Acronym List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Acronyms	Deleted Acronyms and Abbreviations list. It is replaced by a global list elsewhere in the DCD.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change	
1	S1.1.2.1	Changed "buildings" to "buildings/structures" in second sentence.	
		Added two new items to list of buildings/structures:	
		• Ancillary Diesel Building – houses the ancillary diesel generators and their associated support systems.	
		• Firewater Service Complex – consists of two fire water storage tanks and a fire pump enclosure that share a common basemat.	
2	S1.1.2.2	Deleted acronym DC due to it being removed from the global acronym list.	
3	S1.1.2.3	Deleted "Operating" from the definition of COL for consistency with global acronym list.	
4	S1.1.2.7	Revised estimated gross electrical rating from "approximately 1600 MWe" to "1594 MWe" for consistency with DCD T2 Table 10.1-1 and Figure 10.1-2a.	
5	S1.1.3	Deleted "Unit-Specific" from title of section for consistency with other COL Information sections.	
6	Figure 1.1-1	Plot plan updated primarily to add ancillary diesel generator building.	
7	Figure 1.1-2	Figure updated to add PCCS vent fans (per design change described in Section 6.2.2 and RAI 6.2-139) and add a legend.	

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
8	Figures 1.1-3a and 3b	Replaced heat balance figures due to increase in turbine inlet pressure for consistency with Chapter 10 plant heat balance.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Throughout	Editorial changes related to standardization of global acronym list.
2	S1.2.1	 Added two new items to list of principal plant structures: Ancillary Diesel Building – houses the ancillary diesel generators and their associated support systems. Firewater Service Complex – consists of two fire water storage tanks and a fire pump enclosure that share a common basemat.
3	S1.2.1.9, First bullet	Text updated for consistency with N-2 safety-related system design requirements as described in DCD T2 Section 7.1.2.3. Changed "divisions" to "mechanical trains" in second and third sentences. Added new sentence to end as follows: "Operation of any two safety-related electrical divisions ensures that three mechanical trains will remain operational."
4	S1.2.1.9, new fifth bullet	Added new bullet as follows due to design change that added new ancillary diesel generators: "Two ancillary diesel generators provide electrical power to a subset of the loads on the plant investment protection trains and to loads that have been classified as Criterion B under the Regulatory Treatment of Non-Safety Systems program."
5	S1.2.2.1.1, Reactor Pressure Vessel Internals	Paragraph 15 – Added "The chimney partitions are removable to facilitate refueling operations." for consistency with a design change.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
6	S1.2.2.1.2, Main Steamline Isolation Valves	Text updated to reflect design change from y-pattern globe valves to gate valves and to replace valve design details with a reference to DCD T2 Section 5.4.5. Third paragraph – Changed "Y-pattern globe" to "gate" in first sentence. Replaced remainder of paragraph with "Section 5.4.5 provides additional details about the MSIV design configuration and operation." Fourth paragraph – Deleted in its entirety. Fifth paragraph – Deleted second and third sentences.
7	S1.2.2.1.2, Feedwater Lines (FWLs), First paragraph	Text updated to reflect design change in feedwater valve alignment for consistency with DCD T2 Figure 5.1-2. Second sentence – Changed "Two" to "Three". Changed "a process-medium type piston check valve" to "two process-medium operated gate valves". Fourth and fifth sentences – Changed "process-medium gate valve" to "simple check valve".
8	S1.2.2.1.2, Safety Relief Valves, Second bullet, second paragraph	Deleted reference to "250 VDC" power for ADS operation, which is considered excessive detail for a summary section.
9	S1.2.2.1.2, Automatic Depressurization System, third paragraph	Changed "Some of the DPVs" to "The DPVs" in first sentence. Deleted second sentence. All DPVs now attached to horizontal stub lines per DCD T2 Subsection 5.4.13.2.
10	S1.2.2.1.2, Depressurization Valves, second paragraph	Changed "two initiators" to "four initiators" for consistency with DCD T2 Subsection 5.4.13.2.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
11	S1.2.2.2.3	Added the following new first paragraph for consistency with DCD Subsection 7.7.3. "The FWCS accomplishes both RPV water level control and FW temperature control. RPV water level control is accomplished by manipulating the speed of the FW pumps. FW temperature control is accomplished by manipulating the heating steam flow to the seventh stage FW heaters or directing a portion of the FW flow around the high-pressure FW heaters. The two functions are performed by two sets of triple redundant controllers located in separate cabinets." Also changed "a Fault Tolerant Digital Controller (FTDC),
		which is a controller that executes" to "Fault Tolerant Digital Controllers (FTDC), which are controllers that execute" in what is now the third paragraph.
12	S1.2.2.2.4, Second paragraph	Deleted reference to "250 VDC" power which is considered excessive detail for a summary section.
13	S1.2.2.2.5, Ninth paragraph	Updated description to reflect increase in number of gamma thermometers from four to seven per LPRM assembly for consistency with DCD T2 Subsection 7.7.6.2.1.1. Third sentence – Revised to read: "There are seven AFIP gamma thermometer sensors evenly distributed across each LPRM assembly, with one gamma thermometer installed next to each of the four LPRM detectors."
		Fourth sentence – Replaced existing sentence with: "The remaining three gamma thermometers are located midway between LPRM detector locations."

