



Dominion[®]

**North Anna 3
Combined
License
Application**

**Part 2: Final
Safety Analysis
Report**

Revision 8

June 2014

REVISION SUMMARY

Revision 8

Section	Changes	Reason for Change
1.1.1.7	Changed the DCD Revision from “9” to “10”	DCD R10
1.6	Added “and General Reference Material” to title	DCD R10
Table 1.6-201	Added topical reports NEI 07-01 and NEI 10-05	Consistency with EF3 FSAR
1.9.2	Revised to include RGs 5.7 and 5.12 in Table 1.9-202	Added RGs 5.7 and 5.12 to Table 1.9-202
Table 1.9-202	Added RGs 5.7 and 5.12	Consistency with EF3 FSAR
Table 1.9-203, 3.12	RAI 03.12-2, Piping Systems and Piping Components	
Table 1.10-201	Changed FSAR Section for Item No. 8.2.4-5-A from “8.2.1.2.2” to *8.2.1.2.3”	New Section 8.2.1.2.2 inserted
Table 2.0-201, Footnote 9	Editorial	Corrections
2.5.2.5	RAI 02.05.02-06, Vibratory Ground Motion - GMRS	
2.5.2.6	Changed “CB Full Partial Outcrop FIRS” to “CB Partial Column Outcrop FIRS”	Correction
Figure 2.5.2-310	Changed title from “Horizontal and Vertical CB Full Partial Outcrop FIRS” to “Horizontal and Vertical CB Partial Column Outcrop FIRS”	Editorial
3.5.1.4, Table 3.5-201	RAI 03.05.01.04-01, Missiles Generated by Tornadoes and Extreme Winds	
3.7.1.1.4.1.1	Deleted sentence about the SSI model of the RB/FB. Revised sentence about LB and UB shear wave velocities for structural fill to specify that they are not used in the SSI analyses.	Clarification
3.7.1.1.4.1.2	Deleted sentence about the SSI model of the CB. Revised paragraph about LB, BE, and UB values for structural fill to specify that they are not used in the SSI analyses.	Clarification
3.7.1.1.4.1.3	Deleted sentence about the SSI model of the FWSC. Revised paragraph about LB, BE, and LB values for structural fill to specify that they are not used in the SSI analyses.	Clarification

Revision 8 (continued)

Section	Changes	Reason for Change
3.7.2.2	Revised to designate Tier 2* content	Editorial
3.7.2.4.1	Revised sentence that explains SSI analyses elevation notation. Related SSI analysis to SASSI structural model.	Editorial
3.7.2.4.1.1	Adjusted content for clarity	Editorial
3.7.2.4.1.3	Provided additional details related to structural modeling	Editorial
3.7.2.4.1.4	Clarified that site-specific SSI analyses modeled the concrete fill below the FWSC consistent with the mesh size of plate elements for basemat and exterior walls. Added description of effects using cracked concrete properties. Revised paragraph that describes concrete fill to specify that fill is placed below FWSC.	Editorial Error in 3D stick model for RB/FB Clarification
3.7.2.4.1.5	Provided additional details related to structural modeling	Editorial
3.7.2.4.1.6.1	Revised summary associated with Vent Wall stresses to reflect re-analysis with updated values for cracked stiffness and damping. Corrected summary of Unit 3 site-specific SSI enveloping maximum horizontal accelerations for the RB/FB Wall Out-of-plane Oscillators. Added NADV88 elevation values	Error in 3D stick model for RB/FB Editorial
3.7.2.4.1.6.2	Adjusted content for clarity	Editorial
3.7.2.4.1.7	Adjusted content for clarity	Editorial
3.7.2.4.1.8	Changed Table 3.7.2-219 to Table 3.7.2-209	Editorial
Table 3.7.2-201	Adjusted table title and revised footnote	Clarification
Tables 3.7.2-205 thru 3.7.2-209	Changed title from "Ratio with DCD Enveloping..." to "Ratios of Enveloping..." Corrected table values	Error in tabulated values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB

Revision 8 (continued)

Section	Changes	Reason for Change
Table 3.7.2-210	Changed title from “Ratio with DCD Max. Vertical Acceleration: RB/FB” to “Ratios of Enveloping Maximum Vertical Accelerations: RB/FB.” Changed “Loads” to “Acceleration” in (b) subheading. Corrected table values.	Error in tabulated values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB
Tables 3.7.2-211 thru 3.7.2-214	Changed title from “Ratio with DCD Maximum Vertical Acceleration:...” to “Ratios of Enveloping Maximum Vertical Accelerations:...” Changed “Loads” to “Acceleration” in (b) subheading. Corrected table values.	Error in tabulated values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB
Table 3.7.2-215	Changed title from “Ratio with DCD Maximum Horizontal Acceleration:...” to “Ratios of Enveloping Maximum Horizontal Accelerations:...” Changed “Loads” to “Acceleration” in (b) subheading. Corrected table values.	Error in tabulated values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB
Table 3.7.2-216	<p>Corrected table values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB. Added notes to (c) Pedestal Wall and (d) Vent Wall. Added (g) Wall Oscillator table</p> <p>In (b) RCCV Wall, corrected Below RCCV bot values for Acceleration, Max Ratio of NA3 to DCD, and Ratio of NA3 to Allowable. In (e) RSW Wall, revised RSW values for X-shear, Y-shear, X-moment, and Y-moment</p> <p>Added units of kN and g where appropriate.</p>	<p>Error in tabulated values due to incorrect values used for cracked stiffness and damping in some outer walls of the RB/FB. Added (g) table due to the revised analysis required for the cracked member.</p> <p>Updated analysis</p> <p>Editorial</p>
Table 3.7.2-217	Changed title from “Ratio with DCD...” to “Ratios of...”. Changed “Envelop” to “Enveloping” in (a) subheading. Revised the CB enveloping loads	<p>Error in tabulated values.</p> <p>Error in table revision level</p> <p>Transposition error</p>

Revision 8 (continued)

Section	Changes	Reason for Change
Table 3.7.2-218	Changed title from “Ratio with DCD Enveloping Maximum Vertical Acceleration...” to “Ratios of Enveloping Maximum Vertical Accelerations...”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Changed subheading (b) from “...Loads” to “Acceleration”.	Editorial
Table 3.7.2-219	Revised the CB stress test calculations. Added units of “kN” and “g” in column headings where appropriate. Added notes to (b) Slabs table	Transposition error and Editorial
Table 3.7.2-220	Changed title from “Ratio with DCD...” to “Ratios of...”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Revised node number for FWS at 4.65 m elevation	Editorial Transposition error
Table 3.7.2-221	Changed title from “Ratio with DCD...” to “Ratios of...”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Corrected tables associated with FPE model	Editorial Error in tabulated values
Table 3.7.2-222	Changed title from “Ratio with DCD...: FWSC Stick” to “Ratios of...: FWS”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Changed units from “kN” to “MN”. Revised elevation values	Editorial Updated analysis
Table 3.7.2-223	Changed title from “Ratio with DCD Enveloping Max. Vertical Acceleration...” to “Ratios of Enveloping Maximum Vertical Accelerations...”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Changed subheading (b) from “...DCD Loads” to “...DCD Acceleration.”	Editorial

Revision 8 (continued)

Section	Changes	Reason for Change
Table 3.7.2-224	Changed title from “Ratio with DCD Enveloping Max. Vertical Acceleration...” to “Ratios of Enveloping Maximum Vertical Accelerations...”. Changed subheading (a) from “Site-Specific Envelop...” to “Site-Specific Enveloping...”. Changed subheading (b) from “...DCD Loads” to “...DCD Acceleration.”	Editorial
Figure 3.7.2-201	Added x-y orientation to RB/FB Basemat plan view	Editorial
Figure 3.7.2-202	Changed “FG” to “RG” in item (a) caption	Error in layout presented
Figure 3.7.2-203	Added modeling notes for RB/FB SASSI 2010 Model	Editorial
Figures 3.7.2-203 & 3.7.2-204	Added x-y orientation to CB Basemat plan view	Editorial
Figure 3.7.2-205	Added 'SASSI2010' to title	Editorial
Figure 3.7.2-206	Added modeling notes for CB SASSI 2010 Model	Editorial
Figure 3.7.2-207	Added x-y orientation and column lines to FWSC Basemat plan view	Editorial
Figure 3.7.2-209	Added modeling notes for FWSC SASSI 2010 Model	Editorial
Figure 3.7.2-210	Corrected RB/FB Figure associated with cracked elements	Error in figure
Figures 3.7.2-211 thru 3.7.2-282	Corrected figure content to correspond with updated analysis	Updated analysis
Figure 3.7.2-234	Revised title	Editorial
Figure 3.7.2-240	Revised title	Editorial
Figure 3.7.2-246	Revised title	Editorial
3.7.3.13	Revised to designate Tier 2* content	Editorial
3.8	Deleted “stress” from second sentence	Editorial
3.8.4.5.6	Clarified walls applied in the evaluations of “below grade” wall designs. Defined results reflected in Figures 3.8.4-205 through 3.8.4-208.	Editorial

Revision 8 (continued)

Section	Changes	Reason for Change
Figures 3.8.4-201 & 3.8.4-202	Changed legend from “Unit 3 Wall Capacity Passive Pressure” to “Unit 3 Wall Passive Pressure Demand”	Correction
Figure 3.8.4-203	Deleted extra floor level elevations axis values for building lateral soil pressure. Changed “FG” to “FF” in title.	Editorial Error in column designations Updated analysis
Figure 3.8.4-204	Revised RB/FB column line. Changed legend from “Unit 3 Wall Capacity Passive Pressure” to “Unit 3 Wall Passive Pressure Demand.” Revised wall location key.	Correction
3.8.5.5.1	Revised to neglect engineered backfill to calculate resistance for FWSC. Defined evaluation results for foundation stability.	Consistency with seismic analysis strategy Editorial
3.8.5.5.2	Added clarifying detail	Editorial
Tables 3.8.5-201 thru 3.8.5-203	Revised units for lateral pressure and value for calculated FS	Updated analysis. Editorial
Tables 3.8.5-204 thru 3.8.5-206	Revised table title and calculated values due to updated analysis	Updated analysis
3.9.2.4	Revised description of vibration assessment program for reactor internals, including addition of steam dryer vibration assessment program.	DCD R10
3.9.3.1	Changed “piping stress reports” to “equipment stress reports”	Consistency with EF3 FSAR
8.2.1.2.2, 8.2.1.2.3, 8.2.1.2.4, 8.2.4	Inserted new section with description of procedures and training development for transformer voltage monitoring system. Renumbered following sections and updated COL Item 8.2.4-5-A accordingly.	Consistency with EF3 FSAR
12.2.1.1.2	Change LMA from “NAPS SUP 12.2-1” to “STD SUP 12.2-1”	Consistency with EF3 FSAR
13.6.2	Added sentence regarding implementation of the Security Program for physical protection of Special Nuclear Material and deleted 2nd paragraph	Consistency with EF3 FSAR
14.2.9	Clarified requirement for making startup tests available to the NRC	DCD R10

Revision 7

Section	Changes	Reason for Change
1.2.2.10.2	Revised description of Radwaste Building accommodation for Class a, B, and C waste	NAPS DEP 11.4-1
1.2.2.12.15	Zinc injection system is utilized	Design change to adopt zinc injection system
1.2.2.16.9	Refer to revised figures for Radwaste Building	NAPS DEP 11.4-1
Figures 1.2-21R thru 1.2-25R	Added site-specific Radwaste Building figures	NAPS DEP 11.4-1
1.3	Added reference to Table 1.3-4R	NAPS DEP 3.7-1
Table 1.3-4R	Added table	NAPS DEP 3.7-1
1.5	Changed the action statement to reflect added text	EF3 RAI 01.05-5
1.5.1	Added description of actions in response to tsunami at the Fukushima Dai-ichi nuclear power plant	EF3 RAI 01.05-5
1.5.4	Added references	EF3 RAI 01.05-5
Table 1.6-201	Added NEI 06-06	For consistency with EF3 COLA content that addresses EF3 RAI 13.07-1
	Updated revision of NEI 06-13A	Reflect latest revision
	Changed NEI 06-13A to Revision 2, March 2009 and added Part 4 to section column	Technical Specification 5.3.1 was revised to reference NEI 06-13A Revision 2 for cold license operator qualification.
	Revised NEI 06-14A to Revision 7, August 2010	To reflect latest revision (used by QAPD (Appendix 17AA))
	Revised NEI 07-02 revision	Reflect latest revision
	Updated references to radiation protection NEI templates 07-03, 07-08, 07-09, 07-10	NEI template endorsements
	Updated revision dates for NEI templates 07-09A and 07-10A	Reflect latest revisions
1.7.2, 1.7.4	Deleted text associated with COL Item 1.7-1-H	DCD R9
Table 1.7-201	Added Figure 8.1-1R	New figure

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Section	Changes	Reason for Change
Table 1.7-202	Added Figures 11.4-1R and 11.4-2R	NAPS DEP 11.4-1
	Added Figure 11.2-1bR	NAPS DEP 12.3-1
Tables 1.7-202, 1.8-203 & 9.2-2R, Figure 9.2-1R, 9.2.1.2	RAI 09.02.01-11, Revise FSAR to Clarify NAPS CDI	
1.8.2.8	Added section	Site-specific information
1.8.3	Changed “demonstrating that the design” to “demonstrating whether the design	Clarification
1.8.5	Revised to state that there are plant-specific departures from the referenced certified design	Plant-specific departures
1.8.9	Corrected section number	Editorial
	Updated Reference 1.8-202	ESP amended
Table 1.8-201	Added NAPS DEP 3.7-1	Site-specific exceedance of the CSDRS
	Added NAPS DEP 8.1-1 and 8.1-2	Revisions to Chapter 8
	Added NAPS DEP 11.4-1	Plant-specific departure
	Added NAPS DEP 12.3-1	Liquid radwaste effluent discharge piping flow path departure
Table 1.8-202	Revised NAPS ESP VAR 2.0-1a-l	Revised long-term dispersion estimates
	Updated references for NAPS ESP VAR 2.0-4	Revisions to Chapter 2
	Revised NAPS ESP VAR 2.0-5a-h number	Revised analysis of accidental release of liquid radioactive
	Added NAPS ESP VAR 2.3-1	New VAR 2.3-1
	Added NAPS ESP VAR 2.4-4	New VAR 2.4-4
	Added NAPS ESP VAR 2.4-5	New VAR 2.4-5
	Added NAPS ESP VAR 12.2-5	New VAR 12.2-5
	Deleted NAPS ESP VAR 2.5-2	No longer necessary
Table 1.8-202, 12.2.2.2.4, 12.2.2.4.4	RAI 12.02-13, Citation for ESP Variance	

Revision 7 (continued)

Section	Changes	Reason for Change
Tables 1.8-202 & 2.0-201; 2.5.4.6.1	RAI 02.04.12-2, Modeling of Groundwater Elevation Levels	
Table 1.8-203	Revised 1.2.2.12.15 evaluation	Zinc Injection System is included in Unit 3 design
	Revised Appendix 3A to include site-specific soil structure interaction analysis	NAPS DEP 3.7-1
	Added Appendix 3C	Updated new sections for Appendix 3C to add computer codes for SSI analyses and inputs (SASSI2010 and PSHAKE)
	Revised 9A FSAR sections	Reflect CDI content
	Revised 10.45 FSAR sections	Reflect CDI content
1.9.1, 1.9.2	Revised the timeframe for SRP and RG reviews for conformance	Dominion opted to change the cutoff time for SRP and RG evaluations
1.9.2	Added description of evaluations for Division 5 RGs to reference security plans	Evaluations for Division 5 RGs changed to reference security plans
1.9.5	Added section and references 1.9-201 and 1.9-202	NEI templates are referenced in Section 1.9.2
Table 1.9-11R	Added to summarize differences from SRP Section 11	NAPS DEP 11.4-1
Table 1.9-201	Revised SRP 1 revision/date	SRP revised
	Revised SRP 2.5.2 Specific Acceptance Criteria and Evaluation	Exception taken for Modified Mercalli intensity
	Revised SRP 3.5.1.6 revision/date	SRP revised
	Revised SRP 3.7.2 revision/date	SRP revised
	Revised SRP 3.7.3 revision/date	SRP revised
	Revised SRP 3.7.4 revision/date	SRP revised
	Revised SRP 3.8.1 revision/date	SRP revised
	Revised SRP 3.8.2 revision/date	SRP revised
	Revised SRP 3.8.3 revision/date	SRP revised
	Revised SRP 3.8.4 revision/date	SRP revised

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-201 (continued)	Revised SRP 3.8.5 revision/date	SRP revised
	Revised SRP 3.12 revision/date	SRP revised
	Revised SRP 5.4.1.1 revision/date	SRP revised
	Revised SRP 5.4.7 revision/date/evaluation	SRP revised
	Revised SRP 5.4.11 revision/date	SRP revised
	Revised BTP 5.4 revision and evaluation	Correct BTP revision and clarify evaluation
	Revised SRP 6.2.1.5 evaluation. Added Rev. 2	Consistency with DCD
	Revised SRP 6.3 evaluation	EF3 RAI 01-8
	Revised SRP 6.5.1 revision/date	SRP revised
	Revised SRP 7.0 revision/date	SRP revised
	Revised SRP/BTP 7-19 revision/date	BTP revised
	Revised SRP 8.1, 8.2, 8.3.1, and 8.3.2 revision/date/evaluation	SRP revised and updated evaluations
	Revised SRP 8.4 revision/date/evaluation	SRP revised. Clarification
	Added BTP 8-8	New BTP
	Revised SRP 9.4.1 evaluation	Clarification
	Revised SRP 9.4.3 evaluation	Clarification
	Revised SRP 9.5.1 to 9.5.1.1; revised revision/date/evaluation	SRP 9.5.1 renumbered as 9.5.1.1 and issued as Rev. 0; EF3 RAI 01-8
	Added SRP 9.5.1.2	New SRP
	Revised SRP 11.2 revision/date	SRP revised
	Revised SRP 11.5 revision/date	SRP revised
Revised SRP 12.3-12.4 revision/date	SRP revised	
Revised SRP 12.5 revision/date	SRP revised	
Changed SRP 13.1.2-13.1.3.II.1.D from "Not applicable" to Conforms"	For consistency with EF3 COLA content that addresses EF3 RAI 01-8	

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-201 (continued)	Revised SRP 13.5.1.1 revision/date and added Section II.21	SRP revised
	Revised SRP 13.6.1 revision/date	SRP revised
	Revised SRP 13.6.2 revision/date	SRP revised
	Revised SRP 13.6.3 revision/date	SRP revised
	Added SRP 13.6.6	New SRP section
	Revised SRP 14.3.12 revision/date and specific acceptance criteria	SRP revised
	Revised SRP 15.0.3 evaluation	Consistency with EF3
	Revised SRP 15.2.1–15.2.5 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8
	Revised SRP 15.2.6 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8 and DCD R9
	Revised SRP 15.2.7 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8
	Revised SRP 15.4.1 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.4.2 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.4.3 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.4.4–15.4.5 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8
	Revised SRP 15.4.7 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.4.9 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.5.1–15.5.2 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.6.1 Specific Acceptance Criteria	EF3 RAI 01-8
	Revised SRP 15.7.3. Specific Acceptance Criteria. Added revision/date.	EF3 RAI 01-8
	Revised SRP 15.8 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-201 (continued)	Revised SRP 15.9 Specific Acceptance Criteria and Evaluation	EF3 RAI 01-8
	Revised SRP 16.0 revision/date	SRP revised
	Revised SRP 17.6 Evaluation	SRP revised
	Revised SRP 19.1 title/revision/date	SRP revised; editorial
	Revised SRP 19.2 title/revision	EF3 RAI 01-8; editorial
	Added SRP Appendix 18-A	New SRP appendix
Table 1.9-202	Revised RG 1.6 Evaluation	DCD Table 1.9-21 indicates that RG 1.6 is applicable. TS Bases 3.8.1 indicates that the DC Power system conforms to RG 1.6
	Revised RG 1.8 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.8
	Revised RG 1.11 title/revision/date/positions	RG revised; editorial
	Revised RG 1.16 revision/date and Evaluation	RG withdrawn
	Revised RG 1.21 Rev. 1 Evaluation. Added Rev. 2	RG revised; NEI templates endorsed
	Revised RG 1.26 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.26
	Revised RG 1.28 Evaluation. Added Rev. 4	NA3 QAPD Part IV addresses the requirements of RG 1.28
	Revised RG 1.29 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.29
	Revised RG 1.30 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.30
	Revised RG 1.33 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.33
	Added RG 1.34 Rev. 1	RG revised
	Revised RG 1.37 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.37
	Revised RG 1.38 Evaluation; added date/revision/RG position	NA3 QAPD Part IV addresses the requirements of RG 1.38

Revision 7 (continued)

Section	Changes	Reason for Change	
Table 1.9-202 (continued)	Revised RG 1.39 Evaluation; added Rev. 1	RG revised	
	Added Rev. 1 to RG 1.43	RG revised	
	Revised RG 1.44 Rev. 0 title/revision/date	RG revised; editorial	
	Added RG 1.44 Rev. 1	RG revised	
	Revised RG 1.45 revision/date	RG revised	
	Revised RG 1.47 revision/date and Evaluation	RG revised; clarification	
	Added RG 1.50 Rev. 1	RG revised	
	Added RG 1.52 Rev. 4 Evaluation. Added Rev. 3	DCD GTS 5.5.13 utilizes Rev. 3 for the Ventilation Filter Testing Program	
	Revised RG 1.54 Evaluation. Added Rev. 2	NA3 QAPD Part IV addresses the requirements of RG 1.54	
	Revised RG 1.56 to indicate RG withdrawal	RG withdrawn	
	Revised RG 1.57 revision/date	RG revised	
	Revised RG 1.62 revision/date	RG revised	
	Added RG 1.65 Rev. 1	RG revised	
	Revised RG 1.68 revision/date	RG revised and EF3 RAI 01-9	
	Revised RG 1.68.1 revision/date	RG revised	
	Revised RG 1.68.2 revision/date	RG revised	
	Revised RG 1.68.3 revision/date	RG revised	
	Revised RG 1.69 revision/date	RG revised	
	Revised RG 1.82 revision/date	RG revised	
	RAI 06.02.01-1, Strainer Debris		
	Revised RG 1.84 revision/date and Evaluation to included comment that Code Cases N-782 and N-783 are applicable	RG revised; EF3 RAI 03.02.02-2 and DCD R9	
	Revised RG 1.90 revision/date	RG revised	
	Revised RG 1.147 revision/date	RG revised	
Revised RG 1.91 title/revision/date	RG revised; editorial		

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-202 (continued)	Added RG 1.92 Rev. 3	RG revised
	Added RG 1.93 Rev. 1	RG revised
	Added "Withdrawn" to RG 1.94 Evaluation statement	NA3 QAPD Part IV addresses the requirements of RG 1.94
	Added RG 1.100 Rev. 3 . Revised evaluation for Rev. 2	RG revised
	Revised RG 1.101 Evaluation	EF3 RAI 01-9
	Revised RG 1.106 revision/date	RG revised
	Revised RG 1.107 revision/date	RG revised
	Revised RG 1.114 revision/date	RG revised
	Revised RG 1.115 revision/date	RG revised
	Revised RG 1.116 Evaluation	NA3 QAPD Part IV addresses the requirements of RG 1.116
	Revised RG 1.124 revision/date	RG revised
	Revised RG 1.130 revision/date	RG revised
	Revised RG 1.147 revision/date	RG revised
	Revised RG 1.148 revision/date	RG revised
	Added RG 1.221 Rev. 0	New RG
	Added RG 1.125 Rev. 2	RG revised
	Revised RG 1.126 Evaluation	RG revised
	Revised RG 1.128 Rev. 2 Evaluation Added RG 1.128 Rev. 1	DCD R9
	Revised RG 1.129 Evaluation	DCD R9
	Revised RG 1.131 revision/date and Evaluation	RG withdrawn
	Revised RG 1.135 revision/date and Evaluation	RG withdrawn
	Revised RG 1.136 Evaluation	RG revised
	Revised RG 1.139 to indicate RG withdrawal	RG withdrawn
Revised RG 1.141 revision/date	RG revised	
Revised RG 1.145 date	EF3 RAI 01-9	

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-202 (continued)	Revised RG 1.147 revision/date	RG revised
	Revised RG 1.148 revision/date and Evaluation	RG withdrawn
	Revised RG 1.149 revision/date	RG revised
	Revised RG 1.150 revision/date and Evaluation	RG withdrawn
	Revised RG 1.151 revision/date	RG revised
	Added RG 1.152 Rev. 3	RG revised
	Revised RG 1.154 revision/date and Evaluation	RG withdrawn
	Added RG 1.156 Rev. 1	RG revised
	Added RG 1.160 Rev. 3	RG revised
	Revised RG 1.165 revision/date and Evaluation	RG withdrawn
	Revised RG 1.169 date	EF3 RAI 01-9
	Revised RG 1.174 revision/date	RG revised
	Revised RG 1.176 revision/date and Evaluation	RG withdrawn
	Revised RG 1.177 revision/date	RG revised
	Revised RG 1.178 revision/date	RG revised
	Revised RG 1.179 revision/date	RG revised
	Revised RG 1.182 Evaluation	RG 1.182 has been withdrawn by the NRC. The FRN indicates that RG 1.182 is redundant due to the inclusion of its subject matter in RG 1.160 Rev. 3. However, GTS Bases LCO 3.0.4 and SR 3.0.3 reference RG 1.182.
	Revised RG 1.186 date	EF3 RAI 01-9
	Revised RG 1.189 revision/date	RG revised
	Revised RG 1.193 revision/date	RG revised
Revised RG 1.200 revision/date	RG revised	

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-202 (continued)	Revised RG 1.204 Evaluation	Reflect actual switchyard design standards
	Revised RG 1.205 revision/date	RG revised
	Revised RG 1.208 Evaluation	Revised approach conforms to RG
	Added RGs 1.210, 1.211, 1.212, 1.213, 1.218	New RGs
	Added RG 1.221	New RG
	Added RG 4.15 Rev. 2	RG revised
	Deleted RG 5.44	RG not referenced in SRP 13.6
	Added RG 5.54	RG addressed in SRP 13.6; Evaluations for the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans
	Deleted RG 5.62	RG not referenced in SRP 13.6
	Revised RG 5.66 revision/date and Evaluation	RG addressed in SRP 13.6; Evaluations for the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans
	Added RG 5.71	New RG
	Added RG 5.75, RG 5.76, and RG 5.77	RG addressed in SRP 13.6; Evaluations for the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans
	Revised RG 8.1 revision/date and Evaluation	RG withdrawn
	Revised RG 8.2 title/revision/date	RG revised
	Revised RG 8.25 Evaluation	EF3 RAI 01-9
Revised RG 8.33 revision/date and Evaluation	RG withdrawn	
Revised RG 8.35 title/revision/date	RG revised	

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-202 (continued)	Added Note (a)	Evaluations for the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans.
	Revised C.III.1.9.5.1.1 (3) FSAR sections	Editorial
	Revised C.III.1.10.2.1 (3) FSAR sections	Editorial
	Revised C.III.1.10.2.3 (1) FSAR sections	Editorial
	Revised C.III.1.10.4.3 (2) evaluation	QAPD Section IV describes RG 1.33 conformance
	Revised C.III.1.11.3.1 (6) FSAR sections	Editorial
Table 1.9-203	Revised C.III.2.2.5.2 Conformance Evaluation	Exceptions taken
	Revised C.III.8.3.1.1 Conformance Evaluation	Clarification added
	Revised C.III.1.10.3.6 (6) Conformance Evaluation	EF3 RAI 01-9
	Revised C.III.1.17.4.2 Conformance Evaluation	EF3 RAI 01-9
	Revised Section C.III.1 Chapter 18, Section Title (3) HSI, procedures, and training conformance evaluation entry by removing ITAAC 7 and 8 references and adding DCD Sections 18.9 and 18.10. Revised Section C.III.1 Chapter 18, Section Title (2) (3) (4) (5) conformance evaluation entry from Tier 1 ITAAC Table 3.3-1 to Table 3.3-2	DCD R9
	Revised Sections C.I 18.4.1, C.I 18.4.2, and CI 18.4.3 conformance evaluations by adding DCD Section 18.5.2	DCD R9
	Revised Sections C.I 18.7.3.1 & 18.7.3.2 conformance evaluations by changing DCD Section 18.8.1(3) to Section 18.8.1	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.9-204	Added ANSI B30.2, 2001 Overhead Gantry Cranes	Cited in Section 13.5.1.1 and included as Reference 13.5-201.
	Added American Petroleum Institute Recommended Practice 1632	New standard reference
	Revised ASTM E84 to 2008 revision	Consistency with DCD
	Revised ASTM E119 to 2008 revision	Consistency with DCD
	Revised Building Code Data Sheet 7-42 date	New code
	Added Building Seismic Safety Council	Cited in Section 2.5.2
	Added IEEE standards 998, 1313.2, C62.22	Cited in Chapter 8
Table 1.9-205	Added NUREG reports CP-0105, CP0133, 1488, 2115, 2117, CR-5250, CR-5613, CR-5730, CR-6372	Cited in Section 2.5
	Added Section 9.1.5 to, and deleted Section 13.5 from, NUREG 0612 Comment/Section Where Discussed column	Section 13.5 provides SUP information that says Section 9.5.1.8 addresses heavy loads handling
	Added Sections 13.5, 14AA.9.2, & Table 8.1-1R to NUREG 0737 Comment/Section Where Discussed column	Section 13.5.2.1 has statement regarding compliance with NUREG 0737
	Added Sections 14AA.1 & 14AA.9.2 to NUREG-0800 Comment/Section Where Discussed column	Update sections addressing NUREG
	Added NUREG-CR-5750 and NUREG-CR-6890	Cited in Section 19AA.2
1.10.1	Corrected section number	Editorial
	Revised title of 1.10-202	ESP amendment
Table 1.10-201	Deleted Item No. 1.7.1-H	DCD R9
	Corrected titles for 2.0-4-A, 2.0-5-A, 2.0-13-A, 2.0-15-A, 2.0-17-A, 3.11.-1-A	Editorial
	Changed "3.9.9-1-H" to "3.9.9-1-A" and "3.9.9-2-H" to "3.9.9-2-A"	DCD R9
	Changed "5.2-2-H" to "5.2-2-A"	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.10-201 (continued)	Changed 5.3-2-A from "5.3.1.8" to 5.3.1.6 and 5.3.1.8	Address COL Item 5.3-2-A
	Deleted 6.2.1-H	DCD R9
	Revised 6.4-2-A FSAR sections	Editorial
	Updated 8.2.4-10-A FSAR Section references	Sections address COL item
	Added COL Items 8.3.4-1-A and 8.3.4-2-A	DCD R9
	Updated 9.1-4-A FSAR Section references	Sections address COL item
	Changed "9.2.5-1-H" to "9.2.5-1-A"; title/ FSAR reference	DCD R9
	Updated 9.3.11-1-A FSAR Section references	Sections address COL item
	Updated 9.3.11-2-A FSAR Section references	Sections address COL item
	Changed 9.5.1-6, 9.5.1-7 and 9.5.1-10 from "-H" to "-A"	DCD R9
	Added 9.5.1.15.2 to 13.4-1-A FSAR Section column	To reflect revised DCD COL Item 13.4-1-A in DCD R9 that requires reference to Fire Protection Program
	Updated FSAR Sections for COL Items 10.2-1-A, 13.6-16A, 17.2-1-A, 17.2-2-A, & 17.3-1-A	Additional sections address the COL items
	Revised 12.1-1-A, 12.1-2-A, and 12.1-4-A FSAR section	Editorial
	Deleted 12.3-3-H	DCD R9
	Added 12.3-4-A	DCD R9
	Replaced first (duplicate) entry Item "13.5-5-A" with "13.5-4-A"	Correct typo
	Changed "13.5-6-H" to "13.5-6-A"	Reflect removal of COL Holder Items from DCD
Changed Item "13.6-8-H" to 13.6-8-A; revised Items 13.6-7-A and 13.6-8-A and added COL Items 13.6-16-A through 13.6-20-A	DCD R9	

Revision 7 (continued)

Section	Changes	Reason for Change
Table 1.10-201 (continued)	Changed "14.2-2-H" to "14.2-2-A"	DCD R9
	Changed "14.2-3-H" to "14.2-3-A"	DCD R9
	Changed "14.2-4-H" to "14.2-4-A"	DCD R9
	Changed "14.2-6-H" to "14.2-6-A"	DCD R9
	Revised COL Item 16.0-1-A by adding 5.3.1.5	DCD R9
	Deleted COL Item 16.0-2-H	DCD R9
	Added Item 17.4-1-A	DCD R9
	Changed Item 17.4-1-H to 17.4-2-A	DCD R9
	Changed Item 18.13-1-H to 18.13-1-A	DCD R9
	Changed "19.2.6-1-H" to "19.2.6-1-A"	DCD R9
1.11.3	Added reference to NUREG-0933	DCD R9
Table 1.11-201	Revised ER locations for GSI 184; added GSIs 201, 202, and 203	Updated ER locations and EF3 RAI 01-10 Supplemental Response
	Added Generic Issue 199	DEP 3.7-1
2.0	Addressed Appendix 2B	DCD R9
	Identified supplements and variances that could affect an SSAR section; clarified sentence regarding FSAR Section column of Table 2.0-2R	Completeness; editorial
2.0.2	Updated reference information for the ESP	Amendment 3 issued
Table 2.0-2R	Revised/reformatted to more closely match the DCD table contents and update FSAR section information	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
Table 2.0-201	Updated DCD site parameters and notes; implemented DCD Tier 2* notational scheme to applicable content (brackets/italics/asterisks; change bars not applied)	DCD R9
	Updated Unit 3 site characteristics and evaluations, and added NAPS DEP 3.7-1 LMA	DCD R9; new and updated analyses of site characteristics
	Changed reference in Part 3, Release Point, from "SSAR Figure 2.1-1" to "Figure 2.1-1R"	Provide updated site-specific information
	Revised Tier 2* Note (9) to define SSE ground response spectra and Plant Shutdown OBE	NAPS DEP 3.7-1
Tables 2.0-202 and 2.0-203	Replaced GMRS comparison	Changed to reflect new GMRS analysis
Figures 2.0-201 thru 2.0-204	Replaced FIRS figures	Changed to reflect new FIRS analysis
Figure 2.0-205	Updated to reflect ESBWR standard plant layout	DCD R9
Figures 2.0-206 & 2.0-207	Replaced GMRS comparison	Changed to reflect new GMRS analysis
Figure 2.1-1R	Added	Show site boundary
Figure 2.1-201	Updated	Revised aircraft analysis
2.2.2.6.1	Updated Seven Gables information	Updated distance from site
2.2.2.6.2	Updated airways in site vicinity	Updated airway information
2.2.3.1.1	Updated results for gasoline truck hazards evaluation and corrected LMA	Change to ESBWR technology
2.2.3.1.3	Updated Hazardous Chemicals Requiring Analysis	Revised on-site hazards analysis
	Updated liquid hydrogen storage tank size and analysis	Revised on-site hazards analysis
	Added discussion of vapor cloud analysis	Consistency with RG 1.91
2.2.3.2.2	Revised Civilian and Military Total Effective Plant Areas	Revised aircraft analysis
	Updated aircraft impact probability	Revised aircraft analysis

Revision 7 (continued)

Section	Changes	Reason for Change
2.2.3.3	Added	Revised control room habitability analysis
2.2.3.4	Updated wildfire discussion	New wildfire analysis
Section 2.2 References	Deleted references 2.2-207, 2.2-209, 2.2-210, 2.2-211; added references 2.2-216 thru 2.2-239	Reflect content changes
Table 2.2-201	Updated footnote, distance, and kd^2	Reflect new airway data
Table 2.2-202	Replaced table	Change to ESBWR technology
Table 2.2-203	Replaced table	Change to ESBWR technology
Table 2.2-204	Replaced table	Change to ESBWR technology
Table 2.2-205	Added table	Reflect results of toxic vapor cloud control room analyses
Figure 2.2-201	Revised airway names and added 5-mile radius buffer	Revised aircraft accident analysis
2.3.1.2	Clarified minimum dry bulb temperature and addressed new DCD site parameter temperatures	Consistency with US-APWR S-COLA (RAI 02.03.01-6); DCD R9
2.3.1.3.1	Added new site characteristic wind value for hurricane	RG 1.221 was issued
2.3.1.3.2	Added section for revised site characteristic values for tornadoes	Consistency with US-APWR S-COLA (RAI 02.03.01-5)
2.3.1.3.4	Added snow load characteristics	DC/COL-ISG-007 was issued; consistency with US-APWR S-COLA
2.3.2.3.1	Revised SACTI analysis and results	Impacts from changes in cooling tower design to salt deposition and moisture
2.3.2.3.2	Revised SACTI analysis and results	Impacts from changes in cooling tower design to onsite ambient air temperature
2.3.3.1.2	Clarified site information relative to turbine building height	Clarification
2.3.4.1	Clarified site information relative to turbine building height	Clarification
2.3.4.3	Revised table identified as providing ARCON96 information	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
2.3.5.1	Revised XOQDOQ analysis information	DCD R9
Section 2.3 References	Added Reference 2.3-208	Identify snow loads reference
Table 2.3-15R	Revised source to receptor distances	Updated data; consistency with US-APWR COLA
Table 2.3-16R	Revised summary of χ/Q and D/Q values (XOQDOQ)	DCD R9
Table 2.3-17R	Deleted	No longer single sector to depict how χ/Q decreases with distance from site. Results for multiple sectors are provided in Tables 2.3-208 through 2.3-215
Tables 2.3-201 thru 2.3-204 & 2.3-206	Revised χ/Q values from ARCON96 calculation (control room χ/Q)	DCD R9
Table 2.3-205	Deleted	DCD R9
Tables 2.3-208 thru 2.3-215	Revised χ/Q and D/Q values (XOQDOQ)	DCD R9
Tables 2.3-216 thru 2.3-223	Added CIRC cooling tower χ/Q and D/Q values (XOQDOQ)	Provide values to determine tritium contribution to doses
Table 2.3-224	Added table with information on snow events from weather stations in site region	DC/COL-ISG-007 was issued; consistency with US-APWR S-COLA
Table 2.3-225	Added table with updated site tornado characteristic values	Consistency with US-APWR S-COLA
Table 2.3-226	Added table with source to receptor distances for CIRC cooling tower releases	Provide distances to determine χ/Q values
Figures 2.3-202 thru 2.3-204	Added to illustrate information used to address new DCD site parameter temperatures	DCD R9
2.4.1, 2.4.2	Metric units deleted and replaced "msl" as a datum	Updated presentational convention
2.1.1.2, 2.1.2.1	Revised to reflect change in ODEC ownership interest in North Anna Unit 3	ODEC terminated its ownership interest in North Anna Unit 3

Revision 7 (continued)

Section	Changes	Reason for Change
2.4.1.1	Revised Lake Anna normal pool level	As a result of VDEQ withdrawal permit normal pool elevation was raised
	Changed "basin" to "system"	To reflect latest design
2.4.1.3	Added information on existing and proposed water control structures	ESP VAR 2.4-4
2.4.2.2	Revised Design Basis Flood level to Local PMP. Added discussion on revised Local PMP analysis and results	Local PMP analysis was revised based on new finished grading plans
2.4.2.3	Replaced the description of the effects of local intense precipitation	Revised analyses
2.4.3	Revised Lake Anna PMF Analysis	Reflect the increased normal pool elevation and to incorporate a peaked unit hydrograph
	Added description of precipitation losses, the runoff model, probable max flood flow, water level determinations, and coincident wind wave activity	ESP VAR 2.4-4 and 2.4-5
2.4.7.2	Minor wording changes	Editorial
2.4.7.4	Editorial	Editorial
2.4.7.5	Editorial	Editorial
2.4.7.6	Added reference to Section 2.3.1.3.4 for a description of snow depths and the 48-hour winter PMP	NAPS COL 2.0-18-A
2.4.8	Added description of the increase in Lake Anna normal pool elevation	VDEQ permit requiring an increase in the normal pool level
2.4.10	Revised the water levels associated with the revised local PMP and Lake Anna PMF Analyses	Revised analysis required for the reasons listed with Sections 2.4.2 and 2.4.3
2.4.11	Added description of the increase in Lake Anna normal pool elevation and discussion from the ER describing the water budget analysis	New water budget analysis
2.4.11.5	Added information concerning water withdrawals for emergency cooling	SSAR supplement

Revision 7 (continued)

Section	Changes	Reason for Change
2.4.12.1.2	Added reference to new subsurface investigation; made clarifications and editorial changes	Consistency with US-APWR S-COLA. Editorial
2.4.12.1.3	Changed “closed” to “abandoned”;	Consistency with US-APWR S-COLA
	Deleted NANIC well	Not relevant
2.4.12.3	Revised to reflect observation well groundwater level measurements extended through November 2007; clarified design plant grade elevation; changed “closed” to “abandoned” in several places	Consistency with US-APWR S-COLA
2.4.12.4	Updated elevations and added reference to Figures 2.4-207 through 2.4-214b. Changed “Visual Pro 4.3” to “Groundwater Vistas version 6.07”; updated maximum groundwater level; added that maximum groundwater level occurs at southern edge of the Fuel Building	Consistency with US-APWR S-COLA
2.4.13	Entire section reorganized using new section numbers and titles. First paragraph relocated from Section 2.4.13.1; editorial changes	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
2.4.13.1	Revised section title and description of the accident scenario	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
2.4.13.2	Revised section title and revised conceptual model description	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013. This change supersedes COLA changes described in the response to RAI 02.04.13-4.
2.4.13.3	Revised section number and transport analysis to reflect release from the Condensate Storage Tank. Section added for dose analysis	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013. This change supersedes COLA changes described in the response to RAI 02.04.13-4.

Revision 7 (continued)

Section	Changes	Reason for Change
2.4.13.4	Revised section number and regulatory compliance information	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013. This change supersedes COLA changes described in the response to RAI 02.04.13-4.
2.4.14	Minor changes to units and vertical datum	Consistency with remainder of the FSAR
Section 2.4 References	Added references for the revised Lake Anna PMF analysis and the water budget analysis	Included in discussions of the revised PMF and the water budget analysis
	2.4-209: changed “Schlumberger Water Services (SWS), Visual MODFLOW Pro Version 4.3, User’s Manual, Waterloo, Ontario, Canada, 2008” to “Environmental Simulations, Inc. (ESI), Guide to Using Groundwater Vistas, Version 6, Reinholds, Pennsylvania, 2011” Added 2.4-224: “de Marsily, Ghislain, Quantitative Hydrogeology, Groundwater Hydrology for Engineers, Academic Press, Inc., 1986.”	Revised groundwater flow model; consistency with US-APWR S-COLA Replaced reference supersedes changes described in RAI 02.04.12-2 response.
	Updated Reference 2.4-211; deleted References 2.4-215 and 2.4-218; added References 2.4-225 and 2.4-226	Incorporated current applicable references
Table 2.4-1R	Provide water storage values	Increased the normal pool elevation per VDEQ; consistency with US-APWR COLA
Table 2.4-6R	Provide results from the water budget analysis	New water budget analysis; consistency with US-APWR COLA
Table 2.4-15R	Updated data	Consistency with US-APWR S-COLA; editorial Change for Observation Well WP-3 supersedes changes described in RAI 02.04.12-2 response.
Table 2.4-201	Revised drainage areas	Revised the local PMP analysis

Revision 7 (continued)

Section	Changes	Reason for Change
Table 2.4-202	Revised POI drainage areas	Revised the local PMP analysis
Table 2.4-203	Revised peak discharges	Revised the local PMP analysis
Table 2.4-204	Revised local PMP water levels and ditch geometry	Revised the local PMP analysis
Table 2.4-206	Updated results of accidental release analysis	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013. This change supersedes COLA changes described in the response to RAI 02.04.13-4.
Tables 2.4-211& 2.4-212	Deleted	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
Table 2.4-213	Provided water budget model storage values	Required for the water budget discussion in Section 2.4.11
Table 2.4-214	Added results of accidental release analysis	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
Figure 2.4-11R	Added to provide revised inflow results from the revised Lake Anna PMF analysis	Revised the Lake Anna PMF analysis
Figure 2.4-14R	Revised the water level information	Revised the lake normal pool elevation; consistency with US-APWR COLA
Figures 2.4-201, 2.4-203 & 2.4-216	Removed SRI notation	Editorial
Figure 2.4-201	Revised topography and sub-basin boundaries	Revised the local PMP analysis
Figure 2.4-203	Revised topography and cross section locations	Revised the local PMP analysis
Figure 2.4-204	Revised topography	Finished grading drawings
Figures 2.4-205 thru 2.4-214; 2.4-215	Revised	Consistency with Figure 2.1-201

Revision 7 (continued)

Section	Changes	Reason for Change
Figures 2.4-214a & 2.4-214b	Added	Consistency with US-APWR S-COLA
Figure 2.4-216	Revised	Updated groundwater model
Figure 2.4-217	Revised tank used for groundwater analysis	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
Figure 2.4-218	Deleted	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013. This change supersedes COLA changes described in the response to RAI 02.04.13-4.
Figure 2.4-219	Added to depict accidental release to groundwater pathway	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
Figure 2.4-220	Added to depict particle traces from the CST	Accidental release analysis revised to reflect DCD R9 and compliance with DC/COL-ISG-013
Figure 2.4-221	Added to depict the supercritical flow regime and hydraulic jump locations	Revised the local PMP analysis
Figure 2.4-222	Added to depict peaked unit hydrograph utilized in the revised Lake Anna PMF analysis	Revised the Lake Anna PMF analysis
2.5	Geology and seismology considered the Mineral earthquake. The new seismic analyses are based on the CEUS SSC model and RG 1.208.	Changed to reflect the CEUS SSC, RG 1.208, and the Mineral earthquake
2.5.1	Described the new CEUS SSC model and the August 2011 Mineral, VA earthquake	Changed to reflect the CEUS SSC, RG 1.208, and the Mineral earthquake, and the additional borings
2.5.2	Replaced entirely	Changed to reflect the CEUS SSC, RG 1.208, the Mineral earthquake, and the additional borings

Revision 7 (continued)

Section	Changes	Reason for Change
2.5.3	Provided new information related to the August 2011 earthquake	Changed to add the Mineral earthquake
2.5.4 (including tables and figures)	Added: borings, FWSC concrete fill, new SWV profiles, GWL changes	Design and analyses changes
2.5.4.1	Changes references from SSAR sections to FSAR sections	Correction
Appendices 2.5.4BB and 2.5.4CC	Added	Additional borings
2.5.4.5.3, 2.5-221	RAI 02.05.04-20, Backfill Placement, Testing and ITAAC	
2.5.5 (including tables and figures)	Added new slope and modifications to existing slope; replaced SHAKE with P-SHAKE; changed to ASCE 4-98	Design and analyses changes
Section 2.5 References	Revised Reference 2.5-118; added References 2.5-221 thru 2.5-389	New and revised references
Table 2.5-201	Deleted	Replaced by Table 2.5.2-228
Table 2.5-202	Deleted	Replaced by Tables 2.5.2-223 & 2.5.2-25
Table 2.5-203	Deleted	Replaced by Tables 2.5.2-222 & 2.5.2-224
Table 2.5-204	Deleted	Replaced by Table 2.5.2-227
Figures 2.5-201 thru 2.5-204	Deleted	New GMRS and FIRS calculation methodology
Figure 2.5-205	Deleted	Replaced by Figure 2.5.2-313
Figure 2.5-206	Deleted	Replaced by Figures 2.5.2-308 & 2.5.2-310
Figure 2.5-207	Deleted	Replaced by Figures 2.5.2-307 & 2.5.2-309
Figure 2.5-208	Deleted	Replaced by Figure 2.5.2-312
2A.2.1	Updated SSAR reference for instrumentation heights	Clarification
2A.2.3	Updated ARCON96 inputs	Clarification
2A.2.4	Revised tables identified as providing ARCON96 information	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
2A.2.5	Revised administrative controls description	DCD R9
Table 2A-4R	Revised source/receptor and direction information	DCD R9
2B	Added appendix	DCD R9
3.3.2.4	Added to address extreme hurricane winds	RG 1.221
3.5.1.4	Added to address extreme hurricane wind generated missiles	RG 1.221
3.7.1	Added definition of SSE; defined OBE structural damping values consistent with RG 1.61 Rev. 1	NAPS DEP 3.7-1
3.7.1.1	Added site-specific ground motion information	FIRS exceed CSDRS
3.7.1.1.3	Defined the CSDRS as one of two spectra used for ensuring that SSCs meet the requirements for seismic design adequacy	NAPS DEP 3.7-1
3.7.1.1.4	Added	Describe the site-specific Ground Motion Response Spectra
3.7.1.1.5	Added	Describe the site-specific Design Ground Motion Time Histories
3.7.1.1.6	Added	Describe the site-dependent SSE and OBE
3.7.1.2	Defined OBE structural damping values for the Unit 3 site-specific SSI analyses	NAPS DEP 3.7-1
3.7.1.3	Describe Seismic Category I structures for Unit 3 concrete mat foundations founded on rock or concrete fill on rock	NAPS DEP 3.7-1
Tables 3.7.1	Added	FIRS exceed CSDRS
Figures 3.7.1	Added	FIRS exceed CSDRS
3.7.2.2	Added references to Appendix 3A and Section 3.7.2.4.1.6 for relevant information	NAPS DEP 3.7-1

Revision 7 (continued)

Section	Changes	Reason for Change
3.7.2.4	Added to address SSI analysis exceedances of ISRS/FRS	NAPS DEP 3.7-1
	Added to provide for Unit 3 site-specific SSI analyses for the RB/FB, CB, and FWSC	NAPS DEP 3.7-1
3.7.2.4.1	Added to present site-specific SSI analyses of Seismic Category I RB/FB, CB, and FWSC	NAPS DEP 3.7-1
3.7.2.8	Added descriptions of interactions between Non-Category I structures and Seismic Category I structures	RAI 3.07.02-1 and NAPS DEP 3.7-1
Tables 3.7.2-201 thru 3.7.2-224	Added	NAPS DEP 3.7-1
Figures 3.7.2-201 thru 3.7.2-282	Added	NAPS DEP 3.7-1
3.7.3.13	Added update for Seismic Category I buried piping, conduits, and tunnels	NAPS DEP 3.7-1
3.7.6	Added references 3.7-201 thru 3.7-205	Added references
3.8; Tables 3.8.5-201 thru 3.8.5-206; Figures 3.8.4-201 thru 3.8.4-208	Added site-specific information	NAPS DEP 3.7-1
3.10.1.4	RAI 03.10-1, Equipment Qualification	Consistency with EF3
	Updated entirely	Consistency with EF3
3.12	Deleted STD SUP 3.12-2	Consistency with EF3
3A.1	Updated to address basis for ESBWR standard plant SSI analysis and differences from site-specific analysis	NAPS DEP 3.7-1
3C.7.4, 3C.7.5	Added description of SASSI 2010	NAPS DEP 3.7-1
4.2.4.2	Added requirement for site-specific control rod dynamic and seismic analysis	NAPS DEP 3.7-1
6.2.4.2, 6.2.8	Deleted	DCD R9
6.4.5	Added citation to Tables 2.2-203 and 2.2-205 for toxicity analysis and deleted discussion of toxicity analysis	Revised on-site hazards analysis; new Section 2.2.3.3 discusses toxic gas analysis
8.1.5.2.4	Added exception to RG 1.204	NAPS DEP 8.1-2

Revision 7 (continued)

