Technical clarifications. The original text was based on past BWR electrical plant design that required an AC source of power to ensure a safe-shutdown. The ESBWR does not require an AC source of power to effect a safe-shutdown. Four divisions of DC power provide all the necessary power required in the event of a DBE or LOPP with a DBE.
67	Subsection 8.2.4.14 and continuing through the chapter with a global change.	Per licensing comments: Changed all COL “licensee” to “holder”. Added spaces and added or deleted incorrectly placed periods. Corrected capitalization for TOC and other titles within the text. Corrected page numbers in TOC. Resolved all (licensing) verifier comments.
68	Subsection 8.1.6.1, page 8.1-9,	Corrected grammar and typos at “(Subsections 8.1.2.1 & 8.2.4.10)” per licensing comment.
69	Subsection 8.3.1.1.2, page 8.3-3.	Typo capital at ‘Subsection’ and missed ‘holder’ for licensee corrected per licensing comment.
70	Subsections 8.3.1.4.1 & 8.3.3.2, pages 8.3-20 & 8.3-32.	Capitalized “Subsection” in last two known typo errors.