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
14	S1.2.2.3.1, First paragraph	Revised last sentence to read as follows: "The PRMS safety-related channel trip signals provide inputs for generation of protective action signals." Due to the use of digital safety-related I&C systems for ESBWR, boundaries between I&C systems performing safety-related trip functions are less clearly defined than in earlier BWR designs. Actions associated with PRMS functions described as safety-related potentially belong to either LD&IS or SSLC, so text was changed here to be less specific.
15	S1.2.2.3.1, Third paragraph	Changed "seven" to "five". Relocated first bullet to seventh bullet, with last sentence deleted. Changed "isolation of the two sump discharge pipes" to "trip of the two sump pumps" in sixth bullet. Changes are for consistency with DCD T2 Section 11.5 and Subsection 7.5.3 description of Main Steamline RMS and Drywell Sump LCW/HCW Discharge RMS as nonsafety-related.
16	S1.2.2.3.1, last two bullets	 Revised last two bullets to read as follows due to design change that replaced plant stack with three separate building stacks: The Fuel Building Combined Ventilation Exhaust Radiation Monitoring Subsystem continuously monitors halogens, particulates and noble gases releases from the Fuel Building Vent to the RB/FB stack for both normal and accident conditions. Separate radiation monitoring subsystems are provided for the Reactor Building/Fuel Building, Turbine Building and Radwaste Building stacks to monitor particulate, iodine and gaseous concentrations in the stack effluent for both normal and accident plant conditions. These stack monitoring subsystems are composed of three sampling channels that are designed to meet the requirements of both 10 CFR 20 for low level effluent releases and Regulatory Guide 1.97 for accident effluent releases. Provisions for monitoring tritium are also provided.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
17	S1.2.2.4.1, Fifth paragraph	Replaced "Dryer/Separator Pool" with "Equipment Storage Pool" for consistency with other DCD locations.
18	\$1.2.2.5.5	Changed seismic category of refueling machine and fuel handling machine from "II" to "I" due to a change in design requirements.
19	S1.2.2.5.10, Fourth paragraph	Changed "NS" to "II or NS" for seismic category of remaining IFTS equipment for consistency with DCD Subsection 9.1.4.12
20	S1.2.2.6.1, Last paragraph	Changed "Motor-operated" to "Pneumatic-operated" in last paragraph for consistency with DCD T2 Subsection 6.2.4.
21	S1.2.2.6.1, New paragraph	Added new paragraph to describe RWCU/SDC cross-tie to FAPCS that was added to the ESBWR design in response to RAI 6.2-140 S01:
		"The RWCU/SDC system contains cross-tie lines to the Fuel and Auxiliary Pools Cooling System (FAPCS) that enable it to take suction from the suppression pool for post-accident containment heat removal in place of FAPCS. This allows RWCU/SDC to perform suppression pool cooling in the unlikely event that fuel damage has occurred without having to transport radioactive water through the Fuel Building."
22	S1.2.2.10.1	Deleted "Mobile" from fifth paragraph. Added new last paragraph as follows: "Section 11.2 provides additional information about the LWMS." Changes for consistency with DCD T2 Section 11.2.
23	S1.2.2.10.2	Second paragraph, bullets 1 and 2 – Replaced "Wet solid" and "Mobile wet solid" with "A".
		Third paragraph – Deleted "wet solid" from first sentence. Fourth paragraph – Deleted "mobile wet solid" from first sentence and deleted last sentence. Sixth paragraph – Deleted "mobile". Added new last paragraph as follows: "Section 11.4 provides additional information about the SWMS." Changes for consistency with DCD T2 Section 11.4.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
24	S1.2.2.10.3	Fourth paragraph – Changed "plant stack" to "Turbine Building stack".
		Added new last paragraph as follows: "Subsection 11.3.2 provides additional information about the OGS."
		Changes for consistency with DCD T2 Subsection 11.3.2.
25	S1.2.2.11.2, Second (and new third) paragraph	Inserted paragraph break after second sentence to move feedwater pump discussion into a new third paragraph. Replaced "feedwater tank" with "discharge header of the feedwater booster pumps" in first sentence of existing text in new third paragraph.
		Inserted the following in front of the new paragraph: "Four identical and independent, fixed speed motor-driven feedwater booster pumps are provided. The feedwater booster pumps take suction from the open feedwater heater tank and provide adequate suction head for the reactor feedwater pumps. Three of the four booster pumps are normally in operation while the other remains in standby."
		These changes are due to a design change in the FW pump configuration.
26	S1.2.2.11.4	Third paragraph – Changed "combined intermediate valves" to "intermediate stop and intercept valves" for consistency with DCD T2 Subsection 10.2.2.1.
27	S1.2.2.11.5	Fifth paragraph – Changed "plant vent stack" to "Turbine Building vent stack".
		Change due to design change that replaced plant stack with three separate building stacks.
28	S1.2.2.12.3, First paragraph	Added "and service air compressors". Change makes description consistent with current SAS design as described in DCD Tier 2 Subsection 9.3.7.2 and RCCWS as described in Subsection 9.2.2.
29	S1.2.2.12.4, First paragraph	Deleted "and service air compressors". Change makes description consistent with current SAS design as described in DCD Tier 2 Subsection 9.3.7.2 and TCCWS as described in Subsection 9.2.8.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
30	S1.2.2.12.5, Second paragraph	Revised second sentence to read: "Each train has packaged water chiller units with local control panels (one per chiller), pumps (one per chiller), surge tank, air separator, and chemical feed tank." Eliminated exact number of chiller units in each train from third sentence. All trains now have two or more. Added "control" between "local" and "panels" in third sentence. Changes make description consistent with current CWS design as described in DCD T2 Subsection 9.2.7.
31	S1.2.2.12.8, First paragraph	Added "instrument air," to first sentence. Changed "three compressor trains" to "four compressors" in second sentence. Deleted "train" from third sentence. Deleted "Hot Machine Shop" from fourth sentence. Changes make description consistent with current SAS design as described in DCD T2 Subsection 9.3.7.2.
32	S1.2.2.12.11	Deleted "two" from first sentence and changed "through" to "to" in the second bullet. Changes for consistency with DCD T2 Subsection 9.3.12
33	S1.2.2.13.4	Inserted the following new paragraph at front of section to describe new ancillary diesel generators. "Two separate nonsafety-related ancillary diesel generators are located on-site to provide separate sources of on-site power for certain Regulatory Treatment of Non-Safety System (RTNSS) fuctions after the first 72 hours of a design basis accident. Subsection 8.3.1.1.9 and Appendix 19A provides additional details. These ancillary diesel generators are Seismic Category II and are located in the Ancillary Diesel Generator Building, which is also Seismic Category II."
34	S1.2.2.13.6	Instrument and Control Power Supply system has been deleted as an independent system and its function has been transferred to the Uninterruptible AC Power Supply system.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
35	S1.2.2.15.4	Added new paragraph as follows for consistency with DCD T2 Subsection 6.2.2.2.2: "PCCS vent fans are teed off of each PCCS vent line and exhaust to the GDCS pools. The fans aid in the long-term removal of non-condensable gas from the PCCS for continued condenser efficiency."
36	S1.2.2.15.4	Replaced "Dryer/Separator Pool" with "Equipment Storage Pool" for consistency with other DCD locations.
37	S1.2.2.15.5, Sixth paragraph	Editorial correction. Changed "lower" to "upper" in last sentence.
38	S1.2.2.15.5, Seventh paragraph	Added new sentence as follows to end of paragraph: "For severe accident overpressure protection, a smaller branch line from the wetwell airspace is provided that consists of two manual containment isolation valves, which are operated using bottled air. This discharge line will maintain structural integrity when subjected to severe accident containment pressures." (for consistency with hardened containment vent description in DCD Tier 2 Subsection 6.2.5.2)
39	S1.2.2.15.5, Last paragraph	Changed "plant stack" to "Reactor/Fuel Building stack". Change due to design change that replaced plant stack with three separate building stacks.
40	S1.2.2.15.6	First paragraph – Deleted "Nuclear Island", changed "Subsystem" to "System" and changed "NICWS" to "CWS". Fourth paragraph – Changed "is" to "can be". Fifth paragraph – Changed "has" to "provides" in two locations. Deleted fifth sentence in paragraph. Sixth paragraph – Changed "not" to "also". Replaced semicolon with period to split last sentence in two. Changes for consistency with DCD T2 Subsection 9.4.8.2.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
41	S1.2.2.15.7, Containment atmospheric and drywell monitoring	Changed "safety-related" to "nonsafety-related" and "divisions" to "channels" in first paragraph for consistency with DCD T2 Subsection 7.5.2.1. In third paragraph, changed " to provide, respectively, indication of proper functioning of the wetwell-drywell vacuum breaker system, and to measure containment flooding level in case of a severe accident" to "to measure differential pressure and containment flooding level, respectively, in case of a severe accident". Changes for consistency with DCD T2 Subsection 6.2.1.7.
42	S1.2.2.15.7, Containment atmospheric and drywell monitoring	Changed "channels" to "divisions" in fifth paragraph. Added the following to the end of the fifth paragraph due to a design change in feedwater isolation logic: "sump level. Four safety-related divisions of water level instrumentation monitor the buildup of water in the Lower Drywell during a LOCA."
43	S1.2.2.16.3, fourth paragraph	Changed "one of the fire pumps" to "two of the fire pumps" for consistency with DCD T2 Subsection 9.5.1.
44	S1.2.2.16.5	Changed "dryer/separator storage pool" to "equipment storage pool" for consistency with other DCD locations.
45	S1.2.2.16.9	Deleted "mobile" for consistency with DCD T2 Chapter 11.
46	S1.2.2.16.10	Added two new paragraphs as follows based on above change to S1.2.1: "The Ancillary Diesel Building houses the ancillary diesel generators and their associated support systems. This building is nonsafety-related and Seismic Category II. The Firewater Service Complex consists of two fire water storage tanks and a fire pump enclosure that share a common basemat. This structure is nonsafety-related and Seismic Category I."
47	S1.2.3	Deleted "Unit-Specific" from title of section for consistency with other COL Information sections.
48	Figures 1.2-1 to 1.2-33	Figures updated to reflect engineering changes and design details.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	S1.3.1	Editorial. Deleted "Unit-Specific" from section title for consistency with rest of DCD COL Information sections.
2	Table 1.3-1	Main steamline diameter for ESBWR changed from "711 (28)" to "750 (30)" for consistency with diameter change made in DCD Tier 2 Table 5.4-1.
3	Table 1.3-1	Added reference to footnote (6) for ESBWR main steamline pipe material.
4	Table 1.3-1, Note (6)	Added new note as follows: "(6) Portions of the main steamlines that do not meet the 60-year design life expectation due to susceptibility to erosion corrosion or flow accelerated corrosion will be made from low alloy steel." (due to material change from carbon steel to low alloy steel for portions of steamlines)
5	Table 1.3-2, Note (4)	Changed "IC/PCC" to "IC/PCCS" due to acronym usage standardization.
6	Table 1.3-3	Containment leakage rate changed from 0.5% to 0.4% for ESBWR (for consistency with analysis in NEDE-33279P)