Section	Changes	Reason for Change
Table 8.1-1R	Added Table 8.1-1R	DCD Table 8.1-1 updated to reflect exception to RG 1.204 (Departure 8.1-2)
Figure 8.1-1R	Added Figure 8.1-1R Sheet 1	DCD Figure 8.1-1 Sheet 1 updated to reflect location of Main Generator Circuit Breaker (Departure 8.1-1) and addition of Intermediate Transformer in Intermediate Switchyard
8.2.1.1	Clarification of which 500 kV lines the Gordonsville line crosses under	Editorial
	Moved discussion of Switchyard Interface Agreement and protocol discussion from Section 8.2.2.1 to 8.2.1.1 and added LMA NAPS COL 8.2.4-10-A	Consistency with DCD Section 8.2.1.1
8.2.1.2	Clarified that the alternate preferred power source was any one of the three remaining 500 kV lines not being used as a normal preferred power source	Editorial
	Clarified the location of interface between the normal preferred power and the offsite power system	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
8.2.1.2.1	Revised details regarding switchyard AC power and DC power system and total ground resistance for the switchyard grounding system	NA3 US-APWR S-COLA RAIs 08.02-45, 08.02-49 and 08.02-63 (US-APWR S-COLA Part 2 Chapter 8 Rev 5)
	Added clarification that the switchyard surge suppressors on Transformers 1, 2, 3, 5, and 6 protect equipment from voltage surges including lightning	NA3 APWR RAI 08.02-45 (US-APWR S-COLA Part 2 Chapter 8 Rev 5)
	Added LMA NAPS DEP 8.1-2	Departure 8.1-2 for exception to RG 1.204
	Deleted titles of IEEEs discussed in text and added reference number for the IEEEs	Revised for COLA consistency for reference citations
	Revised IEEE 62.22 to IEEE C62.22	Typographical error correction
	Added reference number for reference book cited in text	Revised for COLA consistency for reference citations
	Updated the switchyard equipment capacity and electrical characteristics	NA3 US-APWR S-COLA RAI 08.02-43 (US-APWR S-COLA Part 2 Chapter 8 Rev 4)
8.2.1.2.3	Clarified transformer protection	Dominion Electric Transmission design changes
	Clarified that only the 500 kV circuit breakers have dual trip coils	NA3 R-COLA ESBWR RAI 08.02-31 (NA3 R-COLA ESBWR Part 2 Chapter 8 Rev 3)
8.2.1.2.4	Changed semi-annual inspection of substation equipment to quarterly	Dominion Substation Maintenance Manual, 2013 Edition
	Revised routine switchyard testing activities	Dominion Substation Maintenance Manual, 2013 Edition
	Replaced the titles of referenced NERC standards with reference numbers	Revised for COLA consistency for reference citations

Revision 7 (continued)

Section	Changes	Reason for Change
8.2.2.1	Updated section with PJM study results	Revised PJM study
	Changed maximum switchyard voltage from 534 kV to 540 kV	NA3 US-APWR S-COLA RAI 08.02-64 (US-APWR S-COLA Part 2 Chapter 8 Rev 4)
	Moved discussion of Switchyard Interface Agreement and protocol discussion from Section 8.2.2.1 to 8.2.1.1 and deleted LMA NAPS COL 8.2.4-10-A	Consistency with DCD Section 8.2.1.1
8.2.2.3.2	Clarified that the alternate preferred power source was any one of the three remaining 500 kV lines not being used as a normal preferred power source	Editorial
8.2.2.3.3	Clarified the protection of the offsite power circuits and switchyard equipment	NA3 US-APWR S-COLA RAI 08.02-51 (US-APWR S-COLA Part 2 Chapter 8 Rev 4)
8.2.3	Deleted Section 8.2.3	DCD R9
8.2.4	Revised section that addresses COL Item 8.2.4-10-A	Section that addresses COL Item 8.2.4-10-A revised
8.2.5	Revised title of Reference 8.2-201	Reflect updated PJM study title
	Added References 8.2-203 through 8.2-211	Added references for the IEEE documents, NERC Standards, and reference book cited in the text of Section 8.2
Figure 8.2-201	Revised Figure 8.2-201 to reflect location of the main generator circuit breaker and the intermediate transformer in the intermediate switchyard	Clarification of locations of components
Figure 8.2-202	Revised Figure 8.2-202 to reflect site layout	Revised site layout
8.3.2.1.1	Added information to address COL Item 8.3.4-1-A	DCD R9
8.3.3.2	Added information to address COL Item 8.3.4-2-A	DCD R9
8.3.4	Added new Section 8.3.4 for new COL Items 8.3.4-1-A and 8.3.4-2-A	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
Table 8.3-4R	Added new Table 8.3-4R to address new COL Item 8.3.4-1-A	DCD R9
9.1.4.18	Added	DCD R9
9.1.5.8	Added bullet; Added reference to DCD Section 9.1.5.2	DCD R9 and EF3 RAI 09.01.05-1
9.1.6	Added Sections 9.1.1.7 and 9.1.4.18 to 9.1.4-A	DCD R9
9.2.1.2	RAI 09.02.01-9, Provide PSWS Material Properties Information RAI 09.02.01-13, Use of Fiberglass-Reinforced Plastic Pipe in PSWS (Partial Response)	
	Deleted phosphate as PSWS basin treatment	Phosphate deleted from Unit 3 design. Note: This change partially supersedes COLA changes described in the response to ESBWR R-COLA RAI 09.02.01-09.
	Revised optional chemical injection location	Added operational flexibility for chemical use. Note: This change partially supersedes COLA changes described in the response to ESBWR R-COLA RAI 09.02.01-09.
	Addressed that valve hard seats are not required	DCD R9 (COL 9.2.1-1-A)
9.2.3.2	Changed "Water Treatment" to "Makeup Water"	Site-specific design
	Added ultrafiltration as demineralization option	Site-specific design
	Changed "RO" to "reverse osmosis"	Editorial
	Changed "cooling tower blowdown facility" to "waste heat treatment facility (WHTF)"	Site-specific design
9.2.4.2	Deleted blowdown sump	Removed from design (CDI)
	Changed waste treatment to "state-of-the-art"	Reflect VA state requirements (CDI)
9.2.5	Changed "STD COL 9.2.5-1-H" to "STD COL 9.2.5-1-A"	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
9.2.5.1	Changed “9.2.5-1-H” to “9.2.5-1-A”	DCD R9
	Changed COL Item 9.2.5-1-A from “7 day” to “Seven Day”	DCD R9
9.2.10.2	Deleted “(SWST)”	Editorial
Table 9.2-2R	Revised Notes 2 & 3	DCD R9. Note: This change partially supersedes COLA changes described in the response to ESBWR R-COLA RAI 09.09.01-11.
Table 9.2-9R	Changed from Table 9.2-202	Replaces DCD table
	Changed “RO” to “reverse osmosis”	Editorial
	Added optional ultrafiltration	Site-specific design
Figure 9.2-1R	RAI 09.02.01-10, PSWS Chemical Addition and Maintenance Rule Classification	
Figures 9.2-202, 9.2-203, 9.5-201, 9.5-202	Replaced “Water Treatment Building” with “Makeup Water Building”; replaced “Guard House” with Vehicle Access Facility”; and replaced “Hot Machine Shop” with “Hot Machine Shop and Maintenance Building.”	Site-specific design
Figure 9.2-202	Replaced “Plant Service Water System Building” with “Service Water Building”; “Administrative Building” with “Administration Building”; and “Service Building/Operational Support Center” with “Service Building	Editorial
Figures 9.2-202 & 9.2-203	Added Site Support Structure	Site-specific design
Figure 9.2-203	Deleted blowdown sump	Site-specific design
	Replaced “Admin Building” with “Administration Building” and “Service Building/Operational Support Center” with “Service Building”	Site-specific design
Figure 9.2-204	Deleted blowdown valves	Site-specific design
Figure 9.2-205	Added redundant control valves	Site-specific design

Revision 7 (continued)

Section	Changes	Reason for Change
9.3.9.2.1	Changed hydrogen storage from one 18,000 gallon tank to two 6000 gallon tanks	Revised Unit 3 liquid hydrogen storage facility
	Added description of separate skid mounted backup bulk hydrogen storage bottles for generator cooling	Gaseous hydrogen storage is included in Unit 3 design
9.3.11	Added description of Zinc Injection System	Zinc Injection System is included in Unit 3 design
9.3.11.1	Added	Zinc Injection System is included in Unit 3 design
9.3.11.2	Added Zinc Injection System description	Zinc Injection System is included in Unit 3 design
9.3.11.4	Added tests and inspections	Zinc Injection System is included in Unit 3 design
9.3.11.6	Added Sections 9.3.11 and 9.3.11.1 and deleted Section 9.3.11.2 to 9.3.11-1-A, and changed LMA to NAPS; added Section 9.3.11.2 to 9.3.11-2-A and changed LMA to NAPS	Zinc Injection System is included in Unit 3 design
9.5.1.4	Added reference to Figures 9.5-201, 9.5-202, and 9.5-203 showing site-specific firewater supply piping	Consistency with Section 9.5.1.2, which addresses entire FP water supply system but only references DCD figure
	Water Sources - Changed jockey pump references from plural to singular	Editorial
	Water Sources - Deleted statement regarding treatment of Lake Anna water	Incorporate design changes
	Primary Firewater Source - Added LMA "NAPS SUP 9.5.1-2"	Editorial
	Secondary Firewater Source - Added hydrogen peroxide as treatment chemical for primary FP system	Hydrogen peroxide to be used
	Secondary Firewater Source - Changed chemical addition location to pump discharge	Incorporate design changes
	Fire Pumps - Changed LMA from "STD COL 9.5.1-1-A" to "NAPS COL 9.5.-1-A"	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
9.5.1.5	Revised action statement	Editorial
9.5.1.11	Changed LMA “STD COL 9.5.1-6-H” to “STD COL 9.5.1-6-A”	DCD R9
9.5.1.12	Changed LMA “STD COL 9.5.1-7-H” to “STD COL 9.5.1-7-A”	DCD R9
	Revised action statement	Editorial
	Revised milestone for compliance review of FHA to prior to fuel load	Consistency with EF3
9.5.1.15.2	Changed “Deleted” to “Organization and Responsibilities” and added text	Address revised DCD COL Item 13.4-1-A in DCD R9 to reference Fire Protection
9.5.1.15.4	Changed LMA “STD COL 9.5.1-10-H” to “STD COL 9.5.1-10-A”	DCD R9
9.5.1.16	Changed “9.5.1-6-H” to “9.5.1-6-A”	DCD R9
	Changed “9.5.1-7-H” to “9.5.1-7-A”	DCD R9
	Changed “9.5.1-10-H” to “9.5.1-10-A”	DCD R9
9.5.2.2	Deleted acronym “ARD”	Editorial
	Revised description of Fire Brigade Radio System for COL item	DCD R9
9.5.4.2	RAI 09.05.04-7, Diesel Fuel Oil Storage Inventory Margin RAI 09.05.04-8, Include Diesel Fuel Oil Piping Corrosion Protection Standards in FSAR	
9.5.4.6	Changed 9.5.4-2-A title from “Piping” to “Portion”	DCD R9
Table 9.5-201	Added API Practice 1632	Editorial
Figure 9.5-201	Added new buildings: Site Support Structure, Intermediate Switchyard Control House, and yard Electrical Building	Site-specific design
Figure 9.5-202	Added label for Diesel Fire Pump room	Site-specific design

Revision 7 (continued)

Section	Changes	Reason for Change
Figure 9.5-203	Revised “Dry Cooling Tower Electrical Building” into two structures (“North” and “South”)	Site-specific design
	Removed Hydrogen and Oxygen Storage Areas	Site-specific design
	Changed “Circ. Water Pumphouse” to “Circulating Water Pumphouse”	Site-specific design
9A	Contents - Added Section 9A.4.12	Consistency with 9A.5.12 (CDI)
	Contents - Changed “Water Treatment Building” to “Makeup Water Building”	Site-specific design
9A.1	Revised list of site buildings	Site-specific design
9A.3.1	Revised list of site buildings	Site-specific design
9A.4.7	Changed “STD COL 9A.7-1-A” to “NAPS COL 9A.7-1-A”	Consistency with EF3
	Revised list of site buildings (third paragraph)	Per new site plan (CDI)
	Changed action statement from “second paragraph” to “the last sentence of the third paragraph”	DCD R9
	Deleted deletion of Cold Machine Shop Warehouse and added deletion of the ninth paragraph on Training Center	Training Center is a remote structure shared with Units 1&2. It is not supported by the Unit 3 FP systems.
9A.4.9	Revised Service Water Building Analysis Summary	Revised to one story structure in design (CDI)
9A.4.12	Added section on Makeup Water Building	Consistency with 9A.5.12 (CDI)
9A.5.9	Replaced reference to RTNSS with “redundant”	DCD R9
9A.5.12	Changed “Water Treatment Building” to “Makeup Water Building”	Per new site plan (CDI)
Table 9A.5-5 Revisions	Added list of site-specific fire area changes to Table 9A.5-5	NAPS DEP 11.4-1
Table 9A.5-7 Revisions	Revised list of site-specific fire area changes to Table 9A.5-7	Editorial

Revision 7 (continued)

Section	Changes	Reason for Change
Table 9A.5-5R	Added fire area sheets F6101R, F6193R, F6270R, F6301R, and F6170	NAPS DEP 11.4-1
Figures 9A.2-205 & 9A.2-206	Changes titles	Name of structure changed
Table 9A.5-7R	Replaced reference to “RTNSS Divisional” equipment with “redundant nonsafety-related” in F5159R, F5169R, F7151, F7152, F7153, F7154, F7155, F7161, F7162, F7163, F7164, F7165	DCD R9
	Revised fire area descriptions as shown in fire area drawings in F7151, F7152, F7153, F7154, F7161, F7162, F7163, F7164, F7165, F7174, F7301, F7302, F7303, F7304, F8101, F8102, F8103, F8181, F8183, F8184, F8185, F8186, F8283	Consistency with fire area figures
	Clarified fire extinguishers as either ABC or CO ₂ in fire areas F7151, F7153, F7154, F7161, F7162, F7163, F7164, F7174, F7301, F7302, F7303, F7304, F7180, F7188, F7900R, F8101, F8102, F8103, F8104, F8105, F8106, F8181, F8183, F8187, F8189, F8282, F8283	DCD R9
	Changed building classification from “F-1” to “H-4” for fire area F7188	Consistency with drawing
	Clarified fire pumps provide IC/PCCS makeup or spent fuel pool makeup for fire areas F7301, F7302, F7303, F7304	DCD R9
	Revised existing building names for fire areas F7301, F7302, F7303, F7304, F7180, F8107, F8181, F8183, F8184, F8185, F8186, F8187, F8188, F8189, F8282, F8283	Per new site plan
	Deleted reference to IBC Table 302.3.2 in fire areas F7302, F7303, F7304	Consistency with DCD
	Changed sprinkler flows to “LATER” pending detailed FHA for fire areas F7180, F7700R, F7900R, F8102, F8103	Consistency in FSAR
	Added F8110 for Dry Cooling Tower Electrical Building (North)	Site-specific information for COL 9A.7-2-A

Revision 7 (continued)

Section	Changes	Reason for Change
Table 9A.5-7R (continued)	Added F8108 for CO ₂ Storage Area	Site-specific information for COL 9A.7-2-A
	Added F8111 for Hybrid Cooling Tower	Site-specific information for COL 9A.7-2-A
	Added fire area sheets for new buildings: Electrical Building (Yard), Site Support Structure, Intermediate Switchyard Control House, Well Houses U3-2, U3-3, & U3-4	Site-specific information for COL 9A.7-2-A
Figures 9A.2-20R thru 9A.2-24R	Added figure incorporating new building layout	NAPS DEP 11.4-1
Figure 9A.2-33R	Revised existing building names	Per new site plan
	Added new buildings	Per new site plan
	Removed non-FHA buildings from drawing legend	Clarity
Figures 9A.2-201, 9A.2-203, 9A.2-204	Incorporated new building layout	Site-specific design
Figures 9A.2-201 thru 9A.2-206	Removed SRI notation	Editorial
10.2.2.4	Added to address inspection programs required by the turbine missile probability analysis report GE-ST TMR Rev. 4	NA3 Draft SER OI 10.2-2 Consistency with EF3
10.2.2.7	Added to address inspection programs required by GE-ST TMR Rev. 4	NA3 Draft SER OI 10.2-2 Consistency with EF3
10.2.3.6	Revised to reference GE-ST TMR Rev. 4 for turbine maintenance and inspection program	NA3 Draft SER OI 10.2-2 Consistency with EF3
10.2.3.7	Revised to reference GE-ST TMR Rev. 4 for turbine valves maintenance and inspection program	NA3 Draft SER OI 10.2-2 Consistency with EF3
10.2.3.8	Revised to reference GE-ST TMR Rev. 4	NA3 Draft SER OI 10.2-1 Consistency with EF3
10.2.5	Revised COL Item 10.2-1-A to add references to Sections 10.2.2.4, 10.2.2.7, 10.2.3.6, and 10.2.3.7	NA3 Draft SER OI 10.2-1 and 10.2-2. To reference COLA sections that are updated
10.4.5.2.1, 10.4.5.2.2.1	Added option for adding chemical injection to CIRC CT basin	To allow alternate chemical injection location

Revision 7 (continued)

Section	Changes	Reason for Change
10.4.5.2.2.1	Revised to update planned chemical injections	To allow flexibility to determine best CIRC water treatment regime
10.4.5.5	Revised CIRC pump water minimum condenser inlet temperature	DCD R9
10.4.5.8	Changed “35” degrees to “37.8” degrees	Correction
Table 10.4-3R	Revised CIRC pump flow and water temperature	DCD R9
Figure 10.4-203	Added optional path to cooling tower basin to support changes to Sections 104.5.2.1 and 10.4.5.2.2.1	To allow alternate chemical injection location
11.2.1	Revised population doses and cost-benefit analysis	DCD R9
11.2.2.3.3	Revised cross-reference to DCD and editorial	Consistency with EF3; editorial
11.2.3.2	Incorporated departure	NAPS DEP 12.3-1
	Added details associated with LWMS discharges from the Radwaste Building	Consistency with EF3 RAI 12.03-12.04-6 response
Figure 11.2-1bR	Incorporated departure [OI-103]	NAPS DEP 12.3-1
11.3.1	Revised population doses and cost-benefit analysis	DCD R9
11.4	Added description of SWMS capacities	NAPS DEP 11.4-1
11.4.1	RAI 11.04-4, Revise Description of SWMS	
	Revised cross-reference	Consistency with EF3
11.4.1, 11.4-4-A	Deleted sentence regarding fuel performance and waste generation	Statement was subjective and not needed
11.4.2.2.1, 11.4.2.2.2	Added sections on SWMS Collection and Processing Subsystems	NAPS DEP 11.4-1
11.4.2.2.4	Revised description of container storage	NAPS DEP 11.4-1
11.4.2.3.1	Added description of SWMS pumps	NAPS DEP 11.4-1
11.4.2.3.5	Changed “NEI 07-10” to “NEI 07-10A”	NRC approved topical report
11.4.7	Changed “NEI 07-10” to “NEI 07-10A”	NRC approved topical report
Tables 11.4-1R & 11.4-2R	Added	NAPS DEP 11.4-1
Figures 11.4-1R & 11.4-2R	Added	NAPS DEP 11.4-1

Revision 7 (continued)

Section	Changes	Reason for Change
11.5.4.5	RAI 11.05-5, Sampling of Batch Liquid Release Added	
	Changed "NEI 07-09" to "NEI 07-09A"; revised COL Item number	NRC approved topical report; COL information is site specific
11.5.7	Revised COL Item 11.5-3-A text	Consistency with EF3
11.5.8	Changed "NEI 07-09" to "NEI 07-09A"	NRC approved topical report
DCD Table 11.5-2	Revised reference to DCD table note	DCD R9
DCD Table 11.5-4	Revised reference to DCD table note	DCD R9
Table 11.5-201	Revised Item 1	Editorial
	Changed Note 2	Consistency with EF3
12.1.1.3.1, 12.1.1.3.2, 12.1.1.3.3, 12.1.3	Revised to indicate that COL Items 12.1-1-A to 12.1-4-A are addressed in Appendices 12AA and 12BB	Consistency with EF3
12.1.4	Deleted references to Appendix 12BB	Consistency with EF3
12.2	Cited new Table 12.2-22R	NAPS DEP 11.4-1
12.2.1.1.2	Added section	Consistency with EF3 RAI 01-7
12.2.1.5	Added discussion of 10 CFR 30, 40, and 70; cited new Tables 12.2-206 and 12.2-207	Consistency with EF3
	Added discussion of condensate storage tank; cited new Table 12.2-205; revised LMA	Consistency with EF3
12.2.2.2.2, 12.2.2.2.5, 12.2.2.2.6; Tables 12.2-18bR, 12.2-201, 12.2-203, 12.2-204	Revised gaseous effluent activity releases, concentrations, and doses	DCD R9
12.2.2.2.6	Changed "cow" to "animal"	Clarification
Table 12.2-17R	Revised gaseous effluent activity releases and concentrations; revised LMA	DCD R9; NAPS ESP VAR 12.2-5
12.2.2.4.2, 12.2.2.4.6; Tables 12.2-19bR, 12.2-20bR, 12.2-202, 12.2-203, 12.2-204	Revised liquid effluent activity releases, concentrations, and doses; corrected misspelling	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
12.2.2.4.4	Changed “us” to “is”	Editorial
	Revised statement describing distance from Unit 3 to nearest residence	Clarification
	Revised direction with highest gaseous effluent annual dose	Clarification
	Added statement clarifying value bounds planned casks	Clarification
12.2.4	Deleted reference to Table 2.12-201	Editorial
Table 12.2-15R	Revised to show dispersion from multiple locations	DCD R9
Table 12.2-18aR	Changed reference “Table 2.3-16R” to “Table 12.2-15R”	Correction
Table 12.2-20aR	Added footnote about plant capacity factor	DCD R9
Tables 12.2-22R, Tables 12.3-8R; Figures 12.3-19R thru 12.3-22R, 12.3-39R thru 12.3-42R, 12.3-61R thru 12.3-64R	New tables and figures	NAPS DEP 11.4-1
Tables 12.2-205 thru 12.2-207	New tables	Consistency with EF3 (Tables 12.2-207 thru 12.2-209), which incorporated the response to RAI 12.03-12.4-8
12.3	Added discussion of Radwaste Building	NAPS DEP 11.4-1
12.3.1.3	Deleted	DCD R9
12.3.1.5.1	Incorporated departure	NAPS DEP 12.3-1
	Added LMA “CWR COL 12.3-4-A”	Editorial
12.3.1.5.2	Revised discussion of operational considerations	Consistency with EF3; NA3 Draft SER OI 12.03/04-8 Note: This change supersedes COLA changes described in the response to RAI 12.03-12.04-13
	Changed “NEI 08-08” to “NEI 08-08A”	NRC-approved template
12.3.7	Deleted COL Item 12.3-3-H	DCD R9

Revision 7 (continued)

Section	Changes	Reason for Change
Table 12.3-18R	Added to incorporated departure	NAPS DEP 12.3-1
12.4.7.1	Revised discussion of construction worker doses	Consistency with US-APWR COLA; responses to RAIs 12.3-46 and 12.3-47
12.4.9	Revised list	Cited in Section 12.4.7.1
12.5.3	Added reference to NEI 07-08A	Consistency with EF3
12.5.4.4, Table 12BB-201	RAI 12.03-12.04-11, Very High Radiation Areas	
12.6	Deleted	DCD R9
12AA, 12BB	Revised NEI template numbers; added Section 12.1.2 to 12AA; corrected action statement in 12.5.3.3; added information in 12.5.4.4	NRC-approved templates; Consistency with EF3
Table 12BB-201	Added drawing references	Consistency with EF3
Table 13.4-201	Item 21 topic moved to Section 19.6	EF3 RAI 01.05-9 SUPP
	Item 15 added, Special Nuclear Material Physical Protection Program	New security document
13.5.2.2.8, 13.6.2	Added information about the Special Nuclear Material Physical Protection Program	New security document
13.6.2	Second paragraph moved to Section 19.6	EF3 RAI 01.05-9 SUPP
14AA.4.7	Changed parenthetical in third sentence from "(approximately 5 percent)" to "(not in excess of 5 percent)"	Consistency with LC 3.2.4
19.6	Content relocated from Section 13.6.2	EF3 RAI 01.05-9 SUPP
19A.8.3	Added reference to Unit 3 SSE	NAPS DEP 3.7-1
Table 19A-4R	Added to address extreme hurricane wind generated missiles	RG 1.221

Revision 6

Section	Changes	Reason for Change
1.1.1.7	Revised DCD revision number	DCD R9
1.1.2.2, 1.4.3.1, 2.1.1.2, 2.1.2.1	Revised to reflect change in ODEC ownership interest in North Anna Unit 3	ODEC terminated its ownership interest in North Anna Unit 3
1.1.2.7	Revised action statement and net electrical power output	DCD R9 and updated net electrical power output
1.1.2.8	Revised milestone schedule dates	Updated schedule dates
Table 1.1-201	Revised to delete “holder” items and add CWR LMA prefix	DCD R9 and new LMA prefix
1.4.2.1	Deleted	DCD R9 and reflect contract changes
1.4.3	Added section “Unit 3 Agents and Contractors”	DCD R9
1.4.3.1	Changed section number from “1.4.1” to “1.4.3.1”; revised to reflect organization changes	DCD R9 and reflect contract changes
1.4.3.2	Changed section number from “1.4.2” to “1.4.3.2”; deleted BWR reactor facts	DCD R9 and deleted outdated description
1.4.3.3	Added section for new organization	DCD R9 and reflect contract changes
1.4.3.4	Changed section number from “1.4.3” to “1.4.3.4”; revised to reflect organization changes	DCD R9 and reflect contract changes
1.4.3.5	Changed section number from “1.4.4” to “1.4.3.5”	DCD R9
1.4.3.5.1	Changed section number from “1.4.4.1” to “1.4.3.5.1”	DCD R9
1.4.3.5.2	Changed section number from “1.4.4.2” to “1.4.3.5.2”; changed “preparing a data report” to “preparing data reports”	DCD R9 and reflect multiple data reports were prepared
1.4.3.5.3	Changed section number from “1.4.4.3” to “1.4.3.5.3”; revised to reflect organization changes	DCD R9 and reflect contract changes

Revision 6 (continued)

Section	Changes	Reason for Change
Table 1.6-201	Added NEI 06-06	For consistency with EF3 COLA content that addresses EF3 RAI 13.07-1
	Updated revision of NEI 06-13A	Reflect latest revision
	Changed NEI 06-13A to Revision 2, March 2009 and added Part 4 to section column	Technical Specification 5.3.1 was revised to reference NEI 06-13A Revision 2 for cold license operator qualification.
	Revised NEI 06-14A to Revision 7, August 2010	To reflect latest revision (used by QAPD (Appendix 17AA))
	Added NEI 08-09	Cyber Security Plan updated to Revision 6 of NEI 08-09 and revised based on RAIs; consistency with US-APWR S-COLA
Tables 1.7-202, 1.8-203 & 9.2-2R, Figure 9.2-1R, 9.2.1.2	RAI 09.02.01-11, Revise FSAR to Clarify NAPS CDI	
1.8.5	Revised to state that there are plant-specific departures from the referenced certified design	Plant-specific departures
Table 1.8-201	Added NAPS DEP 3.7-1	Site-specific exceedance of the CSDRS
	Added NAPS DEP 11.4-1	Plant-specific departure
Table 1.8-202, 12.2.2.2.4, 12.2.2.4.4	RAI 12.02-13, Citation for ESP Variance	
Tables 1.8-202 & 2.0-201, 2.4.12.4, Tables 2.4-15R & 2.4-209, Figures 2.4-207 thru 2.4-214, Figure 2.4-216, 2.5.4.6.1	RAI 02.04.12-2, Modeling of Groundwater Elevation Levels	
Table 1.8-203	Revised evaluation	Zinc Injection System is included in Unit 3 design

Revision 6 (continued)

Section	Changes	Reason for Change
Table 1.9-201	Revised SRP 7.0 revision/date	SRP revised
	Revised SRP/BTP 7-19 revision/date	BTP revised
	Revised SRP 8.4 revision/date	SRP revised
	Revised SRP 9.5.1 to 9.5.1.1; revised revision/date	SRP 9.5.1 renumbered as 9.5.1.1 and issued as Rev. 0
	Added SRP 9.5.1.2	New SRP
	Changed SRP 13.1.2-13.1.3.II.1.D from "Not applicable" to Conforms"	For consistency with EF3 COLA content that addresses EF3 RAI 01-8
	Revised SRP 13.5.1.1 revision/date and added Section II.21	SRP revised
	Revised SRP 14.3.12 revision/date and specific acceptance criteria	SRP revised
	Added SRP Appendix 18-A	New SRP appendix
Table 1.9-202	Revised RG 1.8 Evaluation	For accuracy and consistency among COLA parts and sections that address RG 1.8 conformance
	Added "Withdrawn" to RG 1.38 Evaluation statement	RG withdrawn
	Revised RG 1.44 revision/date	RG revised
	Revised RG 1.47 revision/date	RG revised
	Added RG 1.52 Rev. 4	RG revised
	Revised RG 1.56 to indicate RG withdrawal	RG withdrawn
	Revised RG 1.62 revision/date	RG revised
	Revised RG 1.68.1 revision/date	RG revised

Revision 6 (continued)

Section	Changes	Reason for Change
Table 1.9-202 (continued)	Revised RG 1.68.2 revision/date	RG revised
	Revised RG 1.84 revision/date	RG revised
	Added "Withdrawn" to RG 1.94 Evaluation statement	RG withdrawn
	Revised RG 1.114 revision/date	RG revised
	Added "Withdrawn" to RG 1.116 Evaluation	RG withdrawn
	Revised RG 1.126 Evaluation	RG revised
	Revised RG 1.128 Evaluation	DCD R9
	Revised RG 1.136 Evaluation	RG revised
	Revised RG 1.139 to indicate RG withdrawal	RG withdrawn
	Revised RG 1.149 revision/date	RG revised
	Revised RG 1.151 revision/date	RG revised
	Revised RG 1.174 revision/date	RG revised
	Revised RG 1.177 revision/date	RG revised
	Revised RG 1.189 revision/date	RG revised
	Revised RG 1.200 revision/date	RG revised
	RAI 13.06.01-32, Clarify Commitment to Regulatory Guide 5.66	
Table 1.9-202, 6.2.1.6 (deleted)	RAI 06.02.01-1, Strainer Debris	

Revision 6 (continued)

Section	Changes	Reason for Change
Table 1.9-203	Revised Section C.III.1 Chapter 18, Section Title (3) HSI, procedures, and training conformance evaluation entry by removing ITAAC 7 and 8 references and adding DCD Sections 18.9 and 18.10. Revised Section C.III.1 Chapter 18, Section Title (2) (3) (4) (5) conformance evaluation entry from Tier 1 ITAAC Table 3.3-1 to Table 3.3-2	DCD R9
	Revised Sections C.I 18.4.1, C.I 18.4.2, and CI 18.4.3 conformance evaluations by adding DCD Section 18.5.2	DCD R9
	Revised Sections C.I 18.7.3.1 & 18.7.3.2 conformance evaluations by changing DCD Section 18.8.1(3) to Section 18.8.1	DCD R9
Table 1.9-204	Added ANSI B30.2, 2001 Overhead Gantry Cranes	ANSI is cited in Section 13.5.1.1 and included as Reference 13.5-201.Z
Table 1.9-205	Added Section 9.1.5 to NUREG 0612 Comment/Section Where Discussed column	Section 13.5 provides SUP information that says Section 9.5.1.8 addresses heavy loads handling
	Added Section 13.5 to NUREG 0737 Comment/Section Where Discussed column	Section 13.5.2.1 has statement regarding compliance with NUREG 0737
Table 1.10-201	Changed "3.9.9-1-H" to "3.9.9-1-A" and "3.9.9-2-H" to "3.9.9-2-A"	DCD R9
	Changed "5.2-2-H" to "5.2-2-A"	DCD R9
	Changed 5.3-2-A from "5.3.1.8" to 5.3.1.6 and 5.3.1.8	Address COL Item 5.3-2-A
	Added 9.5.1.15.2 to Item No. 13.4-1-A FSAR Section column	To reflect revised DCD COL Item 13.4-1-A in DCD R9 that requires reference to Fire Protection Program
	Replaced first (duplicate) entry Item "13.5-5-A" with "13.5-4-A"	Correct typo

Revision 6 (continued)

Section	Changes	Reason for Change
Table 1.10-201 (continued)	Changed "13.5-6-H" to "13.5-6-A"	Reflect removal of COL Holder Items from DCD
	Changed Item "13.6-8-H" to 13.6-8-A; revised Items 13.6-7-A and 13.6-8-A and added COL Items 13.6-16-A through 13.6-20-A	DCD R9
	Changed "14.2-2-H" to "14.2-2-A"	DCD R9
	Changed "14.2-3-H" to "14.2-3-A"	DCD R9
	Changed "14.2-4-H" to "14.2-4-A"	DCD R9
	Changed "14.2-6-H" to "14.2-6-A"	DCD R9
	Revised COL Item 16.0-1-A by adding 5.3.1.5	DCD R9
	Deleted COL Item 16.0-2-H	DCD R9
	Added Item 17.4-1-A	DCD R9
	Changed Item 17.4-1-H to 17.4-2-A	DCD R9
	Changed Item 18.13-1-H to 18.13-1-A	DCD R9
	Changed "19.2.6-1-H" to "19.2.6-1-A"	DCD R9
Table 1.11-201	Revised ER locations for GSI 184; added GSIs 201, 202, and 203	Updated ER locations and EF3 RAI 01-10 Supplemental Response
1.12.6	Revised to address safety/security interfaces and controls during construction	Close NA3 Draft SER OI 01-2 and EF3 RAI 01-05
Table 1C-201	Added Generic Letter 81-38	Departure 11.4-1
	Added Generic Letter 07-01	EF3 RAI 01-11
1D	Added	DCD R9
2.4.2.3	RAI 02.04.02-2, Locally-Intense Precipitation Flood Event RAI 02.04.02-4, Verifying Grading/Drainage Details with PMP Analysis RAI 02.04.02-5, Protection of Storm Water Drainage Facilities RAI 02.04.02-6, Monitoring of Storm Water Drainage Facilities RAI 02.04.02-7, Margin at Dike Dividing Unit 3 and Units 1/2 Sites	
Figures 2.4-201, 2.4-203 & 2.4-216	Removed SRI notation	Editorial
Figures 2.4-215, 2.5-215, & 2.5-234	Incorporated correct versions of graphics	Correction

Revision 6 (continued)

Section	Changes	Reason for Change
2.4.13.1.2, 2.4.13.3, 2.4.13.4, 2.4-219, Tables 2.4-206 thru 2.4-210, Figure 2.4-218	RAI 02.04.13-4, Accidental Release Groundwater Transport Analysis	
2.5.2.7, 3.7.1.1	RAI 03.07.01-2, Incorporation of SSE & OBE into FSAR	
2.5.4.2.5, 2.5.4.5.3, 2.5.4.7.1, 2.5.4.7.2, Table 2.5-212, Figures 2.5-244 & 2.5-277	RAI 02.05.04-13, Static and Dynamic Properties of Backfill Soil	
2.5.4.2.5, Table 2.5-212	RAI 02.05.04-21, Engineering Properties of Concrete Fill	
2.5.4.5.3, 2.5-221	RAI 02.05.04-20, Backfill Placement, Testing and ITAAC	
2.5.4.8.1	RAI 02.05.04-18, Seismic Loading Induced Settlement Estimate	
3.2	Clarified classification of SSCs outside the DCD scope	Address Unit 3 SER OI 03.02.01-3
Table 3.2-1	Revised to indicate Zinc Injection System (System P74) is included	Zinc Injection System is included in Unit 3 design
	Changed LMA "NA3 CDI" to "NAPS CDI"	Correction
3.9.2.4	Change LMA "NAPS COL 3.9.9.1-H" to "CWR COL 3.9.9.1-A"	DCD R9
	Changed action statement from "last two paragraphs" to "last paragraph"	DCD R9
	Added reference "NEDC-33408P Supplement 1" to list and revised description of reactor internals vibration assessment program	DCD R9 and consistency with EF3 COLA
3.9.3.1	Changed LMA "STD COL 3.9.9-2-H" to "STD COL 3.9.9-2-A"; changed "last sentence" to "fifth paragraph" in action statement	DCD R9
3.9.3.7.1(3)e	Changed "examination" to "inspection"	Consistency with EF3 COLA
3.9.6.1.4(1)	Changed LMA "STD COL 3.9.9-3-A" to "NAPS COL 3.9.9-3-A"	Content is different than EF3 COLA
3.9.6.1.4(4)	Added description of IST program for explosively actuated valves	EF3 RAI 03.09.06-1
3.9.9	Changed COL Item numbers from "H" to "A"	DCD R9

Revision 6 (continued)

Section	Changes	Reason for Change
3.10.1.4	RAI 03.10-1, Equipment Qualification	
3.11.4.4	RAI 03.11-8, Operational Aspects of the EQ Program	
5.2.1.2	Deleted	DCD R9
5.2.5, 5.2.5.9	Changed "STD COL 5.2-2-H" to "STD COL 5.2-2-A"	DCD R9
5.2.6	Changed "5.2-2-H" to "5.2-2-A"	DCD R9
5.3.1.5	Changed COL Item STD COL 16.0-2-H to STD COL 16.0-1-A	DCD R9
	RAI 05.03.02-1, NRC Notification for PTLR Update	
5.3.1.6	Added	Address COL Item 5.3-2-A
5.3.1.8	Added "provided" in first sentence	EF3 COLA
5.3.4	Added "NAPS COL 5.3-2-A" and changed "Section 5.3.1.8" to "Sections 5.3.1.6 and 5.3.1.8"	COL Item 5.3-2-A
6.2.1.6 (deleted)	RAI 06.02.01-1, Strainer Debris	
Figure 8.2-201	Removed SRI notation	Editorial
9.2.1.2	RAI 09.02.01-9, Provide PSWS Material Properties Information RAI 09.02.01-13, Use of Fiberglass-Reinforced Plastic Pipe in PSWS (Partial Response)	
Figure 9.2-1R	RAI 09.02.01-10, PSWS Chemical Addition and Maintenance Rule Classification	
9.5.1.15.2	Changed "Deleted" to "Organization and Responsibilities" and added text	Address revised DCD COL Item 13.4-1-A in DCD R9 to reference Fire Protection
9.5.4.2	RAI 09.05.04-7, Diesel Fuel Oil Storage Inventory Margin RAI 09.05.04-8, Include Diesel Fuel Oil Piping Corrosion Protection Standards in FSAR	
Figures 9A.2-201 thru 9A.2-206	Removed SRI notation	Editorial
11.4.1	RAI 11.04-4, Revise Description of SWMS	
11.4.1, 11.4-4-A	Deleted sentence regarding fuel performance and waste generation	Statement was subjective and not needed
11.5.4.5	RAI 11.05-5, Sampling of Batch Liquid Release Added	
12.3.1.5.2, 12.3-4-A	RAI 12.03-12.04-13, Design Objectives and Guidance in RG 4.21	
12.5.4.4, Table 12BB-201	RAI 12.03-12.04-11, Very High Radiation Areas	

Revision 6 (continued)

Section	Changes	Reason for Change
13.1	<ul style="list-style-type: none"> • Changed vice president titles to generic titles • Moved responsibility for training from the corporate support organization to the Director Nuclear Safety & Licensing • Aligned generic titles and reporting relationships consistent with the revised QAPD in Appendix 17AA • Moved responsibility for accident and transient analyses to director of nuclear analysis and fuel • Removed instances of sharing of resources or management between Units 1 & 2 and Unit 3 for Quality Assurance, Radiation Protection, Training and organizational effectiveness. Sharing is still allowed for Supply Chain, nonlicensed operators and Security • Changed responsibility for fire protection during construction to executive responsible for nuclear development • Deleted section for Senior Vice President of Nuclear Operations • Deleted section for Vice President of Nuclear Development • Deleted section for Director of Nuclear Engineering, Corporate • Deleted duplicate statement within each of Sections 13.1.1.3 and 13.1.3 for cold license candidate qualifications • Added sentence to Section 13.1.2.1.5 regarding Fire Brigade access to keys 	<p>Consistency with the DOM QAPD in Appendix 17AA, EF3 COLA STD text and current Dominion organization</p> <p>Consistency with EF3 COLA content that addresses EF3 NRC RAI 01-8</p> <p>Revision to 13.1.2.1.5 regarding access to keys addressed NA3 APWR S-COLA RAI 09.05.01-26.</p>
13.1.1	Changed “currently operate seven nuclear units at four sites located in Virginia, Connecticut, and Wisconsin” to: currently operates six nuclear units at three sites located in Virginia and Connecticut	Reflect decommissioning of Kewaunee
13.1.2.1.1.8	RAI 13.01.02-13.01.03-5, Add Responsibility for Radiation Manager	
13.1.2.1.1.10	RAI 13.01.02-13.01.03-6, Add Responsibilities for RP Technician	

Revision 6 (continued)

Section	Changes	Reason for Change
Table 13.1-201	<ul style="list-style-type: none"> • Revised for consistency with 13.1 text and to remove non-operational phase FTE estimates • Added additional information to address Part 30/40/70 requirements • Aligned startup and preop test personnel information for consistency with Chapter 14 and current Dominion organizational interface with the EPC Contractor. • Added note “*****” for startup and preop test personnel qualifications 	Consistency with the DOM QAPD in Appendix 17AA and current Dominion organization and resource estimates.
Table 13.1-202	Added Note 6	To indicate compliance with Technical Specifications, Emergency Plan, and Fire Brigade staffing requirements
Figure 13.1-201	Incorporated figure from QAPD	QAPD (DOM-QA-2, R5; Appendix 17AA)
Figure 13.1-202	Changed LMA from NAPS to CWR	EF3 has same figure but does not use STD LMA
Figure 13.1-203	Updated figure to align with changes to Section 13.1	See Section 13.1 changes
Figure 13.1-204	Incorporated figure from QAPD	QAPD (DOM-QA-2, R5; Appendix 17AA)
Figure 13.1-205	Updated figure to align with changes to Section 13.1	See Section 13.1 changes
13.4.1	Added 9.5.1.15.2	DCD R9
Table 13.4-201	RAI 13.06.01-44, Timeframe for Security Procedures	
	Added new Operational Programs 21 (Mitigative Strategies), 22 (Lifecycle Minimization of Contamination), and 23 (SNM control and accounting). Revised FFD program titles, sources, milestones and requirements. Clarified regulatory references to 10 CFR 30, 40, 70 and 73	Consistency with EF3 COLA content that addressed the following EF3 NRC RAIs: 01-4 13.03-54 13.07-1 13.07-2 13.07-4

Revision 6 (continued)

Section	Changes	Reason for Change
13.5	Changed LMAs for COL Item 13.5-4-A (all places throughout), SUP 13.5-10, SUP 13.5-11	Consistency with EF3 COLA content that addresses the following EF3 NRC RAIs: 01-4 01-6
13.5.2	(5th paragraph) Changed "Operations" to "Operating"	Consistency with EF3 COLA
	(Second sentence, Procedures for Calibration, Inspection and Testing) Changed LMA from "STD COL 13.5-6-H" to STD COL 13.5-6A"; revised replacement text entirely	DCD R9
	(2nd paragraph action statement) Changed "for Handling of Heavy Loads" to "Related to Refueling Cavity Integrity"	DCD R9
13.5.2.1	Changed LMA from "STD COL 13.5-2-A" to STD COL 13.5-6A"	DCD R9
	Added reference to procedures related to refueling cavity integrity	Consistency with EF3 COLA
	Changed reference to DCD from "13.5-1" to "18.11-2"	Consistency with EF3 COLA
13.5.2.2.8	Added new paragraph address New Fuel Shipping Plan under Security Procedures	Consistency with EF3 COLA
13.5.2.2.10	Added STD SUP 13.4-40, Procedure related to Refueling Cavity Integrity	Consistency with EF3 COLA
13.5.2.2.11	Added STD SUP 13.5-41, Special Nuclear Material (SNM) Material Control and Accounting Procedures	Consistency with EF3 COLA
13.5-6-A	Changed from "13.5-6-H"	DCD R9
13.5-204	Deleted	Consistency with EF3 COLA
13.6.1.1.5	Added parenthetical DCD reference	Consistency with EF3 COLA
13.6.1.1.8	Deleted content addressing COL Holder Item 13.6-8-H	DCD R9
13.6.2; Table 13.4-201	Added Cyber Security Plan	Respond to Security Rule changes

Revision 6 (continued)

Section	Changes	Reason for Change
13.6.2	Added discussion on submittal of Security Plan documents	DCD R9
	Deleted statement referencing Table 13.4-201	Consistency with EF3 COLA
	Added content to address COL Items 13.6-8-A, 13.6-16-A through 13.6-16-A	DCD R9
	Added STD SUP 13.6-2	RAI 13.06.01-36 and consistency with EF3 COLA
13.6.3	Revised title of 13.6-7-A; added COL Items 13.6-16A through 13.6-20-A	DCD R9
13.6.4	Deleted	NEI 03-12, Appendix F not used
Figure 13.6-201	Added	DCD R9
13.7	Complete replacement. Provided additional detail on Dominion and EPC FFD program implementation milestones	Consistency with EF3 COLA content that addresses the following EF3 NRC RAIs: 13.07-1 13.07-2 13.07-3
13AA	<ul style="list-style-type: none"> • Revised reporting relationships and titles for consistency with organization described in 13.1 • Changed construction manager to executive management position for nuclear development • Changed responsibility for staff recruiting and training to executive position responsible for nuclear development • Changed responsibility for transition to operating phase to executive responsible facility operations • Changed description of interface with EPC contractor and conduct of preoperational and startup testing. 	<p>Consistency with the DOM QAPD and current Dominion organization.</p> <p>Consistency with EF3 COLA content that addresses EF3 NRC RAI 01-5</p> <p>Consistency with division of responsibility between EPC Contractor and Dominion.</p>
13BB	Deleted “which is under review by NRC staff”	NEI 06-13A Revision 2 is NRC-endorsed; no longer under review
13CC	Added appendix, SNM Material Accounting & Control Program Description	Consistency with EF3 COLA content that addresses EF3 NRC RAI 01-4

Revision 6 (continued)

Section	Changes	Reason for Change
13DD	Added appendix, New Fuel Shipping Plan	Consistency with EF3 COLA content that addresses EF3 NRC RAI 01-6
14.2.2.1	Changed LMA from STD COL 14.2-2-H to STD COL 14.2-2-A	DCD R9
14.2.2.2	Changed LMA from "STD COL 14.2-3-H" to "STD COL 14.2-3-A"	DCD R9
	Changed action statement from "...last two sentences..." to "...last sentence..."	DCD R9
	Changed first sentence from "for satisfying the commitments of this section..." to "...for satisfying this section..."	DCD R9
14.2.7	Changed LMA from "STD COL 14.2-4-H" to "STD COL 14.2-4-A"	DCD R9
14.2.9	Changed LMA from "STD COL 14.2-6-H" to "STD COL 14.2-6-A"	DCD R9
14.2.9.1.1	Added traveling screens to abstract	Consistency with EF3 COLA
14.2-1-A	Added LMA "NAPS COL 14.2-1-A"	Align with LMA change at 14AA
14.2-2-A	Changed from 14.2-2-H, including LMA	DCD R9
14.2-3-A	Changed from 14.2-3-H	DCD R9
	Changed LMA from "STD COL 14.2-3H" to "CWR COL 14.2-3-A"	DCD R9 and consistency with EF3 COLA
14.2-4-A	Changed from 14.2-4-H, including LMA	DCD R9
14.2-6-A	Changed from 14.2-6-H, including LMA	DCD R9
14.2.8.1.51, 14.2.8.2.18	RAI 09.02.01-12, Verification of AHS Design Capability	
14.3	Changed Analysis to Analyses in title	DCD R9
14.3.8	Removed hyphen between NRC and approved	Editorial
14.3.9	Changed LMA from "STD COL 14.3-2-A" to "CWR COL 14.3-2-A"	Consistency with EF3
14.3-2-A	Changed LMA from "STD COL 14.3-2-A" to "CWR COL 14.3-2-A"	DCD R9 and consistency with 14.3.9

Revision 6 (continued)

Section	Changes	Reason for Change
14.3A.1	Revised entirely	Address NA3 SER Confirmatory Item No. 14.3A-1, and consistency with the EF3 COLA
14AA	Changed "STD COL 14.2-1-A" to "NAPS COL 14.2-1-A"	Organization information is site specific
	Revised description of organizations, positions, and responsibilities throughout	EPC contract and Chapter 13
	Miscellaneous corrections	Editorial
16	Deleted COL 16.0-1-H	DCD R9
17.4.1	Added modification to the third paragraph to address site-specific SSCs within the scope of the RAP	Address COL Item 17.4-1-A (EF3 RAI 17.04-2)
	Changed "STD COL 17.4-1-H" to "STD COL 17.4-1-A"	DCD R9
	Changed "third" to "fourth" in existing action statement and changed "STD COL 17.4-1-H" to "STD COL 17.4-2-A"	DCD R9
	Revised second and fourth bullets to specify SSCs in the scope of the D-RAP	DCD R9
17.4.6	Changed "STD COL 17.4-1-H" to "STD COL 17.4-1-A" and added "STD COL 17.4-2-A"	DCD R9
17.4.9, 17.4.10	Changed LMA from "STD COL 17.4-1-H" to "STD COL 17.4-2-A"	DCD R9
17.4.13	Added 17.4-1-A; changed "17.4-1-H" to "17.4-2-A"	DCD R9
17.5, 17.5-202	Changed "NEI 06-14" to "NEI 06-14A"	QAPD is now based on NEI 06-14A, the NRC-approved QAPD template
17.6	Changed "STD COL 17.4-1-H" to "STD COL 17.4-2-A"	DCD R9
	Changed "NEI 07-02" to NEI 07-02A"	NEI 07-02A is the NRC-approved Maintenance Rule Program template

Revision 6 (continued)

Section	Changes	Reason for Change
17.6.4	Added	Consistency with EF3 COLA (EF3 RAI 08.02-17 S1)
17.6-201	Changed "NEI 07-02" to "NEI 07-02A"	NEI 07-02A is the NRC-approved Maintenance Rule Program template
17AA	Replaced QAPD R4 with R6	Current version
17AA, Part IV, Section 1, Regulatory Guide 1.28	Revised year of edition and Addenda references from 1993 to 1983	US-APWR S-COLA RAI 17.5-9
18.13.3	Changed "STD COL 18.13-1-H" to "STD COL 18.13-1-A"	DCD R9
18.13-1-A	Renumbered from 18.13-1-H; changed "18.13-1-H" to "18.13-1-A"	DCD R9
19.2.3.2.4, Introduction to Evaluation of External Event Seismic	Removed definition of SSE as the CSDRS	Site-specific exceedance of the CSDRS
19.2.3.2.4, Significant Core Damage Sequences of External Event Seismic	Changed action statement from "second and third" to "second, third and fourth" sentences	DCD R9
	Changed LMA from "STD COL 19.2.6-H" to "NAPS COL 19.2.6-1-A"	DCD R9
	Changed "High Confidence Low Probability of Failure (HCLPF)" to "HCLPF"	Editorial
	Changed "DCD Table 19.2-4" to "Table 19.2-4R"	Site-specific exceedance of the CSDRS
	Added "A minimum HCLPF value of 1.67*SSE will be met for the SSCs identified in Table 19.2-4R"	Site-specific exceedance of the CSDRS
Table 19.2-4R	Removed the definition of SSE as the CSDRS in Note 1	Site-specific exceedance of the CSDRS
19.2.6	Changed COL Item from "19.2.6-1-H" to 19.2.6-1-A"; changed LMA from "STD COL 19.2.6-H" to "NAPS COL 19.2.6-1-A"	DCD R9
19.5	Expanded discussion on Unit 3 parameters and features	Site-specific exceedance of the CSDRS

Revision 6 (continued)

Section	Changes	Reason for Change
19A	Changed “with no departures or supplements” to “with the following departures and/or supplements”	Site-specific exceedance of the CSDRS
19A.8.3	Removed definition of SSE as the CSDRS	Site-specific exceedance of the CSDRS
19D	Added	DCD R9
19AA.2	Revised first paragraph to better describe how the site-specific PRA was developed	Consistency with EF3 R-COLA
	Revised third bullet to clarify the purpose for comparing seismic fragilities	Provide more appropriate description of the comparison
	Revised second paragraph to clarify that the site-specific values were reviewed	Consistency with EF3 R-COLA
	Revised third paragraph by deleting Grand Gulf from LOPP analysis	Consistency with EF3 R-COLA
	Revised fourth paragraph description for the Loss of SW CDF contribution	Consistency with EF3 R-COLA
	Expanded fourth paragraph discussion for the Loss of Service Water frequency and its basis	Consistency with EF3 R-COLA
	Revised to refine the extent to which the seismic response spectrum bounds potential U.S. sites and to explain how the seismic exceedance is accounted for in the plant-specific PRA	Site-specific exceedance of the CSDRS
19AA.2 (continued)	Changed “departures” to “changes” in seventh paragraph	Editorial to preclude confusion with NAPS DEP 3.7-1
19AA.3.1	Changed “DCD Section 3.4.1.1” to “DCD Section 3.4.1.2”	DCD R9
	Revised to better describe how the site-specific internal flooding evaluation was developed	Consistency with EF3 R-COLA
19AA.3.2	Clarified flood event for which no operator actions are credited in the PRA model	DCD R9

Revision 2

Section	Changes
Table 1.9-201	Revised to indicate conformance with SRP 11.4.II.10.
11.4.1	Incorporated a description of the long-term interim low-level radioactive waste storage space in the Radwaste Building and to identify the increased storage as a departure from the ESBWR DCD. Editorial change.
11.4.2.2.4	Revised to provide a description of, and requirements for, the long-term interim low-level radioactive waste storage space in the Radwaste Building, including an estimate of the amount of waste storage capacity, shielding for Class B and C waste storage, handling and integrity requirements, and requirements for crane design features.

Revision 1

Section	Changes
Chapter 1, 1.1-1-A, 1.8.2, 3.7.2.4, 3D, 3E, 6.1, 6.2.1.6, 8.2.4, 12.4.9, 13.6.2, 17.3	Updated titles and numbering to align with DCD R5.
1.1.1.6, 1.1.1.7, 1.1.1.11, 1.1.2.1, 1.1.2.2, 1.1.2.4, Table 1.1-201, 1.3, 1.6, Tables 1.6-201, 1.7-201, 1.7-202, 1.8-201, 1.8-202, & 1.8-203	Modified LMAs. Deleted NEI 03-12, Appendix F and NEI 06-06. Editorial changes added CDI entries for Zinc Injection System.
1.1.1.7, 1.1.1.9, 1.1.2.1, 1.1.2.2, 1.1.2.4, Table 1.1-201, 2.3-203, 2.5.4.10, 14.3A-1-1, 19.5, 19AA.2	Editorial updates/corrections.
1.1.1.7, Figure 9.5-201, 9A.1, 9A.3.1, 9A.4.7, Table 9A.5-7 Revisions, Table 9A.5-7 Departure	RAI NA3 09.05.01-17, Firewater Supply Locations
1.1.2.7	Revised estimated gross and net electrical power output.
1.1.2.8	Revised estimated key milestones
Table 1.1-201, 1.8.3, 1.8.4, 1.8-201, 1.8-202, Tables 1.8-202 & 1.9-205, 1.10, 1.10-201, 1.10-202, Table 1.10-202, 2.0, 2.0-201, 2.0-203, Table 2.0-201, 2.1.2.1, 2.4.13, Section 2.5.1.2.3.k, Section 2.5.1.2.6.b, Section 2.5.1.2.6.g, Section 2.5.4.2.5.b Structural Fill, Section 2.5.4.5.2.b, 2.5.4.5.3, 2.5.4.8, Figure 2.5-253, 12.2-201, 12.2-202, 15.6	Revised to reflect issuance of ESP-003.

Revision 1 (continued)

Section	Changes
1.2.2.12.7, Table 1.8-203, 9.2.1.2	Added NAPS CDI for Plant Service Water System.
1.2.2.16.10	Updated action statement to align with DCD R5.
1.2.2.16.10, Tables 1.8-203, 1.10-201 & 3.2-1; Appendix 9A (Contents), 9A.1, 9A.3.1, 9A.4.7, 9A.5.12, 9A.7-2-A	Removed references to warehouse and cold machine shop (1.2.2.16.10). Added CDI for (no) cold machine shop (Table 3.2-1) and no warehouse, 9A1, 9A.2.1, 9A.3.1, 9A.4.7. Updated section number for Water Treatment Building (9a.5.12, Tables 1.8-203 & 1.10-201; 9A.7-2-A).
1.3.1	Changed title of 1.3.1.
Tables 1.6-201, 1.9-201, & 1.9-203; 13BB	Updated NEI 06-13A to Rev. 1. Incorporated NEI 06-13A, Revision 1.
Table 1.6-201, 11.4.2.3.5, 11.4-201	Corrected NEI 07-10 title and revision.
Table 1.6-201, 12.2.2.4.2, Tables 12.2-15R, 12.2-18aR & 12.2-20aR	Deleted NEI 07-11 (Table 1.6-201). Editorial changes to align with RAI 11.02-1 response (12.2.2.4.2). Aligned with DCD R5 changes and added LMAs (Tables 12.2-15R, 12.2-18aR, & 12.1-20aR) RAI 11.02-1, Liquid Waste - Cost Benefit Analysis.
Table 1.6-201, 13AA.2.3, 13AA.2.4, 13BB	RAI NA3 13.02.01-1, NEI-06-13-A Revision 1 in FSAR
Table 1.6-201, 17.5, 17.5-202	Specified QAPD tie to NEI 06-14A.
Table 1.6-201, 17.6.3	RAI NA3 17.06-1, Maintenance Rule
Tables 1.8-201, 12.2-18bR & 12.2-203	RAI NA3 12.02-10, Clarification of FSAR Tables in Chapter 12, FSAR Table 12.2-17R Update w/Data on Radionuclide Ratios
Tables 1.8-202 & 1.10-201, 2.0, 2.0.1, Tables 2.0-2R & 2.0-201, 2.3.5.1, Tables 2.3-208 thru 2.3-215, 2A, Table 2A-4R	Updated to align with DCD R5.
Tables 1.8-202 & 2.0-201	RAI NA3 15.06.05-1, Radiological Consequence Doses - Evaluation Factors
Table 1.8-202; 12.2.2.2.2, 12.2.2.2.6, 12.2.2.4.2, 12.2.2.4.4; Tables 12.2-15R, 12.2-17R, 12.2-18bR, 12.2-201, 12.2-203, & 12.2-204	RAI NA3 12.02-1, Dose Analysis
Tables 1.8-203 and 1.10-201, 11.2, 11.2.2.3, 11.4, 11.4.2.3.5, 11.4-1-A, Table 11.5-201	Changed "mobile" liquid and solid radwaste systems to "process" systems.
1.9.2, 1.9.3, Tables 1.9-201, 1.9-202, 1.9-203, 1.9-204, 1.9-205, and 1.10-202, 1.11.1, 1C.1	Miscellaneous clarifications and corrections.

Revision 1 (continued)

Section	Changes
Table 1.9-201	Updated evaluation for SRP Section 6.5.1 to conform to DCD R5 changes. RAI NA3 08.02-18, GDC-2 Applicability, RAI NA3 08.02-20, BTP 8-3 Applicability, RAI NA3 08.02-21, BTP 8-5 Applicability, RAI NA3 08.02-22, BTP 8-6 Applicability, & RAI NA3 17.05-1, Comparison of QAPD and SRP 17.5 Criteria.
	Revised evaluation of BTP 8-2 to align with DCD R5.
Tables 1.9-201 and 1.9-202	Revised conformance evaluation for SRP 5.4.13 acceptance criterion 4 (Table 1.9-201) and for RG 1.93 (Table 1.9-202).
Tables 1.9-201, 1.9-203 & 1.10-201	Updated references to DCD R5. Editorial corrections.
Table 1.9-201	Updated turbine model number.
Tables 1.9-201, 1.9-202, & 1.9-204, 14.2.9.1.3	RAI NA3 14.02-5, Personnel Monitors and Radiation Survey Instruments
Tables 1.9-201 & 1.9-202	RAI NA3 14.02-6, Site-Specific Preoperational Test
Table 1.9-201, 13.1.1.2.1, 14AA.2.2.12, 17.5, 17AA	QA Policy incorporated in QAPD.
Table 1.9-202	Updated/corrected RGs 1.26 and 1.29.
Table 1.9-202	Changed RG 1.29 commitment from Rev. 4 to Rev. 3. Changed RG 4.15 commitment from Rev. 2 to Rev. 1. Editorial changes.
	Changed RG 1.40 to "Conforms" and RG 1.136 to reflect DCD R5 corrections.
	RAI NA3 03.02.01-3, RG 1.29 Revision Clarification
	RAI NA3 08.03.02-2, RGs 1.41, 1.128, 1.129 Conformance Clarification
Tables 1.9-202 & 1.9-203	RAI NA3 12.03-12.04-9, Editorial Corrections
Tables 1.9-202 & 1.9-204	Added an exception to RG 1.8 in Table 1.9-202; revised NQA-1 year/title in Table 1.9-204.
Table 1.9-202, 3.9.2.4	RAI NA3 03.09.02-2, FIV Program Schedule for Reactor Internals
Table 1.9-202, 13.1.1.2.1, 13.1.1.2.10, 13.1.2.1, 13.1.2.1.1, 13.1.2.1.1.2, 13.1.2.1.1.9, 13.1.2.1.1.10, 13.1.2.1.5, Table 13.1-201, Figure 13.1-204	RAI NA3 13.01.02-13.01.03-1, Fire Protection Organization
Table 1.9-202, 17AA	RAI NA3 03.02.02-1, RG 1.26 Revision Clarification
Table 1.9-203	Added conformance evaluations for RG Positions C.III.1.5.4.3 through C.III.1.5.4.13.

Revision 1 (continued)

Section	Changes
Table 1.9-203	RAI NA3 14.03.10-1.4, ITAAC for Offsite Full Participation Exercise
Table 1.9-204	RAI NA3 09.05.01-9, COLA Reference to NFPA 55 Added NERC standards.
Table 1.9-204, 2.3.1.3.1, 2.3-204, 2.3-205, 2.3-206	RAI NA3 02.03.01-1, Wind Speed Values
Table 1.9-204, 2.3.2.3.1, 2.3.2.3.2, Section 2.3 References	RAI NA3 02.03.02-1, Local Meteorology
Table 1.9-205, 2.2.3.1.1, 2.2-213, 2.2-214, 2.2-215	RAI NA3 02.02.03-1, Explosion Hazard - Underground Gasoline Storage Tanks
Table 1.10-201	Updated to align with DCD R5 changes; revised COL Item 12.3-3-A from applicant to holder. Corrected referenced section for COL Item 8.2.4-5-A.
Table 1.10-201, 3.6	Deleted COL Item 3.6.5-1-A.
Table 1.10-201, 3.11.4.4, 3.11.7, 3.11-1-A	Added reference to DCD EQ Program description. Administrative changes to reflect DCD R5 numbering and title changes.
Table 1.10-201, 4.3.3.1, 4.3-1-A, 4A.1	Editorial changes to align with DCD R5; revised COL items 4.3-1-A and 4A-1-A.
Table 1.10-201, 5.2.4, 5.2.4.11, 5.2.5, 5.2-1-A, 5.2-2-A, 5.2-3-A	Revised 5.2-1-H to 5.2-1-A. Added Section 5.2.5 to COL Item 5.2-2-H. Added COL Item 5.2-3-A and updated associated content accordingly. Updated to align with DCD R5.
Table 1.10-201, 5.2.4.3.4, 5.2.4.6, 5.2-1-A, 6.6.6	Editorial corrections related to COL Item 5.2-1-A.
Table 1.10-201, 5.3.1.5	Revised for future submittal of PTLR curves.
Table 1.10-201, 6.1	Incorporated deletion of COL Item 6.1.3-1-A in DCD R5.
Table 1.10-201, 6.2.4.2, 6.2-1-H	Updated to align with DCD R5 changes related to COL Item 6.2-1-H.
Table 1.10-201, 6.6, 6.6.2, 6.6.7, 6.6.7.1.1, 6.6.7.1.2, 6.6.7.1.4, 6.6.7.1.5, 6.6.7.1.6, 6.6.7.1.7, 6.6-2-A, 6.6.12	RAIs NA3 10.03.06-1, FAC - Construction Phase, 10.03.06-2, FAC - Baseline Thickness, and 14.02-1, Initial Plant Test - Switchyard Components. Added COL Item 6.6-2-A to align with DCD R5. Added weld accessibility controls description.
Table 1.10-201, 9.1.1.7, 9.1.4.13, 9.1.4.19, 9.1.5.8, 9.1-4-A	Added Section 9.1.1.7. Revised COL Item 9.1.6-4-A to 9.1-4-A to align with DCD R5.
Table 1.10-201, 9.2.5, 9.2.5-1-A	COL Item 9.2.5-1-A changed to 9.2.5-1-H in DCD R5.

Revision 1 (continued)

Section	Changes
Table 1.10-201, 9.5.1.12, 9.5.1.15.3, 13.1-1-A, Appendix 13AA	Editorial changes to align with DCD R5 related to deleting STD SUP 9.5.1-2 and adding COL Items 9.5.1-7-H and 13.1-1-A.
Table 1.10-201, 9.5.1.15.2, 9.5.1-9-A	RAI NA3 09.05.01-1, Fire Protection Program Change Process
Table 1.10-201, 9.5.2.2, 9.5.2.5-1-A, 9.5.2.5-2-A, 9.5.2.5-3-A, 9.5.2.5-4-A, 9.5.2.5-5-A	Changed COL Item 9.5.2.5-1-A to 9.5.2.5-3-A. Added COL Items 9.5.2.5-4-A and 9.5.2.5-5-A.
Table 1.10-201, 10.2.3.4, 10.2.5	Added description of plant-specific turbine maintenance and inspection program. Acknowledged permission to use bounding property values in turbine missile evaluations until actual material specimens are available.
Table 1.10-201, 11.4.1, 11.4.2.3.5, 11.4-1-A, 11.4-2-A, 11.4-3-A	Updated to align with DCD R5. Editorial corrections.
Table 1.10-201, 11.5.7	Deleted references to Section 12.2.
Table 1.10-201, 11.5.4.6, 11.5.4.7, 11.5-1-A, DCD Table 11.5-2, DCD Table 11.5-4	Editorial corrections related to title changes and to add a description of process radiation monitoring procedures.
Table 1.10-201, 12.2.1.5, 12.2-4-A	RAI NA3 12.02-4, STD SUP 12.3-4-A Not Included
Table 1.10-201, 12.5-2-A	Changed title of COL Item 12.5-2-A.
Table 1.10-201, 12BB, 13.6.5, 16.0.1, 16.0-1-A, 16.0-2-H	Editorial corrections. Updated to align with DCD R5 COL Items 16-0-1-A & H, and to address NEI template 07-03 in Appendix 12BB.
Table 1.10-201, 13.6.1.1.3, 13.6.1.1.5, 13.6.1.1.8, 13.6.2, 13.6.3	Updated to align with DCD R5 changes. Added 10 new COL items to Section 13.6.
Tables 1.10-201 & 13.4-201, 6.6, 6.6.2, 6.6.7.1	Added new COL Item. RAI NA3 10.03.06-1, FAC - Construction Phase (Added description of augmented ISI program). RAI NA3 10.03.06-2, FAC - Baseline Thickness (Added discussion of controls to ensure accessibility for PSI and ISI NDE. Added reference to FAC program.)
Table 1.10-201, 14.2.2.1, 14.2.2.2, 14.2.7, 14.2.9, 14.2.10	Updated to align with DCD R5 changes related to new COL Items 14.2-1-1 and 14.2-5-A.
Table 1.10-201, 14.3A	Added Appendix 14.3A to align with DCD R5.
Table 1.10-201, 17.4.1, 17.4.6, 17.4.9, 17.4.10, 17.4-2-A	Updated to reflect DCD R5 changes to COL Item 17.4-1-A.
Table 1.10-201, 18.13, 18.13.3, 18.13.5	Added COL Item 18.13-1-H.

Revision 1 (continued)

Section	Changes
2.0, Tables 2.0-2R, 2.0-201 thru 2.0-203, Figures 2.0-201 thru 2.0-207, 2.1.1.1, 2.1.1.2, 2.1.2.1, Figure 2.1-201, 2.2.2.6.1, 2.2.2.6.2, 2.2.3, 2.2.3.2.2, 2.2.3.4, Tables 2.2-201 thru 2.3-204, Figure 2.2-201, 2.3.1, 2.3.1.3.4, 2.3.2, 2.3.2.3, 2.3.3, 2.3.3.1.2, 2.3.4.1, 2.3.4.3, 2.3.5, 2.3.5.1, Tables 2.3-17R thru 2.3-203, 2.3-201	Editorial corrections.
Table 2.0-201	RAI NA3 02.03.01-3, Clarification of Ambient Temperatures
	RAI NA3 02.05.04-6, Allowable Dynamic Bearing Capacity Differences
Table 2.0-201, 2.3.3.1.2, 2.3.4.1	Updated tallest structure information.
Table 2.0-201, Figure 2.3-201	Updated to reflect GEH analysis. Added Fuel Building information, added Radwaste Building unfiltered inleakage information, deleted Fuel Building Cask Doors information, and added Reactor Building TSC information.
Table 2.0-201, 2.3.1.2, 2.3-207	RAI NAPS 02.03.01-2, 10 CFR 52.79(a)(1)(iii) Dry/Wet Bulb Temperatures
Tables 2.0-201, 2.3-15R, 12.2-18bR, 12.2-201 & 12.2-203, 2.3.5.1, 12.2.2.4.4	RAI NAPS 02.03.05-2, Clarification of χ/Q and D/Q Values, FSAR Table 2.3-16R vs. ER Table 2.7-4 re: EQ
Figure 2.0-205	Updated building coordinates to align with DCD R5.
Figure 2.1-201	Updated to align with DCD R5 (cooling tower pond, construction zones, and plot plan background).
Table 2.2-202	Added Ancillary Diesel Building data.
Table 2.2-202, 2.2-203, & 2.2-204	Updated chemicals and chemical quantities for Unit 3 and removed Units 1 & 2 chemicals.
2.3.2.3.2	Clarification of RAI NA3 02.03.02-1, Local Meteorology, response.
2.3.4.3	Added TSC and renumbered Table 2.3-205 to 2.3-207.
2.3.5.1	RAI NA3 02.03.05-1, χ/Q and D/Q Values
2.3.5.1, Table 2.3-15R	Updated receptor distances.
2.3.5.1, Tables 2.3-204 thru 2.3-215	RAI NA3 02.03.05-3, Long Term (Routine) Diffusion Estimates
Tables 2.3-201 thru Tables 2.3-207	Updated to reflect GEH analysis. Inserted two new tables.

Revision 1 (continued)

Section	Changes
2.4.1, 2.4.1.1, 2.4.2, 2.4.2.2, 2.4.2.3, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.7.2, 2.4.7.4, 2.4.7.5, 2.4.7.6, 2.4.8, 2.4.9, 2.4.10, 2.4.11, 2.4.11.5, 2.4.11.6, 2.4.12, 2.4.12.1.2, 2.4.12.1.3, 2.4.12.3, 2.4.12.4, 2.4.13, 2.4.14, Tables 2.4-15R thru 2.4-17R, Tables 2.4-201 thru 2.4-212, 2.5.1, 2.5.1.2.3, 2.5.1.2.6, 2.5.1.2.7, 2.5.2, 2.5.2.5, 2.5.2.6.7, 2.5.2.6.8, 2.5.2.6.9, 2.5.2.6.10, 2.5.4, 2.5.4.3, 2.5.4.5.3, 2.5.4.5, 2.5.4.6, 2.5.4.6.3, 2.5.4.7, 2.5.4.7.1, 2.5.4.7.2, 2.5.4.7.4, 2.5.4.8, 2.5.4.10, 2.5.4.10.1, 2.5.4.10.2, 2.5.4.11, 2.5.4.12, 2.5.5, 2.5.5.1.2, 2.5.5.1.3, 2.5.5.2.3, 2.5.5.2.4, 2.5.5.3, 2.5.6, Tables 2.5-201 thru 2.5-219, Figures 2.5-201 thru 2.5-276	Miscellaneous editorial changes (LMAs, delimiters).
2.4.2.3, Tables 2.4-201 thru 2.4-204, Figures 2.4-201, 2.4-203, 2.4-204, & 2.4-206 thru 2.4-216	Updated to align with DCD R5; revised Section 2.4 based on DCD R5 impacts.
2.4.14	Corrected typographical error.
Tables 2.4-15R	Added note explaining WP-3 “?” value.
2.5.4.5.3	RAI NA3 02.05.04-3, Material and Engineering Properties of Backfill
2.5.4.8, 2.5.4.10, Table 2.5-213	Corrected seismic classification of Turbine Building to align with DCD R5.
2.5.4.10, Tables 2.5-213 & 2.5-215, Figures 2.5-209 thru 2.5-215, 2.5-221, 2.5-222, 2.5-229 thru 2.5-234, 2.5-252, 2.5-255	Updated to align with DCD R5.
Table 2.5-213	Updated Radwaste Building seismic reference.
2.5.4AAS1, 2.5.4AAS2	Revised title on link page. Added MACTEC Geotechnical Data Report Supplement 2.
3.2, 4.2, 9.3.10.2, 9.5.1.4	Added metric values and deleted STD COL 4.2.6 from Section 4.2.
3.7.1.1, 3.12	Editorial changes.
3.7.2.8	Updated action statement to account for DCD R5 changes.

Revision 1 (continued)

Section	Changes
3.9.3.7.1(3)e, 3.9.3.7.1(3)e, 3.9.6, 3.9.6.1, 3.9.6.1.4, 3.9.6.1.5, 3.9.6.5, 3.9.6.6, 3.9.6.7, 3.9.6.8, 3.9.8, 3.9.10, Table 13.4-201	Expanded IST Program Description.
3.9.3.7.1(3)e, 3.10.1.4, 3.11.2.2, 3.11-1-A, 3.12	Added supplement separator line. Corrected EQD definition. Added dotted lines to signify supplement information within a supplement.
3.9.3.7.1(3)e	RAI NA3 03.09.03-2, Update Reference to Snubber ITAAC Table
3.9.6.8	RAI NA3 03.09.06-3, Dynamic/Static Testing of AOVs
	Clarified IST description for other than air-operated, power-operated valves.
3.10.1.4, 3.10.4	Added commitment to provide an implementation schedule for seismic and dynamic qualification of mechanical and electrical equipment. Updated title to DCD R5.
3.11-1-A	Editorial correction.
3.11.4.4	RAI NA3 03.11-1, EQ Process Implementation; RAI NA3 03.11-2, DCD EQ Approach Implementation; & RAI NA3 03.11-3, Additional EQ Approach Implementation
4.2, 4.3, 4A	Editorial changes.
4.2	Revised to be all IBR. Editorial changes. Deleted COL Item 4.2.6.
5.2.1.1	RAI NA3 05.02.01.01-1, ASME BPV Code + ASME Code for O&M
5.2.1.2	RAI NA3 05.02.01.02-1, Code Cases Not in EWBWR DCD re: ASME BPV or OM Codes
5.2.4, 5.2.4.2	RAI NA3 05.02.04-3, PSI Exams Equivalent to Inservice Inspection (ISI) Exams
5.2.4.3.4, 5.2.4.6, 6.6.6	RAI NA3 05.02.04-4, Incorporating Limits of 10 CFR 50.55a(b)(2)
5.2.5.9	RAI NA3 05.02.05-1, Leak Detection Monitoring
	Restored sentence proposed to be deleted per RAI 05.02.05-1.
5.3.1.5	Added 5.3.1.5 to include a commitment to PT LR.
5.3.1.8, 5.3.1.8.1, 5.3.1.8.2, 5.3.1.8.3, 5.3.1.8.4, Table 5.3-201	Revised 5.3.1.8 and added Table 5.3-201 to include information provided in response RAI NA3 05.03.01-1, Reactor Vessel Surveillance Capsule Program.
6.2.4.2, 6.4.4	Corrected LMA. Editorial change.

Revision 1 (continued)

Section	Changes
6.4.5	Revised action statement to delete last paragraph of DCD Section 6.4.5.
	Updated to reflect GEH analysis.
6.6.7.1.3	Replaced “initial inspections” with “preservice inspections.”
6.6.10.2	Editorial changes.
6B	Updated title per DCD R5.
6D	Added Appendix 6D.
6E, 6G, & 6I	Added appendices 6E, 6G, & 6I.
6F	Added Appendix 6F.
6H	Added to reflect DCD R5 addition of Appendix 6H.
8.2.1.2	RAI NA3 08.02-2, Cable Routing Intermediate Switchyard; & NA3 RAI 08.02-4, Potential Cable Degradation
	RAI NA3 08.02-29, Underground Cable Testing
8.2.1.2, 8.2.1.2.1, 8.2.1.2.3, 8.2.2.1, 8.2.3, 8.2.4-5-A, 8.2-201, 8.2-202, Figures 8.2-202 & 8.2-203, 8.3.2.1.1, 8A.2.1	Editorial corrections. Added 8.2.3.
8.2.1.2.1	RAI NA3 08.02-25, Surge and Lightning Protection Description
8.2.1.2.3	RAI NA3 08.02-7, Protective Relay Acceptance
8.2.1.2.4	RAI NA3 08.02-8, Industry Standards for Switchyard; & NA3 RAI 08.02-9, Transformer Testing Inclusion
8.2.2.1	RAI NA3 08.02-13, Clarify Tech Spec Reference
	RAI NA3 08.02-32, 34.5 kV Loads Impact on Grid Stability
Figure 8.2-201	RAI NA3 08.02-1, Switchyard Figure Discrepancy
	RAI NA3 08.02-30, Identify Switchyard Transformers
Figures 8.2-201 & 8.2-202	Added new bay to connect 500 kV Ladysmith line.
8.3.2.1.1, 8.3.5, 8.3-201	RAI NA3 08.03.02-1, SBO Response Procedures
9.1.4.13, 9.1.4.19	Editorial changes.
9.1.5.6	RAI NA3 09.01.05-1, Size and Rating Requirements for Slings
9.1.5.9, 9.1-5-A	RAI NA3 09.01.05-2, Heavy Load Equipment Outside Scope of DCD

Revision 1 (continued)

Section	Changes
9.2.1.2, 9.2.4.2, 9.2.4.3, 9.2.4.5, Figure 9.2-203, 10.4.5.2.3, Table 11.5-201	RAI NA3 11.05-2, Process and Effluent Monitoring
9.2.1.2; Tables 9.2-2R, 9.2-9R, 9.2-203, & 9.2-204; Figures 9.2-201, 9.2-202, 9.2-203, 9.2-204, & 9.2-205; 9.3.9.1, 9.3.9.2, 9.3.9.2.1, 9.3.9-2-A, 9.5.1.4, 9.5.1-1-A, DCD Table 9.5-2, 9.5.4.2, 9A.4.7	Corrected and added LMAs. Corrected section titles. Added commitment to update FSAR with detailed fire hazards analysis information.
9.2.1.2	RAI NA3 09.02.01-3, PSWS Material Selections Based on Water Quality
9.2.1.2, Table 9.2-2R	Updated to align with DCD R5 related to valve and strainer terminology, cooling tower capacity, and elimination of AOVs.
9.2.3.2	Aligned terminology with DCD R5 related to shutdown/refueling/startup and water storage tanks.
Figure 9.2-201	RAI NA3 09.02.01-1, Cooling Tower Performance Capability
Figures 9.2-202 & 9.2-203	Deleted the Potable Water System connection to the Turbine Building. Added a PWS connection to the Ancillary Diesel Building. Changed Security Building to Guard House, Intake Structure to Station Water Intake Building, and Hot/Cold Machine Shop to Hot Machine Shop (Figure 9.2-202). Changed Security Building to Guard House, Hot/Cold Machine Shop to Hot Machine Shop, and deleted the Sanitary Waste Discharge System connection to the Turbine Building (Figure 9.2-203).
Figure 9.2-204	Revised to reflect Plant Cooling Tower Makeup System design changes.
9.3.2.2	RAI NA3 09.03.02-1, Sampling Containment Atmosphere
9.5.1.4	RAI NA3 09.05.01-8, Quality of Fire Water Sources
9.5.1.4, Figures 9.5-202 and 9.5-203	Updated to align with DCD R5 changes related to the capacity of the secondary firewater source. Added LMAs.
9.5.4.2	RAI NA3 09.05.01-15, Fire Barrier Testing
	Editorial changes.
Table 9.5-201	Added NFPA codes and NEIL.
Figure 9.5-201	Deleted Cold Machine Shop & Office Building, and updated general arrangement.
Figure 9.5-202	Changed "Intake Structure" to "Station Water Intake Building" and updated general arrangement.

Revision 1 (continued)

Section	Changes
Figure 9.5-203	Added Cooling Tower Maintenance Building, Hybrid Cooling Tower Electrical Building, and Dry Cooling Tower Electrical Building.
9.5.1.15.6	RAI NA3 09.05.01-5, Control of Combustibles in Rooms Adjacent to MCR; RAI NA3 09.05.01-6, Control of Combustibles Below Floor in MCR Complex; RAI NA3 09.05.01-7, Control of Combustibles in Computer Rooms; & RAI NA3 09.05.01-13, Storage of Hazardous Chemicals
9.5.1.15.6, 9.5.1-8-A	Aligned titles with DCD R5.
9.5.1.15.9	RAI NA3 09.05.01-11, Fire Protection Program QA
9.5.4.2	Added treatment of Ancillary Diesel Generators.
	RAI NA3 09.05.04-2, Diesel Fuel Oil for Seven-Day Loaded Run
	RAI NA3 09.05.04-4, Fuel Oil Transfer System Corrosion Control
	Updated to align with DCD R5 related to material and corrosion protection for underground systems; and editorial changes to RAI NA3 09.05.04-4 markups.
	RAI NA3 09.05.04-6, Corrosion Protection Systems
9.5.5	Corrected title to agree with DCD.
9A.1, 9A.3.1	Deleted reference to Station Water Pump House.
9A.2.1	Deleted reference to Tables 1.9-202 and 1.9-203.
Table 9A.5-7 Revisions	Revised applicable fire areas.
	Added F7500 to deleted fire area list. Removed Table 9A.5-7 Departure added by RAI NA3 09.05.01-17, Fire Water Supply Locations.
Table 9A.5-7R	Completed to-be-done items with available information and updated design basis fire impact on safe shutdown. Added Fire Areas F7155, 7165, 8182 & 8201.
Figure 9A.2-33R	Revised site plot plan.
Figures 9A.2-201 thru 9A.2-204	Updated general arrangement; added LMA.
Figures 9A.2-205 & 9A.2-206	Deleted "Cold" machine shop; updated general arrangement; added LMA.
9A.5.12	Clarified commitment item.
10.2.3.4	Updated turbine model number.

Revision 1 (continued)

Section	Changes
10.2.3.6	Section inserted (new COL Item 10.2-1-A, Turbine Rotor Maintenance).
10.2.3.8	Section inserted (new COL Items 10.2-2-A, Turbine Missiles.
10.4.5.2.1, 10.4.5.2.2	RAI NA3 10.04.05-1: Circulating Water Large Bore Piping Codes and Failures
10.4.5.5	RAI NA3 10.04.05-2: Flooding due to Hybrid Cooling Tower Failure
	Corrected CW minimum inlet temperature.
10.4.5.6	Inserted Section title.
Table 10.4-3R	Changed to reflect DCD R5 revisions.
Table 10.4-201	Corrected units of conductivity.
Figures 10.4-201, 10.4-202, & 10.4-203	Added LMAs. Editorial changes deleted reference to NEI Topical Reports not incorporated by reference.
11.2.1	RAI NA3 11.02-1, Liquid Waste - Cost Benefit Analysis
	RAI NA3 11.03-2, Cost Benefit for GWMS
11.2.2.3.3	Changed action statements to agree with DCD R5 modifications.
	RAI NA3 11.02-2, LWMS: Sampling Non-Radioactive Systems
11.3.1	RAI NA3 11.03-0, Gaseous Waste - Cost Benefit Analysis
11.4.1	RAI NA3 11.04-1A, Solid Waste - Cost Benefit Analysis
11.4.2.3.5	RAI NA3 11.04-2, SWMS: Sampling Non-Radioactive Systems
11.5.4.9	Added "sampling and analytical" to "frequencies" with respect to discussion radioactive gaseous and liquid wastes.
Table 11.5-201	Revised Note 1
12.1.1.3.1, 12.1.1.3.2, 12.1.1.3.3, 12.1.3, 12.1-1-A, 12.1-2-A, 12.1-3-A, 12.1-4-A	Added supplements to address ALARA DCD COL Items 12.1-4-A, 12.1-1-A, 12.1-2-A, & 12.1-3-A.
12.2.1.5	RAI NA3 12.02-6, Additional Contained Source Uses
	Corrected LMA delimiters to reflect Section 12.2.1.5, other Contained Sources, as DCD item.
12.2.2.4.4	Updated distance from ISFSI to nearest residence.

Revision 1 (continued)

Section	Changes
12.2.2.4.4, Table 12.2-203	RAI NA3 12.02-2, Dose Analysis and EPA Standards
	Changed ISFSI number of casks and dose contribution, and changed existing units and site total doses.
	RAI NA3 12.02-12, Dose Contributions
Table 12.2-18bR	Editorial clarifications to Note 4.
12.3, Tables 12.2-20bR & 12.2-201, 12A	Deleted LMA. Corrected table values from mSv to mrem. Corrected dose rate units. Editorial changes.
12.4.7.1	Changed section number to align with DCD Section 12.4 R5 changes.
12.5, 12.5.4	Editorial changes.
Tables 12.2-15R, 12.2-18bR & 12.2-204	RAI NA3 12.02-11, Clarify Information In Section 12 Tables
Tables 12.2-17R & 12.2-19bR	RAI NA3 12.02-3, Liquid Dose Offsite
12B	Added to reflect DCD R5 addition of Appendix 12B.
12BB	RAI NA3 12.03-12.04-2, Very High Radiation Area Drawings; and RAI NA3 12.05-2, Site-Specific Alterations to NEI 07-03
	Editorial
13.1, 13.1.1, 13.1.2.1.1.9, 13.1.2.1.1.12, 13.1.2.1.5, 13.1.3.1, Table 13.1-201, Figure 13.1-201, 13.6.2, 13AA, 13AA.1.4, 13AA.2.3	Corrected LMAs. Updated executive titles. Revised to specifically address NAPS ESP COL 13.6-1.
13.1.1	RAI NA3 17.05-7, Making Changes to Organizational Descriptions
13.1.1, 13.1.1.1, 13.1.1.2	RAI NA3 13.01.01-3, Corporate Organization
13.1.1, 13.1.1.2.10, 13.1.1.3.1.5, Figures 13.1-201 & 13.1-205	Updated corporate structure and responsibilities.
13.1.1.2, 13.1.1.2.1, 13.1.1.2.9, 13.1.1.3.1.7, 13.1.1.3.1.6, 13.1.1.3.2, 13.1.1.3.2.1, 13.1.1.3.2.2.1, 13.1.1.3.2.2.2, 13.1.1.3.2.2.3, 13.1.1.3.2.2.5, 13.1.2.1.1, 13.1.2.1.1.1, 13.1.2.1.1.2, 13.1.2.1.1.3, 13.1.2.1.1.8, 13.1.2.1.2, 13.1.2.1.2.1, 13.1.2.1.2.2, 13.1.2.1.2.3, 13.1.2.1.2.6, 13AA.1.9	Added component and project engineering. Changed SNSOC to FSRC. Revised the corporate director of nuclear engineering position description. Corrected the reporting relationship for the EPC in Appendix 13AA. Corrected/updated the reporting relationships in Figures 13.1-203 and 204. Resequenced the operations department functions (13.1.2.1.2).

Revision 1 (continued)

Section	Changes
13.1.1.2.1	RAI NA3 13.01.01-1, Guidance Regarding Outside Company Work
13.1.1.2.10	RAI NA3 13.02.02-1, SRP Section 12.2.2 re: Section 13.1
13.1.1.3, 13.1.1.3.1, 13.1.1.3.1.1, 13.1.1.3.1.2, 13.1.1.3.1.3, 13.1.1.3.1.4, 13.1.1.3.1.6, 13.1.1.3.1.7, 13.1.1.3.1.8, 13.1.1.3.2, 13.1.1.3.2.1, 13.1.1.3.2.2, 13.1.1.3.2.2.1, 13.1.1.3.2.2.2, 13.1.1.3.2.2.3, 13.1.1.3.2.2.4, 13.1.1.3.2.3, 13.1.1.3.2.4, 13.1.1.3.2.5, 13.1.1.3.2.6, 13.1.1.3.2.7, 13.1.1.3.2.8, 13.1.1.3.2.9	RAI NA3 13.01.01-2, Executive and Management Positions
13.1.2.1	RAI NA3 13.01.02-13.01.03-3, Plant Organization regarding Section 17.5
13.1.2.1.1.3	RAI NA3 13.01.01-4, Plant Maintenance Programs
13.1.2.1.2.2, 13.1.2.1.2.3	RAI NA3 13.05.02.01-2, Procedures in FSAR Section 13.5.2
13.1.2.1.5	RAI NA3 09.05.01-12, Fire Brigade Leader Qualifications
Figure 13.1-204	RAI NA3 13.01.01-6, Organizational Arrangement Regarding Nuclear w/ Corporate
13.3	Updated to align with DCD R5.
13.5, 13.5.1, 13.5.2, 13.5.2.1, 13.5.2.1.1, 13.5.2.1.2, 13.5.2.1.3, 13.5.2.1.4, 13.5.2.1.5, 13.5.2.1.6, 13.5.2.1.7, 13.5.2.2.1, 13.5.2.2.2, 13.5.2.2.3, 13.5.2.2.4, 13.5.2.2.5, 13.5.2.2.6, 13.5.2.2.6.2, 13.5.2.2.6.4, 13.5.2.2.6.5, 13.5.2.2.7, 13.5.2.2.8, 13.5.2.2.9, 13.5-5-A, 13.5-5-A, 13.5-6-A	Corrected LMA applicability and delimiter notations. Revised 13.5.2.2.6.5 to reference Section 9.1.5.8. Corrected titles for 13.5-5-A and 13.5-6-A.
13.5.2.1.4	RAI NA3 13.05.02.01-3, P-STGs from GTGs
	RAI NA3 13.05.02.01-4, P-SWG re: EOPs and P-STGs
	Editorial correction.
13.5.2.2.1	RAI NA3 13.05.02.01-1, Management of Radioactive Waste
13.7, 13.7-202	Deleted references to pending revision to 10 CFR 26.

Revision 1 (continued)

Section	Changes
Table 13.4-201	Corrected entries in the Section column.
	Deleted the reference to a construction test program in Item 19.
	Consolidated snubber testing and inspection information into new item 20.
14.2.1.4, 14.2.7, 14.2.9, 14.2.9.1.1, 14.2.9.2.1	Changed supplements from STD to site-specific. Added reference to Initial Test Program implementation milestones. Clarified treatment of startup test procedures. Editorial changes.
14.2.2.1, 14AA	RAI NA3 14.02-3, Initial Test Program Administrative Document
14.2.8.1.36	RAI NA3 14.02-1, Initial Plant Test - Switchyard Components
14.2.9.1.4	RAI NA3 14.02-1, Initial Plant Test - Switchyard Components
14.3.8, 14.3.9, 14.3-1-A	Defined EP-ITAAC. Updated to align with DCD R5 changes.
14AA	RAI NA3 14.02-3, Initial Test Program Administrative Document
14AA.2.2.12	Consolidated multiple Independent Review Body names to FSRC.
	Added alternated Independent Review Body titles.
14AA.3.4	RAI NA3 14.02-7, Subsection 14.AA.3.4 - License Amendment
17.0, 17.2, 17.2.1, 17.3, 17.3.1, 17.4.10, 17.5	Changed supplements from STD to site-specific. Added reference to Operational QA Program implementation milestones.
17.5	Editorial change.
17.6.3	Deleted incorrect cross-referenced sections.
17AA	RAI NA3 17.05-4, QAPD Organization Charts; RAI NA3 17.05-5, Correct CFR Citation to 10 CFR 52.79(a)(27); & RAI 17.05-6, Commitment to RG 1.137
19.5, 19AA	RAI NA3 19-1, PRA and Severe Accident Evaluation (Internal Flooding) & RAI NA3 19-2, PRA and Severe Accident Evaluation (Site-Specific)

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Acronyms/Abbreviations/Initialisms

AC	alternating current
ADG	ancillary diesel generator
AHS	Auxiliary Heat Sink
ALARA	as low as reasonably achievable
API	American Petroleum Institute
ARS	acceleration response spectra
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
BE	best estimate
BOP	Balance of Plant
bpf	blows per foot
BTP	Branch Technical Position
BWR	Boiling Water Reactor
CB	Control Building
CBR	California Bearing Ratio
CBVS	Control Building HVAC System
CEUS SSC	Central and Eastern United States Seismic Source Characterization
CIRC	Circulating Water System
CNO	chief nuclear officer
COL	Combined License
COLA	COL Application
CONAVS	Contaminated Area HVAC Subsystem
CPT	cone penetrometer tests
CRF	Capital Recovery Factor
CRHA	Control Room Habitability Area
CRHAVS	Control Room Habitability Area HVAC Subsystem
CS&TS	Condensate Storage and Transfer System
CSDRS	Certified Seismic Design Response Spectra
CST	Condensate Storage Tank
CU	consolidated-undrained
DBA	design basis accident
DBFL	design basis flooding level
DC	Design Certification
DC	direct current
DCD	Design Control Document
DOT	Department of Transportation
D-RAP	design reliability assurance program
DTPG	defined test plan group
EAB	exclusion area boundary
EC	Energy Conservation
ECL	effluent concentration limit
EFU	Emergency Filter Unit
ENS	Emergency Notification System

Acronyms/Abbreviations/Initialisms

EOF	Emergency Operations Facility
EPC	Engineering, Procurement and Construction
EPRI-SOG	Electric Power Research Institute – Seismic Owners Group
EQD	Equipment Qualification Document
ERDS	Emergency Response Data Systems
ESP	Early Site Permit
ESPA	ESP Application
ETR	energy transfer ratio
FAC	flow accelerated corrosion
FFD	Fitness for Duty
FHA	Fire Hazards Analysis
FIRS	foundation input response spectra
FMG	failure mode group
FOAK	first of a kind
FPE	Fire Pump Enclosure
FPS	Fire Protection System
fps	feet per second
FPS	Fire Protection System
FSRC	Facilities Safety Review Committee
F_{ub}	sliding shear resistance force
FWSC	Firewater Service Complex
FWS	Fire Water Storage Tank
gal	gallon
GDC	General Design Criterion
GDCS	Gravity-Driven Cooling System
GE	General Electric
GEH	GE-Hitachi Nuclear Energy Americas, LLC
GEZIP	Zinc Injection Passivation
GIS	Geographic Information System
GMPE	ground motion prediction equation
GMRS	ground motion response spectra
gpm	gallons per minute
HCLPF	High Confidence, Low Probability of Failure
HFE	Human Factors Engineering
HIC	High Integrity Container
HP	high-pressure
HPM	Human Performance Monitoring
HSI	Human System Interface
HWCS	Hydrogen Water Chemistry System
Hz	Hertz
I&C	instrumentation and control
IBC	International Building Code
ICF	Indirect Cost Factor

Acronyms/Abbreviations/Initialisms

IC/PCCS	Isolation Condenser/Passive Containment Cooling System
ICRP	International Commission on Radiation Protection
ICS	Isolation Condenser System
IE	Inspection and Enforcement (NRC)
ISFSI	independent spent fuel storage installation
ISI	inservice inspection
ISRS	in-structure response spectra
IST	inservice testing
JIT	just in time
JTG	Joint Test Group
ksf	kips per square foot
ksi	kips per square inch
LCCF	Labor Cost Correction Factor
LCO	limiting conditions for operation
LLD	lower limit of detection
LOPP	Loss of Preferred Power
LP	low-pressure
LWMS	Liquid Waste Management System
M	moment magnitude
M&TE	measuring and test equipment
MCR	main control room
MCVP	main condenser vacuum pump
MEI	maximally exposed individual
min	minute
MOV	motor-operated valve
mph	miles per hour
MR	Maintenance Rule
msl	mean sea level
MWC	Maximum Water Conservation
MWe	megawatts electric
MWS	Makeup Water System
NAPS	North Anna Power Station
NDE	nondestructive examination
NEI	Nuclear Energy Institute
NEHRP	National Earthquake Hazard Reduction Program
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NPHS	normal plant heat sink
OATC	Operator-At-The Controls
OBE	Operating Basis Earthquake
ODCM	Offsite Dose Calculation Manual

Acronyms/Abbreviations/Initialisms

ODEC	Old Dominion Electric Cooperative
OHLHS	Overhead Heavy Load Handling Systems
OSC	Operational Support Center
OSHA	Occupational Safety and Health Administration
P&ID	pipng and instrument diagram
PCCS	Passive Containment Cooling System
pcf	pounds per cubic foot
PCP	Process Control Program
PCTMS	Plant Cooling Tower Makeup System
PGP	procedures generation package
PI	plasticity index
PMF	probable maximum flood
PMP	probable maximum precipitation
PMWP	probable maximum winter precipitation
PP	pocket penetrometer
ppm	parts per million
PSHA	probabilistic seismic hazard analysis
P-STG	plant-specific technical guideline
PST	preservice test
PSWS	Plant Service Water System
PWS	Potable Water System
PWSS	Pretreated Water Supply System
QA	quality assurance
QAP	quality assurance program
QAPD	Quality Assurance Program Description
QC	quality control
RB	Reactor Building
RB/FB	Reactor Building/Fuel Building
RB-VS	Reactor Building - Vent Stack
RCCV	Reinforced Concrete Containment Vessel
RCCWS	Reactor Component Cooling Water System
RCS	reactor coolant system
RCTS	resonant column torsional shear
REPAVS	Refueling and Pool Area HVAC Subsystem
RG	Regulatory Guide
RO	reactor operator
RP	radiation protection
RPV	reactor pressure vessel
RQD	rock quality designation
RPT	radiation protection technician
RSW	Reactor Shield Wall
RT	radiography techniques
RTNSS	Regulatory Treatment of Non-Safety Systems

Acronyms/Abbreviations/Initialisms

RTO	Regional Transmission Organization
RW-VS	Radwaste Building
SACTI	Seasonal/Annual Cooling Tower Impact (computer code)
SASW	Spectral Analysis of Surface Waves
SCG	Startup Coordinating Group
SDG	standby diesel generator
SFP	Spent Fuel Pool
SM	silty sand
SRO	senior reactor operator
SRP	Standard Review Plan
SSSI	seismic structure-soil-structure interaction
SOV	solenoid-operated valve
S/P	Suppression Pool
SPT	standard penetration test
SS	site-specific
SSAR	Site Safety Analysis Report (ESPA Part 2)
SSCs	structures, systems, and components
SSE	Safe Shutdown Earthquake
SSI	soil-structure interaction
STA	Shift Technical Advisor
STP	Sewage Treatment Plant
SUNSI	sensitive unclassified non-safeguards information
SWDS	Sanitary Waste Discharge System
SWMB	Storm Water Management Basin
SWR	Service Water Reservoir
SWS	Station Water System
SWV	shear wave velocity
TAC	Total Annual Cost
TB	Turbine Building
TBE	Turbine Building Air Exhaust Subsystem
TBVS	Turbine Building HVAC System
TB-VS	Turbine Building - Vent Stack
TCCWS	Turbine Component Cooling Water System
TEDE	total effective dose equivalent
TGS	Turbine Generator Set
TSC	Technical Support Center
UAT	unit auxiliary transformer
UFL	upper flammability limit
UFSAR	Updated Final Safety Analysis Report
USACE	U.S. Army Corps of Engineers
USCS	Unified Soil Classification System
UHRS	uniform hazard response spectra
UHS	ultimate heat sink

Acronyms/Abbreviations/Initialisms

UT	ultrasonic techniques
V&V	verification and validation
VDH	Virginia Department of Health
V_p	compression wave velocity
V_s	shear wave velocity
VHRA	very high radiation area
WHTF	Waste Heat Treatment Facility
ZNIS	Zinc Injection System

FINAL SAFETY ANALYSIS REPORT

Chapter 1 Introduction and General Description of Plant

1.1 Introduction

This section of the ESBWR Design Control Document (DCD), i.e., the referenced DCD, is incorporated by reference with the following departures and/or supplements.

1.1.1 Format and Content

NAPS SUP 1.1-1

1.1.1.1 10 CFR 52 and Regulatory Guide 1.206

This FSAR was developed to comply with the content requirements of 10 CFR 52.79, and to the extent feasible, the content and format requirements contained in Regulatory Guide (RG) 1.206, “Combined License Applications for Nuclear Power Plants (LWR Edition).” See [Table 1.9-203, Conformance With the FSAR Content Guidance In RG 1.206](#). If the information requested by RG 1.206 is not needed (e.g., because it is already provided in the DCD or is located elsewhere in the FSAR), the table specifies the location of the information.

Section C.III.6 of RG 1.206 addresses referencing a design certification (DC) application rather than a certified design. The existing DC rules (10 CFR 52 appendices) require that a Combined Operating License Application (COLA) that references a certified design include a plant-specific DCD containing the same type of information and using the same organization and numbering as the generic DCD for the ESBWR design, as modified and supplemented by the applicant’s exemptions and departures. Where necessary to present additional information, new sections were added following the logical structure of the ESBWR generic DCD.

1.1.1.2 Standard Review Plan

As required by 10 CFR 52.79(a)(41), an evaluation of the facility for conformance with the acceptance criteria contained in NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants LWR Edition,” in effect six months prior to submittal of the COLA was performed. This evaluation determined that this FSAR contains no unacceptable deviations from the acceptance criteria given in the applicable portions of the SRP. Where necessary, [Table 1.9-201](#),

[Conformance with Standard Review Plan](#), provides a summary of any differences from the SRP acceptance criteria, along with a justification for an exception to a criterion or a Branch Technical Position (BTP); or the table identifies the applicable FSAR section(s) that addresses a difference.

1.1.1.3 **Tables and Figures**

Tabulations of data are designated “tables.” Each is identified by the section number followed by a number (for example, Table 1.9-204 would be an FSAR table in Section 1.9.) The use of the “200” series for FSAR table numbers distinguishes FSAR tables from DCD tables. If a table from the DCD is referenced in the FSAR text, it is denoted as such, for example “DCD Table 4.1-1.” If a table from the DCD or Early Site Permit Application (ESPA) was revised for use in the FSAR, the original DCD or ESPA table number is appended with an “R;” for example, if “DCD Table 4.2-1” was revised, it would have become “Table 4.2-1R.” Tables are located at the end of the section immediately following the text.