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Generic	Replaced GE and General Electric with "GE/GEH" throughout section.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Generic	Updated references to GE throughout the section as follows:
		Changed GE to GEH when discussion applies to current tasks and/or conditions.
		Changed GE to GE/GEH when discussion applies to both past and present tasks and/or conditions.
		Retained usage of GE when discussion only applies to tasks and/or conditions completed prior to establishment of the joint venture.
2	Throughout	Changes related to standardization of acronym list.
3	S1.5.2.2	Added the following sentence at the end of the introductory paragraph. "TRACG application for ESBWR anticipated transient without scram analysis is contained in Reference 1.5-15."
4	S1.5.4, Reference 1.5-1	Updated reference to Revision 4 of NEDE-32176P issued in January 2008.
5	S1.5.4, Reference 1.5-2	Updated reference to include Revision 3 of NEDE-32177P that was issued in August 2007. Changed "GE Nuclear Energy" to "GE Hitachi Nuclear Energy" and changed "GE proprietary" to "GEH proprietary".
6	S1.5.4, Reference 1.5-4	Updated reference to include approved Revision 3 of both proprietary (NEDE-32906P-A) and non-proprietary (NEDO-32906-A) versions issued in September 2006.
7	S1.5.4, Reference 1.5-5	Updated reference to include approved Revision 1 of both proprietary (NEDE-33083P-A, Supplement 1) and non-proprietary (NEDO-33083-A, Supplement 1) versions issued in January 2008. Changed "GE Nuclear Energy" to "GE Hitachi Nuclear Energy" and changed "GE proprietary" to "GEH proprietary".
8	S1.5.4, Reference 1.5-8	Added reference to non-proprietary version, NEDO-33079, that was issued in November 2005.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
9	S1.5.4, Reference 1.5-14	Updated reference to include Revision 1 of both proprietary (NEDC-33082P) and non-proprietary (NEDO-33082) versions issued in January 2006.
10	S1.5.4, Reference 1.5-15	Added new reference 1.5-15 as follows: GE Hitachi Nuclear Energy, "TRACG Application for ESBWR Anticipated Transient Without Scram Analysis," NEDE 33083P, Class III (GEH proprietary), Supplement 2, Revision 1, February 2008, and NEDO-33083, Class I (Non-proprietary), Supplement 2, Revision 1, February 2008.