Drawings, pictures, sketches, curves, graphs, and engineering diagrams identified as “figures” are numbered using the section number followed by a number (for example, Figure 2.1-201 would be an FSAR figure in Section 2.1). The use of the “200” series for FSAR figure numbers distinguishes FSAR figures from DCD or ESPA figures. If a figure from the DCD or ESPA is referenced in the FSAR text, it is denoted as such; for example “DCD Figure 4.1-1.” If a figure from the DCD or ESPA was revised for use in the FSAR, the original DCD or ESPA figure number was appended with an “R;” for example, if “DCD Figure 4.2-1” was revised, it would have become “Figure 4.2-1R.” Figures are located at the end of the applicable section following the tables.

1.1.1.4 **Numbering of Pages**

Text pages are numbered sequentially within each chapter (for example, Page 1-4 is the fourth page of Chapter 1).

1.1.1.5 **Proprietary and Security-Related Sensitive Unclassified Non-Safeguards Information (SUNSI)**

Proprietary information and SUNSI¹ is withheld from public disclosure and therefore not included in the public version of the FSAR. SUNSI included in the non-public version of the FSAR is appropriately indicated.

1.1.1.6 **Acronyms**

In addition to the summary list of acronyms in the FSAR frontmatter, acronyms are defined at their first occurrence in FSAR text.

1.1.1.7 **Incorporation by Reference**

10 CFR 52.79 states in part that, “The final safety analysis report need not contain information or analyses submitted to the Commission in connection with the design certification, provided, however, that the final safety analysis report must either include or incorporate by reference the standard design certification final safety analysis report and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site characteristics fall within the site parameters specified in the design certification.” Therefore, because this COLA references the ESBWR DC application, this FSAR incorporates the ESBWR DCD by reference, with the departures presented in [COLA Part 7](#), and with supplemental information, as appropriate (see [Section 1.1.1.10](#)). References in this FSAR to the DCD should be understood to mean the ESBWR DCD, Tier 2, submitted by GE-Hitachi Nuclear Energy Americas LLC (GEH), as Revision 10. |

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1. Any information which, if lost, misused, modified, or accessed without authorization, can reasonably be foreseen as causing harm to the public interest, the commercial or financial interest of the entity or individual to whom the information pertains, the conduct of NRC and Federal programs, or the personal privacy of individuals. SUNSI has been organized into the following seven groups:
 - Allegation information
 - Investigation information
 - Security-related information
 - Proprietary information
 - Privacy Act information
 - Federal, State, Foreign Government, and international agency information
 - Sensitive internal information

1.1.1.8 **Departures from the Standard Design Certification (or Application)**

A departure is a plant-specific “deviation” from design information in a standard DC rule or, consistent with Section C.III.6 of RG 1.206, from design information in a DC application.

10 CFR 52 clarifies that Tier 2 information in a standard DC rule does not include conceptual design information (CDI) and per Section C.III.6 of RG 1.206, Tier 2 information in a standard DC application does not include CDI. Therefore, replacement or revision of CDI does not constitute a departure. Additionally, information addressing combined license (COL) information/holder items and supplemental information (see [Section 1.1.1.10](#)) that does not change the intent or meaning of the ESBWR DCD text is not considered a departure from the ESBWR DCD.

NAPS SUP 1.1-2

1.1.1.9 **Referencing of ESPA Information**

As with the DCD, the FSAR incorporates by reference the North Anna ESPA SSAR, Revision 9, with certain variances and/or supplements (see [Section 1.1.1.10](#)). A variance is a plant-specific deviation from one or more of the site characteristics, design parameters, or terms and conditions of an ESP or from the SSAR. A variance to an ESP is analogous to a departure from a standard DC.

[SSAR Chapter 1](#) is incorporated by reference for historical purposes as an appendix to this chapter.

1.1.1.10 **Supplements**

Supplements fall into one of the following categories (see [Table 1.1-201](#) for definitions of categories unless noted otherwise):

- COL Item
- Conceptual Design Information
- ESP COL Action Item
- ESP Permit Condition
- ESPA SSAR Correction
- Supplemental Information (see definition below)

Supplemental information is FSAR information that includes information not related to COL Items, departures, variances, conceptual design, ESPA corrections, or permit conditions (see [Table 1.1-201](#) for definition of terms); or is information to demonstrate that the design of the facility falls

within the site characteristics and design parameters specified in the DCD.

1.1.1.11 **Left Margin Annotations**

FSAR sections are annotated in the left margin with information that identifies: 1) the reason the information is being provided and, as applicable, 2) whether the information is standard (identical) for any ESBWR application, or specific to the COLA for a particular plant.

The annotations and their definitions are listed in [Table 1.1-201](#).

1.1.1.12 **Tense**

Because this FSAR is a licensing basis document that will control plant design and operations after the COL is issued, the FSAR is generally written in the present tense. Thus, plant design and configuration are described in the present tense although the plant is not yet built. Similarly, programs, procedures, and organizational matters are generally described in the present tense although such descriptions may not yet be implemented. Accordingly, the use of the present tense in this FSAR should be understood as describing the plant, programs and procedures, and organization as they will exist when in place, and not as a representation that they are already in place.

1.1.2 **General Description**

1.1.2.1 **ESBWR Standard Plant Scope**

Replace the last sentence with the following.

NAPS CDI

The orientation of the principal plant structures for Unit 3 is shown in [Figure 2.1-201](#).

Add the following at the end of this section.

NAPS SUP 1.1-2

The ESBWR standard plant scope is discussed in [DCD Section 1.1.2.1](#). In addition to the buildings and structures within the scope of the ESBWR standard plant, the plant includes an intake structure for plant makeup water, normal power heat sink and auxiliary heat sink cooling towers, a sewage treatment plant, water treatment facilities, storage tanks for water and fuel oil, a switchyard and other site support systems and structures necessary to support the operation and maintenance of the facility.

1.1.2.2 Type of License Request

Add the following at the end of this section.

NAPS SUP 1.1-3

Virginia Electric and Power Company (Dominion) is the applicant for a combined construction permit and operating license (COL) under Section 103 of the Atomic Energy Act, for the third nuclear power plant to be located on the existing North Anna Power Station (NAPS) site in Louisa County, Virginia. This COLA references a DC application for an ESBWR (consistent with Section C.III.6 of RG 1.206) and the Early Site Permit (ESP) for the NAPS site. The third unit is designated North Anna Unit 3 (Unit 3).

1.1.2.4 Description of Location

Add the following at the end of this section.

NAPS SUP 1.1-4

[SSAR Section 2.1.1.1](#) is incorporated by reference with no departures or supplements.

1.1.2.7 Rated Core Thermal Power

Replace the last four sentences of this section with the following.

NAPS COL 1.1-1-A

Unit 3 operates at an estimated gross electrical power output at rated power of approximately 1594 MWe (as shown in [DCD Section 10.1](#)). The estimated net electrical power output, which is dependent on site ambient conditions, the normal plant heat sink (NPHS) operation controls, and station electrical loads, is between approximately 1468 MWe and 1523 MWe.

NAPS SUP 1.1-5

1.1.2.8 Schedule

Key milestones associated with the estimated schedule for the completion of construction and the beginning of commercial operation are as follows.

Milestone	Estimated Schedule Date
Potential Safety-Related Construction Start	2019
Fuel Load	2023
Commercial Operation	2024

1.1.3 COL Unit-Specific Information

1.1-1-A Establish Rated Electrical Output

NAPS COL 1.1-1-A

This COL Item is addressed in [Section 1.1.2.7](#).

NAPS SUP 1.1-1

Table 1.1-201 Left Margin Annotations

FSAR		
Component	Margin Annotation	Definition and Use
Standard Departure	STD DEP X.Y.Z -#	FSAR information that departs from the generic DCD and is common for all parallel applicants; i.e., the departure and discussion of the departure are identical for all applicants of the ESBWR technology. Each Standard Departure is numbered based on the applicable section down to the X.Y.Z level, e.g.: STD DEP 9.2-1, or STD DEP 9.2.1-1.
Plant-Specific Departure	(PLANT) DEP X.Y.Z-#	FSAR information that departs from the generic DCD and is plant-specific; i.e., the departure and discussion of the departure are not identical for all applicants of the ESBWR technology. Each Plant-Specific Departure is numbered based on the applicable section down to the X.Y.Z level, e.g.: NAPS DEP 9.2-1, or NAPS DEP 9.2.1-1.
Standard COL Item	STD COL X.Y-#-A	FSAR information that addresses a DCD COL Item that is common for all parallel applicants; i.e., the response to and discussion of the DCD COL Item are identical for all applicants of the ESBWR technology. Each Standard COL Item is numbered as identified in ESBWR DCD Table 1.10-1 . The -A refers to a COL Applicant item.
Consistent with R-COLA COL Item	CWR COL X.Y-#-A	FSAR information that addresses a DCD COL Item and is similar to information presented in the R-COLA for the same DCD COL Item. Each CWR COL Item is numbered as identified in the ESBWR DCD (see STD COL above).
Plant-Specific COL Item	(PLANT) COL X.Y-#-A	FSAR information that addresses a DCD COL Item that is plant-specific; i.e., the response to the COL Item is not a Standard COL Item for parallel applicants. Each Plant-Specific COL Item is numbered as identified in the ESBWR DCD (see STD COL above).

NAPS SUP 1.1-1

Table 1.1-201 Left Margin Annotations

FSAR		
Component	Margin Annotation	Definition and Use
Standard Conceptual Design Information	STD CDI	A Conceptual Design Information designation is used to identify FSAR information that replaces Conceptual Design Information in the DCD, in whole or in part. Replacement and supplemental Conceptual Design Information is generally plant-specific; however, for conceptual design that is generic for all applications the annotation for standard (STD) is used, STD CDI.
Plant Specific Conceptual Design Information	(PLANT) CDI	A Conceptual Design Information designation is used to identify FSAR information that replaces Conceptual Design Information in the DCD, in whole or in part. Plant specific replacement and supplemental Conceptual Design Information uses the annotation (PLANT) CDI, e.g., NAPS CDI.
Standard Supplemental Information	STD SUP X.Y-#	Supplemental FSAR information that is identical for all parallel applicants; i.e., the supplemental information is identical for all applicants of the ESBWR technology. Each Standard Supplemental Information designation is numbered based on applicable section down to the X.Y level, e.g., STD SUP 10.4-1.
Consistent with R-COLA Supplemental Information	CWR SUP X.Y-#	Supplemental FSAR information that is similar to Supplemental Information in the R-COLA. Each CWR Supplemental Information designation is numbered based on the applicable section down to the X.Y level, e.g., CWR SUP 10.4-1.
Plant-Specific Supplemental Information	(PLANT) SUP X.Y-#	Supplemental FSAR information that is plant-specific (not standard or CWR). Each Plant Specific Supplemental Information designation is numbered based on applicable section down to the X.Y level, e.g., NAPS SUP 10.4-1.

NAPS SUP 1.1-1

Table 1.1-201 Left Margin Annotations

FSAR		
Component	Margin Annotation	Definition and Use
ESP COL Item	(PLANT) ESP COL X.Y-#	ESP COL Action items identify matters that an applicant for a construction permit or operating license addresses in a COLA. An ESP COL Item designation is used to identify FSAR information that addresses an ESP COL Action Item. Responses to all ESP COL Action Items are assumed to be plant-specific. An ESP COL Action Item is numbered as identified in the applicable ESP; e.g., NAPS ESP COL 2.4-2.
ESP Permit Condition	(PLANT) ESP PC #	ESP Permit Conditions are requirements to take certain actions as specified in that permit. An ESP Permit Condition designation is used to identify FSAR information that addresses an ESP Permit Condition. Responses to all ESP Permit Conditions are assumed to be plant-specific. An ESP Permit Condition is numbered as identified in the applicable ESP; e.g., NAPS ESP PC 3.E(1).
ESP Variance	(PLANT) ESP VAR X.Y.Z-#	A request for an ESP Variance is a request for deviation from one or more site characteristics, design parameters, or terms and conditions of the ESP; or from the SSAR. Each ESP Variance is numbered based on the applicable section down to the X.Y.Z level, e.g., NAPS ESP VAR 2.4-1.
Early Site Permit Safety Analysis Report Corrections	ESP COR	Corrections to the information provided in the ESP safety analysis report in order to ensure that the information is complete and accurate for FSAR.

1.2 General Plant Description

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.2.2.10.2 Solid Waste Management System

NAPS DEP 11.4-1

Replace the first sentence of the seventh paragraph with the following.

The Radwaste Building is configured to accommodate at least 10 years of packaged Class B and C waste and approximately three months (up to three shipments) of packaged Class A waste considering routine operations and anticipated operational occurrences.

1.2.2.11.4 Main Turbine

Delete the second sentence of the first paragraph and replace the first sentence of the first paragraph with the following.

STD CDI

The main turbine has one high-pressure (HP) turbine and three low-pressure (LP) turbines.

1.2.2.11.7 Main Condenser

Delete the second sentence of the third paragraph and replace the first sentence of the third paragraph with the following.

STD CDI

The main condenser is a multi-pressure, triple-shell unit.

1.2.2.12.7 Plant Service Water System

Delete the last sentence of the first paragraph; delete the second and third sentences of the second paragraph; and revise the first sentence of the second paragraph as follows.

NAPS CDI

The PSWS mechanical draft plume abated cooling towers are used to reject the heat removed from Reactor Component Cooling Water System (RCCWS) and Turbine Component Cooling Water System (TCCWS).

1.2.2.12.13 Hydrogen Water Chemistry System

Replace this section with the following.

STD CDI

The Hydrogen Water Chemistry System (HWCS) consists of hydrogen and oxygen supply systems to inject hydrogen in the feedwater and oxygen in the offgas, plus monitoring systems to track the effectiveness of the system.

1.2.2.12.15 Zinc Injection System

Replace this section with the following.

NAPS CDI

The Zinc Injection System is utilized and injects depleted zinc oxide into the reactor feedwater during power operations as required.

1.2.2.12.16 Freeze Protection

Replace this section with the following.

STD CDI

Freeze protection is incorporated at the individual system level using insulation and heat tracing for all external tanks and piping that may freeze during winter weather.

1.2.2.16.9 Radwaste Building

NAPS DEP 11.4-1

Replace “[Figures 1.2-21](#) through [1.2-25](#)” with “[Figures 1.2-21R](#) through [1.2-25R](#)” in the parenthesis in the first sentence.

1.2.2.16.10 Other Building Structures

Replace the fifth paragraph with the following.

NAPS CDI

Other facilities include the Service Building, Water Treatment Building, Administration Building, Training Center, Sewage Treatment Plant, and hot machine shop. These are all of conventional size and design, and in some cases may be shared with other units at the same site.

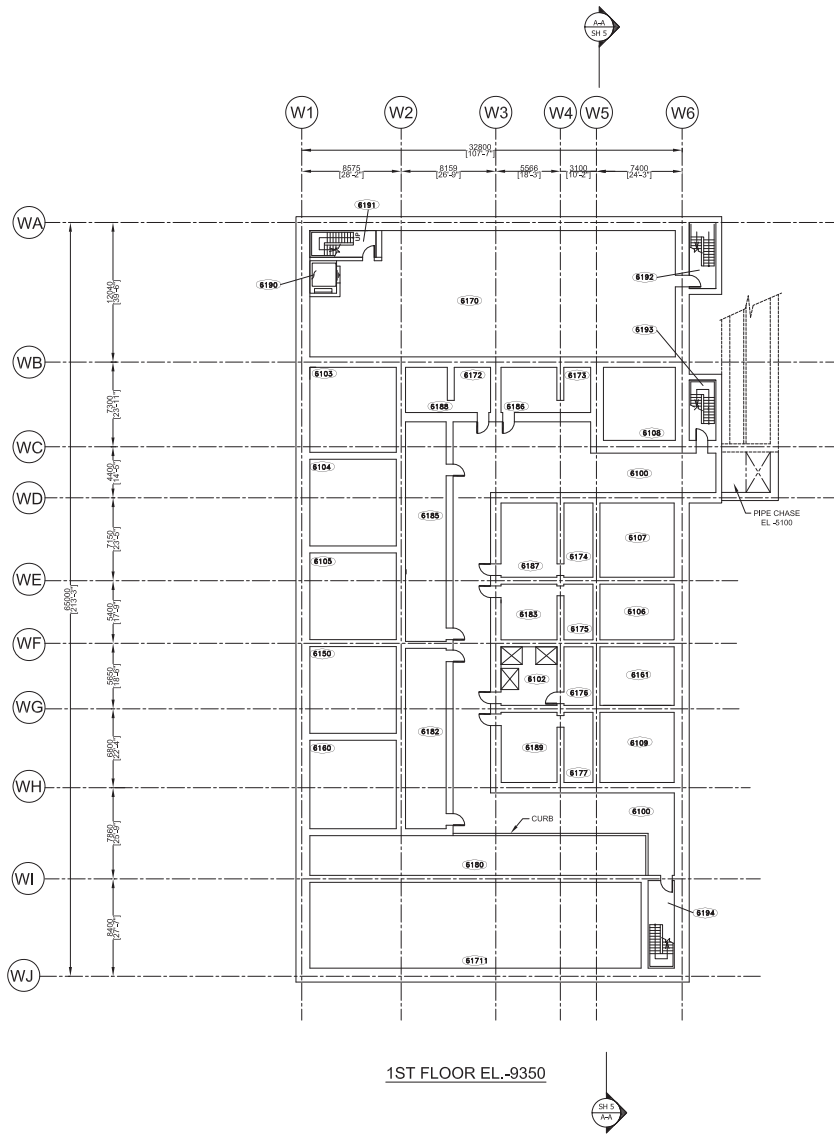
STD SUP 1.2-1

1.2.2.19 Modular Construction Techniques and Plans

To the extent practical, modular construction techniques that have been applied during ABWR construction projects will be adapted and/or modified for use during ESBWR construction. Modularization reviews will be performed to develop a plan for bringing the ABWR experience into

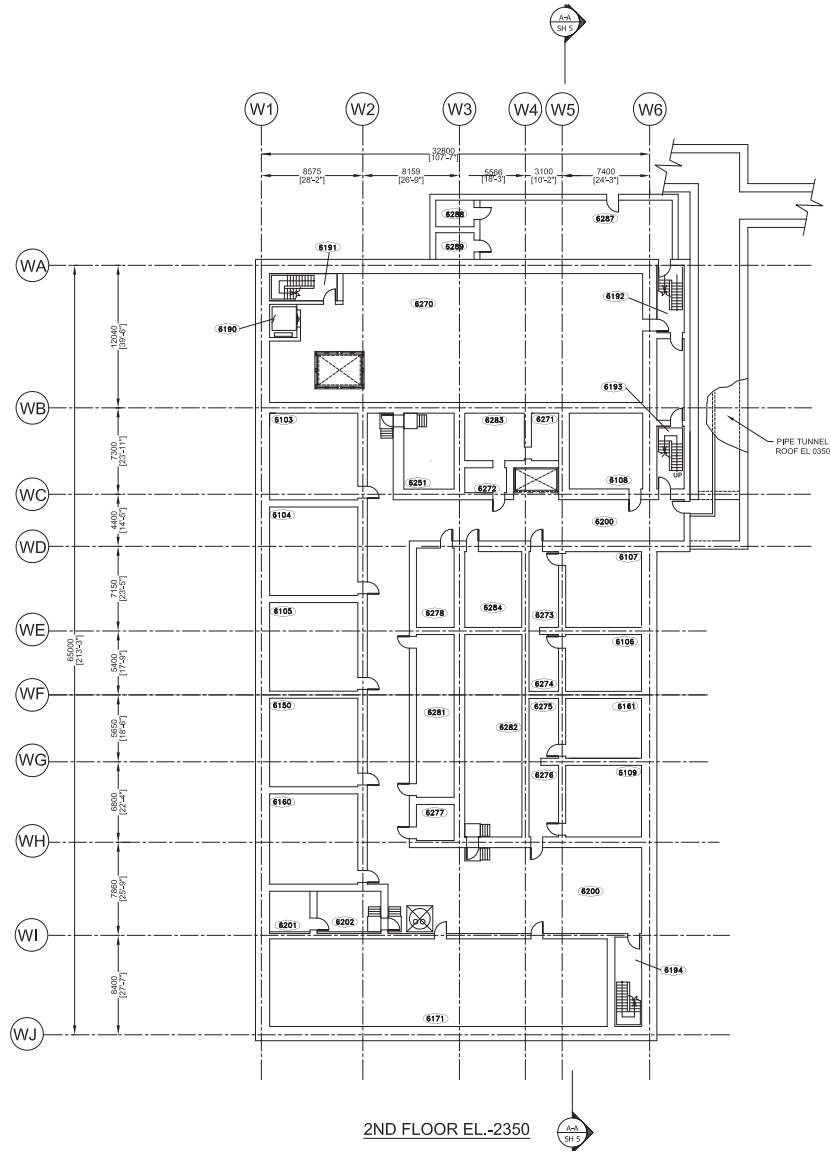
the ESBWR. Once completed, the results of the modularization reviews will be used as guidance to develop the detailed design of the areas affected by modularization.

Figure 1.2-21R Radwaste Building Plan at Elevation -9350



ROOM IDENTIFICATION LIST	
ROOM	DESCRIPTION
6100	CORRIDOR
6102	HIGH, LOW AND DETERGENT SLUMP ROOM
6103	EQUIPMENT DRAIN COLLECTION TANK ROOM A
6104	EQUIPMENT DRAIN COLLECTION TANK ROOM B
6105	EQUIPMENT DRAIN COLLECTION TANK ROOM C
6106	LOW ACTIVITY RESIN HOLDUP TANK ROOM
6107	CONDENSATE RESIN HOLDUP TANK ROOM
6108	HIGH ACTIVITY RESIN HOLDUP TANK ROOM
6109	CONCENTRATED WASTE TANK ROOM
6150	FLOOR DRAIN COLLECTION TANK ROOM A
6160	FLOOR DRAIN COLLECTION TANK ROOM B
6161	LOW ACTIVITY PHASE SEPARATOR ROOM
6170	ELECTRICAL EQUIPMENT ROOM
6171	FLOOR & EQUIPMENT DRAIN SAMPLE TANK ROOM
6172	HIGH ACTIVITY DECONTAMINATION VALVE GALLERY
6173	HIGH ACTIVITY RESIN HOLDUP TANK VALVE GALLERY
6174	CONDENSATE RESIN HOLDUP TANK VALVE GALLERY
6175	LOW ACTIVITY RESIN HOLDUP TANK VALVE GALLERY
6176	LOW ACTIVITY PHASE SEPARATOR VALVE GALLERY
6177	CONCENTRATED WASTE TANK VALVE GALLERY
6180	FLOOR AND EQUIPMENT DRAIN SAMPLE PUMP AREA
6182	FLOOR DRAIN COLLECTION PUMP ROOM
6183	LOW ACTIVITY CIRCULATION PUMP ROOM
6185	EQUIPMENT DRAIN COLLECTION PUMP ROOM
6186	HIGH ACTIVITY CIRCULATION PUMP ROOM
6187	LOW ACTIVITY DECONTAMINATION PUMP ROOM
6188	HIGH ACTIVITY DECONTAMINATION PUMP ROOM
6189	CONCENTRATED WASTE PUMP ROOM
6190	ELEVATOR
6191	STARWELL A
6192	STARWELL B
6193	STARWELL C
6194	STARWELL D

Figure 1.2-22R Radwaste Building Plan at Elevation -2350



ROOM IDENTIFICATION LIST	
ROOM	DESCRIPTION
6103	EQUIPMENT DRAIN COLLECTION TANK ROOM A
6104	EQUIPMENT DRAIN COLLECTION TANK ROOM B
6105	EQUIPMENT DRAIN COLLECTION TANK ROOM C
6106	LOW ACTIVITY RESIN HOLDUP TANK ROOM
6107	CONDENSATE RESIN HOLDUP TANK ROOM
6108	HIGH ACTIVITY RESIN HOLDUP TANK ROOM
6109	CONCENTRATED WASTE TANK ROOM
6150	FLOOR DRAIN COLLECTION TANK ROOM A
6160	FLOOR DRAIN COLLECTION TANK ROOM B
6161	LOW ACTIVITY PHASE SEPARATOR ROOM
6171	FLOOR & EQUIPMENT DRAIN SAMPLE TANK ROOM
6190	ELEVATOR
6191	STAIRWELL A
6192	STAIRWELL B
6193	STAIRWELL C
6194	STAIRWELL D
6200	CORRIDOR
6201	CHEMICAL DRAIN COLLECTION TANK ROOM
6202	CHEMICAL DRAIN COLLECTION PUMP ROOM
6251	HIGH ACTIVITY PHASE SEPARATOR ROOM
6270	CONTROL ROOM
6271	HIGH ACTIVITY RESIN HOLDUP TANK VALVE GALLERY
6272	HIGH ACTIVITY PHASE SEPARATOR VALVE GALLERY
6273	CONDENSATE RESIN HOLDUP TANK VALVE GALLERY
6274	LOW ACTIVITY RESIN HOLDUP TANK VALVE GALLERY
6275	LOW ACTIVITY PHASE SEPARATOR VALVE GALLERY
6276	CONCENTRATED WASTE TANK VALVE GALLERY
6277	FLOOR DRAIN COLLECTION & CHEMICAL DRAIN TANKS VALVE GALLERY
6278	EQUIPMENT DRAIN COLLECTION TANK VALVE GALLERY
6281	DETERGENT DRAIN COLLECTION AND SAMPLE PUMP ROOM
6282	DETERGENT DRAIN COLLECTION & SAMPLE TANK ROOM
6283	HIGH ACTIVITY TRANSFER PUMPS ROOM
6284	LOW ACTIVITY TRANSFER PUMPS ROOM
6287	FOYER
6288	TOILET
6289	LOCKER ROOM

Figure 1.2-23R Radwaste Building Plan at Elevation 4650

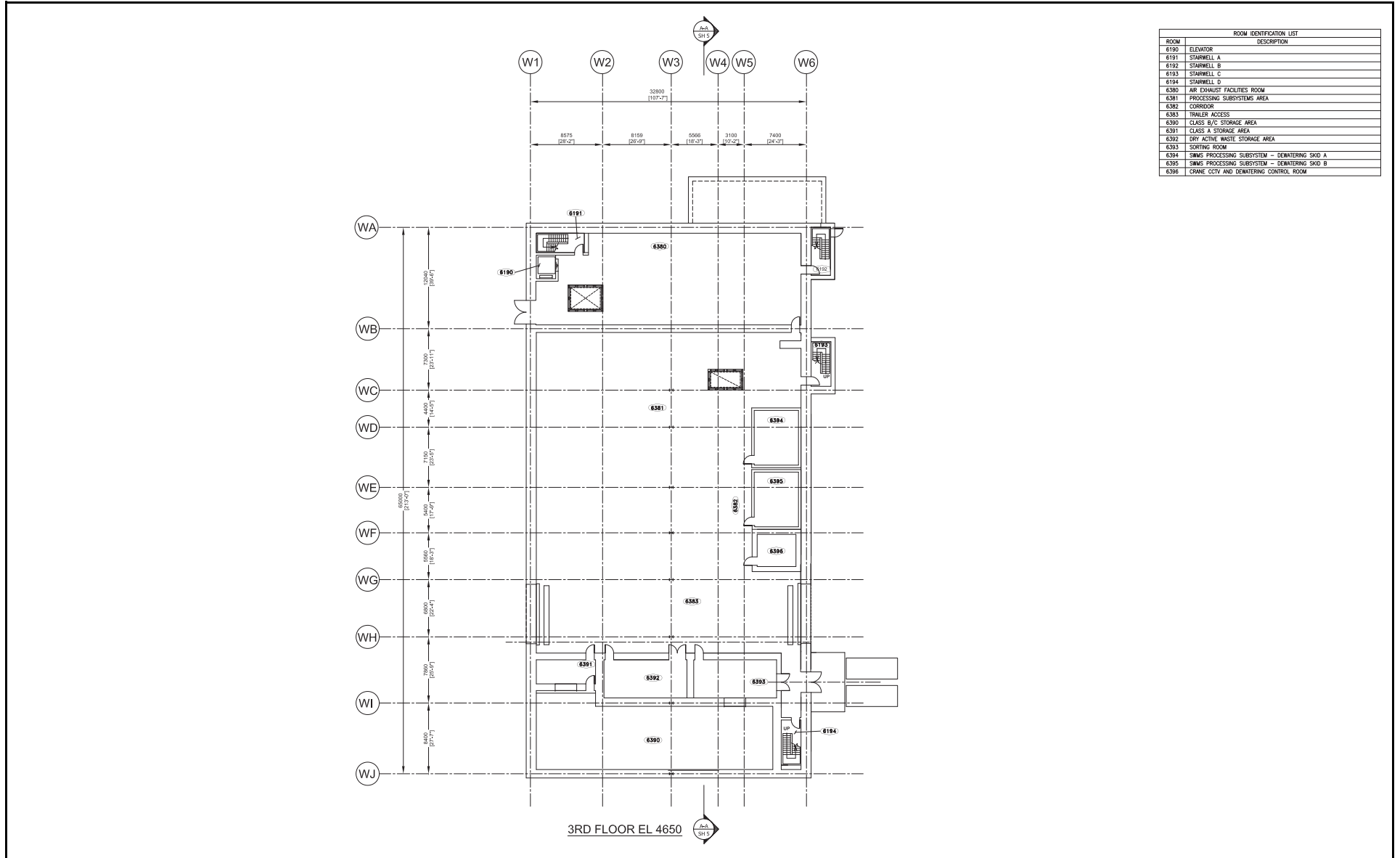


Figure 1.2-24R Radwaste Building Plan at Elevation 10650

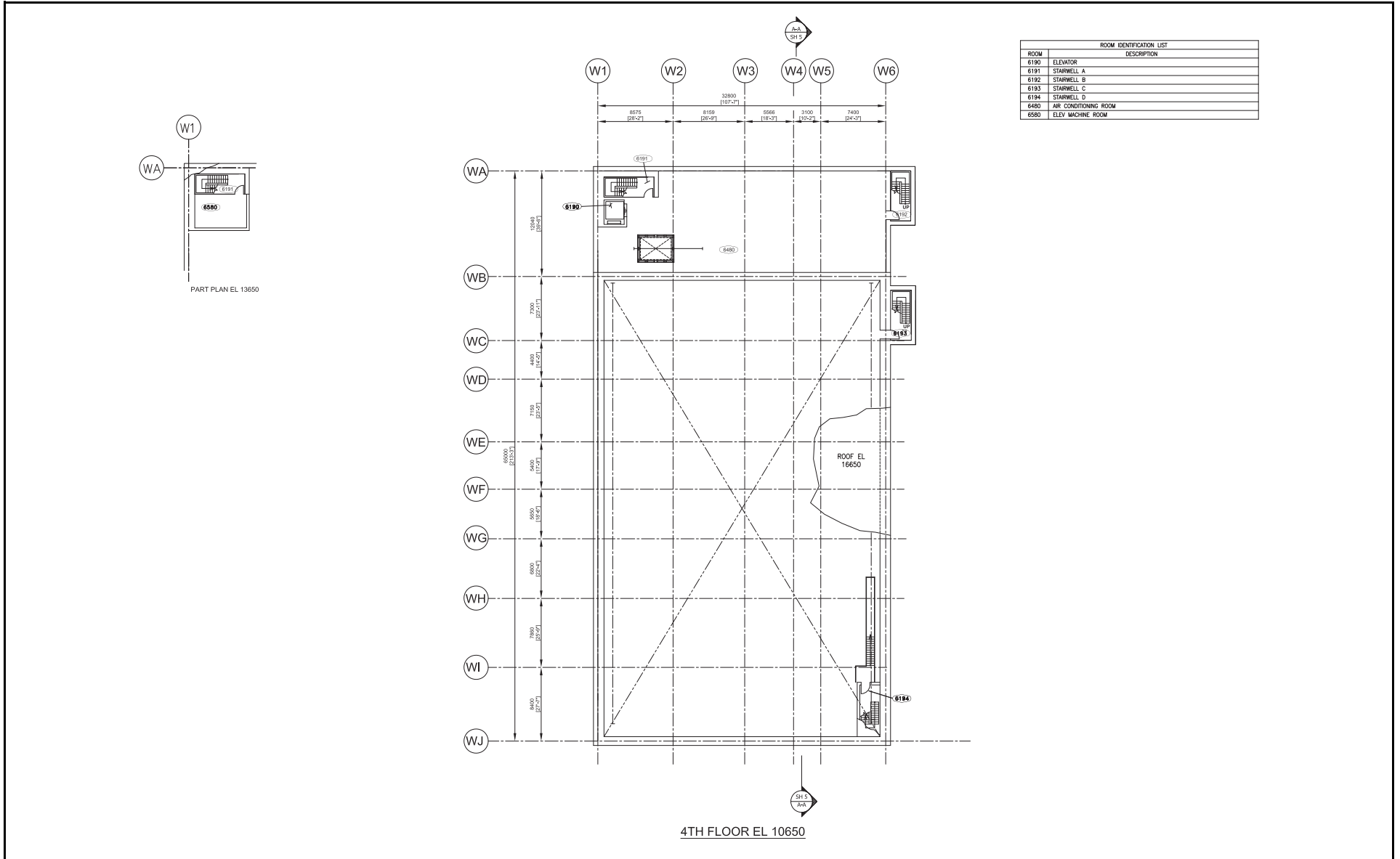
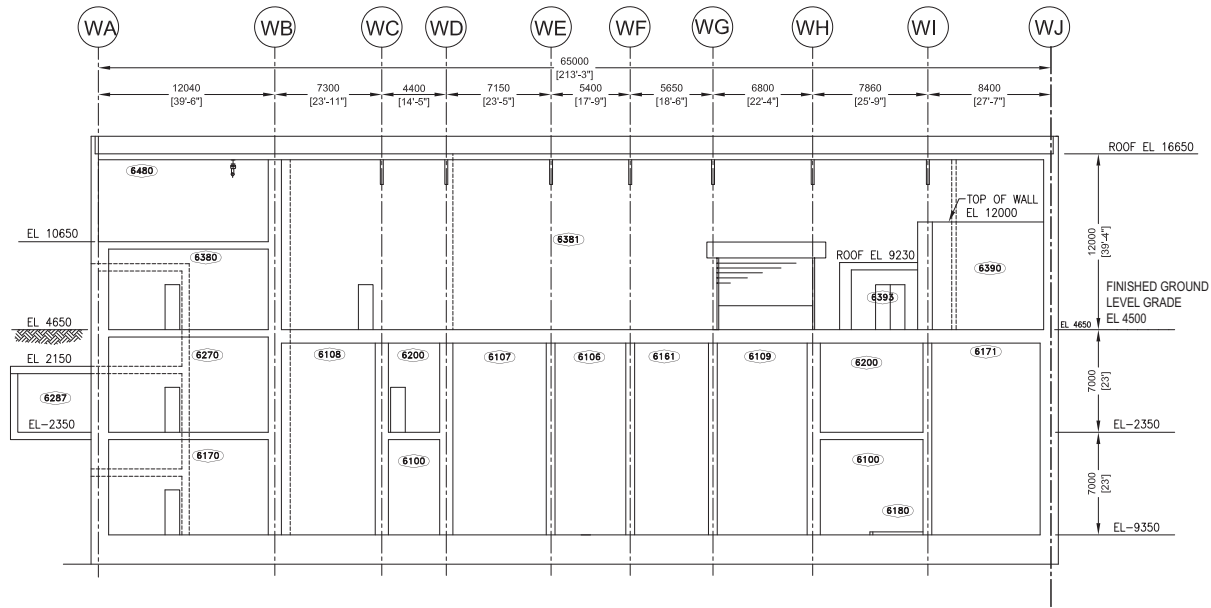


Figure 1.2-25R Radwaste Building Elevation Section A-A

ROOM IDENTIFICATION LIST	
ROOM	DESCRIPTION
6100	CORRIDOR
6106	LOW ACTIVITY RESIN HOLDUP TANK ROOM
6107	CONDENSATE RESIN HOLDUP TANK ROOM
6108	HIGH ACTIVITY RESIN HOLDUP TANK ROOM
6109	CONCENTRATED WASTE TANK ROOM
6161	LOW ACTIVITY PHASE SEPARATOR ROOM
6170	ELECTRICAL EQUIPMENT ROOM
6171	FLOOR AND EQUIPMENT DRAIN SAMPLE TANK ROOM
6180	FLOOR AND EQUIPMENT DRAIN SAMPLE PUMP AREA
6200	CORRIDOR
6270	CONTROL ROOM
6287	FOYER WITH PERSONNEL CONTAMINATION MONITORS
6380	AIR EXHAUST FACILITIES ROOM
6381	PROCESSING SUBSYSTEMS AREA
6390	CLASS B/C STORAGE AREA
6393	SORTING ROOM
6480	AIR CONDITIONING ROOM



SECTION A-A

1.3 Comparison Tables

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Replace the fourth bullet of the first paragraph of this section with the following.

NAPS DEP 3.7-1

- Structural Design Characteristics, listed in [Table 1.3-4R](#).

Add the following at the end of this section.

NAPS COL 1.3-1-A

There are no updates to [DCD Table 1.3-1](#) based on unit-specific information.

1.3.1 COL Information

1.3-1-A Update Table 1.3-1

NAPS COL 1.3-1-A

This COL item is addressed in [Section 1.3](#).

Table 1.3-4R Comparison of Structural Design Characteristics

Component	Units	ESBWR	ABWR
Reactor Building (Chapter 3)			
Type		Low Leakage	Controlled Leakage
Lower-Level Construction		Reinforced Concrete	Reinforced Concrete
Upper-Level Construction		Reinforced Concrete	Reinforced Concrete
Roof		Reinforced Concrete	Reinforced Concrete
Design in-leakage rate	% free volume/day	50	50 (at 0.25 in H ₂ O)
Seismic Design (Section 3.7)			
Safe Shutdown Earthquake	horizontal g vertical g	(1)	0.30 0.30
Wind Design (DCD Subsection 3.3.2)			
Tornado translational	km/hr (mi/hr)	113 (70)	97 (60)
Tornado rotational	km/hr (mi/hr)	531 (330)	483 (300)

Note for ~~Table 1.3-4~~ Table 1.3-4R:

(1) See ~~Figures 2.0-1 and 2.0-2~~ Section 3.7.1.

1.4 Identification of Agents and Contractors

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.4.3 Unit 3 Agents and Contractors

NAPS SUP 1.4-1

1.4.3.1 Dominion

Dominion is the applicant for the COL, and Dominion will be the licensee authorized to construct and operate Unit 3. Dominion is therefore responsible for making each of the key project decisions, including the ultimate decision on whether to build a new nuclear power plant, and would be the plant operator.

Dominion has selected GE-Hitachi Nuclear Energy Americas, LLC (GEH) as its primary contractor for the design of the unit, and Fluor Corporation (Fluor) as the primary contractor for site engineering. Dominion has responsibility for the operation of the unit. The following sections provide information on the experience and qualifications of the aforementioned agents and contractors as well as the division of responsibility between Dominion and its agents and contractors.

1.4.3.2 GE-Hitachi Nuclear Energy Americas, LLC (GEH)

GEH is responsible for developing the complete standard plant for the ESBWR necessary to obtain a DC from the NRC, supporting preparation of the COL application, and activities to support deployment of the ESBWR on the North Anna site. GEH, established in June 2007, is a business alliance of GE and Hitachi's respective nuclear businesses, established to serve the global nuclear industry.

[DCD Table 1.4-1](#) lists the commercial nuclear reactors that were completed by GE or are under construction by GEH. For 50 years, GE provided advanced technology for nuclear energy. GE developed breakthrough light water technology in the mid-1950s: the Boiling Water Reactor (BWR). Since then, GE developed nine evolutions of BWR technology, including the first operational advanced light water design in the world, the ABWR, and culminating in its latest generation of design, the ESBWR. All of GE's nuclear technology has been transferred to GEH. Various subcontractors are supporting GEH.

1.4.3.3 **Fluor Corporation**

Fluor will construct the power block, including the nuclear island and turbine island, and the balance of plant and yard facilities. This construction scope includes erection and delivery of the Reactor Building/Fuel Building, Control Building, Hot Machine Shop, Radwaste Building, Turbine Building, and Electrical Building, as well as, the contents of each building. Fluor will also provide design engineering and procurement for the turbine island and balance of plant and yard facilities and will procure bulk commodities for the project. Fluor's scope of work also includes pre-operational testing of all areas and assisting the owner, as requested, with commissioning and startup activities.

Fluor is one of the world's largest publicly traded engineering, procurement, construction, maintenance (EPCM), and project management companies. Fluor has a global workforce of approximately 41,000 employees and maintains a network of offices in more than 30 countries across six continents. For the past 60 years, Fluor has provided EPCM services to the nuclear industry. During the 1970s and 1980s in the U.S., Fluor designed three nuclear power plants, constructed ten nuclear power plants, and supported construction on another ten nuclear units. In the 1990s, Fluor expanded its services at many of the operating commercial nuclear plants in the United States by providing major capital modification and maintenance services with more than 90 million hours worked.

1.4.3.4 **Bechtel Power Corporation**

Bechtel is the Owner's Engineer and is responsible for engineering and licensing support, as requested by the owner.

Founded in 1898, Bechtel is one of the world's premier engineering, construction, and project management companies. Privately owned with headquarters in San Francisco, Bechtel has 40 offices around the world and 40,000 employees. Bechtel has a history of supporting the nuclear power industry, beginning with the construction in 1950 of the EBR-1 reactor. Since then, Bechtel has constructed more than 60 GWe of nuclear power capacity worldwide. Various subcontractors are supporting Bechtel.

1.4.3.5 **Other Contractors**

In addition to the major contractors listed above, contractual relationships were established with several specialized consultants to assist in

developing the COLA. Other subcontractors may be added as the need arises.

1.4.3.5.1 Tetra Tech NUS, Inc.

Tetra Tech NUS, Inc. conducted new and significant information reviews for the Environmental Report and prepared several sections of the Environmental Report, including the ecological description of the site and vicinity, environmental impacts of construction, and plant cooling system impacts on terrestrial and aquatic ecosystems. Tetra Tech NUS, Inc. also provided general National Environmental Policy Act (NEPA) consultation.

1.4.3.5.2 MACTEC Engineering and Consulting, Inc.

MACTEC Engineering and Consulting, Inc. performed geotechnical field investigations and laboratory testing in support of [Chapter 2](#). That effort included performing standard penetration tests; obtaining core samples and rock cores; performing cone penetrometer tests, cross-hole seismic tests, and laboratory tests of soil and rock samples; installing ground water observation wells; and preparing data reports.

1.4.3.5.3 Lettis Consultants International, Inc.

Lettis Consultants International, Inc. performed probabilistic seismic hazard assessments and related analyses in support of [Chapter 2](#).

1.5 Requirements for Further Technical Information

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.5.1 Evolutionary Design

Add the following at the end of this section.

CWR SUP 1.5-1

1.5.1.1 Post-Fukushima Near-Term Task Force Recommendations

Following the March 11, 2011, Great Tohoku Earthquake and subsequent tsunami at the Fukushima Dai-ichi nuclear power plant, the NRC issued Orders to licensees for implementing recommendations of the Near-Term Task Force Report ([Reference 1.5-201](#)). The following subsections describe how the recommendations applicable to the ESBWR are addressed for Unit 3.

1.5.1.1.1 Recommendation 4.2, Mitigating Strategies for Beyond-Design-Basis External Events

Following the March 2011 events in Japan at the Fukushima Dai-ichi nuclear power plant, the NRC issued to licensees Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" ([Reference 1.5-202](#)). This Order was for implementing Recommendation 4.2 of the NRC Near-Term Task Force Report ([Reference 1.5-201](#)). Order EA-12-049 specifies a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core, containment, and Spent Fuel Pool (SFP) cooling capabilities. The transition phase requires providing sufficient, portable, on-site equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient off-site resources to sustain those functions indefinitely. Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" ([Reference 1.5-203](#)), endorses, with clarifications, the methodologies described in Nuclear Energy Institute (NEI) 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," ([Reference 1.5-204](#)). Although the guidance

does not specifically address the ESBWR design, which employs passive design features, this subsection describes how ESBWR design features for beyond-design-basis external events meet the intent of the guidance.

For the ESBWR, the underlying strategies for coping with extended loss of AC power events involve a three-phase approach as follows:

- I. Initial Phase: Initial coping is implemented through installed plant equipment, without any AC power or makeup to the ultimate heat sink (i.e., safety-related Isolation Condenser System (ICS) and Passive Containment Cooling System (PCCS) pools or Gravity-Driven Cooling System (GDCS)). For the ESBWR, this phase is covered by the existing licensing basis (i.e., 72-hr period for passive systems performance for core, containment, and spent fuel storage pools cooling).
- II. Transition Phase: Following the 72-hr passive system coping time, support is required to continue passive system cooling and makeup to the Isolation Condenser/Passive Containment Cooling System (IC/PCCS) pools and spent fuel storage pools. This support is provided by installed plant ancillary equipment. The installed ancillary equipment is designed with the capacity to support passive system cooling from 3 to 7 days. As described in [DCD Sections 9.1.3](#) and [19A.3.1](#), makeup water can be provided to the IC/PCCS or spent fuel pools through installed safety-related connections to the Fire Protection System (FPS). Between 72 hours and seven days, the resources for performing these safety functions are available on site.
- III. Final Phase: In order to extend the passive system cooling and IC/PCCS pools and spent fuel storage pools cooling time to beyond 7 days (to an indefinite time), some off-site assistance is required. Specifically, for the ESBWR design, diesel fuel for the ancillary diesel generator or diesel fire pump must be replenished. Also, mitigation strategies including procedures, guidance, training, and acquisition, staging, or installation of equipment needed for the strategies to maintain core, containment, and spent fuel storage pools cooling for an extended period of time will be fully implemented prior to initial fuel load.

1.5.1.1.2 **Recommendation 7.1, Reliable Spent Fuel Pool Instrumentation**

Following the March 2011 events in Japan at the Fukushima Dai-ichi nuclear power plant, the NRC issued to licensees Order EA-12-051, “Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation” ([Reference 1.5-205](#)). This Order was for implementing Recommendation 7.1 of the NRC Near-Term Task Force Report ([Reference 1.5-201](#)) for safety enhancements in the form of reliable spent fuel pool instrumentation for beyond-design-basis external events. Interim Staff Guidance JLD-ISG-2012-03, “Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation” ([Reference 1.5-206](#)), endorses, with exceptions, the methodologies described in Nuclear Energy Institute (NEI) 12-02, “Industry Guidance for Compliance with NRC Order EA-12-051, ‘To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,’” ([Reference 1.5-207](#)). Although the guidance does not specifically address the ESBWR design, which employs passive design features, this subsection describes how ESBWR design features for reliable spent fuel pool and buffer pool level instrumentation meet the intent of the guidance.

The ESBWR design provides reliable indication of the water level in spent fuel storage pools for monitoring pool water level conditions by trained personnel. As explained in [DCD Section 9.1.2](#), the design basis for storage of spent fuel includes two separate areas for storage of spent fuel assemblies: 1) a separate deep pit area in the buffer pool in the Reactor Building; and 2) the SFP in the Fuel Building. As described in [DCD Sections 7.5.5](#), [9.1.2.4](#), and [9.1.3](#), safety-related level instrumentation is provided in the SFP and buffer pool, both Seismic Category I, to detect a low water level that would indicate a loss of decay heat removal ability in accordance with NRC regulatory requirements in 10 CFR 50 Appendix A, General Design Criterion 63. The SFP and buffer pool each have two wide-range safety-related level transmitters that transmit signals to the Main Control Room (MCR). These signals are used for collapsed water level indication and to initiate high/low-level alarms, both locally and in the MCR. At a minimum, alarm set points are included at the top of the active fuel, an adequate shielding level, and an elevation just below normal water level to give operators advanced notice of a loss of inventory but with sufficient margin to allow for 72 hours of pool boiling. The SFP also contains backup nonsafety-related level

indicators that can be operated using portable on-site power supplies to indicate when the pool has been replenished to its normal water level.

Details regarding power to the instrumentation channels are in [DCD Section 7.1.2](#). In addition, instrumentation channels provide for power connections from sources independent of the plant alternating current (AC) and direct current (DC) power distribution systems, such as portable generators or replaceable batteries. Power supply designs should provide for quick and accessible connection of sources independent of the plant AC and DC power distribution systems. On-site generators used as an alternate power source and replaceable batteries used for instrument channel power shall have sufficient capacity to maintain the level indication function until off-site resource availability is reasonably assured. The [DCD, Tier 1, Table 2.6.2-2](#) specifies a minimum instrument accuracy of ± 300 mm (1 ft), which meets the guidance set forth in JLD-ISG-2012-03. The instrumentation is designed to maintain its designed accuracy following a power interruption or change in power source without recalibration. [Technical Specifications, Section 3.7.5](#), specifies periodic surveillance of the fuel pools water level during movement of irradiated fuel assemblies in the associated fuel storage pool or when irradiated fuel assemblies are stored in the associated fuel storage pool. For operating, testing, and calibrating the level instruments, training programs are described in [Section 13.2](#) and procedures are described in [Section 13.5](#).

1.5.4 References

- 1.5-201 "Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," July 12, 2011.
- 1.5-202 Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," March 12, 2012.
- 1.5-203 Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 0.
- 1.5-204 NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 1, August 2012.

- 1.5-205 Order EA-1 2-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," March 12, 2012.
- 1.5-206 Interim Staff Guidance JLD-ISG-2012-03, "Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation," Revision 0.
- 1.5-207 NEI 12-02, "Industry Guidance for Compliance with NRC Order EA-12-051, 'To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation'," Revision 1, August 2012.

1.6 Material Incorporated by Reference and General Reference Material

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following paragraph at the end of this section.

NAPS SUP 1.6-1

[Table 1.6-201](#) lists topical reports not included in [DCD Section 1.6](#) that are incorporated in whole or in part by reference in the FSAR.

NAPS SUP 1.6-1

Table 1.6-201 Referenced Topical Reports

Report No.	Title	Section
NEI 06-06	Nuclear Energy Institute, "Fitness for Duty Program Guidance for New Nuclear Power Plant Construction Sites," NEI 06-06, Revision 5, August 2009	13.7
NEI 06-13A	Nuclear Energy Institute, "Technical Report on Template for an Industry Training Program Description," NEI 06-13A, Revision 2, March 2009 (NRC approval as Rev. 1) (NEI published as Rev. 2)	13BB, COLA Part 4
NEI 06-14A	Nuclear Energy Institute, "Quality Assurance Program Description," NEI 06-14A, Revision 7, August 2010	17.5
NEI 07-01	Nuclear Energy Institute, "Methodology for Development of Emergency Action Levels Advanced Passive Light Water Reactors," NEI 07-01, Revision 0, July 2009	Part 10 3.7.1
NEI 07-02A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed under 10 CFR Part 52," NEI 07-02A, Revision 0, Corrected, November 2010	17.6
NEI 07-03A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Radiation Protection Program Description," NEI 07-03A, Revision 0, May 2009	12BB
NEI 07-08A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA)," NEI 07-08A, Revision 0, October 2009	12.5.3 12AA
NEI 07-09A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Offsite Dose Calculation Manual (ODCM) Program Description," NEI 07-09A, Revision 0, March 2009	11.5
NEI 07-10A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Process Control Program (PCP)," NEI 07-10A, Revision 0, March 2009	11.4
NEI 10-05	Nuclear Energy Institute, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," NEI 10-05, Revision 0, June 2011	Part 10 3.7.2

1.7 Drawings and Other Detailed Information

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.7.1 Electrical, Instrumentation and Control Drawings

Add the following at the end of this section.

NAPS SUP 1.7-1 [Table 1.7-201](#) supplements [DCD Table 1.7-2](#) for those portions of the electrical system configuration drawings outside the scope of the DCD.

1.7.2 Piping and Instrumentation Diagrams

Add the following at the end of the first paragraph.

NAPS SUP 1.7-1 [Table 1.7-202](#) supplements [DCD Table 1.7-3](#) for those portions of the mechanical system configuration drawings outside the scope of the DCD.

1.7.4 COL information

1.7-1-H Final Design Configuration Confirmation

[Deleted]

NAPS SUP 1.7-1 **Table 1.7-201 Summary of Electrical System Configuration Drawings**

- NAPS DEP 8.1-1** Figure 8.1-1R, [Electrical Power Distribution System \(Sh 1 of 3\)](#)
Figure 8.2-201, [500/230 kV Switchyard Single-Line Diagram](#)
Figure 8.2-202, [500/230 kV Switchyard Arrangement](#)
Figure 8.2-203, [Dominion Transmission Line Map](#)
-

NAPS SUP 1.7-1 **Table 1.7-202 Summary of Mechanical System Configuration Drawings**

- Figure 9.2-1R, [Plant Service Water System Simplified Diagram](#)
Figure 9.2-202, [Potable Water System Simplified Diagram](#)
Figure 9.2-203, [Sanitary Waste Discharge System Simplified Diagram](#)
Figure 9.2-204, [Station Water System - Plant Cooling Tower Makeup System \(PCTMS\)](#)
Figure 9.2-205, [Station Water System - Pretreated Water Supply System \(PWSS\)](#)
Figure 9.5-201, [Fire Protection System; Main Yard Loop](#)
Figure 9.5-202, [Fire Protection System Secondary Fire Pumps](#)
Figure 9.5-203, [Fire Protection System; Cooling Tower Yard Loop](#)
Figure 10.4-201, [Circulating Water Pumps](#)
Figure 10.4-202, [Dry Cooling Tower Array](#)
Figure 10.4-203, [Hybrid Cooling Tower](#)
NAPS DEP 12.3-1 Figure 11.2-1bR, [Floor Drain](#)
NAPS DEP 11.4-1 Figure 11.4-1R, [Solid Waste Management System Process Diagram](#)
NAPS DEP 11.4-1 Figure 11.4-2R, [SWMS Collection Subsystem](#)
-

1.8 Interfaces with Standard Design

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.8.2 Identification of Balance of Plant Interfaces

Add the following paragraph after the first paragraph of this section.

STD CDI

The significant interface requirements for those systems that are beyond the scope of the DCD are identified in [DCD Tier 1](#).

Delete the second sentence of the second paragraph of this section.

1.8.2.8 Independent Spent Fuel Storage Installation

Add the following paragraph after the last paragraph of this section.

NAPS SUP 1.8-7

No Unit 3 Independent Spent Fuel Storage Installation (ISFSI) is currently planned. Any future Unit 3 ISFSI will comply with the requirements of this FSAR.

NAPS SUP 1.8-1

1.8.3 Verification of Site Parameters

[Chapter 2](#) provides information demonstrating whether the site characteristics fall within the ESBWR site parameters specified in the referenced certified design.

[Chapter 2](#) also provides information demonstrating whether the design of the facility falls within the site characteristics and bounding design parameters for the ESP ([Reference 1.8-202](#)).

NAPS SUP 1.8-2

1.8.4 COL Information Items and Permit Conditions

[Section 1.10](#) identifies specific FSAR sections that address the COL information items from the referenced certified design, and COL Action Items and Permit Conditions from the ESP.

NAPS SUP 1.8-3

1.8.5 Generic Changes and Departures from the Referenced Certified Design

There are plant-specific departures from the referenced certified design. (Reference [Table 1.8-201](#))

NAPS SUP 1.8-4

1.8.6 Variances from the ESP and ESPA SSAR

Requests for variances from the ESP and SSAR comply with the requirements of 10 CFR 52.39 and 10 CFR 52.93. Variances are listed in

[Table 1.8-202](#), along with the section of the FSAR in which each is discussed. These variances are described and evaluated in [COLA Part 7](#).

NAPS SUP 1.8-5

1.8.7 Conceptual Design Information

The referenced DCD includes conceptual design information (CDI) for certain systems, or portions of systems, that are outside the scope of the standard plant design. [Table 1.8-203](#) identifies systems for which either the CDI in the DCD is adopted as the actual system design information, or the CDI in the DCD is replaced with site-specific design information, along with cross references to FSAR sections where the CDI is treated. Where there are differences between the conceptual design and the actual design, these differences have been evaluated. The evaluations have concluded that there are no impacts on the safety evaluations provided in the referenced certified design.

NAPS SUP 1.8-6

1.8.8 Probabilistic Risk Assessment

Site- and plant-specific information, including site meteorological data and site-specific population distribution, plant-specific design information that replaced conceptual design information described in the DCD, and the departures listed in [Section 1.8.5](#), were reviewed with respect to the design certification PRA. The conclusion, which is documented in [Section 19.5](#), is that there is no significant change from the certified design PRA.

1.8.9 References

1.8-201 [Deleted]

1.8-202 [Early Site Permit \(ESP\) for the North Anna ESP Site, No. ESP-003, Amendment No. 3, U.S. Nuclear Regulatory Commission, January 2013.](#)

NAPS SUP 1.8-3

Table 1.8-201 Departures from the Referenced Certified Design

Number	Subject	FSAR Section
NAPS DEP 3.7-1	Seismic Spectra Exceedance	1.3 Table 1.3-4R Table 1.11-201 2.0 Table 2.0-2R Table 2.0-201 Figures 2.0-201 through 2.0-204 3.7 3.7.1 3.7.2 (and associated figures) 3.7.3.13 3.7.4.4 3.7.5 3.8.4 (and associated figures) 3.8.5 (and associated figures) 3A.1 3C.7.4 3C.7.5 4.2.4.2 19.2.3.2.4 Table 19.2-4R (Note 1) 19A.8.3
NAPS DEP 8.1-1	Figure 8.1-1, Sheet 1, Electrical Power Distribution System	Figure 8.1-1R
NAPS DEP 8.1-2	RG 1.204 Compliance	Table 1.9-202 8.1.5.2.4 Table 8.1-1R 8.2.1.2.1

NAPS SUP 1.8-3

Table 1.8-201 Departures from the Referenced Certified Design

Number	Subject	FSAR Section
NAPS DEP 11.4-1	Long-Term, Temporary Storage of Class B and C Low-Level Radioactive Waste	1.2.2.10.2 1.2.2.16.9 Table 1.9-11R Table 1C-201 Table 9A.5-5R Figures 9A.2-20R through 9A.2-24R 11.4 11.4.1 11.4.2.2.1 11.4.2.2.2 11.4.2.2.4 11.4.2.3.1 Table 11.4-1R Table 11.4-2R 12.2 12.3 Table 12.2-22R 12.3.1.5.1 Table 12.3-8R
NAPS DEP 12.3-1	Liquid Radwaste Effluent Discharge Piping Flow Plan	11.2.3.2 Figure 11.2-1bR 12.3.1.5.1 12.2-18aR 12.2-18bR

NAPS SUP 1.8-4

Table 1.8-202 Variances from the ESP and ESPA SSAR

Number	Subject	FSAR Location
NAPS ESP VAR 2.0-1	Long-Term Deposition Value (D/Q) Estimate	Section 2.3.5 Table 2.0-201
NAPS ESP VAR 2.0-2	Hydraulic Conductivity	Section 2.4.12.1.2 Table 2.0-201
NAPS ESP VAR 2.0-3	Hydraulic Gradient	Section 2.4.12.1.2 , Table 2.0-201
NAPS ESP VAR 2.0-4	Vibratory Ground Motion	Section 2.0 , Section 2.5 Section 2.5.1 Section 2.5.2 Section 2.5.3
NAPS ESP VAR 2.0-5	Distribution Coefficients (K_d)	Table 2.0-201
NAPS ESP VAR 2.0-6	DBA Source Term Parameters and Doses	Table 2.0-201
NAPS ESP VAR 2.0-7a-b	Coordinates and Abandoned Mat Foundations	Table 2.0-201
NAPS ESP VAR 2.3-1	Tornado Site Characteristics	Table 2.0-201 Section 2.3.1.3.2
NAPS ESP VAR 2.4-1	Void Ratio, Porosity, and Seepage Velocity	Section 2.4.12.1.2
NAPS ESP VAR 2.4-2	NAPS Water Supply Well Information	Table 2.4-17R
NAPS ESP VAR 2.4-3	Well Reference Point Elevation	Table 2.4-15R
NAPS ESP VAR 2.4-4	Lake Level Increase	Section 2.4.1.3 Section 2.4.3 Section 2.4.3.3 Section 2.4.8 Section 2.4.11.1 Section 2.4.11.4 Table 2.4-1R Table 2.4-6R Figure 2.4-14R
NAPS ESP VAR 2.4-5	Lake Anna Probable Maximum Flood (PMF) Level Increase	Section 2.4.3 Section 2.4.3.4 Section 2.4.3.5 Section 2.4.10 Figure 2.4-11R
NAPS ESP VAR 2.5-1	Stability of Slopes	Section 2.5.5

NAPS SUP 1.8-4

Table 1.8-202 Variances from the ESP and ESPA SSAR

Number	Subject	FSAR Location
NAPS ESP VAR 2.5-2	[Deleted}	
NAPS ESP VAR 12.2-1	Gaseous Pathway Doses	Section 12.2.2.2.6 Table 12.2-18bR
NAPS ESP VAR 12.2-2	[Deleted]	
NAPS ESP VAR 12.2-3	Annual Liquid Effluent Releases	Section 12.2.2.4.6 Table 12.2-19bR
NAPS ESP VAR 12.2-4	Existing Units' and Site Total Doses	Section 12.2.2.2.4 Section 12.2.2.4.4 Table 12.2-203
NAPS ESP VAR 12.2-5	Annual Gaseous Effluent Releases	Section 12.2.2.2.5 Table 12.2-17R

Table 1.8-203 Conceptual Design Information (CDI)

Item in DCD	CDI in DCD adopted as actual design	CDI in DCD replaced with actual design	Evaluation	FSAR Section
1.1.2.1 ESBWR Standard Plant Scope Figure 1.1-1 ESBWR Standard Plant General Site Plan		X	Site-specific plan general site plan provided	1.1.2.1 Figure 2.1-201
1.2.2.11.4 Main Turbine	X		Conceptual turbine type selected as site-specific design	1.2.2.11.4
1.2.2.11.7 Main Condenser	X		Conceptual condenser type selected as site-specific design	1.2.2.11.7
1.2.2.12.7 Plant Service Water System		X	Site-specific design described	1.2.2.12.7
1.2.2.12.13 Hydrogen Water Chemistry Table 3.2-1 P73 Note 9.3.9 Hydrogen Water Chemistry		X	Hydrogen water chemistry option utilized	1.2.2.12.13 Table 3.2-1 9.3.9
1.2.2.12.15 Zinc Injection System Table 3.2-1 P74 Note 9.3.11 Zinc Injection System		X	Zinc Injection system option utilized	1.2.2.12.15 Table 3.2-1 9.3.11
1.2.2.12.16 Freeze Protection		X	Freeze protection incorporated for external tanks and piping that may freeze during winter weather	1.2.2.12.16
1.2.2.16.10 Other Building Structures		X	Site-specific buildings specified	1.2.2.16.10
1.8.2 Identification of BOP Interfaces	X		Not applicable	1.8.2
Appendix 3A Seismic Soil-Structure Interaction Analysis		X	Site-specific geotechnical data described in Chapter 2 Site-specific soil-structure interaction analysis described in Section 3.7.2	Chapter 2 3.7.2 Appendix 3A

Table 1.8-203 Conceptual Design Information (CDI)

Item in DCD	CDI in DCD adopted as actual design	CDI in DCD replaced with actual design	Evaluation	FSAR Section
Appendix 3A.2 ESBWR Standard Site Plan		X	Site-specific general site plan provided	Section 3A.2 Figure 2.1-201
Appendix 3C Computer Programs Used in the Design and Analysis of Seismic Category I Structures		X	Site-specific computer codes used in site-specific SSI Analysis described in Section 3.7.2	Appendix 3C.7.4 Appendix 3C.7.5
9.2.1 Plant Service Water Table 9.2-2 Figure 9.2-1		X	Site-specific system description and design characteristics described	9.2.1 Table 9.2-2R Figure 9.2-1R
9.2.3 Makeup Water System Table 9.2-9		X	Site-specific system description and design characteristics described	9.2.3 Table 9.2-9R
9.2.4 Potable and Sanitary Water Systems		X	Site-specific system description and design characteristics described	9.2.4 Figure 9.2-202 Figure 9.2-203
9.2.10 Station Water System		X	Site-specific system description and design characteristics described	9.2.10 Table 9.2-203 Table 9.2-204 Figure 9.2-204 Figure 9.2-205
9.3.9 Hydrogen Water Chemistry System		X	Site-specific system description and design characteristics described	9.3.9
9.3.11 Zinc Injection System		X	Site-specific system description and design characteristics described	9.3.11

Table 1.8-203 Conceptual Design Information (CDI)

Item in DCD	CDI in DCD adopted as actual design	CDI in DCD replaced with actual design	Evaluation	FSAR Section
9A Appendix 9A Fire Hazards Analysis		X	Site-specific buildings specified. Site-specific Fire Zone drawings supplied.	9A Contents 9A.1 9A.3.1 9A.4.7 9A.4.9 9A.4.12 9A.5.8 9A.5.9 9A.5.12
10.4.5 Circulating Water System Table 10.4-3 Figure 10.4-1		X	Site-specific system description and design characteristics described	10.4.5.2.1 Table 10.4-3R Figure 10.4-201 Figure 10.4-202 Figure 10.4-203

1.9 Conformance with Standard Review Plan and Applicability of Codes and Standards

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.9.1 Conformance with Standard Review Plan

Add the following paragraph at the end of this section.

NAPS COL 1.9-3-A

[Table 1.9-201](#) evaluates conformance with the SRP sections and BTPs in effect six months prior to the submittal of the COLA. Additionally, SRP sections and BTPs in effect up to January 31, 2013 were evaluated for inclusion in this table. Several SRP sections issued later than January 31, 2013, were evaluated as noted in [Table 1.9-201](#). [Table 1.9-201](#) does not re-address conformance with the SRP for those portions of the facility design included in the referenced certified design. Similarly, [Table 1.9-201](#) does not re-address SSAR conformance with the applicable RS-002 sections.

In the table, the term “Conforms” means that no exception is being taken to the guidance in the SRP section/acceptance criteria as they apply to site-specific design information, operational aspects of the facility, or siting information in the FSAR that supplements the SSAR. The term “Not applicable” means that the SRP section/acceptance criteria do not apply to the ESBWR or Unit 3. Any differences with the SRP acceptance criteria are identified and justified, with references to the applicable FSAR section(s) that address the difference, as necessary.

1.9.2 Applicability to Regulatory Criteria

Add the following paragraphs at the end of this section.

NAPS COL 1.9-3-A

Division 1, 4, 5, and 8 Regulatory Guides

[Table 1.9-202](#) evaluates conformance with Division 1, 4, 5, and 8 RGs in effect six months prior to the submittal of the COLA. Additionally, RGs in effect up to January 31, 2013 were evaluated for inclusion into this table. Several RGs issued later than January 31, 2013, were evaluated as noted in [Table 1.9-202](#). Each issued Division 1 RG is evaluated. Issued Division 4, 5, and 8 RGs identified in the SRP, RG 1.206, or [DCD Table 1.9-21](#) as COL responsibility are also evaluated. (Conformance with Division 4 RGs is also addressed in [COLA Part 3](#),

[Section 1.4.](#)) For Division 5 Regulatory Guides, the plant-specific physical security plans include no substantive deviations from the NRC-endorsed template in NEI 03-12, “Template for Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, and [Independent Spent Fuel Storage Installation Security Program]” ([Reference 1.9-201](#)). The Cyber Security Plan includes no substantive deviations from the template in NEI 08-09, “Cyber Security Plan for Nuclear Reactors” ([Reference 1.9-202](#)). Therefore, the degree of conformance with Division 5 regulatory guides for the Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan is consistent with the degree of conformance of NEI 03-12, and the Cyber Security Plan is consistent with the degree of conformance of NEI 08-09. Except for RGs 5.7 and 5.12, [Table 1.9-202](#) does not re-address conformance with RGs for those portions of the facility design included in the referenced certified design. Similarly, [Table 1.9-202](#) does not re-address SSAR conformance with the applicable RGs.

In the table, the term “Conforms” means that no exception is being taken to the guidance in the regulatory positions as they apply to site-specific design information, operational aspects of the facility, or siting information in the FSAR that supplements the SSAR. The term “Not applicable” means that the regulatory positions do not apply to the ESBWR or Unit 3.

Regulatory Guide 1.206

[Table 1.9-203](#) evaluates conformance with the FSAR content guidance in RG 1.206. Where necessary, the table identifies the FSAR section where the required information is provided. In the table, the term “Conforms” means that the information called for in RG 1.206 is either: 1) already addressed in the DCD or SSAR; or 2) addressed by adding new information beyond that contained in the DCD or SSAR. The term “Not applicable” means that the information called for in RG 1.206 does not apply to the ESBWR or Unit 3.

[Table 1.9-203](#) evaluates conformance with RG 1.206, Section C.III.2, “Information Needed for a Combined License Application Referencing a Certified Design and an Early Site Permit.” Section C.III.1, “Information Needed for a Combined License Application Referencing a Certified Design,” and Section C.I, “Standard Format and Content of Combined License Applications for Nuclear Power Plants-Light-Water Reactor Edition,” were also evaluated, as applicable, if portions of these sections

were referenced or identified in RG 1.206, Section C.III.2, or Section C.III.1, respectively.

NAPS SUP 1.9-1

Industrial Codes and Standards

[Table 1.9-204](#) identifies the Industrial Codes and Standards that are applicable to those portions of the Unit 3 design that are beyond the scope of the DCD or the SSAR, and to the operational aspects of the facility.

1.9.3 Applicability of Experience Information

Add the following after the first sentence of the section.

NAPS SUP 1.9-2

[Table 1.9-205](#) lists NUREG and NUREG/CR reports cited in the FSAR.

Add the following paragraph at the end of this section.

[Table 1.9-205](#) addresses operational experience information, as described in applicable NUREG reports, for those portions of the Unit 3 design and operation that are beyond the scope of the DCD. The comment column of [Table 1.9-205](#) includes a reference to the applicable FSAR section that provides further discussion of the operational experience.

1.9.4 COL Information

1.9-3-A SRP and Regulatory Guide Applicability

NAPS COL 1.9-3-A

This COL Item is addressed in [Sections 1.9.1](#) and [1.9.2](#).

1.9.5 References

1.9-201 Nuclear Energy Institute, "Template for Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, and [Independent Spent Fuel Storage Installation Security Program]," NEI 03-12, Revision 7.

1.9-202 Nuclear Energy Institute, "Cyber Security Plan for Nuclear Power Reactors," NEI 08-09, Revision 6.

NAPS DEP 11.4-1

Table 1.9-11R Summary of Differences from SRP Section 11

SRP Section	Specific SRP Acceptance Criteria	Summary Description of Difference	Subsection Where Discussed
11.1	II.9—BWR GALE Code	Alternate computer code.	
11.2		None	
11.3	II.A.7—Potential Releases	1) Activity from charcoal tanks not included in final release tabulations 2) Total Flow is evaluated for 1 hour, not 2 hours	<u>DCD</u> 11.3.7.1
11.4	On site storage facility	Not within scope of design certification. (On site storage facility is a separate building from Radwaste Building) <u>The Radwaste Building is configured to accommodate at least 10 years of packaged Class B and C waste and approximately 3 months (up to three shipments) of packaged Class A waste considering routine operations and anticipated operational occurrences.</u>	11.4
11.5		None	

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
1	Introduction and Interfaces	Rev. 2	Dec-11	No Specific Acceptance Criteria	Conforms
2.0	Site Characteristics and Site Parameters	Initial Issuance	Mar-07	II.1, II.2, II.3, II.5 II.4	Not applicable Conforms
2.1.1	Site Location and Description	Rev. 3	Mar-07	II.1, II.2	Conforms
2.1.2	Exclusion Area Authority and Control	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
2.1.3	Population Distribution	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.2.1–2.2.2	Identification of Potential Hazards in Site Vicinity	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
2.2.3	Evaluation of Potential Accidents	Rev. 3	Mar-07	II.1, II.2	Conforms
2.3.1	Regional Climatology	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
2.3.2	Local Meteorology	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.3.3	Onsite Meteorological Measurements Programs	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
2.3.4	Short Term Atmospheric Dispersion Estimates for Accident Releases	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
2.4.1	Hydrologic Description	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.4.2	Floods	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10	Conforms
2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	Rev. 4	Mar-07	II.1, II.2, II.3	Conforms
2.4.4	Potential Dam Failures	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
2.4.5	Probable Maximum Surge and Seiche Flooding	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.4.6	Probable Maximum Tsunami Hazards	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
2.4.7	Ice Effects	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.4.8	Cooling Water Canals and Reservoirs	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.4.9	Channel Diversions	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
2.4.10	Flooding Protection Requirements	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.4.11	Low Water Considerations	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.4.12	Groundwater	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
2.4.13	Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters	Rev. 3	Mar-07	II.1	Conforms. The relatively simple hydrogeologic conditions preclude the need to evaluate alternative conceptual models of the groundwater system. Alternative conceptual models of the more complex surface water system are evaluated to identify the bounding conditions.
				II.2, II.5	Conforms
				II.3	Conforms. Distribution coefficients conservatively assigned from literature values and compared to site-specific distribution coefficients.
				II.4	Conforms. There are no site-proximity hazards, seismic, or non-seismic events that would increase the radionuclide concentrations above the values reported in Section 2.4.13 .
2.4.14	Technical Specifications and Emergency Operation Requirements	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.5.1	Basic Geologic and Seismic Information	Rev. 4	Mar-07	II.1, II.2	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
2.5.2	Vibratory Ground Motion	Rev. 4	Mar-07	II.1	Conforms with the following exception. The CEUS SSC Report (Reference 2.5-223) considered all available independent measures of the size of an earthquake, including Modified Mercalli Intensity [MMI], in assessing a “uniform moment magnitude E[M]” for each CEUS earthquake. Appendix B of the CEUS SSC Report (the published final earthquake catalog) did not present the various independent measures available for each earthquake, including MMI, but rather reported only the uniform moment magnitude E[M]. Therefore, for consistency with the Report’s earthquake catalog, MMI is not presented in any tabulations or plots of earthquakes in the FSAR.
				II.2, II.3, II.4, II.5, II.6	Conforms
2.5.3	Surface Faulting	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
2.5.4	Stability of Subsurface Materials and Foundations	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12	Conforms
2.5.5	Stability of Slopes	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.2.1	Seismic Classification	Rev. 2	Mar-07	II.1	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.2.2	System Quality Group Classification	Rev. 2	Mar-07	II.1	Conforms
3.3.1	Wind Loadings	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.3.2	Tornado Loadings	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.4.1	Internal Flood Protection for Onsite Equipment Failures	Rev. 3	Mar-07	II.1, II.2	Conforms
3.4.2	Analysis Procedures	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.5.1.1	Internally Generated Missiles (Outside Containment)	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.2	Internally-Generated Missiles (Inside Containment)	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.3	Turbine Missiles	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.5	Site Proximity Missiles (Except Aircraft)	Rev. 4	Mar-07	II.1, II.2	Conforms
3.5.1.6	Aircraft Hazards	Rev. 4	Mar-10	II.1, II.2	Conforms
3.5.2	Structures, Systems, and Components to be Protected from Externally-Generated Missiles	Rev. 3	Mar-07		Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.5.3	Barrier Design Procedures	Rev. 3	Mar-07	II.1, II.2	Conforms
3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
3.6.3	Leak-Before-Break Evaluation Procedures	Rev. 1	Mar-07	II.1, II.2	Not applicable. ESBWR design does not rely on a Leak Before Break Evaluation.
3.7.1	Seismic Design Parameters	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.7.2	Seismic System Analysis	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
3.7.3	Seismic Subsystem Analysis	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
3.7.4	Seismic Instrumentation	Draft Rev. 3	Aug-13	II.1, II.2	Conforms
3.8.1	Concrete Containment	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.8.2	Steel Containment	Rev. 3	May-10	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.8.4	Other Seismic Category I Structures	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
3.8.5	Foundations	Rev. 4	Sep-13	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.9.1	Special Topics for Mechanical Components	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.9.2	Dynamic Testing and Analysis of Systems, Structures, and Components	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.9.3	ASME Code Class 1, 2, and 3 Components, and Component Supports, and Core Support Structures	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
3.9.4	Control Rod Drive Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.9.5	Reactor Pressure Vessel Internals	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints	Rev. 3	Mar-07	II.1, II.3, II.4, II.5, II.6 II.2	Conforms Not applicable. There are no safety related pumps.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.9.7	Risk-Informed Inservice Testing	Rev. 0	Aug-98	II.A, II.B	Not applicable. Risk-informed inservice testing is not being used.
3.9.8	Risk-Informed Inservice Inspection of Piping	Rev. 0	Sep-03	II.1, II.2, II.3	Not applicable. Risk-informed inservice inspection of piping is not being used.
3.10	Seismic and Dynamic Qualification of Mechanical and Electrical Equipment	Rev. 3	Mar-07	II.1, II.2, II.3, II.5	Conforms
				II.4, II.6	Conforms
3.11	Environmental Qualification of Mechanical and Electrical Equipment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14, II.15	Conforms
				II.16	Conforms
3.12	ASME Code Class 1, 2, and 3 Piping Systems, Piping Components and their Associated Supports	Initial Issuance	Mar-07	II.A, II.B, II.C, II.D	Conforms
3.13	Threaded Fasteners - ASME Code Class 1, 2, and 3	Initial Issuance	Mar-07	II.1, II.2	Conforms
BTP 3-1	Classification of Main Steam Components Other than the Reactor Coolant Pressure Boundary for BWR Plants	Rev. 2	Mar-07		Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 3-2	Classification of BWR/6 Main Steam and Feedwater Components Other than the Reactor Coolant Pressure Boundary	Rev. 2	Mar-07		Conforms
BTP 3-3	Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	Rev. 3	Mar-07		Conforms
BTP 3-4	Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment	Rev. 2	Mar-07		Conforms
4.2	Fuel System Design	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
4.3	Nuclear Design	Rev. 3	Mar-07	II.1, II.2, II.4	Conforms
				II.3	Conforms
4.4	Thermal and Hydraulic Design	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.8, II.9, II.10	Conforms
				II.7	Not applicable
4.5.1	Control Rod Drive Structural Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
4.5.2	Reactor Internal and Core Support Structure Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
4.6	Functional Design of Control Rod Drive System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
BTP 4-1	Westinghouse Constant Axial Offset Control (CAOC)	Rev. 3	Mar-07		Not applicable to the ESBWR
5.2.1.1	Compliance with the Codes and Standards Rule, 10 CFR 50.55a	Rev. 3	Mar-07	RG 1.26	Conforms
5.2.1.2	Applicable Code Cases	Rev. 3	Mar-07	RG 1.84, RG 1.147, RG 1.192	Conforms
5.2.2	Overpressure Protection	Rev. 3	Mar-07	II.1, II.2, II.5, II.6, II.7	Conforms
				II.3, & II.4	Not applicable to the ESBWR
5.2.3	Reactor Coolant Pressure Boundary Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. Acceptance Criterion II.3 is addressed in DCD Section 3.9.3.9 .
5.2.4	Reactor Coolant Pressure Boundary Inservice Inspection and Testing	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	Rev. 2	Mar-07	II.1, II.2	Conforms
5.3.1	Reactor Vessel Materials	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
5.3.2	Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
5.3.3	Reactor Vessel Integrity	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
5.4	Reactor Coolant System Component and Subsystem Design	Rev. 2	Mar-07		Conforms
5.4.1.1	Pump Flywheel Integrity (PWR)	Rev. 3	May-10		Not applicable to the ESBWR
5.4.2.1	Steam Generator Materials	Rev. 3	Mar-07		Not applicable to the ESBWR
5.4.2.2	Steam Generator Program	Rev. 2	Mar-07		Not applicable to the ESBWR
5.4.6	Reactor Core Isolation Cooling System (BWR)	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10	Conforms
5.4.7	Residual Heat Removal (RHR) System	Rev. 5	May-10	II.1	Not applicable to the ESBWR. ESBWR is designed in accordance with BTP RSB 5-1 as stated in DCD Table 1.9-20 .
				II.2, II.3, II.4	Conforms. ESBWR uses ICS and RWCU/SDC
5.4.8	Reactor Water Cleanup System (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
5.4.11	Pressurizer Relief Tank	Rev. 4	May-10		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
5.4.12	Reactor Coolant System High Point Vents	Rev. 1	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
5.4.13	Isolation Condenser System (BWR)	Initial Issuance	Mar-07	II.1, II.2, II.3, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12 II.4	Conforms Conforms with the following exception: The ESBWR is designed to shut down safely without reliance on offsite or diesel-generator-derived AC power, therefore, RG 1.93 is only applicable to onsite safety-related DC power systems.
BTP 5-1	Monitoring of Secondary Side Water Chemistry in PWR Steam Generators	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 5-2	Overpressurization Protection of Pressurized-Water Reactors While Operating at Low Temperatures	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 5-3	Fracture Toughness Requirements	Rev. 3	Mar-07		Conforms
BTP 5-4	Design Requirements of the Residual Heat Removal System	Rev. 4	Mar-07		Not applicable. Refer to DCD Table 1.9-20 which identifies BTP RSB 5-1. See RG 1.33 in Table 1.9-202 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.1.1	Engineered Safety Features Materials	Rev. 2	Mar-07	II.1, II.2, II.3, II.4	Conforms
6.1.2	Protective Coating Systems (Paints) - Organic Materials	Rev. 3	Mar-07	II.1	Conforms
6.2.1	Containment Functional Design	Rev. 3	Mar-07		Conforms
6.2.1.1.A	PWR Dry Containments, Including Subatmospheric Containments	Rev. 3	Mar-07		Not applicable to the ESBWR
6.2.1.1.B	Ice Condenser Containments	Draft Rev. 3	Jun-96		Not applicable to the ESBWR
6.2.1.1.C	Pressure-Suppression Type BWR Containments	Rev. 7	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
6.2.1.2	Subcompartment Analysis	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
6.2.1.3	Mass and Energy Release Analysis for Postulated Loss-of-Coolant Accidents (LOCAs)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
6.2.1.4	Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures	Rev. 2	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.2.1.5	Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability Studies	Rev. 3	Mar-07	II.1, II.2	Exception. Minimum containment pressure analysis for ECCS performance capabilities study is defined by the DCD which invokes Rev. 2. See DCD Tables 1.9-6 and 1.9-20 , and DCD Appendix 6C .
		Rev. 2	Jul-81	II.1, II.2	Conforms
6.2.2	Containment Heat Removal Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
6.2.3	Secondary Containment Functional Design	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. See DCD Table 1.9-20 .
6.2.4	Containment Isolation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16, II.17, II.18, II.19, II.20, II.21, II.22	Conforms
6.2.5	Combustible Gas Control in Containment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
6.2.6	Containment Leakage Testing	Rev. 3	Mar-07		Conforms
6.2.7	Fracture Prevention of Containment Pressure Boundary	Rev. 1	Mar-07	II.1, II.2	Conforms
6.3	Emergency Core Cooling System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.6, II.7, II.8, II.10	Conforms
				II.5, II.9	

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.4	Control Room Habitability System	Rev. 3	Mar-07	II.1, II.2, II.4, II.5, II.6	Conforms
				II.3	Exception: For differential pressure testing of the control room, the periodic verification interval of every 18 months in Acceptance Criteria II.3.a through II.3.c is increased to every 24 months to accommodate the ESBWR's two year operating cycle. The frequencies for testing the CR HVAC system are defined by Technical Specifications 3.7.2 and 5.5.12 of the referenced certified design.
				II.7	Exception: SRP states that self-contained breathing apparatus for the control room personnel should be on hand. DCD Section 6.4.1.1 states that CRHA habitability requirements are satisfied without the need for individual breathing apparatus and/or special clothing.
6.5.1	ESF Atmosphere Cleanup Systems	Rev. 4	May-10	II.1, II.2, II.3, II.4, II.5, II.6	Conforms. Surveillances, testing, and maintenance guidelines for the CRHAVS are addressed in Technical Specifications 3.7.2, 5.5.12, and 5.5.13, Maintenance Rule requirements in Section 17.6, and procedure requirements in Section 13.5.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.5.2	Containment Spray as a Fission Product Cleanup System	Rev. 4	Mar-07		Not applicable. See DCD Table 1.9-20 .
6.5.3	Fission Product Control Systems and Structures	Rev. 3	Mar-07	II.1, II.2 (there is no II.3) II.4	Conforms Not applicable. Drywell spray function is not credited in DCD Chapter 15 dose analysis.
6.5.4	Ice Condenser as a Fission Product Cleanup System	Draft Rev. 4	Jun-96		Not applicable to the ESBWR
6.5.5	Pressure Suppression Pool as a Fission Product Cleanup System	Rev. 1	Mar-07	II.1, II.2 II.3	Conforms. Refer to DCD Table 1.9-20 . Not applicable.
6.6	Inservice Inspection and Testing of Class 2 and 3 Components	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
6.7	Main Steam Isolation Valve Leakage Control System (BWR)	Draft Rev. 3	Jun-96		Not applicable
BTP 6-1	pH For Emergency Coolant Water for Pressurized Water Reactors	Initial Issuance	Mar-07		Not applicable to the ESBWR
BTP 6-2	Minimum Containment Pressure Model for PWR ECCS Performance Evaluation	Rev. 3	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 6-3	Determination of Bypass Leakage Paths in Dual Containment Plants	Rev. 3	Mar-07		Conforms. Refer to DCD Table 1.9-20 .
BTP 6-4	Containment Purging During Normal Plant Operations	Rev. 3	Mar-07		Conforms. Refer to TS SR 3.6.1.3 .
BTP 6-5	Currently the Responsibility of Reactor Systems Piping From the RWST (or BWST) and Containment Sump(s) to the Safety Injection Pumps	Rev. 3	Mar-07		Not applicable
7.0	Instrumentation and Controls - Overview of Review Process	Rev. 6	May-10		Conforms
Appendix 7.0-A	Review Process for Digital Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms
7.1	Instrumentation and Controls - Introduction	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
7.1-T	Table 7-1 Regulatory Requirements, Acceptance Criteria, and Guidelines for Instrumentation and Control Systems Important to Safety	Rev. 5	Mar-07		Conforms
Appendix 7.1-A	Acceptance Criteria and Guidelines for Instrumentation and Controls Systems Important to Safety	Rev. 5	Mar-07	1, 2, 3, 4, 5	Conforms
Appendix 7.1-B	Guidance for Evaluation of Conformance to IEEE Std 279	Rev. 5	Mar-07		Conforms
Appendix 7.1-C	Guidance for Evaluation of Conformance to IEEE Std 603	Rev. 5	Mar-07		Conforms
Appendix 7.1-D	Guidance for Evaluation of the Application of IEEE Std 7-4.3.2	Initial Issuance	Mar-07	SRM to SECY 93-087 II.Q	Conforms
7.2	Reactor Trip System	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
7.3	Engineered Safety Features Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
7.4	Safe Shutdown Systems	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
7.5	Information Systems Important to Safety	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
7.6	Interlock Systems Important to Safety	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
7.7	Control Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
7.8	Diverse Instrumentation and Control Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
7.9	Data Communication Systems	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Addressed in DCD Section 7.1 . Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10 .
Appendix 7-A	General Agenda, Station Site Visits (formerly Appendix 7-B)	Rev. 5	Mar-07		Not applicable. Provides guidance to the NRC to conduct site visits.
Appendix 7-B	Acronyms, Abbreviations, and Glossary (formerly Appendix 7-C)	Rev. 5	Mar-07		Conforms
BTP 7-1	Guidance on Isolation of Low-Pressure Systems from the High-Pressure Reactor Coolant System	Rev. 5	Mar-07		Conforms
BTP 7-2	Guidance on Requirements of Motor-Operated Valves in the Emergency Core Cooling System Accumulator Lines	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-3	Guidance on Protection System Trip Point Changes for Operation with Reactor Coolant Pumps Out of Service	Rev. 5	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 7-4	Guidance on Design Criteria for Auxiliary Feedwater Systems	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-5	Guidance on Spurious Withdrawals of Single Control Rods in Pressurized Water Reactors	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-6	Guidance on Design of Instrumentation and Controls Provided to Accomplish Changeover from Injection to Recirculation Mode	Rev. 5	Mar-07		Not applicable. ESBWR does not use recirculation pumps or active ECCS pumps.
HICB-7	Not Used				Not used
BTP 7-8	Guidance for Application of Regulatory Guide 1.22	Rev. 5	Mar-07		Conforms. Chapter 16 addresses Technical Specifications.
BTP 7-9	Guidance on Requirements for Reactor Protection System Anticipatory Trips	Rev. 5	Mar-07		Conforms
BTP 7-10	Guidance on Application of Regulatory Guide 1.97	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 7-11	Guidance on Application and Qualification of Isolation Devices	Rev. 5	Mar-07		Conforms.
BTP 7-12	Guidance on Establishing and Maintaining Instrument Setpoints	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.
BTP 7-13	Guidance on Cross-Calibration of Protection System Resistance Temperature Detectors	Rev. 5	Mar-07		Not applicable. RTDs are not used in the ESBWR protection systems.
BTP 7-14	Guidance on Software Reviews for Digital Computer-Based Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms
HCIB-15	Not Used				Not used
BTP 7-16	Withdrawn				Withdrawn
BTP 7-17	Guidance on Self-Test and Surveillance Test Provisions	Rev 5	Mar-07		Conforms. Section 13.5 addresses procedures. Chapter 16 addresses Technical Specifications.
BTP 7-18	Guidance on the Use of Programmable Logic Controllers in Digital Computer-Based Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 7-19	Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems	Rev. 6	Jul-12		Conforms
HCIB-20	Not Used				Not used
BTP 7-21	Guidance on Digital Computer Real-Time Performance	Rev. 5	Mar-07		Conforms
8.1	Electric Power - Introduction	Rev. 4	Feb-12		Conforms. Refer to SRP Section 8.2, Section 8.3.1, Section 8.3.2 and Section 8.4
8.2	Offsite Power System	Rev. 5	May-10	II.4, II.5, II.6, II.8	Conforms
				II.1, II.2, II.3, II.7	Not applicable. ESBWR is a passive design and does not rely on offsite power.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
8.3.1	A-C Power Systems (Onsite)	Rev. 4	May-10	II.1, II.2, II.3A, II.4.A, II.4.C through II.4.H, II.4.J, II.5, II.6, II.7, II.10	Conforms
				II.3.B	Not applicable. The ESBWR standard design is a single unit plant. There is no sharing of SSCs of the Class 1E power system among the NAPS units.
				II.4.B, II.4.I	Not applicable. The ESBWR diesel generators are not safety-related.
				II.8	Not applicable. The ESBWR diesel generators are not safety-related, nor is AC power needed to achieve safe shutdown.
				II.9	Conforms. Addressed in DCD Section 17.4 and in Section 17.6 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
8.3.2	D-C Power Systems (Onsite)	Rev. 4	May-10	II.1, II.2, II.3, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
				II.5	Exception: Battery and battery room ventilation systems design are as described in the DCD is in accordance with Rev. 1 of RG 1.128; refer to DCD Table 1.9-21 and DCD Section 8.1.5.2.4 .
				II.4	Not applicable. The ESBWR standard design is a single unit plant.
				II.12	Conforms. Addressed in Section 17.6 .
				II.13	Conforms. Addressed in Section 17.6 .
8.4	Station Blackout	Rev. 1	May-10	II.1, II.2	Conforms. Addressed in DCD Section 15.5.5 .
				II.3	Not applicable. Onsite Class 1E Emergency AC power sources are not required for ESBWR safe shutdown.
				II.4	Conforms with the following exception: Emergency AC power sources are not required for ESBWR safe shutdown.
				II.5	Conforms. Addressed in Sections 17.4 and 17.6 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
Appendix 8-A	General Agenda, Station Site Visits	Rev. 1	Mar-07		Not applicable. Provides guidance to NRC to conduct site visits.
BTP 8-1	Requirements on Motor-Operated Valves in the ECCS Accumulator Lines	Rev. 3	Mar-07		Not applicable. The ESBWR does not have any safety-related motor-operated valves.
BTP 8-2	Use of Diesel-Generator Sets for Peaking	Rev. 3	Mar-07		Not applicable. The ESBWR can achieve safe shutdown without AC power, and the diesel-generator sets are not safety-related. Therefore, this BTP is not applicable.
BTP 8-3	Stability of Offsite Power Systems	Rev. 3	Mar-07		Conforms. Stability studies were performed to investigate the loss of off-site generation.
BTP 8-4	Application of the Single Failure Criterion to Manually Controlled Electrically Operated Valves	Rev. 3	Mar-07		Not applicable. The ESBWR does not use any manually-operated valves to mitigate an accident.
BTP 8-5	Supplemental Guidance for Bypass and Inoperable Status Indication for Engineered Safety Features Systems	Rev. 3	Mar-07		Not applicable. The ESBWR is designed in accordance with ICSB 21, the predecessor to BTP 8-5, as stated in DCD Table 8.1-1 and DCD Section 8.3.2.2.2 . Also, refer to DCD Table 7.1-1 for conformance to RG 1.47 and Bypass and Inoperable Status Indicator (BISI) for all safety-related systems.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 8-6	Adequacy of Station Electric Distribution System Voltages	Rev. 3	Mar-07		Not applicable. The ESBWR is designed in accordance with PSB 1, the predecessor to BTP 8-6, as stated in DCD Table 8.1-1 and DCD Section 8.3.1.1.2 .
BTP 8-7	Criteria for Alarms and Indications Associated with Diesel-Generator Unit Bypassed and Inoperable Status	Rev. 3	Mar-07		Not applicable. The ESBWR does not use safety-related diesel generators.
BTP 8-8	Onsite (Emergency Diesel Generators) and Offsite Power Sources Allowed Outage Time Extensions	Rev. 0	Feb-12		Not applicable. The ESBWR Generic Technical Specifications do not include onsite (Emergency Diesel Generators) or offsite power sources.
9.1.1	Criticality Safety of Fresh and Spent Fuel Storage and Handling	Rev. 3	Mar-07	II.1	Conforms
9.1.2	New and Spent Fuel Storage	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
9.1.3	Spent Fuel Pool Cooling and Cleanup System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
				II.8	Conforms. EP-ITAAC are addressed in COLA Part 10 .
9.1.4	Light Load Handling System (Related to Refueling)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.1.5	Overhead Heavy Load Handling Systems	Rev. 1	Mar-07	II.1, II.2, II.3, II.4	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.2.1	Station Service Water System	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.2.2	Reactor Auxiliary Cooling Water Systems	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.2.3	Demineralized Water Makeup System				SRP withdrawn
9.2.4	Potable and Sanitary Water Systems	Rev. 3	Mar-07	II.1.A, II.1.B, II.1.C	Conforms
9.2.5	Ultimate Heat Sink	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
9.2.6	Condensate Storage Facilities	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
9.3.1	Compressed Air System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms. Instrument Air is addressed in DCD Section 9.3.6 , Service Air is addressed in DCD Section 9.3.7 , and High Pressure Nitrogen Supply System is addressed in DCD Section 9.3.8 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.3.2	Process and Post-accident Sampling Systems	Rev. 3	Mar-07	II.1, II.3, II.4 II.2	Conforms Exception. Technical Specifications do not require analyses. Section 9.3.2 addresses actions required to qualify process sampling for taking radioactive samples without having a specific post-accident sampling system. Analyses and frequencies of process systems are addressed in plant operating procedures.
9.3.3	Equipment and Floor Drainage System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
9.3.4	Chemical and Volume Control System (PWR) (Including Boron Recovery System)	Rev. 3	Mar-07		Not applicable to the ESBWR
9.3.5	Standby Liquid Control System (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
9.4.1	Control Room Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms.
9.4.2	Spent Fuel Pool Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.4.3	Auxiliary and Radwaste Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
9.4.4	Turbine Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.4.5	Engineered Safety Feature Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.5.1.1	Fire Protection Program	Rev. 0	Feb-09	II.1, II.2, II.4	Not applicable. See Table 1.9-202 and DCD Table 1.9-21 .
				II.3	Exception: Due to physical and administrative separation of Unit 3 from Units 1 and 2, the on-site executive in charge of construction will have overall responsibility for Unit 3 fire protection during construction.
				II.5, II.6	Conforms
				II.7	Exception: The elements of the Fire Protection Program required to be operational prior to receipt of new fuel are those elements necessary to protect buildings storing new fuel and adjacent fire areas that could affect the fuel storage area. Other required elements of the Fire Protection Program will be fully operational prior to initial fuel loading. Refer to Section 13.4 .
9.5.1.2	Risk-Informed, Performance-Based Fire Protection Program	Rev. 0	Dec-09	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Not applicable. Risk-informed performance-based fire protection is not used.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.5.2	Communications Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
9.5.3	Lighting Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.5	Emergency Diesel Engine Cooling Water System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.6	Emergency Diesel Engine Starting System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.7	Emergency Diesel Engine Lubrication System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.8	Emergency Diesel Engine Combustion Air Intake and Exhaust System	Rev. 3	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2	Turbine Generator	Rev. 3	Mar-07	II.1.A, II.1.B	Conforms
				II.1.C	Exception—The Turbine Generator Set (TGS) has the capability to permit periodic testing of all components important to safety while the unit is at or above rated speed. In DCD Section 10.2.2.7 , a list of components that may be tested with the unit at load is provided. However, some load reduction may be necessary before testing main stop and control valves, and intermediate stop and intercept valves (see DCD Section 10.2.3.7). Overspeed trip testing is performed at speed levels greater than or equal to rated speed with no electrical load. Thus, not all components are capable of being tested at rated load as required in the corresponding Acceptance Criterion.