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Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Table 1.6-1	General Table Update to reflect contents of Revision 5 of the individual DCD Chapters.
2	Table 1.6-1	 Deleted listings for the following GE/GEH topical reports: APED-5750 NEDO-21000 NEDO-32291 and NEDO-32291 Supplement 1 NEDC-32988 NEDO-33206 (moved to NEDO-33306) NEDE-33314P and NEDO-33314
3	Table 1.6-1	Added listings for the following GE/GEH topical reports: NEDO-21052 NEDE-23819 NEDE-23996-1 NEDE-23996-2 NEDE-23996-3 NEDE-24679 NEDO-31960-A Supplement 1 NEDO-32407-A NEDO-32465-A NEDC-31851P-A NEDC-31851P-A NEDE-33075P-A / NEDO-33075-A NEDE-33083P Supplement 3 and NEDO-33083 Supplement 3 NEDE-33304P and NEDO-33304 NEDO-33306 (moved from NEDO-33206) NEDE-33388P and NEDO-33388 NEDE-33391 NEDE-33408P and NEDO-33408

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
4	Table 1.6-2	Deleted topical report MPR 2524-A

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change	
1	Generic	Editorial. Revised acronym usage for consistency with Global Acronym List.	
2	Table 1.7-1, Standard Line Designation EF	Changed "Boiler Feedwater" to "Steam/Boiler Feedwater" in Service column due to material change from carbon steel to low alloy steel for portions of steamlines.	
3	Table 1.7-2	Deleted "Automatic Depressurization System" from title of Figure 7.3-1a for consistency with that figure.	
4	Table 1.7-2	Added new Figure 7.7-7, Title "High Pressure Feedwater Heater Temperature Control Diagram", which is a new DCD figure.	
5	Table 1.7-2	Deleted Figure 8.1-6, which has been removed from the DCD.	
6	Table 1.7-2	Added new Figure 8.3-3, Title "Ancillary Power Functional Figure", which is a new DCD figure.	
7	Table 1.7-3	Changed "5.4-4" to "5.4-4b" for consistency with numbering of figure in DCD T2 Chapter 5.	
8	Table 1.7-3	Inserted Figure 6.3-1a, "GDCS Typical Process Flows"	
9	Table 1.7-3	Deleted Figure 6.3-4, which has been removed from the DCD.	
10	Table 1.7-3	Changed "9.2-2" to "9.2-2a and 2b" to indicate this is a two-part drawing.	
11	Table 1.7-3	Changed "9.4-7" to "9.4-7a and 7b" to indicate this is a two-part drawing.	
12	Table 1.7-3	Added new Figure 9.5-9a, Title "Ancillary Diesel Generator Fuel Oil Storage and Transfer System Diagram", which is a new DCD figure.	
13	Table 1.7-3	Changed title of Figures 9.5-9, 9.5-10, 9.5-11 and 9.5-12 to add "Standby" to the front of them for consistency with those figures in DCD Revision 5.	

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Throughout	Changes related to standardization of acronym list.
2	S1.8.2.2	Editorial. First sentence reworded for clarity.