(continued)

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2	Turbine Generator (continued)			II.1.C (continued)	<p>Load reduction for turbine valve testing is common in the existing fleet of power reactors and is considered acceptable. Testing at turbine loads below the rated load condition is considered an acceptable means of confirming that equipment relied on to prevent turbine overspeed related failures is available and capable of providing required functions. Further, component redundancies, as described in DCD Section 10.2.2.4, ensure that a single failure of any of the above valves important to safety will not disable the function of the overspeed protection system.</p>

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2	Turbine Generator (continued)			II.2.A	Exception—Inservice inspection of main steam and reheat valves is discussed in DCD Sections 10.2.2.7 and 10.2.3.7 . The first disassembly and visual inspection of all main stop valves, main control valves, intermediate stop, and intercept valves are performed within the first three refueling shutdowns. However, the interval for subsequent inspections may be extended beyond the SRP interval of 3-1/3 years to an interval consistent with applicable industry guidance, subject to the requirements of the turbine missile probability analysis. The inspection interval may not exceed the requirements or assumptions in the turbine missile probability analysis. Further, inspection intervals are only extended if there are no significant findings in the initial (baseline) inspections. Thus, with the above provisions, extending the inspection interval beyond the SRP interval is considered acceptable.
				II.2.B, II.3	Conforms
10.2.3	Turbine Rotor Integrity	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.3	Main Steam Supply System	Rev. 4	Mar-07	II.1, II.2, II.3, II.5, II.6, II.7, II.8	Conforms
				II.4	Not applicable to the ESBWR
10.3.6	Steam and Feedwater System Materials	Rev. 3	Mar-07	II.1, II.2	Conforms
10.4.1	Main Condensers	Rev. 3	Mar-07	II.1	Conforms
10.4.2	Main Condenser Evacuation System	Rev. 3	Mar-07	II.1	Conforms
10.4.3	Turbine Gland Sealing System	Rev. 3	Mar-07		Conforms
10.4.4	Turbine Bypass System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
10.4.5	Circulating Water System	Rev. 3	Mar-07	II.1	Conforms
10.4.6	Condensate Cleanup System	Rev. 3	Mar-07	II.1	Conforms
				II.2	Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.4.7	Condensate and Feedwater System	Rev. 4	Mar-07	II.1, II.2.B, II.3, II.4, II.5, II.6,	Conforms
				II.2.A,	Not applicable to the ESBWR
				II.7	Exception: This SRP acceptance criterion states that guidance for acceptable FAC inspection programs "is found in (NRC) Generic Letter 89-08 and in EPRI NP-3944." EPRI document NSAC-202L, Rev. 2, supersedes EPRI NP-3944 and is therefore referenced in place of EPRI NP-3944 in DCD Section 6.6.7 , for guidance regarding FAC (erosion corrosion) monitoring and related inspection programs. The more recent document, EPRI NSAC-202L, utilizes more extensive industry experience and improved inspection methods and modeling. The substitution of EPRI NSAC-202L, Rev. 2, in place of EPRI NP-3944 is therefore acceptable.
				II.8	Conforms. Addressed in DCD Sections 3.9.3, 5.2.4 , and 10.4.7 , and DCD Tables 1.9-22 and 1.11-1 .
10.4.8	Steam Generator Blowdown System (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.4.9	Auxiliary Feedwater System (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 10-1	Design Guidelines for Auxiliary Feedwater System Pump Drive and Power Supply Diversity for Pressurized Water Reactor Plants	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 10-2	Design Guidelines for Avoiding Water Hammers in Steam Generators	Rev. 4	Mar-07		Not applicable to the ESBWR
11.1	Source Terms	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.6, II.7, II.8, II.9	Conforms. Addressed in DCD Section 12.2 and in Section 12.2 .
				II.5	Conforms. Addressed in Sections 11.2 and 11.3 .
11.2	Liquid Waste Management System	Rev. 4	May-10	II.1, II.2, II.3, II.4, II.5	Conforms. Addressed in DCD Sections 11.2 and 12.2 , and in Sections 11.2 and 12.2 .
				II.6	Not applicable. Applies to ESP applications.
11.3	Gaseous Waste Management System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms. Addressed in DCD Sections 11.3 and 12.2 , and in Sections 11.2 and 12.2 .
				II.8	Not applicable. Applies to ESP applications.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
11.4	Solid Waste Management System	Rev. 3	Mar-07	II.1, II.2, II.5, II.7, II.8, II.9, II.10, II.14 II.3, II.4, II.6, II.11, II.12, II.13	Conforms. Conforms (addressed in DCD Section 11.4 and in Section 11.4 ; for Acceptance Criterion II.13, this is also addressed in Section 11.5) with the following exception: RG 1.206, Section 13.4 includes the PCP as an operational program, and only requires a program description in the COLA and a milestone for full program implementation. The FSAR provides a description of the PCP, along with the implementation milestone. Procedures for handling waste will be developed once the PCP is implemented.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	Rev. 5	May-10	II.1, II.2	Conforms (addressed in DCD Section 11.5.2) with the following exception: Procedural controls are based on NQA-1, rather than RG 1.33, as described in Section 13.5 . Quality Assurance Program requirements are addressed in Section 17.5 .
				II.3, II.4, II.5	Conforms (addressed in DCD Sections 11.5.2 and 11.5.3 , and in Section 11.5) with the following exceptions: 1) RG 1.206, Section 13.4 includes the ODCM (including the SREC) and PCP as operational programs, and only requires program descriptions in the COLA and milestones for full program implementation. The FSAR provides descriptions of the PCP and ODCM along with implementation milestones. 2) Procedural controls are based on NQA-1, rather than RG 1.33, as described in Section 13.5 . Quality Assurance Program requirements are addressed in Section 17.5 . Conformance with NUREG-0718 is addressed in DCD Table 1.9-8 .
				II.6	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 11-3	Design Guidance for Solid Radioactive Waste Management Systems Installed in Light-Water-Cooled Nuclear Power Reactor Plants	Rev. 3	Mar-07	B.1,B.3, B.5 B.2, B.4	Conforms Conforms (addressed in DCD Section 11.4 and in Section 11.4 ; for Acceptance Criterion II.13, this is also addressed in Section 11.5) with the following exception: RG 1.206, Section 13.4 includes the PCP as an operational program, and only requires a program description in the COLA and a milestone for full program implementation. The FSAR provides a description of the PCP, along with the implementation milestone. Procedures for handling waste will be developed once the PCP is implemented.
BTP 11-5	Postulated Radioactive Releases Due to a Waste Gas System Leak or Failure	Rev. 3	Mar-07		Conforms. Addressed in DCD Section 11.3 .
BTP 11-6	Postulated Radioactive Releases Due to Liquid-containing Tank Failures	Rev. 3	Mar-07		Conforms. Addressed in DCD Section 15.3.16 and in Section 2.4.13 .
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. Addressed in Section 13.2 , and Appendices 12AA and 12BB .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
12.2	Radiation Sources	Rev. 3	Mar-07	II.1	Not applicable. Acceptance criterion cites RG 1.3. SRP states RG 1.3 is applicable to license holders issued prior to January 10, 1997. COL applicant is not a license holder.
				II.2	Not applicable to the ESBWR
				II.3	Conforms. Addressed in DCD Sections 12.3 and 15.4 and in Section 6.4 .
				II.4	Conforms. Addressed in DCD Section 12.3 .
				II.5	Conforms
				II.6	Conforms. Addresses in DCD Sections 1A and 12.2 .
				II.7	Conforms. Addressed in DCD Section 12.2 .
12.3–12.4	Radiation Protection Design Features	Rev. 4	Dec-11	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
12.5	Operational Radiation Protection Program	Rev. 4	May-10	II.1	Conforms with the following exceptions: 1) NUREG-0731 is not active, and is not utilized; 2) RG 8.8 specifies the use of RG 1.16. Reporting per C.1.b(2) and C.1.b(3) of RG 1.16 is no longer required.
				II.2.A, II.2.B, II.2.C, II.2.D, II.2.E.i, II.2.E.ii, II.2.E.iii, II.2.E.iv, II.2.F, II.2.G, II.2.H, II.4	Conforms
				II.2.E.v	Conforms with the following exception: NUREG-1736 states that RGs 8.20, 8.26, and 8.32 are outdated and recommends use of the methods in RG 8.9, Rev. 1. Therefore, the methods identified in RG 8.9, Rev. 1 will be used in place of those in RGs 8.20, 8.26, and 8.32.
				II.3	Conforms with the following exceptions: 1) RG 8.25 is not applicable to power stations; 2) NUREG-1736 states that RGs 8.20, 8.26, and 8.32 are outdated and recommends use of the methods in RG 8.9, Rev. 1; and 3) RP program and procedures are established, implemented, maintained, and reviewed under the QA Program described in Section 17.5 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.1.1	Management and Technical Support Organization	Rev. 5	Mar-07	II.1.A, B, D, II.2.A.i through II.2.A.v	Conforms
				II.1.C	Exception: The experience requirements of corporate staff are set by corporate policy and not provided in detail; however, the experience level of Dominion, as discussed in Section 13.1 and Appendix 13AA , in the area of nuclear plant development, construction, and management establishes that Dominion has the necessary capability and staff to ensure that design and construction of the facility will be performed in an acceptable manner.
				II.2.A.vi, II.2.A.vii	Conforms. Addressed in Sections 13.1 and 14.2 .
				II.2.A.viii	Not applicable. Only applies to applicants whose applications were pending as of February 16, 1982.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.1.2–13.1.3	Operating Organization	Rev. 6	Mar-07	General 1	Exception: SRP requires operational, onsite technical support, and maintenance groups to be under the direction and supervision of a plant manager. Dominion has organized much of its technical support with direct reporting to offsite/corporate organizations and dotted line reporting to the site executive in charge of plant management. This applies to such groups as training, security, emergency preparedness, QA, licensing, and projects.
				General 2, General 3	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.1.2–13.1.3 <i>(continued)</i>	Operating Organization	Rev. 6	Mar-07	General 4	Not applicable. There are no requests for exemptions from the requirements of 10 CFR 50.54(m).
				II.1.A, II.1.B	Conforms with the following exception: Section 17.5 states, “The operational phase quality assurance program requirements will be established through the Company’s commitment to ANSI/ASME NQA-1-1994 as described within this QAPD. This edition of NQA-1 contains overall quality assurance requirements equivalent to those of ANSI N18.7-1976, and the Company has included within this QAPD the required administrative controls from ANSI N18.7-1976. Therefore, the Company does not commit to compliance with the requirements of ANSI N18.7-1976/ANS-3.2.”
				II.1.A.i through II.1.A.v, II.1.C, II.1.D, II.1.E, II.1.F, II.1.G	Conforms
				II.1.H	Conforms. Addressed in Section 13.2 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.2.1	Reactor Operator Requalification Program: Reactor Operator Training	Rev. 3	Mar-07	II.1.A.i	Conforms. Addressed in Section 13.1 .
				II.1.A.ii, II.1.A.iii, II.1.A.v, II.1.B, II.1.D, II.1.E	Conforms
				II.1.A.iv	Conforms. Addressed in Sections 13.1, 13.2, and 17.5 .
				II.1.A.vi	Conforms. Addressed in DCD Chapter 18 .
				II.1.A.vii	Exception: The COLA incorporates by reference approved industry template NEI 06-13, which does not address compliance with NUREG-1021.
				II.1.C	Exception: This item states that “formal segments of the initial licensed operator training program should be substantially complete when the pre-operational program test begins.” Appendix 13BB commits to a similar state of readiness: “Before initial fuel loading, the number of persons trained in preparation for RO and SRO licensing examinations will be sufficient to meet regulatory requirements, with allowances for examination contingencies and without the need for planned overtime.”

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.2.2	Non-Licensed Plant Staff Training	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.7, II.8, II.9	Conforms.
				II.6	Exception: This item states that “formal segments of the initial training program should be substantially complete when the pre-operational test program begins.” Appendix 13BB commits to a similar state of readiness: “Before initial fuel loading, sufficient plant staff will be trained to provide for safe plant operations.”
				II.10	Conforms. Addressed in DCD Section 9.5.1 .
				II.11	Conforms. Addressed in Sections 13.2 and 13.4 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.3	Emergency Planning	Rev. 3	Mar-07	II.1, II.2,	Conforms. Addressed in Section 13.4 , COLA Part 5 , and COLA Part 10 .
				II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.17, II.18, II.27, II.28, II.29, II.30	Conforms. Addressed in COLA Part 5 .
				II.14	Not applicable. Allows NRC to issue a license when applicant asserts that noncompliance with offsite EP requirements is because state or local government has declined to participate in emergency planning.
				II.15, II.16, II.19, II.20, II.21	Not applicable. Only applies to ESP applications.
				II.22	Not applicable. Only applies to design certification applications.
				II.23, II.24	Conforms. Addressed in COLA Part 10 .
				II.25	Conforms. Addressed in DCD Section 13.3 and COLA Part 5 . The NAPS Units 1 and 2 EOF will be used for Unit 3.
				II.26	Conforms. Reviewed under SRPs 7.5 and 18.2.
				II.31	Conforms. Addressed in Section 13.4 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.4	Operational Programs	Rev. 3	Mar-07		Conforms
13.5.1.1	Administrative Procedures - General	Rev. 1	Dec-11	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
				II.8	Section 13.5 and DCD Section 18.9 discuss conformance with NUREG- 0711
				II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16, II.17, II.18, II.19, II.20, II.21	Conforms
13.5.2.1	Operating and Emergency Operating Procedures	Rev. 2	Mar-07	II.1	Conforms
				II.2.A, II.2.B	Conforms
				II.2.C	Section 13.5 and DCD Section 18.9 discuss conformance with NUREG- 0711
				II.2.D, II.2.E, II.2.F, II.2.G, II.2.H, II.2.I	Conforms
13.6	Physical Security	Rev. 3	Mar-07		Addressed in COLA Part 8 .
13.6.1	Physical Security - Combined License Review Responsibilities	Rev. 1	Oct-10		Addressed in COLA Part 8 .
13.6.2	Physical Security - Design Certification	Rev. 1	Oct-10		Not applicable. Applies to design certification applications.
13.6.3	Physical Security - Early Site Permit	Rev. 1	Oct-10		Not applicable. Applies to ESP applications.
13.6.6	Cyber Security Plan	Initial issuance	Nov-10		Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
14.2	Initial Plant Test Program - Design Certification and New License Applicants	Rev. 3	Mar-07	1A, 1B, 1C, 2A, COL/OL Applicants: 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3H, 4A, 4B, 5A, 5B, 5C, 5D, 6A, 6B, 6C	Conforms with the following exception: Refer to Table 1.9-202 for exceptions to RG 1.68.
				DC Applicants: 3A, 3B, 3C, 3D, 4A, 6A, 6B, 6C	Not applicable. Applies to DC applicants.
14.2.1	Generic Guidelines for Extended Power Uprate Testing Programs	Initial Issuance	Aug-06		Not applicable. Applies to power uprates.
14.3	Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2	Conforms
14.3.1	[Reserved]	[Reserved]	Mar-07		Not used
14.3.2	Structural and Systems Engineering - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II. 11	Conforms
14.3.3	Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2.A, II.2.B, II.2.C, II.2.D, II.2.E	Conforms
14.3.4	Reactor Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
14.3.5	Instrumentation and Controls - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
14.3.6	Electrical Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	Class 1E Equipment: II.1, II.2, II.3, II.4, II.5 Other Electrical Equipment Important to Safety: II.1, II.2, II.3, II.4, II.5	Conforms
14.3.7	Plant Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
14.3.8	Radiation Protection - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3	Conforms
14.3.9	Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
14.3.10	Emergency Planning - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2	Conforms
14.3.11	Containment Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
14.3.12	Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria	Rev. 1	May-10	II.1, II.2	Conforms
15	Introduction - Transient and Accident Analyses	Rev. 3	Mar-07	I.1, I.2, 1.3, I.4, I.5, I.6	Conforms
15.0.1	Radiological Consequence Analyses Using Alternative Source Terms	Rev. 0	Jul-00	V	Conforms
15.0.2	Review of Transient and Accident Analysis Method	Rev. 0	Dec-05	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
15.0.3	Design Basis Accident Radiological Consequences of Analyses for Advanced Light Water Reactors	Initial Issuance	Mar-07		Conforms
15.1.1– 15.1.4	Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief or Safety Valve	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, 1, 2, 3, 4	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.1.5	Steam System Piping Failures Inside and Outside of Containment (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
15.1.5.A	Radiological Consequences of Main Steam Line Failures Outside Containment of a PWR				Not applicable to the ESBWR
15.2.1–15.2.5	Loss of External Load; Turbine Trip; Loss of Condenser Vacuum; Closure of Main Steam Isolation Valve (BWR); and Steam Pressure Regulator Failure (Closed)	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
15.2.6	Loss of Nonemergency AC Power to the Station Auxiliaries	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.5B, II.5C, II.5D II.5A	Conforms Not applicable. There are no RCS loops in the ESBWR. ESBWR did apply the 2% power uncertainty portion of this acceptance criterion.
15.2.7	Loss of Normal Feedwater Flow	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
15.2.8	Feedwater System Pipe Breaks Inside and Outside Containment (PWR)	Rev. 2	Mar-07		Not applicable to the ESBWR

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.3.1– 15.3.2	Loss of Forced Reactor Coolant Flow Including Trip of Pump Motor and Flow Controller Malfunctions	Rev. 2	Mar-07		Not applicable to the ESBWR
15.3.3– 15.3.4	Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break	Rev. 3	Mar-07		Not applicable to the ESBWR
15.4.1	Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup Condition	Rev. 3	Mar-07	II.1.A, II.1.C	Conforms
				II.1.B	Not applicable to the ESBWR
15.4.2	Uncontrolled Control Rod Assembly Withdrawal at Power	Rev. 3	Mar-07	II.1.A, II.1.C	Conforms
				II.1.B	Not applicable to the ESBWR
15.4.3	Control Rod Misoperation (System Malfunction or Operator Error)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
15.4.4– 15.4.5	Startup of an Inactive Loop or Recirculation Loop at an Incorrect Temperature, and Flow Controller Malfunction Causing an Increase in BWR Core Flow Rate	Rev. 2	Mar-07		Not applicable. ESBWR does not have forced recirculation systems.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.4.6	Inadvertent Decrease in Boron Concentration in the Reactor Coolant System (PWR)	Rev. 2	Mar-07		Not applicable to the ESBWR
15.4.7	Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position	Rev. 2	Mar-07	II.1, II.2	Conforms
15.4.8	Spectrum of Rod Ejection Accidents (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
15.4.8.A	Radiological Consequences of a Control Rod Ejection Accident (PWR)				Not applicable to the ESBWR
15.4.9	Spectrum of Rod Drop Accidents (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms. Postulated events are not applicable to the ESBWR.
15.4.9.A	Radiological Consequences of Control Rod Drop Accident (BWR)	Rev 2	July 81		Conforms. Postulated control rod drop events are not applicable to the ESBWR.
15.5.1– 15.5.2	Inadvertent Operation of ECCS and Chemical and Volume Control System Malfunction that Increases Reactor Coolant Inventory	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.6.1	Inadvertent Opening of a PWR Pressurizer Pressure Relief Valve or a BWR Pressure Relief Valve	Rev. 2	Mar-07	II.1, II.2, II.3, II.A, II.B, II.C, II.D	Conforms
15.6.2	Radiological Consequences of the Failure of Small Lines Carrying Primary Coolant Outside Containment	Rev. 2	Jul-81	II.1, II.2	Conforms
15.6.3	Radiological Consequences of Steam Generator Tube Failure				Not applicable to the ESBWR
15.6.4	Radiological Consequences of Main Steam Line Failure Outside Containment (BWR)	Rev. 2	Jul-81	II.1, II.2, II.3 II.4	Conforms Conforms. Addressed in TS 3.4.3 .
15.6.5	Loss-of-Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary	Rev. 3	Mar-07	II.1A, II.1B, II.1C, II.1D, II.1.E, II.2, II.3	Conforms.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.6.5.A	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Including Containment Leakage Contribution	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20 .
15.6.5.B	Radiological Consequences of a Design Basis Loss-of-Coolant Accident: Leakage From Engineered Safety Feature Components Outside Containment	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20 .
15.6.5.D	Radiological Consequences of a Design Basis Loss-of-Coolant Accident: Leakage From Main Steam Isolation Valve Leakage Control System (BWR)	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20 .
15.7.3	Postulated Radioactive Releases Due to Liquid-Containing Tank Failures	Rev. 2	Jul-81	II.1, II.2	Conforms
15.7.4	Radiological Consequences of Fuel Handling Accidents	Rev. 2	Jul-81	II.1, II.2, II.3, II.4, II.5	Conforms. Radiological assumptions superseded by SRP 15.0.1.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.7.5	Spent Fuel Cask Drop Accidents	Rev. 2	July 81	II.1, II.2, II.3, II.4, II.5	Conforms. Because a spent fuel cask drop exceeding 9.2 m (30 ft) is not postulated (DCD Section 15.4.10.1), per SRP 15.7.5 a design basis radiological analysis is not required. Therefore, the acceptance criteria do not apply even though the SRP does.
15.8	Anticipated Transients Without Scram	Rev. 2	Mar-07	II.1.A	Not applicable. ESBWR does not have recirculation pumps.
				II.1.B, II.1.C, II.1.D, II.1.E, II.1.F	Conforms
15.9	Boiling Water Reactor Stability	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
16.0	Technical Specifications	Rev. 3	Mar-10		Conforms
16.1	Risk-informed Decision Making: Technical Specifications	Rev. 1	Mar-07		Not applicable
17.1	Quality Assurance During the Design and Construction Phases	Rev. 2	Jul-81		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.
17.2	Quality Assurance During the Operations Phase	Rev. 2	Jul-81		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
17.3	Quality Assurance Program Description	Rev. 0	Aug-90		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.
17.4	Reliability Assurance Program (RAP)	Initial Issuance	Mar-07	II.B.1, II.B.2, II.B.3, II.B.4, II.B.5, II.B.6, II.B.7, II.B.8, II.B.9	Conforms. Addressed in DCD Section 17.4 and in Section 17.6 .

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
17.5	Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants	Initial Issuance	Mar-07	II.A, II.B.1, II.B.2, II.B.3, II.B.4, II.B.5, II.B.6, II.B.7, II.C, II.D, II.E, II.F.1, II.F.2, II.F.3, II.F.4, II.F.5, II.F.6, II.F.7, II.F.9, II.F.12, II.G, II.H, II.I, II.J, II.K, II.L.1, II.L.2, II.L.3, II.L.4, II.L.5, II.L.6, II.L.7, II.M.1, II.M.2, II.M.3, II.M.4, II.M.5, II.N, II.O, II.P, II.Q, II.R.1, II.R.2, II.R.3.a, II.R.3.c, II.R.4, II.R.5, II.R.6, II.R.7, II.R.8, II.R.9, II.R.10, II.R.11, II.R.12, II.S, II.T, II.U.1.a, II.U.1.b, II.U.1.c, II.U.1.d, II.U.2.a, II.U.2.b, II.U.2.c, II.U.2.d, II.U.2.e, II.U.2.f, II.U.2.g, II.U.2.h, II.U.2.i, II.U.2.j, II.U.2.l, II.V	DOM-QA-1: Conforms
				II.B.8	DOM-QA-1: Alternative language addresses the grace period (previously approved by NRC).
				II.B.9, II.F.8, II.F.10, II.F.11, II.M.6, II.M.7, II.M.8, II.R.3.b, II.W	DOM-QA-1: Not applicable. DOM-QA-1 is not used during the operational phase.
				II.L.8	DOM-QA-1: Not applicable. This process for qualification of commercial-grade calibration services is not used.
				II.U.1.e	DOM-QA-1: Not a commitment in DOM-QA-1. Included in implementing procedure.
				II.U.2.k	DOM-QA-1: Not applicable. On-line records not used.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
17.5 (continued)	Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants	Initial Issuance	Mar-07	II.A, II.B, II.C, II.D., II.E, II.F, II.G, II.H, II.I, II.J, II.K, II.L, II.M, II.N, II.O, II.P, II.Q, II.R, II.S, II.T, II.U, II.V, II.W Option 1 II.W Option II	Dominion QAPD (Appendix 17AA): Conforms Dominion QAPD: Not applicable for North Anna. Option I chosen
17.6	Maintenance Rule	Rev. 1	Aug-07	II.1, II.2	Exception: RG 1.160 Rev. 2, RG 1.182 Rev. 0 are referenced in Section 17.6
18	Human Factors Engineering	Rev. 2	Mar-07	II.A II.B, II.C	Conforms Not applicable. These acceptance criteria apply to changes to existing plants.
Appendix 18-A	Crediting Manual Operator Actions in Diversity and Defense-in-Depth (D3) Analyses	Rev. 0	Nov-09	N/A	Conforms
19.0	Probabilistic Risk Assessment and Severe Accident Evaluation for New Reactors	Rev. 2	Jun-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7 II.8, II.9	Conforms Not applicable. Only applies to Westinghouse AP 600 design.

Table 1.9-201 Conformance with Standard Review Plan

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
19.1	Determining the Technical Adequacy of Probabilistic Risk Assessment for Risk-Informed License Amendment Requests after Initial Fuel Load	Rev. 3	Sep-12	II	Not applicable
19.2	Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance	Initial issuance	Jun-07	II.1, II.2, II.3, II.4, II.5	Not applicable

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.1	Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal System Pumps	Rev. 0	Nov-70	General	Not applicable
1.3	Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors	Rev. 2	Jun-74	General	Not applicable. RG 1.183 is used.
1.4	Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors	Rev. 2	Jun-74	General	Not applicable
1.5	Assumptions Used for Evaluating the Potential Radiological Consequences of a Steam Line Break Accident for Boiling Water Reactors	Rev. 0	Mar-71	General	Not applicable. RG 1.183 is used.
1.6	Independence Between Redundant Standby (Onsite) Power Sources and Between Their Distribution Systems	Rev. 0	Mar-71	General	Conforms. Portions pertaining to the safety-related DC system are addressed in DCD Section 8.3.2
1.7	Control of Combustible Gas Concentrations in Containment	Rev. 3	Mar-07	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.8	Qualification and Training of Personnel for Nuclear Power Plants	Rev. 3	May-00	General	See Appendix 17AA , QAPD, Part IV
1.9	Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants	Rev. 4	Mar-07	General	Not applicable
1.11	Instrument Lines Penetrating the Primary Reactor Containment	Rev. 1	Mar-10	C.1 – C.7	Conforms
1.12	Nuclear Power Plant Instrumentation for Earthquakes	Rev. 2	Mar-97	C.1, C.4 – C.7 C.3, C.8	Conforms Conforms. The seismic monitoring program, including the necessary test and operating procedures, will be implemented prior to receipt of fuel on site.
1.13	Spent Fuel Storage Facility Design Basis	Rev. 2	Mar-07	General	Conforms
1.14	Reactor Coolant Pump Flywheel Integrity	Rev. 1	Aug-75	General	Not applicable
1.16	Reporting of Operating Information—Appendix A Technical Specifications				Withdrawn. Per Section 14.2.2.5 , startup test reports are prepared in accordance with this RG.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.20	Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing	Rev. 3	Mar-07	C.1	Conforms.
				C.2	Conforms
				C.3	Conforms
1.21	Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants	Rev. 2	Jun-09	General	Exception: PCP and ODCM follow NEI 07-10A and NEI 07-09A, respectively. These NEI templates reference RG 1.21, Rev. 1. Also, DCD implements Rev. 1. Refer to DCD Table 1.9-21 .
		Rev. 1	Jun-74	General	Conforms. Sections 11.4.2.3 (NEI 07-10A) and 11.5.4.5 (NEI 07-09A) provide descriptions of the PCP and ODCM, respectively. Implementation milestones are provided in Section 13.4 .
1.22	Periodic Testing of Protection System Actuation Functions	Rev. 0	Feb-72	General	Conforms. Operational program implementation is described in Section 13.4 .
1.23	Meteorological Monitoring Programs for Nuclear Power Plants	Rev. 1	Mar-07	General	Exception. Conform to Proposed Revision 1 to RG 1.23. See SSAR Section 1.8.2 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.24	Assumptions Used for Evaluating the Potential Radiological Consequences of a Pressurized Water Reactor Radioactive Gas Storage Tank Failure	Rev. 0	Mar-72	All	Not applicable
1.25	Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors	Rev. 0	Mar-72	General	Not applicable. RG 1.183 is used.
1.26	Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants	Rev. 4	Mar-07	All	See Appendix 17AA , QAPD, Part IV
		Rev. 3	Feb-76	All	Conforms. Refer to DCD Tables 1.9-21, 1.9-21a, 1.9-21b .
1.27	Ultimate Heat Sink for Nuclear Power Plants	Rev. 2	Jan-76	General	The UHS is within the scope of the referenced certified design and is addressed in DCD Section 9.2.5 .
1.28	Quality Assurance Program Requirements (Design and Construction)	Rev. 4	Jun-10		Exception: QAPD references Rev. 3
		Rev. 3	Aug-85	General	See Appendix 17AA , QAPD, Part IV

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.29	Seismic Design Classification	Rev. 4	Mar-07	General	See Appendix 17AA , QAPD, Part IV
		Rev. 3	Sep-78	All	Conforms. Refer to in DCD Tables 1.9-21 , 1.9-21a , 1.9-21b .
1.30	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment	Rev. 0	Aug-72	General	See Appendix 17AA , QAPD, Part IV
1.31	Control of Ferrite Content in Stainless Steel Weld Metal	Rev. 3	Apr-78	General	Conforms. Operational program implementation is described in Section 13.4 .
1.32	Criteria for Power Systems for Nuclear Power Plants	Rev. 3	Mar-04	General	Conforms.
1.33	Quality Assurance Program Requirements (Operation)	Rev. 2	Feb-78	General	See Appendix 17AA , QAPD, Part IV
1.34	Control of Electroslag Weld Properties	Rev. 1	Mar-11	General	Exception. The requirements for control of electroslag weld properties are defined by the DCD, which implements Rev. 0. Refer to DCD Table 1.9-21
		Rev. 0	Dec-72	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.35	Inservice Inspection of UngROUTed Tendons in Prestressed Concrete Containments	Rev. 3	Jul-90	General	Not applicable
1.35.1	Determining Prestressing for Inspection of Prestressed Concrete Containments	Rev. 0	Jul-90	General	Not applicable
1.36	Nonmetallic Thermal Insulation for Austenitic Stainless Steel	Rev. 0	Feb-73	General	Conforms. Operational program implementation is described in Section 13.4 .
1.37	Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants	Rev. 1	Mar-07	General	See Appendix 17AA , QAPD, Part IV
1.38	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants	Rev. 2	May-77	General	See Appendix 17AA , QAPD, Part IV
1.39	Housekeeping Requirements for Water-Cooled Nuclear Power Plants	Rev. 2	Sep-77	General	Exception. QAPD references Rev. 1
		Rev. 1	Oct-76		See Appendix 17AA , QAPD, Part IV

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.40	Qualification Tests of Continuous-Duty Motors Installed Inside the Containment of Water-Cooled Nuclear Power Plants	Rev. 0	Mar-73	General	Conforms
1.41	Preoperational Testing of Redundant On-Site Electric Power Systems to Verify Proper Load Group Assignments	Rev. 0	Mar-73	General	Conforms with the following exception. There are no safety-related DGs for ESBWR.
1.43	Control of Stainless Steel Weld Cladding of Low-Alloy Steel Components	Rev. 1	Mar-11	General	Exception. The requirements for control of stainless steel weld cladding of low-alloy steel components are defined by the DCD, which implements Rev. 0. Refer to DCD Table 1.9-21 .
		Rev. 0	May-73	General	Conforms
1.44	Control of the Processing and Use of Sensitized Stainless Steel	Rev. 1	Mar-11	General	Exception. The requirements for control of the use of sensitized stainless steel are defined by the DCD which implements Rev. 0. Refer to DCD Table 1.9-21 .
		Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.45	Reactor Coolant Pressure Boundary Leakage Detection Systems	Rev. 1	May-08	General	Conforms. Operational program implementation is described in Section 13.4 .
1.47	Bypassed and Inoperable Status Indication for Nuclear Power Plant Safety Systems	Rev. 1	Feb-10	General	Conforms
1.50	Control of Preheat Temperature for Welding of Low-Alloy Steel	Rev. 1	Mar-11	General	Exception. The requirements for control of preheat of welding of low-allow steel are defined by the DCD, which implements Rev. 0. Refer to DCD Table 1.9-21 .
		Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .
1.52	Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants	Rev. 4	Sep-12	General	Exception: ESF and RB exhaust filtration units are designed, inspected and tested to RG 1.52, Rev. 3. Refer to DCD Sections 6.4.7, 9.4.1, and 9.4.6.4 , DCD Tables 1.9-21 and 1.9-21a , and TS Section 5.5.13 .
		Rev. 3	Jun-01	General	Conforms. Refer to DCD Section 9.4.6.4 , DCD Tables 1.9-21 and 1.9-21a , and TS Section 5.5.13 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.53	Application of the Single-Failure Criterion to Safety Systems	Rev. 2	Nov-03	General	Conforms
1.54	Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants	Rev. 2	Oct-10		Exception. Appendix 17AA , QAPD, Part IV endorses Rev. 1
		Rev. 1	Jul-00	General	See Appendix 17AA , QAPD, Part IV
1.56	Maintenance of Water Purity in Boiling Water Reactors				Withdrawn.
1.57	Design Limits and Loading Combinations for Metal Primary Reactor Containment System Components	Rev. 2	May-13	General	Conforms
1.59	Design Basis Floods for Nuclear Power Plants (Errata Published 7/30/80)	Rev. 2	Aug-77	General	Conforms
1.60	Design Response Spectra for Seismic Design of Nuclear Power Plants	Rev. 1	Dec-73	General	Conforms
1.61	Damping Values for Seismic Design of Nuclear Power Plants	Rev. 1	Mar-07	General	Conforms
1.62	Manual Initiation of Protective Actions	Rev. 1	Jun-10	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.63	Electric Penetration Assemblies in Containment Structures for Nuclear Power Plants	Rev. 3	Feb-87	General	Conforms
1.65	Materials and Inspections for Reactor Vessel Closure Studs	Rev. 1	Apr-10	General	Exception. The requirements for RPV closure studs are defined by the DCD, which implements Rev. 0. Refer to DCD Table 1.9-21 .
		Rev. 0	Oct-73	General	Conforms
1.68	Initial Test Programs for Water-Cooled Nuclear Power Plants	Rev. 3	Mar-07	General	Conforms with the following exception: Equipment listed in Appendix A, Items 1.k(2) and 1.k(3) not included in the initial test program.
1.68.1	Preoperational and Initial Startup Testing of Feedwater and Condensate Systems for Boiling Water Reactor Power Plants	Rev. 2	Sep-12	General	Conforms
1.68.2	Initial Startup Test Program to Demonstrate Remote Shutdown Capability for Water-Cooled Nuclear Power Plants	Rev. 2	Apr-10	General	Conforms
1.68.3	Preoperational Testing of Instrument and Control Air Systems	Rev. 1	Sep-12	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.69	Concrete Radiation Shields for Nuclear Power Plants	Rev. 1	May-09	General	Conforms
1.70	Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants LWR Edition	Rev. 3	Nov-78	—	Not applicable. RG 1.206 is used. Table 1.9-203 .
1.71	Welder Qualification for Areas of Limited Accessibility	Rev. 1	Mar-07	General	Conforms. Operational program implementation is described in Section 13.4 .
1.72	Spray Pond Piping Made from Fiberglass-Reinforced Thermosetting Resin	Rev. 2	Nov-78	General	Not applicable
1.73	Qualification Tests of Electric Valve Operators Installed Inside the Containment of Nuclear Power Plants	Rev. 0	Jan-74	General	Conforms
1.75	Criteria for Independence of Electrical Safety Systems	Rev. 3	Feb-05	General	Conforms
1.76	Design Basis Tornado and Tornado Missiles for Nuclear Power Plants	Rev. 1	Mar-07	General	Conforms
1.77	Assumptions Used for Evaluating a Control Rod Ejection Accident for Pressurized Water Reactors	Rev. 0	May-74	General	Not applicable

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.78	Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release	Rev. 1	Dec-01	General	Conforms
1.79	Preoperational Testing of Emergency Core Cooling Systems for Pressurized Water Reactors	Rev. 1	Sep-75	General	Not applicable
1.81	Shared Emergency and Shutdown Electric Systems for Multi-Unit Nuclear Power Plants	Rev. 1	Jan-75	General	Not applicable
1.82	Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident	Rev. 4	Mar-12	General	Not applicable
1.83	Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes	Rev. 1	Jul-75	General	Not applicable
1.84	Design, Fabrication, and Materials Code Case Acceptability, ASME Section III	Rev. 35	Oct-10	General	Conforms. Code Case N-782 also applies as described in the Comments sections for RG 1.84 in DCD Table 1.9-21 . Code Case N-763 also applies as described in DCD Sections 3.8.1.6.4 and 3.8.3.6.1 through 3.8.3.6.5 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.86	Termination of Operating Licenses for Nuclear Reactors	Rev. 0	Jun-74	General	This RG is outside the scope of the FSAR.
1.87	Guidance for Construction of Class 1 Components in Elevated-Temperature Reactors (Supplement to ASME Section III Code Cases 1592, 1593, 1594, 1595, and 1596)	Rev. 1	Jun-75	General	Not applicable
1.89	Environmental Qualification of Certain Electric Equipment Important to Safety for Nuclear Power Plants	Rev. 1	Jun-84	General	Conforms. Source terms from RG 1.183 used.
1.90	Inservice Inspection of Prestressed Concrete Containment Structures with Grouted Tendons	Rev. 2	Nov-12	General	Not applicable
1.91	Evaluations of Explosions Postulated to Occur at Nearby Facilities and on Transportation Routes Near Nuclear Power Plants	Rev. 2	Apr-13	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.92	Combining Modal Responses and Spatial Components in Seismic Response Analysis	Rev. 3	Oct-12	General	Exception. The requirements for combining modal responses and spatial components in seismic response analysis are defined by the DCD, which implements Rev. 2. Refer to DCD Tables 1.9-21 and 1.9-21a .
		Rev. 2	Jul-06	General	Conforms
1.93	Availability of Electric Power Sources	Rev. 1	Mar-12	General	Exception. The requirements for availability of electric power sources are defined by the DCD, which implements Rev. 0. Refer to DCD Tables 1.9-21 and 1.9-21a
		Rev. 0	Dec-74	General	Conforms with the following clarification. The ESBWR is designed to shut down safely without reliance on offsite or diesel-generator-derived AC power, therefore, the regulatory guide is only applicable to onsite safety-related DC power systems.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.94	Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants	Rev. 1	Apr-76	General	See Appendix 17AA , QAPD, Part IV
1.96	Design of Main Steam Isolation Valve Leakage Control Systems for Boiling Water Reactor Nuclear Power Plants	Rev. 1	Jun-76	General	Not applicable
1.97	Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants	Rev. 4	Jun-06	General	Conforms. Operational program implementation is described in Section 13.4 .
1.98	Assumptions Used for Evaluating the Potential Radiological Consequences of a Radioactive Offgas System Failure in a Boiling Water Reactor	Rev. 0	Mar-76	General	Not applicable. Superseded by BTP 11-5.
1.99	Radiation Embrittlement of Reactor Vessel Materials	Rev. 2	May-88	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.100	Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants	Rev. 3	Sep-09	C.1.1	Exception: The seismic qualification requirements for ESBWR standard plant design are defined by the DCD, which implements Rev. 2. DCD Tables 1.9-21, 1.9-21a, 1.9-21b
				C.1.2, C.2	Conforms only regarding endorsement of ASME QME-1-2007
		Rev. 2	Jun-88	General	Conforms. Operational program implementation is described in Section 13.4 .
1.101	Emergency Response Planning and Preparedness for Nuclear Power Reactors	Rev. 5	Jun-05	General	Conforms except Unit 3 Emergency Plan utilizes NEI 07-01, Rev. 0 for EALs instead of NUREG-0654/ FEMA-REP-1, Appendix 1
1.102	Flood Protection for Nuclear Power Plants	Rev. 1	Sep-76	General	Conforms
1.105	Setpoints For Safety-Related Instrumentation	Rev. 3	Dec-99	General	Conforms. Operational program implementation is described in Section 13.4 .
1.106	Thermal Overload Protection for Electric Motors on Motor-Operated Valves	Rev. 2	Feb-12	General	Not applicable

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.107	Qualifications for Cement Grouting for Prestressing Tendons in Containment Structures	Rev. 2	Jun-11	General	Not applicable
1.109	Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I	Rev. 1	Oct-77	General	Conforms
1.110	Cost-Benefit Analysis for Radwaste Systems for Light-Water-Cooled Nuclear Power Reactors	Rev. 0	Mar-76	General	Conforms
1.111	Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors	Rev. 1	Jul-77	General	Conforms
1.112	Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light-Water-Cooled Nuclear Power Reactors	Rev. 1	Mar-07	General	Conforms except the suggested breakdown identified in Appendix A to the RG is not used because it is not consistent with the DCD presentation of information.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.113	Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I	Rev. 1	Apr-77	General	Conforms
1.114	Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit	Rev. 3	Oct-08	General	Conforms
1.115	Protection Against Low-Trajectory Turbine Missiles	Rev. 2	Jan-12	General	Conforms
1.116	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems	Rev. 0-R	Jun-76	General	See Appendix 17AA , QAPD, Part IV
1.117	Tornado Design Classification	Rev. 1	Apr-78	General	Conforms
1.118	Periodic Testing of Electric Power and Protection Systems	Rev. 3	Apr-95	General	Conforms. Operational program implementation is described in Section 13.4 .
1.121	Bases for Plugging Degraded PWR Steam Generator Tubes	Rev. 0	Aug-76	General	Not applicable

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.122	Development of Floor Design Response Spectra for Seismic Design of Floor-Supported Equipment or Components	Rev. 1	Feb-78	General	Conforms
1.124	Service Limits and Loading Combinations for Class 1 Linear-Type Supports	Rev. 3	Jul-13	General	Conforms
1.125	Physical Models for Design and Operation of Hydraulic Structures and Systems for Nuclear Power Plants	Rev. 2	Mar-09		Exception. DCD implements Rev. 1. Refer to DCD Table 1.9-21 .
		Rev. 1	Oct-78	General	Conforms
1.126	An Acceptable Model and Related Statistical Methods for the Analysis of Fuel Densification	Rev. 2	Mar-10	General	Conforms
1.127	Inspection of Water-Control Structures Associated with Nuclear Power Plants	Rev. 1	Mar-78	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.128	Installation Design and Installation of Vented Lead-Acid Storage Batteries for Nuclear Power Plants	Rev. 2	Feb-07	General	Exception: Battery and battery room ventilation system designs are in accordance with RG 1.128, Rev. 1. Refer to DCD Table 1.9-21 and DCD Sections 8.1.5.2.4, 9.4.6, and 9.4.7.
		Rev. 1	Oct-78	General	Conforms with the following exception: Operational aspects are in accordance with RG 1.128, Rev. 2.
1.129	Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants	Rev. 2	Feb-07	General	Conforms. Addressed in DCD Sections 8.3.2.1.1, 14.2.8.1.3.5 , and in Technical Specifications LCO 3.8.3 and Bases B 3.8.3 .
1.130	Service Limits and Loading Combinations for Class 1 Plate-and-Shell-Type Supports	Rev. 3	Jul-13	General	Conforms
1.131	Qualification Tests of Electric Cables, Field Splices, and Connections for Light-Water-Cooled Nuclear Power Plants				Withdrawn

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.132	Site Investigations for Foundations of Nuclear Power Plants	Rev. 2	Oct-03	C.1, C.2, C.3, C.4.1 – C.4.2, C.4.4, C.4.5, C.5 – C.7	Conforms
				C.4.3	<p>Conforms with the following exceptions: The RG identifies that at least one continuously sampled boring should be used for each safety-related structure. For the Unit 3 investigation, the rock was continuously cored. Because all of the soil above the rock will be removed under major structures, continuous sampling was not performed in the soil. (Continuous sampling to 15 ft depth, and the CPTs in soil provides a continuous record.) The RG identifies that boreholes with depths greater than about 100 ft should be surveyed for deviation.</p> <p style="text-align: right;"><i>(continued)</i></p>

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.132 <i>(cont'd)</i>	Site Investigations for Foundations of Nuclear Power Plan	Rev. 2	Oct-03	C.4.3 <i>(cont'd)</i>	<i>(continued)</i> Deviation surveys were made in the three deepest boreholes in conjunction with the down-hole geophysical testing, but not in all holes deeper than 100 ft depth, since such deviation surveys serve no useful purpose. The RG identifies that color photographs of all cores should be taken soon after removal from the borehole to document the condition of the soils at the time of drilling. Color photos were taken of the rock cores but not the soil samples. The undisturbed soil samples are sealed in steel tubes. The disturbed soil samples have lost their structure and thus a photo serves little useful purpose.
1.133	Loose-Part Detection Program for the Primary System of Light Water Cooled Reactors	Rev. 1	May-81	General	Not applicable

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.134	Medical Evaluation of Licensed Personnel for Nuclear Power Plants	Rev. 3	Mar-98	General	Conforms. Although RG 1.134 is not specifically identified in the FSAR, equivalent requirements for medical evaluations for licensed personnel are embedded in policies and procedures of operations and training departments.
1.135	Normal Water Level and Discharge at Nuclear Power Plants				Withdrawn
1.136	Design Limits, Loading Combinations, Materials, Construction, and Testing of Concrete Containments	Rev. 3	Mar-07	General	Conforms Positions applicable to prestressed concrete containments and tensioning systems are not applicable.
1.137	Fuel-Oil Systems for Standby Diesel Generators	Rev. 1	Oct-79	General	Not applicable
1.138	Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants	Rev. 2	Dec-03	General	Conforms
1.139	Guidance for Residual Heat Removal				Withdrawn.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.140	Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Normal Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants	Rev. 2	Jun-01	General	Conforms. Operational program implementation is described in Section 13.4 .
1.141	Containment Isolation Provisions for Fluid Systems	Rev. 1	Jul-10	General	Conforms
1.142	Safety-Related Concrete Structures for Nuclear Power Plants (Other Than Reactor Vessels and Containments)	Rev. 2	Nov-01	General	Conforms
1.143	Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants	Rev. 2	Nov-01	General	Conforms. Operational program implementation is described in Section 13.4 .
1.145	Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants	Rev. 1	Feb-83	General	Conforms
1.147	Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1	Rev. 16	Oct-10	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.148	Functional Specification for Active Valve Assemblies in Systems Important to Safety in Nuclear Power Plants				Withdrawn
1.149	Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations	Rev. 4	Apr-11	General	Conforms
1.150	Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations				Withdrawn
1.151	Instrument Sensing Lines	Rev. 1	Jul-10	General	Conforms. Operational program implementation is described in Section 13.4 .
1.152	Criteria for Use of Computers in Safety Systems of Nuclear Power Plants	Rev. 3	Jun-11		Exception. DCD implements Rev. 2. Refer to DCD Table 1.9-21 .
		Rev. 2	Jan-06	General	Conforms. Operational program implementation is described in Section 13.4 .
1.153	Criteria for Safety Systems	Rev. 1	Jun-96	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.154	Format and Content of Plant-Specific Pressurized Thermal Shock Safety Analysis Reports for Pressurized Water Reactors				Withdrawn
1.155	Station Blackout	Rev. 0	Aug-88	General	Conforms, except no emergency AC power is required for the ESBWR. Only the coping analysis is applicable. Operational program implementation is described in Section 13.4 .
1.156	Environmental Qualification of Connection Assemblies for Nuclear Power Plants	Rev. 1	Jun-11		Exception. DCD implements Rev. 0. Refer to DCD Table 1.9-21 .
		Rev. 0	Nov-87	General	Conforms
1.157	Best-Estimate Calculations of Emergency Core Cooling System Performance	Rev. 0	May-89	General	Conforms
1.158	Qualification of Safety-Related Lead Storage Batteries for Nuclear Power Plants	Rev. 0	Feb-89	General	Conforms
1.159	Assuring the Availability of Funds for Decommissioning Nuclear Reactors	Rev. 1	Oct-03	General	Conforms. The amount of funds for decommissioning and the method of financial assurance is described in COLA Part 1 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.160	Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Rev. 3	May-12	General	Exception: The Maintenance Rule Program is based on NEI 07-02A Rev. 0, which complies with RG 1.160 Rev. 2.
		Rev. 2	Mar-97	General	Conforms. Operational program implementation is described in Section 13.4 .
1.161	Evaluation of Reactor Pressure Vessels with Charpy Upper-Shelf Energy Less Than 50 Ft-Lb.	Rev. 0	Jun-95	General	Not applicable.
1.162	Format and Content of Report for Thermal Annealing of Reactor Pressure Vessels	Rev. 0	Feb-96	General	This RG is outside the scope of the FSAR.
1.163	Performance-Based Containment Leak-Test Program	Rev. 0	Sep-95	General	Conforms
1.165	Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion				Withdrawn
1.166	Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Postearthquake Actions	Rev. 0	Mar-97	General	Conforms. The seismic monitoring program, including the necessary test and operating procedures, will be implemented prior to receipt of fuel on site.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.167	Restart of a Nuclear Power Plant Shut Down by a Seismic Event	Rev. 0	Mar-97	General	Not applicable.
1.168	Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 1	Feb-04	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .
1.169	Configuration Management Plans for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .
1.170	Software Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .
1.171	Software Unit Testing for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .
1.172	Software Requirements Specifications for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.173	Developing Software Life Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10 .
1.174	An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis	Rev. 2	May-11	General	Not applicable. The approach described in this RG is not being used.
1.175	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing	Rev. 0	Aug-98	General	Not applicable. Risk informed inservice testing is not being used.
1.176	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Graded Quality Assurance				Withdrawn
1.177	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications	Rev. 1	May-11	General	Not applicable. Risk informed Technical Specifications are not being used.
1.178	An Approach For Plant-Specific Risk-informed Decisionmaking Inservice Inspection of Piping	Rev. 1	Sep-03	General	Not applicable. Risk informed inservice inspection is not being used.
1.179	Standard Format and Content of License Termination Plans for Nuclear Power Reactors	Rev. 1	Jun-11	General	This RG is outside the scope of the FSAR.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.180	Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems	Rev. 1	Oct-03	General	Conforms. Operational program implementation is described in Section 13.4 .
1.181	Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e)	Rev. 0	Sep-99	General	Conforms
1.182	Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants	Rev. 0	May-00	General	Withdrawn. Exception: See Rev. 0 Evaluation. Conforms. Refer to TS Sections B3.0.4 and B SR 3.0.3 .
1.183	Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors	Rev. 0	Jul-00	General	Conforms
1.184	Decommissioning of Nuclear Power Reactors	Rev. 0	Jul-00	General	Not applicable. The RG provides guidance on how to conduct decommissioning activities.
1.185	Standard Format and Content for Post-Shutdown Decommissioning Activities Report	Rev. 0	Jul-00	General	This RG is outside the scope of the FSAR.
1.186	Guidance and Examples for Identifying 10 CFR 50.2 Design Bases	Rev. 0	Dec-00	General	This RG is outside the scope of the FSAR.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.187	Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments	Rev. 0	Nov-00	General	Conforms.
1.188	Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses	Rev. 1	Sep-05	General	This RG is outside the scope of the FSAR.
1.189	Fire Protection for Nuclear Power Plants	Rev. 2	Oct-09	General	Conforms with the following exception. Section C.1.1.c of the RG states that during construction, on sites with an operating unit, the superintendent of the operating plant should have overall responsibility for fire protection. However, due to physical and administrative separation of Unit 3 from the operating units, the on-site executive in charge of construction will have overall responsibility for Unit 3 fire protection during construction.
1.190	Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence	Rev. 0	Mar-01	General	Conforms. The reactor vessel material surveillance program is described in Section 5.3.1.8 . Implementation of the program is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.191	Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown	Rev. 0	May-01	General	This RG is outside the scope of the FSAR.
1.192	Operation and Maintenance Code Case Acceptability, ASME OM Code	Rev. 0	Jun-03	General	Conforms. Operational program implementation is described in Section 13.4 .
1.193	ASME Code Cases Not Approved for Use	Rev. 3	Oct-10	General	Conforms
1.194	Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants	Rev. 0	Jun-03	General	Conforms
1.195	Methods and Assumptions for Evaluating Radiological Consequences of Design Basis Accidents at Light-Water Nuclear Power Reactors	Rev. 0	May-03	General	Not applicable. RG 1.183 is used.
1.196	Control Room Habitability at Light-Water Nuclear Power Reactors	Rev. 1	Jan-07	General	Conforms
1.197	Demonstrating Control Room Envelope Integrity at Nuclear Power Plant Reactors	Rev. 0	May-03	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.198	Procedures and Criteria for Assessing Seismic Soil Liquefaction At Nuclear Power Plant Sites	Rev. 0	Nov-03	General	Conforms
1.199	Anchoring Components and Structural Supports in Concrete	Rev. 0	Nov-03	General	Conforms
1.200	An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities	Rev. 2	Mar-09	General	Not applicable
1.201	Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance	Rev. 1	May-06	General	Not applicable
1.202	Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors	Rev. 0	Feb-05	General	Not applicable. The RG provides guidance for submitting decommissioning cost estimates to NRC prior to license termination.
1.203	Transient and Accident Analysis Methods	Rev. 0	Dec-05	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

	RG Number	Title	Revision	Date	RG Position	Evaluation
NAPS DEP 8.1-2	1.204	Guidelines for Lightning Protection of Nuclear Power Plants	Rev. 0	Nov-05	C.1	Conforms with the following exceptions: The switchyard surge protection system is not designed to guidelines of IEEE C62.23. The switchyard surge protection system is designed to Dominion transmission system standards that provide similar protection.
					C.2	Conforms
	1.205	Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants	Rev. 1	Dec-09	General	Not applicable. Risk-informed, performance-based fire protection is not used.
	1.206	Combined License Applications for Nuclear Power Plants (LWR Edition)	Rev. 0	Jun-07	General	See Table 1.9-203 .
	1.207	Guidelines for Evaluating Fatigue Analyses Incorporating the Life Reduction of Metal Components Due to the Effects of the Light-Water Reactor Environment for New Reactors	Rev. 0	Mar-07	General	Conforms

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.208	A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion	Rev. 0	Mar-07	All	Conforms. See Sections 2.5.2 and 3.7.1 .
1.209	Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants	Rev. 0	Mar-07	General	Conforms. Operational program implementation is described in Section 13.4 .
1.210	Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants	Rev. 0	Jun-08	General	Exception. The DCD endorses IEEE 650-1990 (R 1998). Refer to DCD Table 1.9-22 .
1.211	Qualification of Safety-Related Cables and Field Splices for Nuclear Power Plants	Rev. 0	Apr-09	C.1-C.5	Exception. The DCD endorses IEEE 383-2003 without exception. Refer to DCD Table 1.9-22 .
				C.6	Conforms. Operational program implementation is described in Section 13.4 .
1.212	Sizing of Large Lead-Acid Storage Batteries	Rev. 0	Nov-08	General	Exception. The DCD endorses IEEE 485-1997 (R 2003) without exception and the DCD endorses IEEE 535-1986 (R 1994). Refer to DCD Table 1.9-22 and DCD Section 8.3.2.1.1 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
1.213	Qualification of Safety-Related Motor Control Centers for Nuclear Power Plants	Rev. 0	May-09	General	Exception. The DCD endorses IEEE 649-1991 (R 2004). Refer to DCD Table 1.9-22 .
1.218	Condition-Monitoring Techniques for Electric Cables Used in Nuclear Power Plants	Rev. 0	Apr-13	General	Conforms. Operational program implementation is described in Section 13.4 .
1.221	Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants	Rev. 0	Oct-11	General	Conforms
4.7	General Site Suitability Criteria for Nuclear Power Stations	Rev. 2	Apr-98	General	Conforms. See SSAR Section 1.8.2 .

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RG Number	Title	Revision	Date	RG Position	Evaluation
4.15	Quality Assurance for Radiological Monitoring Programs (Inception Through Normal Operations to License Termination) – Effluent Streams and the Environment	Rev. 2	Jul-07		Exception. Unit 3 complies with Rev. 1.
		Rev. 1	Feb-79	General	<p>Conforms. Section 11.5.4.5 (NEI 07-09A) provides a description of the ODCM. The implementation milestone is provided in Section 13.4.</p> <p>Justification for referring to RG 4.15 Rev 1 instead of Rev 2</p> <p>Dominion will extend the existing North Anna Units 1 and 2 program for quality assurance of radiological effluent and environmental monitoring, that is based on Regulatory Guide 4.15, Revision 1, to apply to North Anna Unit 3. Regulatory Guide 4.15, Revision 1 is a proven methodology for quality assurance of radiological effluent and environmental monitoring programs that is acceptable to the NRC staff as a method for demonstrating compliance with applicable requirements</p>

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
4.15 <i>(cont'd)</i>	Quality Assurance for Radiological Monitoring Programs (Inception Through Normal Operations to License Termination) – Effluent Streams and the Environment	Rev. 1	Feb-79	General	(continued) of 10 CFR Parts 20, 50, 52, 61, and 72. Use of Revision 2 of Regulatory Guide 4.15 would necessitate conducting two separate programs involving the use of common staff, facilities, and equipment, which would create an undue burden and may lead to increased probability for human error. Therefore, Dominion commits to use RG 4.15, Revision 1 methodology for North Anna Unit 3 for optimal consistency, efficiency, and practicality.
				C.2.3, C.2.5 – C.2.7	Not applicable. These types of detection equipment are not used.
				C.3.2	Not applicable. This testing option is not used.
5.7	Entry/Exit Control for Protected Areas, Vital Areas, and Material Access Areas	Rev. 1	May-80	General	Note (a)

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
5.12	General Use of Locks in the Protection and Control of Facilities and Special Nuclear Materials	Rev. 0	Nov-73	General	Note (a)
5.54	Standard Format and Content of Safeguards Contingency Plans for Nuclear Power Plants	Rev. 1	Jun-09	General	Note (a)
5.66	Access Authorization Program for Nuclear Power Plants	Rev. 2	Oct-11	General	Note (a)
5.69	Guidance for the Application of Radiological Sabotage Design-Basis Threat in the Design, Development and Implementation of a Physical Security Program that Meets 10 CFR 73.55 Requirements	Rev. 0	Sep-07	General	Note (a)
5.71	Cyber Security Programs for Nuclear Facilities	Rev. 0	Jan-10	General	Note (a)
5.75	Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities	Rev. 0	Jul-09	General	Note (a)
5.76	Physical Protection Programs at Nuclear Power Reactors	Rev. 0	Jul-09	General	Note (a)
5.77	Insider Mitigation Program	Rev. 0	Mar-09	General	Note (a)
8.1	Radiation Symbol				Withdrawn

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
8.2	Administrative Practices in Radiation Surveys and Monitoring	Rev. 1	May-11	General	Conforms. Operational program implementation is described in Section 13.4 .
8.4	Direct-Reading and Indirect-Reading Pocket Dosimeters	Rev. 0	Feb-73	General	Conforms. Operational program implementation is described in Section 13.4 .
8.5	Criticality and Other Interior Evacuation Signals	Rev. 1	Mar-81	General	Conforms. Operational program implementation is described in Section 13.4 .
8.6	Standard Test Procedure for Geiger-Muller Counters	Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .
8.7	Instructions for Recording and Reporting Occupational Radiation Dose Data	Rev. 2	Nov-05	General	Conforms. Operational program implementation is described in Section 13.4 .
8.8	Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable	Rev. 3	Jun-78	General	Conforms. Operational program implementation is described in Section 13.4 .
8.9	Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program	Rev. 1	Jul-93	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
8.10	Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable	Rev. 1-R	May-77	General	Conforms. Operational program implementation is described in Section 13.4 .
8.11	Applications of Bioassay for Uranium	Rev. 0	Jun-74	General	Not applicable. RG 8.11 has been superseded by RG 8.9, Rev 1.
8.13	Instruction Concerning Prenatal Radiation Exposure	Rev. 3	Jun-99	General	Conforms. Operational program implementation is described in Section 13.4 .
8.15	Acceptable Programs for Respiratory Protection	Rev. 1	Oct-99	General	Conforms. Operational program implementation is described in Section 13.4 .
8.19	Occupational Radiation Dose Assessment in Light-Water Reactor Power Plants – Design Stage Man-Rem Estimates	Rev. 1	Jun-79	General	Conforms
8.20	Applications of Bioassay for I-125 and I-131	Rev. 1	Sep-79	General	Exception. Per NUREG-1736, RG 8.20 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4 .
8.25	Air Sampling in the Workplace	Rev. 1	Jun-92	General	Not applicable, RG does not apply to reactor licensees.

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
8.26	Applications of Bioassay for Fission and Activation Products	Rev. 0	Sep-80	General	Exception. Per NUREG-1736, RG 8.26 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4 .
8.27	Radiation Protection Training for Personnel at Light-Water-Cooled Nuclear Power Plants	Rev. 0	Mar-81	General	Conforms. Operational program implementation is described in Section 13.4 .
8.28	Audible-Alarm Dosimeters	Rev. 0	Jul-81	General	Conforms. Operational program implementation is described in Section 13.4 .
8.29	Instruction Concerning Risks from Occupational Radiation Exposure	Rev. 1	Feb-96	General	Conforms. Operational program implementation is described in Section 13.4 .
8.32	Criteria for Establishing a Tritium Bioassay Program	Rev. 0	Jul-88	General	Exception. Per NUREG-1736, RG 8.32 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4 .
8.33	Quality Management Program				Withdrawn
8.34	Monitoring Criteria and Methods To Calculate Occupational Radiation Doses	Rev. 0	Jul-92	General	Conforms. Operational program implementation is described in Section 13.4 .

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Table 1.9-202 Conformance with Regulatory Guides

RG Number	Title	Revision	Date	RG Position	Evaluation
8.35	Planned Special Exposure	Rev. 1	Aug-10	General	Conforms. Operational program implementation is described in Section 13.4 .
8.36	Radiation Dose to the Embryo/Fetus	Rev. 0	Jul-92	General	Conforms. Operational program implementation is described in Section 13.4 .
8.38	Control of Access to High and Very High Radiation Areas of Nuclear Plants	Rev. 1	May-06	General	Conforms. Operational program implementation is described in Section 13.4 .

Note (a): Division 5 of the regulatory guides applies to materials and plant protection. As appropriate, the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans (i.e., Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan).

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.2 1	Introduction and General Description of the Plant	Conforms
C.III.2 1.1	Introduction	Conforms
C.III.2 1.2	General Plant Description	Conforms. Addressed in Sections 1.2.2.19 and 2.0 , Figure 2.1-201 , and DCD Figures 1.2-1 through 1.2-33 .
C.III.2 1.3	Comparisons with Other Facilities	Conforms
C.III.2 1.4	Identification of Agents and Contractors	Conforms
C.III.2 1.5	Requirements for Further Technical Information	Conforms
C.III.2 1.6	Material Referenced	Conforms
C.III.2 1.7	Drawings and Other Detailed Information	Conforms
C.III.2 1.8	Site and Plant Design Interfaces and Conceptual Design Information	Conforms. There are no generic changes or departures from the DCD.
C. III.2 1.9	Conformance with Regulatory Criteria	Conforms
C.III.2 2.1.1	Site Location and Description	Conforms
C.III.2 2.1.2.1	Authority	Conforms
C.III.2 2.1.2.2	Control of Activities Unrelated to Plant Operation	Conforms. There are no known significant changes regarding activities unrelated to plant operation within the exclusion area.
C.III.2 2.1.2.3	Arrangements for Traffic Control	Conforms. There are no known significant changes regarding highways, railroads, or waterways that traverse the exclusion area.
C.III.2 2.1.2.4	Abandonment or Relocation of Roads	Conforms. There are no known significant changes regarding any public roads traversing the exclusion area.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.2 2.1.3	Population Distribution	Conforms
C.III.2 2.2	Nearby Industrial, Transportation, and Military Facilities	Conforms
C.III.2 2.3.1	Regional Climatology	Conforms
C.III.2 2.3.2	Local Meteorology	Conforms
C.III.2 2.3.3	Onsite Meteorological Measurements Program	Conforms. Addressed in SSAR Sections 2.3.3 and 1.8.2 (which commit to RG 1.23, Proposed Revision 1).
C.III.2 2.3.4	Short-Term Atmospheric Dispersion Estimates for Accident Releases	Conforms
C.III.2 2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	Conforms
C.III.2 2.4.1	Hydrologic Description	Conforms
C.III.2 2.4.2	Floods	Conforms
C.III.2 2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	Conforms
C.III.2 2.4.4	Potential Dam Failures	Conforms
C.III.2 2.4.5	Probable Maximum Surge and Seiche Flooding	Conforms
C.III.2 2.4.6	Probable Maximum Tsunami Hazards	Conforms
C.III.2 2.4.7	Ice Effects	Conforms. Addressed in DCD Appendix 3G .
C.III.2 2.4.8	Cooling Water Canals and Reservoirs	Conforms
C.III.2 2.4.9	Channel Diversions	Conforms

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**Table 1.9-203 Conformance With the FSAR Content Guidance In
RG 1.206**

Section	Section Title	Conformance Evaluation
C.III.2 2.4.10	Flooding Protection Requirements	Conforms. There are no safety-related SSCs that are not part of the DC facility.
C.III.2 2.4.11	Low Water Considerations	Conforms
C.III.2 2.4.12	Groundwater	Not applicable. A permanent dewatering system is not required.
C.III.2 2.4.13	Accidental Release of Radioactive Liquid Effluent in Ground and Surface Waters	Conforms
C.III.2 2.4.14	Technical Specifications and Emergency Operation Requirements	Conforms
C.III.2 2.5.1	Basic Geologic and Seismic Information	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.2 2.5.2	Vibratory Ground Motion	<p>Conforms with the following clarifications. The supplemental text in Section 2.5.2 has exceptions to the information requested in C.I.2.5.2.1 and C.I.2.5.2.4:</p> <ul style="list-style-type: none"> • See the evaluation for SRP Section 2.5.2 in Table 1.9-201 for the exception to C.I.2.5.2.1. • C.I.2.5.2.4 indicates the applicant should “Provide 16th, median, mean, and 84th fractile PSHA hazard curves for 1, 2.5, 5, 10, 25, and 100 Hertz (Hz) frequencies both before and after correcting for local site amplification.” Section 2.5.2.4 presents rock mean and fractile hazard curves [“before local site amplification”], appropriately representing the statistical uncertainty of the mean seismic hazard curves. The NUREG/CR-6728 Approach 2A methodology for estimating site-specific ground motions from input rock motions, accepted by the NRC, does not require the use of fractile soil-horizon, site-specific seismic hazard curves in developing site-specific uniform hazard response spectra (UHRS) at the mean annual frequencies of exceedance (MAFE) of 10^{-4} and 10^{-5}, required to develop the GMRS and FIRS in Section 2.5.2.
C.III.2 2.5.3	Surface Faulting	Conforms
C.III.2 2.5.4	Stability of Subsurface Materials and Foundations	Conforms
C.I 2.5.4.1	Geologic Features	Conforms
C.I 2.5.4.2	Properties of Subsurface Materials	Conforms
C.I 2.5.4.3	Foundation Interfaces	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.I 2.5.4.4	Geophysical Surveys	Conforms
C.I 2.5.4.5	Excavations and Backfill	Conforms. Addressed in Sections 2.5.4.5 and 17.5 .
C.I 2.5.4.6	Ground Water Conditions	Conforms
C.I 2.5.4.7	Response of Soil and Rock to Dynamic Loading	Conforms
C.I 2.5.4.8	Liquefaction Potential	Conforms
C.I 2.5.4.9	Earthquake Site Characteristics	Conforms
C.I 2.5.4.10	Static Stability	Conforms
C.I 2.5.4.11	Design Criteria	Conforms
C.I 2.5.4.12	Techniques to Improve Subsurface Conditions	Conforms
C.III.2 2.5.5	Stability of slopes	Conforms
C.III.1 3.1	Conformance with NRC General Design Criteria	Conforms. Conformance with the NRC's criteria in 10 CFR 50, Appendix A, is described in DCD Section 3.1 and the applicable DCD system sections.
C.III.1 3.2.1	Seismic Classification	Conforms. There are no additional safety-related or RTNSS SSCs subject to seismic classification beyond those addressed in the DCD. There are no SSCs outside the referenced certified design that are required to be designed for an OBE.
C.III.1 3.2.2	System Quality Group Classification	Conforms. There are no additional safety-related or RTNSS SSCs subject to system quality group classification beyond those addressed in the DCD.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.3.1 (1)	Wind Loadings	Conforms. There are no safety-related SSCs outside the scope of the certified design. Nonsafety-related facility SSCs that are not included in the referenced certified design meet the requirements of DCD Sections 3.3.1.3 and 3.3.2.3 .
C.III.1 3.3.1 (2)	Wind Loadings	Conforms
C.III.1 3.3.2	Tornado Loadings	Conforms
C.III.1 3.4	Internal Flood Protection	Conforms. There are no SSCs outside the scope of the referenced certified design that require internal flood protection whose failure could prevent a safe shutdown of the plant or result in the uncontrolled release of significant radioactivity.
C.III.1 3.4.2	Analysis Procedures	Conforms. There are no Seismic Category I structures outside the scope of the referenced certified design.
C.III.1 3.5.1.1	Internally Generated Missiles (Outside Containment)	Conforms. There are no SSCs outside the scope of the referenced certified design that are required to be protected against damage from internally generated missiles.
C.III.1 3.5.1.2	Internally Generated Missiles (Inside Containment)	Conforms
C.III.1 3.5.1.3	Turbine Missiles	Conforms. Addressed in DCD Section 10.2.3.8 .
C.III.1 3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds	Conforms. Table 2.0-201 demonstrates that the site-specific tornado characteristics are bounded by the parameters assumed in the DCD. DCD Section 3.5.1.4 indicates that resistance to missiles is independent of site topography.
C.III.1 3.5.1.5	Site Proximity Missiles (Except Aircraft)	Conforms
C.III.2 3.5.1.6	Aircraft Hazards	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.5.2	Structures, Systems, and Components To Be Protected from Externally Generated Missiles	Conforms. There are no SSCs outside the scope of the referenced certified design that are required to be protected from externally generated missiles.
C.III.1 3.5.3	Barrier Design Procedures	Conforms. There are no SSCs that require reanalysis for tornado, extreme wind, or site proximity missile impact or for aircraft impact.
C.III.1 3.6	Protection against Dynamic Effects Associated with the Postulated Rupture of Piping	Conforms
C.III.1 3.6.1	Plant Design for Protection against Postulated Piping Failures in Fluid systems Outside of Containment	Conforms
C.III.1 3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	Conforms
C.III.1 3.6.3	Leak-Before-Break Evaluation Procedures	Not Applicable. ESBWR design does not rely on a Leak Before Break Evaluation.
C.III.1 3.7.1	Seismic Design Parameters	Conforms. Addressed in Sections 3.7 and 3.7.1 .
C.III.1 3.7.1.1	Design Ground Motion	Conforms
C.III.1 3.7.1.2	Percentage of Critical Damping Values	Conforms
C.III.1 3.7.1.3	Supporting Media for Seismic Category I Structures	Conforms
C.III.1 3.7.2	Seismic System Analysis	Conforms. Addressed in Section 3.7.2 .
C.III.1 3.7.2.1	Seismic Analysis Methods	Conforms
C.III.1 3.7.2.2	Natural Frequencies and Responses	Conforms. Addressed in Section 3.7.2.2 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.7.2.3	Procedures Used for Analytical Modeling	Conforms
C.III.1 3.7.2.4	Soil/Structure Interaction	Conforms
C.III.1 3.7.2.5	Development of Floor Response Spectra	Conforms. Addressed in DCD Section 3.7.2.5 .
C.III.1 3.7.2.6	Three Components of Earthquake Motion	Conforms
C.III.1 3.7.2.7	Combination of Modal Responses	Conforms
C.III.1 3.7.2.8	Interaction of Nonseismic Category I Structures with Seismic Category I Structures	Conforms. There are no Seismic Category I structures outside the scope of the referenced certified design. In lieu of providing the plant-specific distances between structures and the heights of structures, the distance and height requirements for Non-Seismic Category I structures are addressed in Section 3.7.2.8 .
C.III.1 3.7.2.9	Effects of Parameter Variations on Floor Response Spectra	Conforms. Addressed in DCD Section 3.7.2.9 .
C.III.1 3.7.2.10	Use of Constant Vertical Static Factors	Conforms
C.III.1 3.7.2.11	Method Used to Account for Torsional Effects	Conforms
C.III.1 3.7.2.12	Comparison of Responses	Conforms. Addressed in DCD Section 3.7.2.12 .
C.III.1 3.7.2.13	Methods for Seismic Analysis of Dams	Not applicable. There are no Seismic Category I dams in the ESBWR design per DCD Section 3.7.3.14 .
C.III.1 3.7.2.14	Determination of Dynamic Stability of Seismic Category I Structures	Conforms. Addressed in DCD Sections 3.7.2.14 and 3.8.5.5 .
C.III.1 3.7.2.15	Analysis Procedure for Damping	Conforms
C.III.1 3.7.3.1	Seismic Analysis Methods	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.7.3.2	Procedures Used for Analytical Modeling	Conforms
C.III.1 3.7.3.3	Analysis Procedure for Damping	Conforms
C.III.1 3.7.3.4	Three Components of Earthquake Motion	Conforms
C.III.1 3.7.3.5	Combination of Modal Responses	Conforms. Addressed in DCD Section 3.7.3.7 .
C.III.1 3.7.3.6	Use of Constant Vertical Static Factors	Conforms
C.III.1 3.7.3.7	Buried Seismic Category I Piping, Conduits, and Tunnels	Conforms. Addressed in Section 3.7.3.13 .
C.III.1 3.7.3.8	Methods for Seismic Analysis of Seismic Category I Concrete Dams	Not applicable. There are no Seismic Category I dams for Unit 3.
C.III.1 3.7.3.9	Methods for Seismic Analysis of Above-Ground Tanks	Conforms. Addressed in DCD Section 3.7.3.15 .
C.III.1 3.7.4	Seismic Instrumentation	Conforms
C.III.1 3.8.1	Concrete Containment	Conforms
C.III.1 3.8.2	Steel Containment	Conforms
C.III.1 3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments	Conforms
C.III.1 3.8.4	Other Seismic Category I Structures	Conforms. There are no Seismic Category I structures that are outside the scope of the DCD.
C.III.1 3.8.5	Foundations	Conforms
C.III.1 3.9.1	Special Topics for Mechanical Components	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.9.1.1	Design Transients	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.2	Computer Programs Used in Analysis	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.3	Experimental Stress Analysis	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.4	Considerations for the Evaluation of the Faulted Condition	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.2	Dynamic Testing and Analysis of Systems, Components, and Equipment	Conforms. There are no systems outside the scope of the referenced certified design that require dynamic testing and analysis.
C.III.1 3.9.2.1	Piping Vibration, Thermal Expansion, and Dynamic Effects	Conforms. There are no ASME Code Class 1, 2, and 3 systems; other high-energy piping systems inside seismic Category I structures; high-energy portions of systems for which failure could reduce the functioning of any seismic Category I plant feature to an unacceptable level; or seismic Category I portions of moderate-energy piping systems located outside containment outside the scope of the referenced certified design.
C.III.1 3.9.2.2	Seismic Analysis and Qualification of Seismic Category I Mechanical Equipment	Conforms
C.III.1 3.9.2.3	Dynamic Response Analysis of Reactor Internals Under Operational Flow Transients and Steady-State Conditions	Conforms. There are no ESBWR pressure vessel internals that the referenced certified design does not cover.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.9.2.4	Pre-Operational Flow-Induced Vibration Testing of Reactor Internals	Conforms. There are no BWR pressure vessel internals that the referenced certified design does not cover. DCD Sections 3.9.2.3 and 3.9.2.4 adequately cover the analysis of potential adverse flow effects that could impact BWR vessel internals.
C.III.1 3.9.2.5	Dynamic System Analysis of the Reactor Internals Under Faulted Condition	Conforms. Addressed in DCD Section 3.9.3.1 and DCD Table 3.9-2 .
C.III.1 3.9.2.6	Correlations of Reactor Internals Vibration Tests with the Analytical Results	Conforms. Addressed in DCD Section 3.9.2.6 .
C.III.1 3.9.3	ASME Code Class 1, 2, and 3 Components and Component Supports, and Core Support Structures	Conforms. There are no pressure-retaining components or component supports designed or constructed in accordance with ASME Code Class 1, 2, or 3, or GDC 1, 2, 4, 14, or 15, beyond those evaluated in the referenced certified design.
C.III.1 3.9.4	Control Rod Drive Systems	Conforms
C.III.1 3.9.5.1	Design Arrangements	Conforms
C.III.1 3.9.5.2	Loading Conditions	Conforms
C.III.1 3.9.5.3	Design Bases	Conforms
C.III.1 3.9.5.4	BWR Reactor Pressure Vessel Internals Including Steam Dryer	Conforms. There are no reactor pressure vessel internals (including the steam dryer) or other main steam system components that are not covered by the referenced certified design. The reactor is classified as non-prototype.
C.III.1 3.9.6.1	Functional Design and Qualification of Pumps, Valves, and Dynamic Restraints	Conforms. There is no safety-related equipment beyond the scope of the referenced certified design.
C.III.1 3.9.6.2	Inservice Testing Program for Pumps	Not applicable. There are no safety-related pumps.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.9.6.3	Inservice Testing Program for Valves	Conforms. Addressed in DCD Section 3.9.6 ; the list of valves included in the IST program is provided in DCD Table 3.9-8 . IST Program test procedures and schedules are addressed in TS Section 5.5.5 . Justification for cold shutdown and refueling outage test schedules is addressed in DCD Section 3.9.6 and DCD Table 3.9-8 . The implementation milestones for the IST and MOV Programs are addressed in Section 13.4 .
C.III.1 3.9.6.3.1	Inservice Testing Program for Motor-Operated Valves (MOVs)	Conforms. Addressed in DCD Section 3.9.6 .
C.III.1 3.9.6.3.2	Inservice Testing Program for Power-Operated Valves (POVs) Other Than MOVs	Conforms. Addressed in DCD Section 3.9.6 .
C.III.1 3.9.6.3.3	Inservice Testing Program for Check Valves	Conforms. Addressed in DCD Section 3.9.6 .
C.III.1 3.9.6.3.4	Pressure Isolation Valve (PIV) Leak Testing	Not applicable. The ESBWR plant does not have any PIVs.
C.III.1 3.9.6.3.5	Containment Isolation Valve (CIV) Leak Testing	Conforms
C.III.1 3.9.6.3.6	Inservice Testing Program for Safety and Relief Valves	Conforms. Addressed in DCD Table 3.9-8 .
C.III.1 3.9.6.3.7	Inservice Testing Program for Manually Operated Valves	Conforms. Addressed in DCD Table 3.9-8 .
C.III.1 3.9.6.3.8	Inservice Testing Program for Explosively Activated Valves	Conforms. Addressed in DCD Table 3.9-8 .
C.III.1 3.9.6.4	Inservice Testing Program for Dynamic Restraints	Conforms with the following exception: A plant specific snubber table will be prepared in conjunction with closure of ITAAC Table 3.1-1 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.9.6.5	Relief Requests and Alternative Authorizations to ASME OM Code	Conforms
C.III.1 3.10.1	Seismic Qualification Criteria	Conforms. There is no seismic or dynamic qualification required for equipment that is outside the scope of the referenced certified design.
C.III.1 3.10.2	Methods and Procedures for Qualifying Mechanical and Electrical Equipment and Instrumentation	Conforms
C.III.1 3.10.3	Methods and Procedures of Analysis or Testing of Supports of Mechanical and Electrical Equipment and Instrumentation	Conforms
C.III.1 3.10.4	Test and Analyses Results and Experience Database	Conforms
C.III.1 3.11	Environmental Qualification of Mechanical and Electrical Equipment	Conforms. There is no other equipment beyond that which has been evaluated in the referenced certified design.
C.III.1 3.11.1	Equipment Location and Environmental Conditions	Conforms
C.III.1 3.11.2	Qualification Tests and Analysis	Conforms
C.III.1 3.11.3	Qualification Test Results	Conforms
C.III.1 3.11.4	Loss of Ventilation	Conforms
C.III.1 3.11.5	Estimated Chemical and Radiation Environment	Conforms
C.III.1 3.11.6	Qualification of Mechanical Equipment	Conforms
C.III.1 3.12.1	Introduction	Conforms
C.III.1 3.12.2	Codes and Standards	Conforms. Addressed in Sections 3.2, 3.6, and 3.7 , and Chapters 5 and 14 .

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Section	Section Title	Conformance Evaluation
C.III.1 3.12.3	Piping Analysis Methods	Conforms. Addressed in Section 3.7.2.2 and DCD Section 3.7.3.9.
C.III.1 3.12.3.1	Experimental Stress Analyses	Conforms. Addressed in DCD Section 3.9.1.3.
C.III.1 3.12.3.2	Modal Response Spectrum Method	Conforms. Addressed in DCD Section 3.7.2.1.
C.III.1 3.12.3.3	Response Spectra Method (or Independent Support Motion Method)	Conforms. Addressed in DCD Section 3.7.2.1.2.
C.III.1 3.12.3.4	Time History Method	Conforms. Addressed in DCD Section 3.7.2.1.1.
C.III.1 3.12.3.5	Inelastic Analyses Method	Not Applicable. Per DCD Section 3.9.1.4 (Inelastic Analyses Methods), except for pipe whip restraints, inelastic analyses methods are not used in the ESBWR piping design and analysis.
C.III.1 3.12.3.6	Small-Bore Piping Method	Conforms. Addressed in DCD Section 3.7.3.16.
C.III.1 3.12.3.7	Nonseismic/Seismic Interaction (II/I)	Conforms with the following exception: The location and distance between piping systems will be established as part of the completion of ITAAC Table 3.1-1.
C.III.1 3.12.3.8	Seismic Category I Buried Piping	Not Applicable. Per Section 3.7.3.13, there is no buried Seismic Category I piping.
C.III.1 3.12.4	Piping Modeling Technique	Conforms. Addressed in DCD Section 3.7.3.3.1 and Appendix 3D for the PISYS computer code.
C.III.1 3.12.4.1	Computer Codes	Conforms. Addressed in DCD Appendix 3D.
C.III.1 3.12.4.2	Dynamic Piping Model	Conforms. Addressed in DCD Section 3.7.3.3.1.
C.III.1 3.12.4.3	Piping Benchmark Program	Conforms. Addressed in DCD Appendix 3D.
C.III.1 3.12.4.4	Decoupling Criteria	Conforms. Addressed in DCD Sections 3.7.2.3 and 3.7.3.16.
C.III.1 3.12.5.1	Seismic Input Envelope vs. Site-Specific Spectra	Conforms. Addressed in Section 3.7.1.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.12.5.2	Design Transients	Conforms. Addressed in DCD Section 3.9.1.1 and DCD Table 3.9-1 .
C.III.1 3.12.5.3	Loadings and Load Combination	Conforms. Addressed in DCD Section 3.9.1.1 and DCD Table 3.9-8 .
C.III.1 3.12.5.4	Damping Values	Conforms. Addressed in Section 3.7.1.2 and DCD Table 3.7-1 .
C.III.1 3.12.5.5	Combination of Modal Responses	Conforms. Addressed in DCD Section 3.7.3.7 .
C.III.1 3.12.5.6	High-Frequency Modes	Conforms. Addressed in Sections 3.7.1.1 and 3.7.1.2 .
C.III.1 3.12.5.7	Fatigue Evaluation of ASME Code Class 1 Piping	Conforms. Addressed in DCD Section 3.9.3.4 and DCD Table 3.9-8 .
C.III.1 3.12.5.8	Fatigue Evaluation of ASME Code Class 2 and 3 Piping	Conforms. Addressed in Section 3.9 .
C.III.1 3.12.5.9	Thermal Oscillations in Piping Connected to the Reactor Coolant System	Conforms
C.III.1 3.12.5.10	Thermal Stratification	Conforms. Addressed in DCD Section 3.9.2.1.2 .
C.III.1 3.12.5.11	Safety Relief Valve Design, Installation, and Testing	Conforms. Addressed in DCD Figures 5.2-3 and 5.4-3 , and DCD Table 3.9-8 .
C.III.1 3.12.5.12	Functional Capability	Conforms. Addressed in DCD Table 3.9-2 , Note 13 , and Chapters 5 and 6 .
C.III.1 3.12.5.13	Combination of Inertial and Seismic Anchor Motion Effects	Conforms. Addressed in DCD Section 3.7.3.9 .
C.III.1 3.12.5.14	Operating-Basis Earthquake as a Design Load	Not applicable. The SSE establishes the design load for the ESBWR.
C.III.1 3.12.5.15	Welded Attachments	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.5.16	Modal Damping for Composite Structures	Conforms. Addressed in DCD Section 3.7.2.13 .

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Section	Section Title	Conformance Evaluation
C.III.1 3.12.5.17	Minimum Temperature for Thermal Analyses	Conforms. Addressed in DCD Sections 3.9.1.1 and 3.9.3.1 .
C.III.1 3.12.5.18	Intersystem Loss-of-Coolant Accident	Conforms. Addressed in DCD Appendix 3K .
C.III.1 3.12.5.19	Effects of Environment on Fatigue Design	Conforms. Addressed in DCD Section 3.9.3.4 . The reference in RG 1.206 to 1.76 appears to be in error, and should have referenced 1.207.
C.III.1 3.12.6.1	Applicable Codes	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.2	Jurisdictional Boundaries	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.3	Loads and Load Combinations	Conforms. Addressed in Section 3.9 and DCD Appendix 3B .
C.III.1 3.12.6.4	Pipe Support Baseplate and Anchor Bolt Design	Conforms. Addressed in DCD Section 3.9.3.7 .
C.III.1 3.12.6.5	Use of Energy Absorbers and Limit Stops	Conforms. Addressed in DCD Section 3.9.3.7 .
C.III.1 3.12.6.6	Use of Snubbers	Conforms. Addressed in DCD Section 3.9.3.7.1(3) .
C.III.1 3.12.6.7	Pipe Support Stiffnesses	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.8	Seismic Self-Weight Excitation	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.9	Design of Supplementary Steel	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.10	Consideration of Friction Forces	Conforms. Addressed in DCD Section 3.9.3.7.1(5) .
C.III.1 3.12.6.11	Pipe Support Gaps and Clearances	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.12	Instrumentation Line Support Criteria	Conforms. Addressed in DCD Section 3.9.3.7.1 .
C.III.1 3.12.6.13	Pipe Deflection Limits	Conforms. Addressed in DCD Section 3.9.2.1.1 and Chapter 14 .
C.III.1 3.13	Threaded Fasteners – ASME code Class 1, 2, and 3	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 3.13.1.1	Materials Selection	Conforms
C.III.1 3.13.1.2	Special Materials Fabrication Processes and Special Controls	Conforms
C.III.1 3.13.1.3	Fracture Toughness Requirements for Threaded Fasteners Made of Ferritic Materials	Conforms
C.III.1 3.13.1.5	Certified Material Test Reports	Conforms
C.III.1 3.13.2	Inservice Inspection Requirements	Conforms
C.III.1 4.1	Reactor: Summary Description	Conforms
C.III.1 4.2	Fuel System Design	Conforms
C.III.1 4.3	Nuclear Design	Conforms
C.III.1 4.4	Thermal and Hydraulic Design	Conforms
C.III.1 4.5.1	Control Rod Drive Structural Materials	Conforms
C.III.1 4.5.2	Reactor Internal and Core Support Materials	Conforms
C.III.1 4.6	Functional Design of Reactivity Control System	Conforms
C.III.1 5.1	Reactor Coolant and Connecting Systems: Summary Description	Conforms
C.III.1 5.2.1	Compliance with ASME Codes and Code Cases	Conforms
C.III.1 5.2.2.1	Design Bases	Conforms
C.III.1 5.2.2.2	Design Evaluation	Conforms
C.III.1 5.2.2.3	Piping and Instrumentation Diagrams	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 5.2.2.4	Equipment and Component Description	Conforms
C.III.1 5.2.2.5	Mounting of Pressure-Relief Devices	Conforms
C.III.1 5.2.2.6	Applicable Codes and Classification	Conforms
C.III.1 5.2.2.7	Material Specification	Conforms
C.III.1 5.2.2.8	Process Instrumentation	Conforms
C.III.1 5.2.2.9	System Reliability	Conforms
C.III.1 5.2.2.10	Testing and Inspection	Conforms. Addressed in DCD Section 5.2.2.4 , and in Section 3.9 and Chapter 14 .
C.III.1 5.2.3.1	Material Specifications	Conforms
C.III.1 5.2.3.2	Compatibility with Reactor Coolant	Conforms. Addressed in DCD Section 5.2.3 .
C.III.1 5.2.3.3	Fabrication and Processing of Ferritic Materials	Conforms
C.III.1 5.2.3.4	Fabrication and Processing of Austenitic Stainless Steels	Conforms
C.III.1 5.2.3.5	Prevention of Primary Water Stress-Corrosion Cracking for Nickel-Based Alloys (PWRs only)	Not applicable. Applies only to PWRs.
C.III.1 5.2.3.6	Threaded Fasteners	Conforms. Addressed in DCD Section 3.9.3.9 .
C.III.1 5.2.4.1	Inservice Inspection and Testing Program	Conforms. Addressed in DCD Section 5.2.4 and in Section 5.2.4 .
C.III.1 5.2.4.2	Preservice Inspection and Testing Program	Conforms. Addressed in DCD Section 5.2.4 .
C.III.1 5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 5.3.1.1	Material Specifications	Conforms
C.III.1 5.3.1.2	Special Processes Used for Manufacturing and Fabrication	Conforms
C.III.1 5.3.1.3	Special Methods for Nondestructive Examination	Conforms
C.III.1 5.3.1.4	Special Controls for Ferritic and Austenitic Stainless Steels	Conforms
C.III.1 5.3.1.5	Fracture Toughness	Conforms
C.III.1 5.3.1.6	Material Surveillance	Conforms. Addressed in DCD Section 5.3.1.6 and Section 5.3.1.8 .
C.III.1 5.3.1.7	Reactor Vessel Fasteners	RG does not contain any guidance in this section.
C.III.1 5.3.2.1	Limit Curves	Conforms
C.III.1 5.3.2.2	Operating Procedures	Conforms. Addressed in DCD Sections 5.3.2.1 , 5.3.2.2 , and 5.3.3.6 , and in Section 5.3.3.6 .
C.III.1 5.3.2.3	Pressurized Thermal Shock (PWRs only)	Not applicable. Applies only to PWRs.
C.III.1 5.3.2.4	Upper-Shelf Energy	Conforms
C.III.1 5.3.3	Reactor Vessel Integrity	Conforms. Identification of a specific manufacturer is not required.
C.III.1 5.3.3.1	Design	Conforms
C.III.1 5.3.3.2	Materials of Construction	Conforms
C.III.1 5.3.3.3	Fabrication Methods	Conforms
C.III.1 5.3.3.4	Inspection Requirements	Conforms. Addressed in DCD Section 5.3.3.4 .
C.III.1 5.3.3.5	Shipment and Installation	Conforms. Addressed in DCD Section 5.3.3.5 .

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Section	Section Title	Conformance Evaluation
C.III.1 5.3.3.6	Operating Conditions	Conforms. Addressed in DCD Section 5.3.3.6 .
C.III.1 5.3.3.7	Inservice Surveillance	Conforms. Addressed in DCD Section 5.3.3.7 .
C.III.1 5.3.3.8	Threaded Fasteners	Conforms. Addressed in DCD Section 3.9.3.9 .
C.III.1 5.4.1	Reactor Coolant Pumps or Circulation Pumps (BWR)	Conforms
C.III.1 5.4.1.1	Pump Flywheel Integrity (PWR)	Not applicable. Applies only to PWRs.
C.III.1 5.4.2	Steam Generators (PWR)	Not applicable. Applies only to PWRs.
C.III.1 5.4.3	Reactor Coolant System Piping and Valves	Conforms
C.III.1 5.4.4	Main Steamline Flow Restrictions	Conforms
C.III.1 5.4.5	Pressurizer	Not applicable. Applies only to PWRs.
C.III.1 5.4.6	Reactor Core Isolation Cooling System (BWRs/Isolation Condenser System (Economic Simplified BWR)	Conforms
C.III.1 5.4.7	Residual Heat Removal System/Passive Residual Heat Removal System (Advanced Light-Water Reactor) Shutdown Cooling Mode of the Reactor Water Cleanup System (Economic Simplified BWR)	Conforms
C.III.1 5.4.8	Reactor Water Cleanup System (BWR) Reactor Water Cleanup/Shutdown Cooling System (Economic Simplified BWR)	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 5.4.9	Reactor Coolant System Pressure Relief Devices/Reactor Coolant Depressurization Systems	Conforms
C.III.1 5.4.10	Reactor Coolant System Component Supports	Conforms
C.III.1 5.4.11	Pressurizer Relief Discharge System (PWRs only)	Not applicable. Applies only to PWRs.
C.III.1 5.4.12	Reactor Coolant System High-Point Vents	Conforms
C.III.1 5.4.13	Main Steamline, Feedwater, and Auxiliary Feedwater Piping	Conforms
C.III.1 6.1	Engineered Safety Features: Engineered Safety Feature Materials	Conforms. Addressed in DCD Section 6.1 .
C.III.1 6.1.1.1	Materials Selection and Fabrication	Conforms
C.III.1 6.1.1.2	Composition and Compatibility of Core Cooling Coolants and Containment Sprays	Conforms. Addressed in DCD Sections 5.2.3.2, 5.2.3.4.1, 5.4.8, 6.1.1.3.4, 6.1.1.4, 6.1.2, 9.1.3, and 9.3.10 .
C.III.1 6.1.2	Organic Materials	Conforms
C.III.1 6.2	Containment Systems	Conforms
C.III.1 6.2.1	Containment Functional Design	Conforms
C.III.1 6.2.2	Containment Heat Removal Systems	Conforms
C.III.1 6.2.3	Secondary Containment Functional Design	Not Applicable. The ESBWR plant does not have a secondary containment.
C.III.1 6.2.4	Containment Isolation System	Conforms.
C.III.1 6.2.5	Combustible Gas Control in Containment	Conforms.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 6.2.6	Containment Leakage Testing	Conforms. Addressed in DCD Sections 6.2.6.1 through 6.2.6.4 , and in Section 13.4 . Special testing requirements in RG 1.206, Section C.III.1, Section 6.2.6.5 are not applicable to the ESBWR.
C.III.1 6.2.7	Fracture Prevention of Containment Pressure Vessel	Conforms
C.III 6.3	Emergency Core Cooling System	Conforms. There are no aspects of the site-specific design that affect the LOCA analyses in the DCD.
C.III.1 6.4	Habitability Systems	Conforms
C.III.2 6.5	Fission Product Removal and Control Systems	Conforms
C.III.1 6.6	Inservice Inspection of Class 2 and 3 Components	Conforms. Addressed in DCD Section 6.6 and in Section 6.6.10.3 .
C.III.1 6.6.1	Components Subject to Examination	Conforms
C.III.1 6.6.2	Accessibility	Conforms
C.III.1 6.6.3	Examination Techniques and Procedures	Conforms. Addressed in DCD Section 6.6.3.2 . There are no special examination techniques required to meet the ASME Code.
C.III.1 6.6.4	Inspection Intervals	Conforms. Addressed in DCD Section 6.6.4 .
C.III.1 6.6.5	Examination Categories and Requirements	Conforms. Addressed in DCD Section 6.6.3.1 .
C.III.1 6.6.6	Evaluation of Examination Results	Conforms (addressed in DCD Section 6.6.5), except that RG 1.206 references ASME Code Sections IWC-4000 and IWD-4000 for Class 2 and Class 3, respectively, whereas DCD Section 6.6.5 references IWA-4000. Later editions of ASME Code Section XI do not contain Sections IWC-4000 and IWD-4000, only IWA-4000. Therefore, the intent of the RG is met.

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Section	Section Title	Conformance Evaluation
C.III.1 6.6.7	System Pressure Tests	Conforms. Addressed in DCD Section 6.6.6 .
C.III.1 6.6.8	Augmented Inservice Inspection to Protect against Postulated Piping Failures	Conforms. Addressed in DCD Section 6.6.7 .
C.III.1 6.7	Main Steamline Isolation Valve Leakage Control Steam (BWRs)	Not applicable to the ESBWR.
C.III.1 7	Instrumentation and Controls	Conforms. Addressed in DCD Chapter 7, Tier 1 , and design-related ITAAC (DAC). There are no departures from the referenced certified design.
C.III.1 7.1	Introduction	Conforms. There is no safety-related instrumentation, control, or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.2	Reactor Trip System	Conforms. There is no reactor trip system instrumentation, control, or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.3	Engineered Safety Features Systems	Conforms. There are no ESF systems I&C or supporting systems that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.4	Systems Required for safe Shutdown	Conforms. There are no safe-shutdown systems I&C or supporting systems that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.5	Information Systems Important to Safety	Conforms. There are no information systems important to safety that have not been addressed in the referenced certified design or other parts of the COL application.

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Section	Section Title	Conformance Evaluation
C.III.1 7.6	Interlock Systems Important to Safety	Conforms. There are no interlock systems important to safety that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.7	Control Systems Not Required for Safety	Conforms. There is no control system instrumentation or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.8	Diverse Instrumentation and Control Systems	Conforms. There is no diverse I&C system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.9	Data Communication Systems	Conforms. There are no data communication systems that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 8	Electrical Power	Conforms
C.III.1 8.1	Introduction	Conforms. There are no safety-related or RTNSS onsite AC or DC loads that are added to the referenced certified design. There are no safety-related or RTNSS electrical systems that are beyond the scope of the referenced certified design.
C.III.1 8.2.1	Description	Conforms. Addressed in Section 8.2 .
C.III.1 8.2.2	Analysis	Conforms. Addressed in Section 8.2 .
C.III.1 8.3.1.1	AC Power Systems: Description	Conforms for interfaces between on-site and off-site power systems and their physical arrangement. Addressed in DCD Section 8.3.1 and in Section 8.3.1.1 .
C.III.1 8.3.1.2	Analysis	Not applicable. Does not request information for passive designs.
C.III.1 8.3.1.3	Electrical Power System Calculations and Distribution System Studies for AC Systems	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 8.3.2.1	DC Power Systems: Description	Not applicable. Does not request information for passive designs.
C.III.1 8.3.2.2	Analysis	Not applicable. Does not request information for passive designs.
C.III.1 8.3.2.3	Electrical Power System Calculations and Distribution System Studies for DC Systems	Conforms
C.III.1 8.4.1(1)	Station Blackout: Description	Not applicable. Does not request information for passive designs.
C.III.1 8.4.1(2)		Not applicable. Does not request information for passive designs.
C.III.1 8.4.1(3)		Conforms. Addressed in Section 8.3.2.1.1 .
C.III.1 8.4.1(4)		Conforms. Addressed in Section 8.3.2.1.1 .
C.III.1 8.4.2	Analysis	Not applicable. Does not request information for passive designs.
C.III 9.1.1	Fuel Storage and Handling: Criticality Safety of Fresh and Spent Fuel Storage and Handling	Conforms. Addressed in DCD Sections 9.1.1 and 9.1.2 .
C.III 9.1.2	New and Spent Fuel Storage	Conforms. Addressed in DCD Section 9.1.2 .
C.III 9.1.3	Spent Fuel Pool Cooling and Cleanup System	Conforms. Addressed in DCD Section 9.1.3 .
C.III 9.1.4	Light Load Handling System (Related to Refueling)	Conforms
C.III.1 9.1.5	Overhead Heavy Load Handling System	Conforms. Addressed in DCD Section 9.1.5.5 and in Sections 9.1.4 and 9.1.5 .
C.III.1 9.2.1.1	Station Service Water System (Open, Raw Water Cooling Systems): Design Bases	Conforms. Addressed in DCD Section 9.2.1.1 .
C.III.1 9.2.1.2	System Description	Conforms. Addressed in DCD Section 9.2.1.2 and in Section 9.2.1.2 .

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Section	Section Title	Conformance Evaluation
C.III.1 9.2.1.3	Safety Evaluation	Conforms. Addressed in DCD Section 9.2.1.3 and in Section 9.2.1.2 (for long-term corrosion and fouling).
C.III.1 9.2.1.4	Inspection and Testing Requirements	Conforms. Addressed in DCD Section 9.2.1.4 .
C.III.1 9.2.1.5	Instrumentation Requirements	Conforms. Addressed in DCD Section 9.2.1.5 .
C.III 9.2.2	Cooling System for Reactor Auxiliaries (Closed Cooling Water Systems)	Conforms
C.III.1 9.2 (for DCD Section 9.2.3)	Makeup Water System Design Bases	Conforms. Design Bases, Safety Evaluation, Inspection and Testing Requirements, and Instrumentation are addressed in DCD Section 9.2.3 . System Description is addressed in Section 9.2.3 .
C.III.1 9.2.4	Potable and Sanitary Water Systems Design Bases	Conforms
C.III.1 9.2.5	Ultimate Heat Sink	The design of the UHS is within the scope of the referenced certified design, and inspection and testing requirements are addressed in DCD Section 9.2.5 .
C.III.1 9.2.6	Condensate Storage Facilities	Conforms. There are no safety-related or RTNSS condensate storage facilities outside the scope of the referenced certified design that are sources of water for residual heat removal or sources of coolant inventory makeup for safety-related systems.
C.III.1 9.2 (for DCD Section 9.2.7)	Chilled Water System	Conforms. Addressed in DCD Section 9.2.7 .
C.III.1 9.2 (for DCD Section 9.2.8)	Turbine Component Cooling Water System	Conforms. Addressed in DCD Section 9.2.8 .