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Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Table 1.9-3, SRP 3.7.3	Editorial – Spelled out "response spectra".
2	Table 1.9-6, SRP 6.1.2	Deleted contents of table columns 2 and 4. Changed Summary Description of Difference to "None". (per response to RAI 6.1-16 S01)
3	Table 1.9-6, SRP 6.5.1	Changed Summary Description of Difference from "Not applicable to the ESBWR" to "None". (per response to RAI 6.4-18)
4	Table 1.9-7, SRP 7.1, 7.3 – 10 CFR 50.34(f), TMI Action Items	Changed Subsection Where Discussed to "7.1.6.1" for consistency with DCD T2 Chapter 7.
5	Table 1.9-7, 10 CFR 50.55a(h)	Revised SRP Section to "7.1 to 7.9" for consistency with SRP. Revised Summary Description of Difference to "IEEE 279, which is referenced in the SRP when referring to 10 CFR 50.55a(h), has been superseded by IEEE 603 in 10 CFR 50.55a(h)." Revised Subsection Where Discussed to "Numerous locations throughout Chapter 7". Changes for consistency with SRP, 10 CFR 50.55a(h) and DCD T2 Chapter 7.
6	Table 1.9-7, SRP 7.1, 7.5, 7.9 – SRM to SECY 93-087	Editorial – Added "Item" in Specific SRP Acceptance Criteria entry. Revised Subsection Where Discussed to "7.1.6.3" for consistency with DCD T2 Chapter 7.
7	Table 1.9-7, SRP 7.1 – RG 1.22	Revised Subsection Where Discussed to "7.1.6.4" for consistency with DCD T2 Chapter 7.
8	Table 1.9-7, SRP 7.1, 7.2, 7.3 – RG 1.118	Revised Subsection Where Discussed to "7.3.1.1.3.4" for consistency with DCD T2 Chapter 7.
9	Table 1.9-7, SRP 7.2, 7.3 – BTP HICB-3	Changed "BTP Position One" to "BTP Position B.1" in Summary Description of Difference. Revised Subsection Where Discussed to "7.2.1.3.5, 7.2.2.3.5, 7.2.3.3.5, 7.3.1.1.3.5, 7.3.1.2.3.5, 7.3.3.3.5, 7.3.4.3.5, 7.3.5.3.5" for consistency with DCD T2 Chapter 7.

	Location	
Item	(e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
10	Table 1.9-7, SRP 7.3 – BTP HICB-6	Revised Subsection Where Discussed to "7.3.1.1.3.5, 7.3.1.2.3.5, 7.3.3.3.5, 7.3.4.3.5, 7.3.5.3.5" for consistency with DCD T2 Chapter 7.
11	Table 1.9-7, SRP 7.3 – BTP HICB-8	Revised Subsection Where Discussed to "7.3.1.1.3.5, 7.3.1.2.3.5" for consistency with DCD T2 Chapter 7.
12	Table 1.9-7, SRP 7.2, 7.3, 7.4 – BTP HICB-13	Revised Subsection Where Discussed to "7.2.1.3.5, 7.2.3.3.5, 7.3.1.1.3.5, 7.3.1.2.3.5, 7.3.3.3.5, 7.3.4.3.5, 7.3.5.3.5, 7.3.6.3.5, 7.4.1.3.5, 7.4.4.3.5, 7.5.2.3.5, 7.5.3.3.5" for consistency with DCD T2 Chapter 7.
13	Table 1.9-7, SRP 7.4 – RG 1.53	Changed Summary Description of Difference to "None" and deleted information in Subsection Where Discussed column for consistency with DCD T2 Chapter 7.
14	Table 1.9-7, SRP 7.6 – 50.34(f)(2)(v)(I.D.3)	Editorial – Clarified Specific SRP Acceptance Criteria entry to read "10 CFR 50.34(f)(2)(v) TMI Action Item I.D.3". Revised Subsection Where Discussed to "7.6.1.3.1" for consistency with DCD T2 Chapter 7.
15	Table 1.9-7, SRP 7.6 – GDC 25	Revised Subsection Where Discussed to "7.6.1.3.2" for consistency with DCD T2 Chapter 7.
16	Table 1.9-7, SRP 7.7, 7.9 – RG 1.151	Deleted "Clarification relative to FWCS," from Summary Description of Difference. Revised Subsection Where Discussed to "7.1.5.3.4, 7.7.5.3.3" for consistency with DCD T2 Chapter 7.
17	Table 1.9-8, SRP 8.1, RG 1.128	Changed Summary Description of Difference from "None" to "The ESBWR design allows for installation design and installation of batteries in accordance with IEEE 1187. IEEE 484 is not applicable for Valve-Regulated Lead-Acid (VRLA) batteries." Added 8.1.5.2.4 and 8.3.2.2.2 to Subsection Where Discussed column. (for consistency with referenced DCD subsections)
18	Table 1.9-8, SRP 8.1, RG 1.129	Changed "8.3.2.2" to "8.3.2.2.2" in Subsection Where Discussed column. (for consistency with referenced DCD subsections)

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19	Table 1.9-9, SRP 9.2.1	Changed Specific SRP Acceptance Criteria column to read: "II.4, II.5, II.6 – Acceptance criteria for meeting GDCs 44, 45, and 46." Changed Summary Description of Difference to "PSWS is nonsafety-related and meets the intent of GDCs 44, 45, and 46. The requirements within these GDCs that apply to safety-related systems do not apply to PSWS." (per response to RAI 9.2-7 S02)
20	Table 1.9-9, SRP 9.2.2	Changed Specific SRP Acceptance Criteria column to read: "II.4, II.5, II.6 – Acceptance criteria for meeting GDCs 44, 45, and 46." Changed Summary Description of Difference to "RCCWS and CWS are nonsafety-related. The ESBWR does not have reactor coolant pumps. RCCWS and CWS meet the intent of GDCs 44, 45, and 46. The requirements within these GDCs that apply to safety-related systems do not apply to RCCWS or CWS." (per response to RAI 9.2-7 S02)
21	Table 1.9-9, SRP 9.4.5	Changed Summary Description of Difference to "None". (per response to RAI 6.4-18)
22	Table 1.9-9, SRP 9.5.1, fourth item	Editorial. Revised subsection number from 9.5.1.12.1.6 to 9.5.1.12.1.7 due to restructuring in Chapter 9.
23	Table 1.9-9, SRP 9.5.1, fifth item	Added Subsection 9.5.1.12.1.5 to Subsection Where Discussed column due to addition of tanks for ancillary diesel generators.
24	Table 1.9-9, SRP 9.5.1, sixth item	Editorial. Revised subsection number from 9.5.1.12.1.5 to 9.5.1.12.1.6 due to restructuring in Chapter 9.

	Location	
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25	Table 1.9-9, SRP 9.5.1,	Added new item.
	seventh item	Specific SRP Acceptance Criteria: "Section 6.4.1 of SPLB BTP 9.5-1 recommends standpipe and hose stations meet the provisions of Regulatory Guide 1.189, which restricts maximum hose length to 30.5 m (100 ft)."
		Summary Description of Difference: "Standpipes and hose stations external to containment and portable extinguishers provide protection during refueling and maintenance operations. The 30.5 m (100 ft) hose coverage requirement cannot be met in containment for all areas with standpipes located outside containment."
		Subsection Where Discussed: "9.5.1.12.1.8, 9A.6.5.8"
		(per response to RAI 14.3-209 S01)
26	Table 1.9-20, SRP 4.2	Added listing for Appendix B, Revision 3, Issue Date "03/2007", Applicability "Yes". This listing was added based on commitments made for control rod drop accidents in response to 4.6-23 S02.
27	Table 1.9-20, SRP 6.5.1	Changed ESBWR Applicability to "Yes". Changed comment to "The ESBWR utilizes a safety-related filter system to protect the main control room environment following a design basis accident as discussed in Section 6.4." (for consistency with Section 6.4 and the change to SRP 6.5.1 in Table 1.9-6)
28	Table 1.9-20, Appendix 8A, BTP ICSB 8	Applicability changed to "No" and added "ESBWR has no emergency diesel generators" to Comments column.
29	Table 1.9-20, SRP 9.4.5	Changed ESBWR Applicability to "Yes". Changed comment to "The EFU portion of the CRHAVS supplies the engineered safety feature for CRHA radiological protection as described in Section 6.4 and Subsection 9.4.1." (per response to RAI 6.4-18)
30	Table 1.9-20, BTP 11-6	Added new listing for BTP 11-6, Revision 0, Issue Date "03/2007", Applicability "Yes". Change for consistency with DCD T2 Reference 11.2-11.

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31	Table 1.9-20, SRP 11.3 and BTP ETSB 11-5	Changed Issued Date to "03/2007" for consistency with DCD T2 Reference 11.3-18. Removed "ETSB" from title of BTP.
32	Table 1.9-20, SRP 11.4, BTP ETSB 11-3 and Appendix 11.4-A	Changed Issued Date to "03/2007" for consistency with DCD T2 Reference 11.4-1. Removed "ETSB" from title of BTP.
33	Table 1.9-21, RG 1.40	Changed ESBWR Applicability to "Yes". Changed comment to "Applies to PCCS vent fans only". (per response to RAI 14.3-206)
34	Table 1.9-21, RG 1.54	Deleted comment (per response to RAI 6.1-16 S01).
35	Table 1.9-21, RG 1.57	Changed revision for RG 1.57 to Revision 1, March 2007 (per response to RAI 3.8-110 S01).
36	Table 1.9-21, RG 1.93	Added "See also Subsection 3.1.2.8" to Comments column.
37	Table 1.9-21, RG 1.97	Added new line item for Revision 3, May 1983, with comment that it applies for "Instrument Ranges Only". (per response to RAI 11.5-49)
38	Table 1.9-21, RG 1.97	Updated title of Revision 4 to "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants" to match issued version. (per response to RAI 11.5-49)
39	Table 1.9-21, RG 1.128 and RG 1.129	Added "See Table 1.9-8 for exception."
40	Table 1.9-21, RG 1.136	Changed revision for RG 1.136 to Revision 3, March 2007 and updated the title of the RG to match the new revision (per response to RAI 3.8-5 S03).
41	Table 1.9-21, RG 1.180	Changed applicability to Yes (per response to RAI 3.11-22).
42	Table 1.9-21	Added listings for RGs 8.7, 8.9, 8.13, 8.15, 8.20, 8.25, 8.26, 8.28, 8.29, 8.34, 8.35 and 8.36. (per response to RAI 12.2-24)
43	Table 1.9-21b, RG 1.54	Changed comments to "No exceptions." (per response to RAI 6.1-16 S01)
44	Table 1.9-22, ARI	Changed date for ARI 450 from 1999 to 2007.

	Location (e.g., subsection with	
Item	paragraph/sentence/item, table with column/row, or figure)	Description of Change
45	Table 1.9-22, AISC	Changed item "M015L-91" to its replacement, "325-01", changed year from "1991" to "2001", and changed "1st Edition" to "3rd Edition".
46	Table 1.9-22, ANS	Added new item 58.3-1992, Year "1992 (R 1998)", Title "Physical Protection for Nuclear Safety-Related Systems and Components".
47	Table 1.9-22, ASHRAE	Changed date for ASHRAE 15 from 2001 to 2007. Changed date for ASHRAE 52.2 from 1999 to 2007. Changed ASHRAE 62-2001 to ASHRAE 62.1-2007.
48	Table 1.9-22, ASME	Added "– including Addenda" to description for AG-1 standard (per response to RAI 6.4-10).
49	Table 1.9-22, ASME	Added new item QME-1-2007, Year "2007", Title "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants". (per response to RAI RAI 3.9-178 S01)
50	Table 1.9-22, ASTM	Changed name of issuing organization to "ASTM International (formerly American Society for Testing and Materials)" to reflect organization's current change.
		Updated year of issue for all ASTM standards to the most recent versions. Deleted ASTM standards that have been withdrawn.
51	Table 1.9-22, ASTM	Added new item A167-99, Year "1999 (R 2004)", Title "Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip".
52	Table 1.9-22, ASTM	Added new item A182/A182M-08, Year "2008", Title "Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service".
53	Table 1.9-22, ASTM	Added new item A213/A213M-08, Year "2008", Title "Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes".

	Location	
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54	Table 1.9-22, ASTM	Added new item A312/A312M-08, Year "2008", Title "Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes".
55	Table 1.9-22, ASTM	Added new item A351/A351M-06, Year "2006", Title "Standard Specification for Castings, Austenitic, for Pressure-Containing Parts".
56	Table 1.9-22, ASTM	Added new item A380-06, Year "2006", Title "Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment and Systems".
57	Table 1.9-22, ASTM	Added new item A479A479M-06a, Year "2006", Title "Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels".
58	Table 1.9-22, ASTM	Added new item A490-08a, Year "2008", Title "Standard Specification for Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength".
59	Table 1.9-22, ASTM	Added new item A800/A800M-01 (2006), Year "2006", Title "Standard Practice for Steel Casting, Austenitic Alloy, Estimating Ferrite Content Thereof".
60	Table 1.9-22, ASTM	Added new item D3911-03, Year "2003", Title "Standard Test Method for Evaluating Coatings Used in Light-Water Nuclear Power Plants at Simulated Design Basis Accident (DBA) Conditions".
61	Table 1.9-22, ASTM	Added new item D3912, Year "1995 (R 2001)", Title "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants". (per response to RAI 15.4-15)
62	Table 1.9-22, AWS	Added new item A5.4/A5.4M:2006, Year "2006", Title "Specification for Stainless Steel Electrodes for Shielded Metal Arc Welding".
63	Table 1.9-22, CEA	Deleted all CEA standards. They are replaced/superceded by EIA and/or TIA standards.

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64	Table 1.9-22, EPRI	Added new item TR-1008192, Year "2004", Title "BWRVIP-130: BWR Vessel and Internals Project BWR Water Chemistry Guidelines". Deleted listing for TR-103515 R2. (per response to RAI 10.4-15)
65	Table 1.9-22, ECA	Deleted all ECA standards. They are replaced/superceded by EIA and/or TIA standards.
66	Table 1.9-22, EIA	Updated all EIA standards to latest revisions. Deleted those that have been superceded or withdrawn.
67	Table 1.9-22, IEEE	General updates throughout listing to acknowledge existence of newer revisions or updated reaffirmations.
68	Table 1.9-22, IEEE	Deleted listing for withdrawn standard IEEE 281-1984.
69	Table 1.9-22, IEEE	Added listing for IEEE 323-1974 as basis for RG 1.89 qualification of equipment in a harsh environment per the response to RAI 3.11-11 S01. (Note - The 2003 version of IEEE 323 remains applicable in other areas.)
70	Table 1.9-22, IEEE	Added new item IEEE 334-1994, Year "1994 (R 1999)", Title "IEEE Standard for Qualifying Continuous Duty Class 1E Motors for Nuclear Power Generating Stations" with "(Note: 2006 version exists)". (per response to RAI 14.3-206)
71	Table 1.9-22, IEEE	Changed year for IEEE-344 from 2004 to 1987 (R 1993). Added note: "(Note: 2004 version exists, but it is not endorsed by NRC.)" Change for consistency with DCD T2 Table 3.8-6, 3.8-9 and Section 3.10.
72	Table 1.9-22, IEEE	Deleted IEEE-387 which applies to safety-related diesel generators. ESBWR has no safety-related diesel generators.
73	Table 1.9-22, IEEE	Added "(including the correction sheet dated January 30, 1995)" in Title description for IEEE 603-1991. (per response to RAI 7.1-78)
74	Table 1.9-22, IEEE	Deleted listing for withdrawn standard IEEE 622A-1984.

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75	Table 1.9-22, IEEE	Changed year for IEEE-741 from 1997 to 1986. Added note: "(Note: 2007 and 1997 (R 2002) versions exist, but are not endorsed by RG 1.63.)"
76	Table 1.9-22, IEEE	Changed year from 2004 to 1992 for IEEE 946. Added note as follows: "(Note: 2004 version exists, but it is not endorsed by NRC.)"
77	Table 1.9-22, IEEE	Changed year from 2004 to 1996 for IEEE 1050. Added note as follows: "(Note: 2004 version exists, but it is not endorsed by RG 1.204.)"
78	Table 1.9-22, IEEE	Deleted listing for withdrawn standard C37.20-1969.
79	Table 1.9-22, ISA	Changed organization name to "Instrumentation, Systems, and Automation Society".
80	Table 1.9-22, ISA	Added note to d67.03.01-1997 as follows: "(Note: 1982 issued version has been withdrawn)"
81	Table 1.9-22, ISA	Added listing for ANSI/ISA MC96.1-1982, Year "1982", Title "Temperature Measurement Thermocouples".
82	Table 1.9-22, ISO	Deleted ISO standards due to their removal from DCD T2 Chapter 7.
83	Table 1.9-22, MSS	Added listing for SP-55-2006, Year "2006", Title "Quality Standard for Steel Castings for Valves, Flanges and Fittings and Other Piping Components – Visual Method for Evaluation of Surface Irregularities".
84	Table 1.9-22, MSS	Added listing for SP-61-2003, Year "2003", Title "Pressure Testing of Steel Valves".
85	Table 1.9-22, NFPA	Added listing for NFPA 1144, Year "2008", Title "Standard for Reducing Structure Ignition Hazards from Wildland Fire".
86	Table 1.9-22, NEI	Added listing for NUMARC 91-06, Year "1991", Title "Guidelines for Industry Actions to Assess Shutdown Management". (per response to RAI 19.1-123 S02 and as referenced in the Technical Specification Bases, Chapter 16B)

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87	Table 1.9-22, SSPC	Editorial. Changed organization title from "Steel Structures Painting Council" to "The Society for Protective Coatings".
88	Table 1.9-22, SSPC	Added listing for SP-8-82, Year "1982", Title "Pickling (Editorial Changes September 1, 2000)".
89	Table 1.9-22, TIA	Updated all TIA standards to latest revisions. Deleted those that have been superceded or withdrawn.
90	Table 1.9-23	General table update to match NUREG references throughout DCD Revision 5. Section cross-reference changes marked with revision bars but not detailed on this change list.
91	Table 1.9-23	The following NUREG reports were deleted in Revision 5: • 75/067
92	Table 1.9-23	The following NUREG reports were added in Revision 5: • 1482, Rev 1 • CR-1980 • CR-2919 • CR-4513, Rev 1 • CR-5950

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1	Table 1.10-1	General Table Update to reflect contents of Revision 5 of the individual DCD Chapters.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1	Table 1.11-1, Item/Issue A-19	Changed Technical Resolution statement from: "(5) See Chapter 7 for further details" to: "(5) Addressed by compliance with RG 1.152. As noted in Table 1.9-21, the ESBWR Standard Plant design complies with RG 1.152." (per response to RAI 7.1-1 S01)
2	Table 1.11-1, Item A-24	Editorial. Changed "Subsection 3.11.2.2" to "Subsection 3.11.3" for consistency with Rev 5 structure of DCD T2 Section 3.11.
3	Table 1.11-1, Item/Issue A-47	Added "by nonsafety-related signals" to third sentence in main paragraph of Technical Resolution statement. Revised fourth sentence to read: "The trip logic for the FWCS overfill protection is provided by the N-DCIS with input from the Nuclear Boiler System instrumentation." Added new fifth sentence in same paragraph that reads as follows: "In addition, the main feedwater lines are isolated by safety-related signals if the reactor water level rises to Level 8 as described in Subsection 5.4.5." These changes are for consistency with main feedwater isolation and feedwater control system design features as described in DCD T2 Subsections 5.4.5 and 7.7.3, respectively. Editorial. Changed "reactor vessel water high-high, Level 8" to "reactor vessel water level – high, Level 8" in last sentence of main paragraph to match Chapter 16 description of this parameter.
4	Table 1.11-1, Issue 10	Editorial. Changed "Appendix 7A" to "Subsection 7.7.6" due to elimination of Appendix 7A from DCD Chapter 7.
5	Table 1.11-1, Issue 50	Added "Issue addressed under TMI Action Plan Item II.F.2 in Table 1A-1." to Technical Resolution statement. (per response to RAI 7.1-1 S01)

	Location	
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6	Table 1.11-1, Issue 64	Added the following to the Technical Resolution statement:
		"Addressed by compliance with RG 1.151. As noted in Table 1.9-21, the ESBWR Standard Plant design complies with RG 1.151.
		Refer to Table 7.1-1 for additional information on compliance with IEEE 603 and RG 1.151."
		(per response to RAI 7.1-1 S01)
7	Table 1.11-1, Issue 67.3.3	Changed revision for RG 1.97 from Rev 3 to Rev 4. Revised last sentence of statement to say "An assessment of the Regulatory Guide is found in Section 7.5." (for consistency with DCD T2 Table 1.9-21 and latest revision of DCD T2 Section 7.5, which no longer contains a detailed list of instruments)
8	Table 1.11-1, Issue 83, First paragraph	Editorial – Changed "is such is" to "as is" in first paragraph.
9	Table 1.11-1, Issue 83, Third paragraph	Revised first sentence to read as follows: "The Control Room Habitability Area Heating, Ventilation, and Air Conditioning System (CRHAVS) instrumentation is designed to detect high airborne radioactivity and smoke, and automatically isolate the CRHA upon detection of high airborne radioactivity, toxic gases, or smoke." Added new second sentence as follows: "Subsection 6.4.5 addresses toxic gas detection requirements." Changes are for consistency with design of CRHAVS as described in DCD T2 Section 6.4.
10	Table 1.11-1, Issue 101	Added "Issue resolved in conjunction with operator training and procedures." to Technical Resolution statement. (per response to RAI 7.1-1 S01)
11	Table 1.11-1, Issue 118	Editorial – Added SI units "about 0.06 to 6 liters" for "a few ounces to about 1.5 gallons".
12	Throughout	Editorial changes related to standardization of acronym list.