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Section	Section Title	Conformance Evaluation
C.III.1 9.2 (for DCD Section 9.2.10)	Station Water System	Conforms. Design Bases, Safety Evaluation, Inspection and Testing Requirements, and Instrumentation are addressed in DCD Section 9.2.10 . System Description is addressed in Section 9.2.10 .
C.III.1 9.3	Process Auxiliaries	Conforms. Hydrogen Water Chemistry is addressed in Section 9.3.9 , Oxygen Injection System is addressed in Section 9.3.10 , Zinc Injection System is addressed in Section 9.3.11 , and Auxiliary Boiler System is addressed in DCD Section 9.3.12 .
C.III.1 9.3.1	Compressed Air Systems	Conforms. Instrument Air is addressed in DCD Section 9.3.6 , Service Air is addressed in DCD Section 9.3.7 , and High Pressure Nitrogen Supply System is addressed in DCD Section 9.3.8 .
C.III.1 9.3.2	Process and Postaccident Sampling Systems	Conforms
C.III.1 9.3.3	Equipment and Floor Drain System	Conforms. Addressed in DCD Section 9.3.3 .
C.III.1 9.3.4	Chemical and Volume Control System (PWRs) (Including Boron Recovery System)	Not applicable. Applies only to PWRs.
C.III.1 9.3.5	Standby Liquid Control System	Conforms
C.III.1 9.4	Air Conditioning, Heating, Cooling, and Ventilation Systems	Conforms. Reactor Building HVAC System is addressed in DCD Section 9.4.6 , Electric Building Heating, Ventilation, and Air Conditioning System is addressed in DCD Section 9.4.7 , and Drywell Cooling System is addressed in DCD Section 9.4.8 .
C.III.1 9.4.1	Control Room Area Ventilation System	Conforms
C.III.1 9.4.2	Spent Fuel Pool Area Ventilation Systems	Conforms
C.III.1 9.4.3	Auxiliary and Radwaste Area Ventilation System	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 9.4.4	Turbine Building Area Ventilation System	Conforms
C.III.1 9.4.5	Engineered Safety Feature Ventilation System	Conforms
C.III.1 9.5.1	Fire Protection Program	Conforms
C.III.1 9.5.1.1(1)		Conforms
C.III.1 9.5.1.1(2)		Conforms
C.III.1 9.5.1.1(3)		Conforms. Addressed in Section 1.7
C.III.1 9.5.1.1(4)		Conforms. Will be completed in accordance with the milestones in Section 13.4 .
C.III.1 9.5.1.1(5)		Conforms. Will be completed in accordance with the milestones in Section 13.4 .
C.III.1 9.5.1.1(6)		Conforms
C.III.1 9.5.1.1(7)		Conforms. Will be completed in accordance with the milestones in Section 13.4 .
C.III.1 9.5.1.1(8)		Conforms
C.III.1 9.5.1.1(9)		Conforms. Addressed in DCD Sections 9.5.1.15 and 14.3 , and in Section 13.4 .
C.III.1 9.5.2	Communication System	Conforms. Addressed in DCD Section 9.5.2 and in Section 9.5.2 .
C.III.1 9.5.3	Lighting System	Conforms. Addressed in DCD Section 9.5.3 .
C.III.1 9.5.4	Diesel Generator Fuel Oil Storage and Transfer Systems	Conforms. Addressed in DCD Section 9.5.4 and in Section 9.5.4 .
C.III.1 9.5.4.1	Design Basis	Conforms. Addressed in DCD Section 9.5.4 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 9.5.4.2	System Description	Conforms
C.III.1 9.5.4.3	Safety Evaluation	Conforms
C.III.1 9.5.5	Diesel Generator Cooling Water Systems	Conforms. Addressed in DCD Section 9.5.5 .
C.III.1 9.5.6	Diesel Generator Starting Systems	Conforms. Addressed in DCD Section 9.5.6 .
C.III.1 9.5.7	Diesel Generator Lubrication Systems	Conforms. Addressed in DCD Section 9.5.7 .
C.III.1 9.5.8	Diesel Generator Combustion Air Intake and Exhaust System	Conforms. Addressed in DCD Section 9.5.8 .
C.III.1 10.1	Steam and Power Conversion: Introduction	Conforms. There are no principal design features of the steam and power conversion system that are outside the scope of the referenced certified design.
C.III.1 10.2.1 (1)	Design Bases	Conforms. Addressed in DCD Section 10.2.1 .
C.III.1 10.2.1 (2)	Design Bases	Conforms. Addressed in DCD Section 10.2.2 .
C.III.1 10.2.1 (3)	Design Bases	Conforms. Addressed in DCD Sections 3.5.1, 3.5.3, 3.6, 10.2.1 and 10.2.4 , and DCD Figure 3.5-2 .
C.III.1 10.2.2 (1)	Description	Conforms. Addressed in DCD Sections 10.2.2, 10.2.3 , and DCD Figures 1.2-12 to 1.2-20, 3.5-2, and 10.1-1 .
C.III.1 10.2.2 (2)	Description	Conforms. Addressed in DCD Sections 10.2.2 and 10.2.3 .
C.III.1 10.2.2 (3)	Description	Conforms. Addressed in DCD Section 10.2.2 and DCD Figures 10.2-1, 10.2-2, and 10.2-3 .
C.III.1 10.2.2 (4)	Description	Conforms. Addressed in DCD Sections 10.2.3 and 14.2.8 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 10.2.2 (5)	Description	Conforms. Addressed in DCD Sections 12.2.1, 12.2.3, 12.4.4, DCD Table 12.2-23, and DCD Figures 12.3-12 to 12.3-18 and 12.3-32 to 12.3-38.
C.III.1 10.2.2 (6)	Description	Conforms. Addressed in DCD Sections 3.6, 10.2.2, and 10.2.4.
C.III.1 10.2.3 (1)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Sections 10.2.3.6 and 10.2.3.7.
C.III.1 10.2.3 (2)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Section 10.2.3.8.
C.III.1 10.2.3 (3)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Section 10.2.3.8.
C.III.1 10.2.3 (4)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Section 10.2.3.8.
C.III.1 10.2.3 (5)	Turbine Rotor Integrity	Conforms. Addressed in DCD Sections 10.2.2 and 10.2.3, and Section 10.2.3.8.
C.III.1 10.3	Main Steam Supply System	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (1)	Design Bases	Conforms. Addressed in DCD Section 10.3.1.
C.III.1 10.3.1 (2)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (3)	Design Bases	Conforms. Addressed in DCD Sections 10.3.2 and 10.3.3.
C.III.1 10.3.1 (4)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (5)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (6)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.2	Description	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.3	Evaluation	Conforms. Addressed in DCD Section 10.3.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 10.3.4	Inspection and Testing Requirements	Conforms. Addressed in DCD Section 10.3.4 .
C.III.1 10.3.5	Water Chemistry (PWR Only)	Not applicable. Only applies to PWRs.
C.III.1 10.3.6 (1)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Section 10.3.6 .
C.III.1 10.3.6 (2)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Sections 6.6 and 10.3.4 .
C.III.1 10.3.6 (3)	Steam and Feedwater System Materials	Not applicable. DCD Section 10.3.6 states that there are no austenitic stainless steels in the steam and feedwater system piping.
C.III.1 10.3.6 (4)	Steam and Feedwater System Materials	Not Applicable. DCD Section 10.3.6 states that there are no austenitic stainless steels in the ASME Code Section III Class 1 and 2 portions of steam and feedwater piping.
C.III.1 10.3.6 (5)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Section 10.3 .
C.III.1 10.3.6 (6)	Steam and Feedwater System Materials	Not applicable, DCD identifies materials
C.III.1 10.4 (1)	Other Features of the Steam and Power Conversion System	Conforms
C.III.1 10.4.1	Main Condensers	Conforms. Sampling points for detection are discussed in DCD Section 10.4.1.5.4 . Although sodium content and sampling for sodium content is not specifically mentioned in DCD Section 10.4.1 , monitoring condensate for an increase in conductivity is considered an acceptable means to detect condenser tube leakage. A table of key parameters and associated action levels is provided as Table 10.4-201 . Alarm setpoints are established to provide an indication of abnormal chemistry conditions prior to reaching a recommended action level.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 10.4.2	Main Condenser Evacuation System	Conforms. There are no design features of the main condenser evacuation system that are outside the scope of the referenced certified design.
C.III.1 10.4.3 (1)	Turbine Gland Sealing System	Conforms. Addressed in DCD Section 10.4.3 .
C.III.1 10.4.3 (2)		Conforms
C.III.1 10.4.4 (1)	Turbine Bypass System	Conforms. The Turbine Bypass System is consistent with the referenced certified design.
C.III.1 10.4.5 (1)	Circulating Water System	Conforms
C.III.1 10.4.5 (2)		Not applicable. The circulating water system does not interface with the UHS.
C.III.1 10.4.6 (1)	Condensate Cleanup System	Conforms
C.III.1 10.4.6 (2)		Conforms. Addressed in DCD Sections 10.4.1 , 10.4.6 , and 5.2.3 , DCD Table 5.2-5 , and in Table 10.4-201 .
C.III.1 10.4.6 (3)		Conforms
C.III.1 10.4.6 (4)		Not applicable. Only applies to PWRs.
C.III.1 10.4.7 (1)	Condensate and Feedwater Systems	Not applicable. Only applies to PWRs.
C.III.1 10.4.7 (2)		Conforms. Addressed in DCD Sections 1.2.2 and 5.2.4 , and DCD Tables 1.9-22 and 1.11-1 .
C.III.1 10.4.7 (3)		Not applicable. The condensate and feedwater systems are consistent with the referenced certified design.
C.III.1 10.4.8	Steam Generator Blowdown System (PWR)	Not applicable. Only applies to PWRs.
C.III.1 10.4.9	Auxiliary Feedwater System (PWR)	Not applicable. Only applies to PWRs.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 11.1	Source Terms	Conforms
C.III.1 11.2.1(1)	Liquid Waste Management Systems: Design Bases	Conforms. Addressed in DCD Section 11.2 and in Section 11.2 .
C.III.1 11.2.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.2 .
C.III.1 11.2.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.2.1 and DCD Table 11.2-3 . Conformance with RG 1.140 is addressed in DCD Section 9.4.3 .
C.III.1 11.2.1(4)	Design Bases	Conforms. Addressed in DCD Section 9.4.3 .
C.III.1 11.2.1(5)	Design Bases	Conforms. Addressed in DCD Sections 11.2.3 and 15.3.16 and in Section 2.4.13 .
C.III.1 11.2.1(6)	Design Bases	Conforms. Quality Assurance Program requirements are addressed in Chapter 17 .
C.III.1 11.2.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.2.4 .
C.III.1 11.2.1(8)	Design Bases	Conforms
C.III.1 11.2.1(9)	Design Bases	Conforms. Addressed in DCD Section 11.2.2 and in Section 11.2 .
C.III.1 11.2.2(1)	System Description	Conforms. Addressed in DCD Section 11.2.2 .
C.III.1 11.2.2(2)	System Description	Conforms. Addressed in DCD Section 11.2.2 .
C.III.1 11.2.2(3)	System Description	Conforms. Addressed in DCD Section 11.2.2 .
C.III.1 11.2.2(4)	System Description	Conforms. Addressed in DCD Section 11.2.2 .
C.III.1 11.2.3(1)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 11.2 and 12.2 , and in Section 12.2 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 11.2.3(2)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 11.2 and 12.2 , and in Section 12.2 .
C.III.1 11.3.1(1)	Gaseous Waste Management Systems: Design Bases	Addressed in DCD Section 11.3 . Conforms with the following exception: No discussion is provided regarding the capability of and requirements for using portable processing equipment for refueling outages.
C.III.1 11.3.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.3 .
C.III.1 11.3.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.3 .
C.III.1 11.3.1(4)	Design Bases	Conforms. Quality Assurance Program requirements are addressed in Chapter 17 .
C.III.1 11.3.1(5)	Design Bases	Conforms. Addressed in DCD Section 11.3.5 .
C.III.1 11.3.1(6)	Design Bases	Conforms. Addressed in DCD Section 12.3.1.5 and in Section 12.3.1.5.2 .
C.III.1 11.3.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.3 .
C.III.1 11.3.2(1)	System Description	Conforms. Addressed in DCD Section 11.3.2 .
C.III.1 11.3.2(2)	System Description	Conforms. Addressed in DCD Section 11.3.2 .
C.III.1 11.3.2(3)	System Description	Conforms. Addressed in DCD Section 11.3.2 .
C.III.1 11.3.2(4)	System Description	Conforms. Addressed in DCD Sections 11.3.2 , 11.3.3 , and 9.4 .
C.III.1 11.3.3	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 11.3 and 12.2 , and in Section 12.2 .
C.III.1 11.4.1(1)	Solid Waste Management System: Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 11.4.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(4)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Sections 11.4 , 13.5 , and 17.5 .
C.III.1 11.4.1(5)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(6)	Design Bases	Conforms.
C.III.1 11.4.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.4 .
C.III.1 11.4.2(1)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 .
C.III.1 11.4.2(2)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 .
C.III.1 11.4.2(3)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 . There are no temporary onsite storage facilities.
C.III.1 11.4.2 (4)	System Description	Conforms. Addressed in DCD Section 11.4 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 11.4.3 (1)	Radioactive Effluent Releases	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 .
C.III.1 11.4.3 (2)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 3.1 and 11.4 .
C.III.1 11.4.3 (3)	Radioactive Effluent Releases	Conforms. Addressed in DCD Section 12.2 .
C.III.1 11.5.1	Process and Effluent Radiological Monitoring and Sampling Systems: Design Bases	Conforms
C.III.1 11.5.2(1)	System Description	Conforms. Addressed in DCD Section 11.5 .
C.III.1 11.5.2 (2)	System Description	Conforms with the following exception: Section 11.5 provides a description of the ODCM. The implementation milestone is provided in Section 13.4 .
C.III.1 11.5.2 (3)	System Description	Conforms with the following exception: Section 11.5 and TS Section 5 provide a description of radiological effluent controls. The implementation milestone is provided in Section 13.4 .
C.III.1 11.5.2 (4)	System Description	Conforms with the following exception: Section 11.5 and TS Section 5 provide a description of the REMP. The implementation milestone is provided in Section 13.4 .
C.III.1 11.5.2 (5)	System Description	Conforms. Addressed in DCD Sections 3.1 and 11.5 .
C.III.1 11.5.2 (6)	System Description	Conforms
C.III.1 11.5.2 (7)	System Description	Conforms
C.III.1 11.5.3	Effluent Monitoring and Sampling	Conforms
C.III.1 11.5.4	Process Monitoring and Sampling	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 12.1.1	Policy Considerations	Conforms. Addressed in Sections 12.1 and 12.5 .
C.III.1 12.1.2	Design Considerations	Conforms. Addressed in Section 12.5 .
C.III.1 12.1.3	Operational Considerations	Conforms. Addressed in Sections 12.1 and 12.5 .
C.III.1 12.2.1	Contained Sources	Conforms. Addressed in DCD Section 12.2.1 .
C.III.1 12.2.2	Airborne Radioactive Material Sources	Conforms
C.III.1 12.3.1	Facility Design Features	Conforms
C.III.1 12.3.2	Shielding	Conforms
C.III.1 12.3.3	Ventilation	Conforms. Addressed in DCD Sections 9.4.1 and 12.3 .
C.III.1 12.3.4	Area Radiation and Airborne Radioactivity Monitoring Instrumentation	Conforms. Addressed in Sections 12.3 and 12.5 .
C.III.1 12.3.5	Dose Assessment	Conforms. Addressed in DCD Section 12.4 and in Section 12.4 .
C.III.1 12.4	Dose Assessment	Conforms
C.III.1 12.5 (1) (a)	Operational Radiation Protection Program: Organization	Conforms. Addressed in Sections 12.5 and 13.1 .
C.III.1 12.5 (1) (b)	Facilities	Conforms
C.III.1 12.5 (1) (c)	Instrumentation and Equipment	Conforms
C.III.1 12.5 (1) (d)	Procedures	Conforms
C.III.1 12.5 (1) (e)	Training	Conforms. Addressed in Sections 12.5 and 13.2 .
C.III.1 12.5 (2)		Conforms. Addressed in DCD Section 12.3 .
C.III.1 12.5 (3)		Conforms. Addressed in Sections 12.5 , 13.1 , and 13.4 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 12.5 (4)		Conforms. Addressed in Section 13.4 .
C.III.1 12.5, last paragraph		Conforms. Addressed in Sections 12.5 , 13.1 , 13.2 , and 13.5 .
C.III.1 12.5.1	Organization	Conforms. Addressed in Sections 12.5 and 13.1 .
C.III.1 12.5.2	Equipment, Instrumentation, and Facilities	Conforms
C.III.1 12.5.3	Procedures	Addressed in Sections 12.5 , 13.2 , 13.5 , and 17.5 . Conforms with one exception: With respect to RG 1.33, Dominion’s QA procedures follow NQA-1 rather than the older standards referenced in RG 1.33. The QA requirements are described in Section 17.5 .
C.III.1 13.1.1(1)	Organizational Structure of Applicant: Management and Technical Support Organization	Conforms. Addressed in Sections 13.1 and 14.2 .
C.III.1 13.1.1(2)		Conforms
C.III.1 13.1.1(3)		Conforms
C.III.1 13.1.1(4)		Conforms
C.III.1 13.1.1(5)		Conforms
C.III.1 13.1.1(6)		Conforms
C.III.1 13.1.1(7)		Conforms. Addressed in Sections 13.1 and 14.2 .
C.III.1 13.1.1.1	Design, Construction, and Operating Responsibilities	Conforms
C.III.1 13.1.1.2	Organizational Arrangement	Conforms. Addressed in Sections 13.1 and 17.5 . Unit 3 is not a new, multi-unit plant site.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.1.1.3	Qualifications	Conforms. Addressed in Sections 13.1 and 17.5 .
C.III.1 13.1.2(1)		Exception. The guidelines of RG 1.33 are met through equivalent administrative controls described in Chapter 17 .
C.III.1 13.1.2(2)		Exception. The guidelines of RG 1.33 are met through equivalent administrative controls described in Chapter 17 .
C.III.1 13.1.2(3)		Conforms. Addressed in Sections 9.5.1 and 13.1 .
C.III.1 13.1.2(4)		Conforms
C.III.1 13.1.2(5)		Conforms
C.III.1 13.1.2(6)		Conforms
C.III.1 13.1.2(7)		Conforms
C.III.1 13.1.2(8)		Conforms. Addressed in Appendix 13AA .
C.III.1 13.1.2.1	Plant Organization	Conforms. Addressed in Sections 13.1 and 17.5 .
C.III.1 13.1.2.2(1)	Plant Personnel Responsibilities and Authorities	Conforms. Addressed in Sections 13.1 and 17.5 .
C.III.1 13.1.2.2(2)		Conforms
C.III.1 13.1.2.2(3)		Conforms
C.III.1 13.1.2.3	Operating Shift Crews	Conforms
C.III.1 13.1.3.1	Qualification Requirements	Conforms. Addressed in Sections 13.1 and 17.5 .
C.III.1 13.1.3.2	Qualifications of Plant Personnel	Exception. Resumes will not be included in the application, but will be available for inspection at corporate headquarters upon request.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.2.1	Plant Staff Training Program	Conforms
C.III.1 13.2.1.1 Licensed Staff (1)		Conforms with the following exceptions: 1) this item discusses inclusion of details of the licensed training program. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section; 2) the requirement for a “contingency plan...in the event fuel loading is subsequently delayed” is met by the operator re-qualification program; and 3) the industry standard content for this section does not include a discussion of proposed schedule for licensed personnel.
C.III.1 13.2.1.1 Licensed Staff (2)		Conforms
C.III.1 13.2.1.1 Licensed Staff (3)		Conforms
C.III.1 13.2.1.1 Licensed Staff (4)		Conforms
C.III.1 13.2.1.1 Licensed Staff (5)		Conforms
C.III.1 13.2.1.1 Licensed Staff (6)		Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.2.1.1 Non-licensed Staff (1)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (2)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (3)		Exception – This item discusses programs not covered under 10 CFR 50.120. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section.
C.III.1 13.2.1.1 Non-licensed Staff (4)		Conforms. Addressed in Section 9.5.1 .
C.III.1 13.2.1.1 Non-licensed Staff (5)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (6)		Conforms with the following exception: The first part of this item discusses detailed course descriptions. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section. The implementation milestone is addressed in Section 13.4 .
C.III.1 13.2.1.1 Non-licensed Staff (7)		Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.2.1.2	Coordination with Preoperational Tests and Fuel Loading	Conforms with the following exception – Rather than providing contingency plans for training in the event of significantly delayed fuel loading the retraining programs are utilized, as described in Appendix 13BB . Figure 13.1-202 shows the training schedule relative to fuel loading.
C.III.1 13.2.2(1)	Applicable NRC Documents: 10 CFR 19	Conforms
C.III.1 13.2.2(2)	10 CFR 26	Conforms
C.III.1 13.2.2(3)	10 CFR 50	Conforms
C.III.1 13.2.2(4)	10 CFR 50 Appendix E	Conforms
C.III.1 13.2.2(5)	10 CFR 52	Conforms
C.III.1 13.2.2(6)	10 CFR 55	Conforms
C.III.1 13.2.2(7)	RG 1.8	Addressed in Table 1.9-202 .
C.III.1 13.2.2(8)	RG 1.149	Addressed in Table 1.9-202 .
C.III.1 13.2.2(9)	NUREG-0711	Conforms. HFE addressed in DCD Chapter 18 .
C.III.1 13.2.2(10)	NUREG-1021	Exception: Industry standard content for this section does not explicitly include discussion of compliance with NUREG-1021, Operator Licensing Examination Standards for Power Reactors.
C.III.1 13.2.2(11)	NUREG-1220	Not applicable. NUREG provides instructions for NRC inspectors.
C.III.1 13.2.2(12)	GL 86-04	Conforms
C.III.1 13.2.2(13)	RG 1.134	Conforms. Industry standard content for this section does not explicitly include a discussion of compliance with RG 1.134, Medical Evaluations.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.3(1)	Emergency Planning	Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3(2)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3(3)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3(4)		Conforms. Addressed in Chapter 2 , and the Emergency Plan and Evacuation Time Estimate in COLA Part 5 .
C.III.1 13.3(5)		Conforms. Addressed in COLA Part 5 .
C.III.1 13.3(6)		Not applicable. Applies when state and/or local governments decline to participate in emergency planning and preparedness.
C.III.1 13.3(7)		Conforms
C.III.1 13.3.1 (1)	Combined License Application and Emergency Plan Content	Conforms. Addressed in COLA Part 5 .
C.III.1 13.3.1 (2)		Conforms. Addressed in COLA Part 5 and 10 .
C.III.1 13.3.1 (3)		Conforms. Addressed in Chapter 1 and the Emergency Plan in COLA Part 5 .
C.III.1 13.3.1 (4)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3.1 (5)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3.1 (6)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3.1 (7)		Conforms. Addressed in Chapter 1 .
C.III.1 13.3.1 (8)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3.1 (9)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.3.2 (1)	Emergency Plan Considerations for Multiunit Sites	Conforms. The Unit 3 EP is a stand-alone plan and does not rely upon the EP for Units 1 and 2.
C.III.1 13.3.2 (2)		Not applicable. The Unit 3 EP is a stand-alone plan and does not rely upon the EP for Units 1 and 2.
C.III.1 13.3.2 (3)		Conforms. Addressed in the Emergency Plan in COLA Part 5 and 10 .
C.III.1 13.3.2 (4)		Conforms. Addressed in COLA Part 5 .
C.III.1 13.3.2 (5)		Conforms. Addressed in the Emergency Plan in COLA Part 5 .
C.III.1 13.3.2 (6)		Conforms. Addressed in the Emergency Plan and the Evacuation Time Estimate in COLA Part 5 .
C.III.1 13.3.2 (7)		Not applicable. Provisions for co-located licensees do not apply.
C.III.1 13.3.2 (8)		Conforms. Addressed in COLA Part 10 .
C.III.1 13.3.2 (9)		Not applicable. There are no adjacent sites.
C.III.1 13.3.3	Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria	Conforms with the following exceptions: 1. Did not include ITAAC in COLA Part 10 to address the non-bolded items in RG 1.206, Table II.C.1-B1. 2. Did not include ITAAC in COLA Part 10 to address RG 1.206, Table II.C.1-B1 ITAAC 17.0.
C.III.1 13.4	Operational Program Implementation	Conforms
C.III.1 13.5.1	Administrative Procedures	Conforms. Addressed in Sections 13.5 and 17.5 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 13.5.2.1	Operating and Emergency Operating Procedures	Conforms with the following exception: Section 13.5.1 identifies classes of procedures by topic or type in lieu of the specific title. Operating procedures will be developed after activities such as job and task analyses have been completed.
C.III.1 13.5.2.2	Maintenance and Other Operating Procedures	Conforms
C.III.1 13.6	Security	Conforms. Addressed in Sections 13.4 and 13.6 , and COLA Part 8 .
C.I 13.7	FFD	Conforms
C.III.1 14.1	Verification Program: Specific Information to be Addressed for the Initial Plant Test Program	Conforms. Addressed in Sections 14.2 and 14.3 .
C.III.1 14.2	Initial Plant Test Program	Conforms
C.III.1 14.2.1	Summary of Test Program and Objectives	Conforms
C.III.1 14.2.2	Organization and Staffing	Conforms. Addressed in DCD Section 14.2 and in Sections 13.1 , 14.2 , and 17.5 .
C.III.1 14.2.3	Test Procedures	Conforms. Addressed in DCD Section 14.2 .
C.III.1 14.2.4	Conduct of Test Program	Conforms. Addressed in DCD Section 14.2 .
C.III.1 14.2.5	Review, Evaluation, and Approval of Test Results	Conforms. Addressed in DCD Section 14.2 .
C.III.1 14.2.6	Test Records	Conforms
C.III.1 14.2.7	Conformance of Tests Programs with Regulatory Guides	Conforms. Addressed in DCD Section 14.2.3 .
C.III.1 14.2.8	Utilization of Reactor Operating and Testing Experiences in Development of Test Program	Conforms. Addressed in DCD Section 14.2 and in Section 14.2 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 14.2.9	Trial Use of Plant Operating and Emergency Procedures	Conforms. Addressed in DCD Section 14.2.5 and in Section 13.2 .
C.III.1 14.2.10	Initial Fuel Loading and Initial Criticality	Conforms. Addressed in DCD Section 14.2.6 .
C.III.1 14.2.11	Test Program Schedule	Conforms. Addressed in DCD Section 14.2.7 and in Section 14.2.7 .
C.III.1 14.2.12	Individual Test Descriptions	Conforms. Addressed in DCD Section 14.2.8 and in Section 14.2.9 .
C.III.1 14.3	Inspections, Tests, Analyses, and Acceptance Criteria	Conforms. Addressed in COLA Part 10 .
C.III.1 15.1	Transient and Accident Analyses: Transient and Accident Classification	Conforms. There are no aspects of the site-specific design that affect the transient and accident analyses in the DCD.
C.III.1 15.2	Frequency of Occurrence	Conforms
C.III.1 15.3	Plant Characteristics Considered in the Safety Evaluation	Conforms
C.III.1 15.4	Assumed Protection System Actions	Conforms
C.III.1 15.5	Evaluation of Individual Initiating Events	Conforms.
C.III.1 15.6	Event Evaluation	See below
C.III.1 15.6.1	Identification of Causes and Frequency Classification	Conforms
C.III.1 15.6.2	Sequence of Events and Systems Operation	Conforms
C.III.1 15.6.3	Core and System Performance	Conforms
C.III.1 15.6.4	Barrier Performance	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 15.6.5	Radiological Consequences	Conforms. Table 2.0-201 compares the site-specific short-term χ /Qs for the EAB, LPZ, and control room to the χ /Qs assumed in the DCD.
C.III.1 16.1	Technical Specifications and Bases	Conforms. Addressed in COLA Part 4 . There are no deviations from the generic TS bases.
C.III.1 16.2	Content and Format of Technical Specifications and Bases	Conforms. Addressed in COLA Part 4 . No plant-specific deviations from the referenced certified generic Technical Specifications or Bases are required and none are being requested (e.g., incorporation of TSTF travelers).
C.III.1 17.1	Quality Assurance and Reliability Assurance: Quality Assurance During the Design and Construction Phase	Conforms
C.III.1 17.2	Quality Assurance During the Operations Phase	Conforms
C.III.1 17.3	Quality Assurance Program Description	Conforms
C.III.1 17.4.1	New Section 17.4 in the Standard Review Plan	Conforms
C.III.1 17.4.2	Reliability Assurance Program Scope, Stages, and Goals	Conforms. Addressed in Section 17.4 and DCD Section 17.4 .
C.III.1 17.4.3	Reliability Assurance Program Implementation	Conforms. Addressed in Sections 17.4 and 17.6 .
C.III.1 17.4.4	Reliability Assurance Program Information Needed in a COL Application	Conforms. Addressed in DCD Section 17.4 and in Sections 17.4, 17.5, and 17.6 .
C.III.1 17.5	Quality Assurance Program Guidance	See below
C.III.1 17.5.1	COL Applicant QA Program Responsibilities	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.III.1 17.5.2	Updated SRP Section 17.5 and the QA Program Description	Conforms. QA applied to safety-related activities performed prior to the start of construction (e.g., site investigation, design and safety analysis, early procurements) is described in the Dominion Nuclear Facility QAPD topical report, DOM-QA-1. QA applied during activities to adapt the design to specific plant implementation, construction, and operations is addressed in Section 17.5 .
C.III.1 17.5.3	Evaluation of the QAPD Against the SRP and QAPD Submittal Guidance	Conforms
C.III.1 17.6	Description of the Applicant's Program for Implementation of 10 CFR 50.65, the Maintenance Rule	Conforms
C.III.1 17.6.1	Scoping per 10 CFR 50.65(b)	Conforms
C.III.1 17.6.2	Monitoring per 10 CFR 50.65(a)	Conforms
C.III.1 17.6.3	Periodic Evaluation per 10 CFR 50.65(a)(3)	Conforms
C.III.1 17.6.4	Risk Assessment and Management per 10 CFR 50.65(a)(4)	Conforms
C.III.1 17.6.5	Maintenance Rule Training and Qualification	Conforms
C.III.1 17.6.6	Maintenance Rule Program Role in Implementation of Reliability Assurance Program (RAP) in the Operations Phase	Conforms
C.III.1 17.6.7	Maintenance Rule Program Implementation	Conforms
C.III.1 Chapter 18	Human Factors Engineering	Conforms

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
	HFE principles incorporated into:	
	(1) Planning and management	Conforms. Addressed in DCD Section 18.2 .
	(2) Plant design processes not closed with design certification	Conforms. Addressed in DCD Tier 1 , ITAAC Table 3.3-2 .
	(3) HSI, procedures, and training	Conforms. Addressed in DCD Tier 1 , ITAAC Table 3.3-2 , Item 6, and DCD Sections 18.9 and 18.10 .
	(4) implementation of the design	Conforms. Addressed in DCD Tier 1 , ITAAC Table 3.3-2 , Item 10.
	(5) monitoring of performance at the site	Conforms. Addressed in DCD Tier 1 , ITAAC Table 3.3-2 , Item 11.
	Applicant program addresses normal and emergency, maintenance, test, inspection and surveillance activities	Conforms. Addressed in DCD Section 18.1 .
	FSAR/DCD describe objectives and scope of the applicant's activities related to element, methodology, and results for (12 HFE elements)	Conforms. Addressed in DCD Sections 18.3 through 18.13 .
	Applicant should reference detailed implementation plan reviewed and approved as part of design certification	Conforms. Addressed in DCD Section 18.2.1 .
C.I 18.1	HFE Program Management	Conforms. Addressed in DCD Sections 18.2.2 and 18.2.3 .
C.I 18.1.1	General HFE Program and Scope	Conforms. Addressed in DCD Sections 18.2.1 and 18.2.2 .
C.I 18.1.2	HFE Team and Organization	Conforms. Addressed in DCD Section 18.2.3 .
C.I 18.1.3	HFE Process and Procedures	Conforms. Addressed in DCD Sections 18.2.1 and 18.2.2 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.I 18.1.4	HFE Issues Tracking	Conforms. Addressed in DCD Section 18.2.2 .
C.I 18.1.5	HFE Technical Program	Conforms. Addressed in DCD Sections 18.3 through 18.13 .
C.I 18.2.1	Objectives and scope	Conforms. Addressed in DCD Section 18.3.1 .
C.I 18.2.2.1	OER Process	Conforms. Addressed in DCD Section 18.3.2 .
C.I 18.2.2.2	Predecessor plants and systems	Conforms. Addressed in DCD Section 18.3.2.1 .
C.I 18.2.2.3	Risk-important human actions	Conforms. Addressed in DCD Section 18.3.2.2 .
C.I 18.2.2.4	HFE technology	Conforms. Addressed in DCD Section 18.3.2.3 .
C.I 18.2.2.5	Recognized industry issues	Conforms. Addressed in DCD Section 18.3.2.4 .
C.I 18.2.2.6	Issues Identified by plant personnel	Conforms. Addressed in DCD Section 18.3.2.5 .
C.I 18.2.2.7	Issue Analysis, Tracking, and Review	Conforms. Addressed in DCD Section 18.3.2.6 .
C.I 18.2.3	Results	Conforms. Addressed in DCD Section 18.3.3 .
C.I 18.3.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.4.2 .
C.I 18.3.1.1	Functional Requirements Analysis	Conforms. Addressed in DCD Section 18.4.1 .
C.I 18.3.1.2	Function Allocation Analysis	Conforms. Addressed in DCD Section 18.4.2 .
C.I 18.3.2.1	Methodology for Functional Requirements Analysis	Conforms. Addressed in DCD Section 18.4.1 .
C.I 18.3.2.2	Methodology for Function Allocation Analysis	Conforms. Addressed in DCD Section 18.4.2 .
C.I 18.3.3	Results	Conforms. Addressed in DCD Sections 18.4.1 and 18.4.2 .
C.I 18.4.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2 .

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.I 18.4.2	Methodology	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2.
C.I 18.4.3	Results	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2.
C.I 18.5.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.6.2.
C.I 18.5.2	Methodology	Conforms. Addressed in DCD Sections 18.6.4 and 18.6.5.
C.I 18.5.3	Results	Conforms. Addressed in DCD Section 18.6.6.
C.I 18.6.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.7.1.
C.I 18.6.2	Methodology	Conforms. Addressed in DCD Section 18.7.2.
C.I 18.6.3	Results	Conforms. Addressed in DCD Section 18.7.3.
C.I 6.3.2.8	Manual Actions	Conforms. Addressed in DCD Section 18.7.2.
C.I 18.7.1	Objectives and scope	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.1	HSI Design Inputs	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.2	Concept of operations	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.3	Functional Requirements Specification	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.4	HSI Concept Design	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.5	HSI Detailed Design and Integration	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.6	HSI Tests and Evaluations	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.1	Overview of HSI Design and Its Key Features	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.2	Safety Aspects of the HSI	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.3	HSI Change Process	Conforms. Addressed in DCD Section 18.13.3.

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Table 1.9-203 Conformance With the FSAR Content Guidance In RG 1.206

Section	Section Title	Conformance Evaluation
C.I 18.8.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.9.1 .
C.I 18.8.2	Methodology	Conforms. Addressed in DCD Section 18.9.2 .
C.I 18.8.3	Results	Conforms. Addressed in DCD Section 18.9.3 .
C.I 18.9.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.10.1 and 18.10.2 .
C.I 18.9.2	Methodology	Conforms. Addressed in DCD Sections 18.10.3 and 18.10.4 .
C.I 18.9.3	Results	Conforms. Addressed in DCD Section 18.10.5 .
C.I 18.10.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.11 and 18.11.1 .
C.I 18.10.2	Methodology	Conforms. Addressed in DCD Section 18.11 .
C.I 18.10.2.1	Operational Conditions Sampling	Conforms. Addressed in DCD Section 18.11 .
C.I 18.10.2.2	Design Verification	Conforms. Addressed in DCD Section 18.11 .
C.I 18.10.2.3	Integrated System Validation	Conforms. Addressed in DCD Section 18.11 .
C.I 18.10.2.4	Human Engineering Discrepancy Resolution	Conforms. Addressed in DCD Section 18.11 .
C.I 18.10.3	Results	Conforms. Addressed in DCD Section 18.11.2 .
C.I 18.11.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.12.1 .
C.I 18.11.2	Methodology	Conforms. Addressed in DCD Section 18.12.2 .
C.I 18.11.3	Results	Conforms. Addressed in DCD Section 18.12.3 .
C.I 18.12.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.13.1 and 18.13.2 .
C.I 18.12.2	Methodology	Conforms. Addressed in DCD Sections 18.13.2 and 18.13.3 .
C.I 18.12.3	Results	Conforms. Addressed in DCD Section 18.13.4 .

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**Table 1.9-203 Conformance With the FSAR Content Guidance In
RG 1.206**

Section	Section Title	Conformance Evaluation
C.III.1 Chapter 19	Probabilistic Risk Assessment and Severe Accident Evaluation	Conforms. As discussed in RG 1.206, Section C.III.1.10, the FSAR follows the organization and numbering of the referenced certified design.

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Table 1.9-204 Industrial Codes and Standards

Code or Standard Number	Year	Title
American National Standards Institute		
B30.2	2001	Overhead and Gantry Cranes
N323D	2002	Installed Radiation Protection Instrumentation
American Petroleum Institute		
Recommended Practice 1632	2010	Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems
American Society of Civil Engineers (ASCE)		
ASCE 7-02	2002	Minimum Design Loads for Buildings and Other Structures
American Society of Mechanical Engineers (ASME)		
A17.1	2007	Safety Code for Elevators and Escalators
B31.1	2007	Power Piping
NQA-1	1994	Quality Assurance Requirements for Nuclear Facility Applications
Boiler and Pressure Vessel Code, Section IX	2007	Qualification Standard for Welding and Brazing Procedures, Welder, Brazers and Welding and Brazing Operators
ASTM International		
ASTM E84-08a	2008	Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM E119-08a	2008	Standard Test Methods for Fire Tests of Building Construction and Materials
ASTM E814-06	2006	Standard Test Method for Fire Tests of Through-Penetration Fire Stops
Applicable Building Codes		
International Building Code	As defined in the Virginia Uniform Statewide Building Code edition of record	International Building Code

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Table 1.9-204 Industrial Codes and Standards

Code or Standard Number	Year	Title
Applicable Building Codes (continued)		
International Fire Code	As defined in the Virginia Uniform Statewide Building Code edition of record	International Fire Code
28 CFR 36		Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities (Americans With Disabilities Act (ADA) Accessibility Guidelines)
	2003	Virginia Uniform Statewide Building Code, Part I (Virginia Construction Code)
Factory Mutual		
Data Sheet 7-42	2012	Guidelines for Evaluating the Effects of Vapor Cloud Explosions Using a TNT Equivalency Method
	2007	Approval Guide
Building Seismic Safety Council	2009	National Earthquake Hazard Reduction Program (NEHRP) Recommended Provisions for Seismic Safety Council Regulations for New Buildings and Other Structures
Institute of Electrical and Electronics Engineers (IEEE)		
998	1996 (R 2002)	IEEE Guide for Direct Lightning Stroke Shielding of Substations
1313.2	1999 (R 2005)	IEEE Guide for the Application of Insulation Coordination
C2	2007	National Electric Safety Code
C57.19.100-1995 (R2003)	2004	IEEE Guide for Application of Power Apparatus Bushings
C62.22	2009	IEEE Guide for the Application of Metal Oxide Surge Arrester for Alternating Current Systems

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Table 1.9-204 Industrial Codes and Standards

Code or Standard Number	Year	Title
National Fire Protection Association (NFPA)		
NFPA 10	2007	Standard for Portable Fire Extinguishers
NFPA 11	2005	Standard for Low-, Medium-, and High-Expansion Foam
NFPA 13	2007	Standard for the Installation of Sprinkler Systems
NFPA (continued)		
NFPA 14	2007	Standard for the Installation of Sandpipe and Hose Systems
NFPA 15	2007	Standard for Water Spray Fixed Systems for Fire Protection
NFPA 16	2007	Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
NFPA 20	2007	Standard for the Installation of Stationary Pumps for Fire Protection
NFPA 24	2007	Standard for the Installation of Private Fire Service Mains and their Appurtenances
NFPA 25	2008	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
NFPA 30	2008	Flammable and Combustible Liquids Code
NFPA 37	2006	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines
NFPA 55	2005	Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks
NFPA 70	2008	National Electric Code
NFPA 72	2007	National Fire Alarm Code
NFPA 80	2007	Standard for Fire Doors and Other Opening Protectives

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Table 1.9-204 Industrial Codes and Standards

Code or Standard Number	Year	Title
NFPA 80A	2007	Recommended Practice for Protection of Buildings from Exterior Fire Exposures
NFPA 101	2006	Life Safety Code
NFPA 204	2007	Standard for Smoke and Heat Venting
NFPA 214	2005	Standard on Water-Cooling Towers
NFPA (continued)		
NFPA 241	2004	Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 252	2008	Standard Methods of Fire Tests of Door Assemblies
NFPA 255	2006	Standard Method of Test of Surface Burning Characteristics of Building Materials
NFPA 780	2008	Standard for the Installation of Lightning Protection Systems
North American Electric Reliability Corporation (NERC)		
PRC-005-1	2006	Transmission and Generation Protection System Maintenance and Testing
PRC-008-0	2005	Underfrequency Load Shedding Equipment Maintenance Program
PRC-017-0	2005	Special Protection System Maintenance and Testing
Occupational Safety and Health Act (OSHA)		
29 CFR 1910	2006	Occupational Safety and Health Standards
29 CFR 1926	2006	Safety and Health Regulations for Construction
Underwriters Laboratories (UL)		
	2007	Fire Protection Equipment Directory
Environmental Protection Agency (EPA)		
40 CFR 60	2006	EPA Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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Table 1.9-205 NUREG Reports Cited

NUREG No.	Issue Date	Title	Comment/ Section Where Discussed
0016, Rev. 1	01/1979	Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Boiling Water Reactors (BWRs)	12.2
CP-0105	1990	An Overview of Geological Studies: in Proceedings of the U.S. Nuclear Regulatory Commission Seventeenth Water Reactor Safety Information Meeting	2.5
CP-0133	1994	Geologically recent near-surface faulting and folding in Giles County, southwest Virginia: New exposures of extensional and apparent reverse faults in alluvial sediments between Pembroke and Proceedings of the U.S. Nuclear Regulatory Commission for 1994	2.5
0570	06/1979	Toxic Vapor Concentrations in the Control Room Following a Postulated Accidental Release	6.4
0612	07/1980	Control of Heavy Loads at Nuclear Power Plants	9.1.5
0737	11/1980	Clarification of TMI Action Plan Requirements	Table 8.1-1R 13.1 13.5 14AA.9.2
0800	03/2007	Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants	1.1 2.0 2.2 2.5 9.3 11.5 14AA.1 14AA.9.2
0868	06/1982	A Collection of Mathematical Models for Dispersion in Surface Water and Groundwater	2.4

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Table 1.9-205 NUREG Reports Cited

NUREG No.	Issue Date	Title	Comment/ Section Where Discussed
1437	05/1996	Generic Environmental Impact Statement for License Renewal of Nuclear Plants	12.2
1488	04/1994	Revised Livermore Seismic Hazard Estimates for Sixty-Nine Nuclear Power Plant Sites East of the Rocky Mountains	2.5
1736	10/2001	Consolidated Guidance: 10 CFR Part 20 – Standards for Protection Against Radiation	1.9
1805	12/2004	Fire Dynamics Tools (FDTs) Quantitative Fire Hazard Analysis Methods for the U.S. Nuclear Regulatory Commission Fire Protection Inspection Program	2.2
1811, Vol. 1	12/2006	Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site, Volume 1	2.4
1835	09/2005	Safety Evaluation Report for an Early Site Permit (ESP) at the North Anna ESP Site	2.0
2115	01/2012	Central and Eastern United States Seismic Source Characterization for Nuclear Facilities	2.5
2117	2012	Practical Implementation Guidelines for SSHAC Level 3 and 4 Hazard Studies: U.S. Nuclear Regulatory Commission	2.5
CR-4013	04/1986	LADTAP II Technical Reference and User Guide	12.2
CR-4653	03/1987	GASPAR II Technical Reference and User Guide	12.2
CR-5250	01/1989	Seismic Hazard Characterization of 69 Nuclear Plant Sites East of the Rocky Mountains	2.5
CR-5512, Vol. 1	10/1992	Residual Radioactive Contamination from Decommissioning, Vol. 1	2.4

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Table 1.9-205 NUREG Reports Cited

NUREG No.	Issue Date	Title	Comment/ Section Where Discussed
CR-5613	1990	Features along the Atlantic Seaboard: U.S. Nuclear Regulatory Commission	2.5
CR-5730	1999	Paleoseismology Study Northwest of the New Madrid Seismic Zone: U.S. Nuclear Regulatory Commission	2.5
CR-5750	2/1999	Rates of Initiating Events at U.S. Nuclear Power Plants: 1987 - 1995	19AA.2
CR-6372	1997	Recommendations for Probabilistic Seismic Hazard Analysis – Guidance on Uncertainty and Use of Experts	2.5
CR-6624	11/1999	Recommendations for Revision of Regulatory Guide 1.78	2.2
CR-6697	11/2000	Development of Probabilistic RESRAD 6.0 and RESRAD-BUILD 3.0 Computer Codes	2.4
CR-6728	10/2001	Technical Basis for Revision of Regulatory Guidance on Design Ground Motions: Hazard- and Risk-consistent Ground Motion Spectra Guidelines	2.5
CR-6890	12/2005	Reevaluation of Station Blackout Risk at Nuclear Power Plants	19AA.2

1.10 Summary of COL Items

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following at the end of this section.

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[Table 1.10-201](#) lists the FSAR location(s) where the individual COL items from the DCD are addressed. [Table 1.10-202](#) lists the FSAR location(s) where the individual COL Action Items and Permit Conditions from the ESP ([Reference 1.10-202](#)) are addressed.

1.10.1 References

1.10-201 [Deleted]

1.10-202 [Early Site Permit \(ESP\) for the North Anna ESP Site, No. ESP-003, Amendment No. 3, U.S. Nuclear Regulatory Commission, January 2013.](#)

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
1.1-1-A	Establish Rated Electrical Output	1.1.2.7
1.3-1-A	Update Table 1.3-1	1.3.1
1.9-3-A	SRP and Regulatory Guide Applicability	SRP: Table 1.9-201 RGs: 1.9.1 and 1.9.2 RG 1.206: Table 1.9-203
1.11-1-A	Address Table 1.11-1 Items that refer to Notes (2) and (7)	1.11.1 and Table 1.11-201
1C.1-1-A	Handling of Safeguards Information	1C.1, Table 1C-201
1C.1-2-A	Emergency Preparedness and Response Actions	1C.1, Table 1C-202
2.0-1-A	Site Characteristics Demonstration	2.0
2.0-2-A	Site Location and Description Information in Accordance with SRP 2.1.1	2.0 and 2.1.1
2.0-3-A	Site-Specific Exclusion Area Authority and Control Information in Accordance with SRP 2.1.2.	2.0 and 2.1.2
2.0-4-A	Population Distribution Information in Accordance with SRP 2.1.3	2.0 and 2.1.3
2.0-5-A	Identification of Potential Hazards in the Site Vicinity, in Accordance with SRP 2.2.1 - 2.2.2	2.0 and 2.2
2.0-6-A	Evaluation of Potential Accidents in Accordance with SRP 2.2.3	2.0 and 2.2.3
2.0-7-A	Regional Climatology in Accordance with SRP 2.3.1	2.0 and 2.3.1
2.0-8-A	Local Meteorology in Accordance with SRP 2.3.2	2.0 and 2.3.2
2.0-9-A	Onsite Meteorological Measurement Programs in Accordance with SRP 2.3.3	2.0 and 2.3.3
2.0-10-A	Short-Term Diffusion Estimates for Accidental Atmospheric Releases in Accordance with SRP 2.3.4	2.0 and 2.3.4

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
2.0-11-A	Long-Term Diffusion Estimates in Accordance with SRP 2.3.5	2.0 and 2.3.5
2.0-12-A	Hydraulic Description Maximum Ground Water Level in Accordance with SRP 2.4.1	2.0 and 2.4.1
2.0-13-A	Floods in Accordance with SRP 2.4.2	2.0 and 2.4.2
2.0-14-A	Probable Maximum Flood on Streams and Rivers in Accordance with SRP 2.4.3	2.0 and 2.4.3
2.0-15-A	Potential Dam Failures in Accordance with SRP 2.4.4	2.0 and 2.4.4
2.0-16-A	Probable Maximum Surge and Seiche Flooding in Accordance with SRP 2.4.5	2.0 and 2.4.5
2.0-17-A	Probable Maximum Tsunami Flooding in Accordance with SRP 2.4.6	2.0 and 2.4.6
2.0-18-A	Ice Effects in Accordance with SRP 2.4.7	2.0 and 2.4.7
2.0-19-A	Cooling Water Canals and Reservoirs in Accordance with SRP 2.4.8	2.0 and 2.4.8
2.0-20-A	Channel Diversion in Accordance with SRP 2.4.9	2.0 and 2.4.9
2.0-21-A	Flooding Protection Requirements in Accordance with SRP 2.4.10	2.0 and 2.4.10
2.0-22-A	Cooling Water Supply in Accordance with SRP 2.4.11	2.0 and 2.4.11
2.0-23-A	Groundwater in Accordance with SRP 2.4.12	2.0 and 2.4.12
2.0-24-A	Accidental Releases of Liquid Effluents in Ground and Surface Waters in Accordance with SRP 2.4.13	2.0 and 2.4.13
2.0-25-A	Technical Specifications and Emergency Operation Requirements in Accordance with SRP 2.4.14	2.0 and 2.4.14
2.0-26-A	Basic Geologic and Seismic Information in Accordance with SRP 2.5.1	2.0 and 2.5.1
2.0-27-A	Vibratory Ground Motion in Accordance with SRP 2.5.2	2.0 and 2.5.2
2.0-28-A	Surface Faulting in Accordance with SRP 2.5.3	2.0 and 2.5.3

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
2.0-29-A	Stability of Subsurface Materials and Foundations in Accordance with SRP 2.5.4	2.0 and 2.5.4
2.0-30-A	Stability of Slopes in Accordance with SRP 2.5.5	2.0 and 2.5.5
2A.2-1-A	Confirmation of the ESBWR χ/Q Values	2.3.4.3 and 2A.2.4
2A.2-2-A	Confirmation of the Reactor Building χ/Q Values	2A.2.5
3.9.9-1-A	Reactor Internals Vibration Analysis, Measurement and Inspection Program	3.9.2.4
3.9.9-2-A	ASME Class 2 or 3 or Quality Group D Components with 60 Year Design Life	3.9.3.1
3.9.9-3-A	Inservice Testing Programs	3.9.6
3.9.9-4-A	Snubber Inspection and Test Program	3.9.3.7.1(3)e
3.10.4-1-A	Dynamic Qualification Report	3.10.1.4
3.11-1-A	Environmental Qualification Document	3.11.4.4
4.3-1-A	Variances from Certified Design	4.3.3.1
4A-1-A	Variances from Certified Design	4A.1
5.2-1-A	Preservice and Inservice Inspection Program Description	5.2.4, 5.2.4.3.4, 5.2.4.6, 5.2.4.11, and 6.6
5.2-2-A	Leak Detection Monitoring	5.2.5 and 5.2.5.9
5.2-3-A	Preservice and Inservice Inspection NDE Accessibility Plan Description	5.2.4 and 5.2.4.2
5.3-2-A	Materials and Surveillance Capsule	5.3.1.6 and 5.3.1.8
6.4-1-A	CRHA Procedures and Training	6.4.4
6.4-2-A	Toxic Gas Analysis	6.4.5 and Tables 2.2-203 and 2.2-205
6.6-1-A	PSI/ISI Program Description	6.6
6.6-2-A	PSI/ISI NDE Accessibility Plan Description	6.6.2
8.2.4-1-A	Transmission System Description	8.2.1.1
8.2.4-2-A	Switchyard Description	8.2.1.2.1
8.2.4-3-A	Normal Preferred Power	8.2.1.2
8.2.4-4-A	Alternate Preferred Power	8.2.1.2

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
8.2.4-5-A	Protective Relaying	8.2.1.2.3
8.2.4-6-A	Switchyard DC Power	8.2.1.2.1
8.2.4-7-A	Switchyard AC Power	8.2.1.2.1
8.2.4-8-A	Switchyard Transformer Protection	8.2.1.2.1
8.2.4-9-A	Stability and Reliability of the Offsite Transmission Power Systems	8.2.2.1
8.2.4-10-A	Interface Requirements	8.2.1.1
8.3.4-1-A	Safety Related Battery Float and Equalizing Voltage values	8.3.2.1.1
8.3.4-2-A	Identification and Monitoring of Underground or Inaccessible Power and Control Cables to the PSWS and DG Fuel Oil Transfer System Equipment That Have Accident Mitigating Functions.	8.3.3.2
8A.2.3-1-A	Cathodic Protection System	8A.2.1
9.1-4-A	Fuel Handling Operations	9.1.1.7, 9.1.4.13, 9.1.4.18, and 9.1.4.19
9.1-5-A	Handling of Heavy Loads	9.1.5.6, 9.1.5.8, and 9.1.5.9
9.2.1-1-A	Material Selection	9.2.1.2
9.2.5-1-A	Post Seven Day Makeup to UHS	9.2.5
9.3.2-1-A	Post-Accident Sampling Program	9.3.2.2
9.3.9-1-A	Implementation of Hydrogen Water Chemistry	9.3.9
9.3.9-2-A	Hydrogen and Oxygen Storage and Supply	9.3.9.2
9.3.10-1-A	Oxygen Storage Facility	9.3.10.2
9.3.11-1-A	Determine Need for Zinc Injection System	9.3.11 and 9.3.11.1
9.3.11-2-A	Provide System Description for Zinc Injection System	9.3.11.2 and 9.3.11.4
9.5.1-1-A	Secondary Firewater Storage Source	9.5.1.4
9.5.1-2-A	Secondary Firewater Capacity	9.5.1.4

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
9.5.1-4-A	Piping and Instrument Diagrams	9.5.1.2, 9.5.1.4, 9.5.1.5, and Figures 9.5-201, 9.5-202, and 9.5-203
9.5.1-5-A	Fire Barriers	9.5.1.10
9.5.1-6-A	Smoke Control	9.5.1.11
9.5.1-7-A	Fire Hazards Analysis (FHA) Compliance Review	9.5.1.12
9.5.1-8-A	Fire Protection (FP) Program Description	9.5.1.15
9.5.1-10-A	Fire Brigade	9.5.1.15.4, 13.1.2.1.5
9.5.1-11-A	Quality Assurance	9.5.1.15.9
9.5.2.5-1-A	Emergency Notification System	9.5.2.2
9.5.2.5-2-A	Grid Transmission Operator	9.5.2.2
9.5.2.5-3-A	Offsite Interfaces (1)	9.5.2.2
9.5.2.5-4-A	Offsite Interfaces (2)	9.5.2.2
9.5.2.5-5-A	Fire Brigade Radio System	9.5.2.2
9.5.4-1-A	Fuel Oil Capacity	9.5.4.2
9.5.4-2-A	Protection of Underground Portion	9.5.4.2
9A.7-1-A	Yard Fire Zone Drawings	9A.4.7
9A.7-2-A	Fire Hazards Analysis for Site Specific Areas	9A.4.7, 9A.5.7, 9A.5.8, 9A.5.9, and 9A.5.12
10.2-1-A	Turbine Maintenance and Inspection Program	10.2.2.4 10.2.2.7 10.2.3.6 10.2.3.7
10.2-2-A	Turbine Missile Probability Analysis	10.2.3.8
10.4-1-A	Leakage (of Circulating Water Into the Condenser)	10.4.6.3
11.2-6-A	Implementation of IE Bulletin 80-10	11.2.2.3
11.2-6-B	Implementation of Part 20.1406	11.2.2.3
11.4-1-A	SWMS Processing Subsystem Regulatory Guide Compliance	11.4.2.3.5
11.4-2-A	Compliance with IE Bulletin 80-10	11.4.2.3.5

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
11.4-3-A	Process Control Program	11.4.2.3.5
11.4-4-A	Temporary Storage Facility	11.4.1
11.4-5-A	Compliance with Part 20.1406	11.4.1
11.5-1-A	Sensitivity or Subsystem Lower Limit of Detection	11.5.4.7
11.5-2-A	Offsite Dose Calculation Manual	11.5.4.4, 11.5.4.5, and 11.5.5.8
11.5-3-A	Process and Effluent Monitoring Program	11.5, 11.5.4.6, and Table 11.5-201
11.5-4-A	Site Specific Offsite Dose Calculation	11.5.4.8
11.5-5-A	Instrument Sensitivities	11.5.4.9
12.1-1-A	Regulatory Guide 8.10	12.1.1.3.2
12.1-2-A	Regulatory Guide 1.8	12.1.1.3.3
12.1-3-A	Operational Considerations	12.1.3
12.1-4-A	Regulatory Guide 8.8	12.1.1.3.1
12.2-2-A	Airborne Effluents and Doses	12.2.2.1, 12.2.2.2, and Table 2.0-201
12.2-3-A	Liquid Effluents and Doses	12.2.2.4
12.2-4-A	Other Contained Sources	12.2.1.5
12.3-2-A	Operational Considerations	12.3.4
12.3-4-A	Compliance with 10 CFR 20.1406	12.3.1.5.2
12.5-1-A	Equipment, Instrumentation, and Facilities	12BB
12.5-2-A	Compliance with 10 CFR Part 50.34(f)(2)(xxvii) and NUREG-0737 Item III.D.3.3	12BB
12.5-3-A	Radiation Protection Program	12BB
13.1-1-A	Organizational Structure	9.5.1.15.3, 13.1.1 through 13.1.3, and Appendix 13AA
13.2-1-A	Reactor Operator Training	13.2.1 and 13BB
13.2-2-A	Training for Non-Licensed Plant Staff	13.2.2 and 13BB

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
13.3-1-A	Identification of OSC and Communication Interfaces with Control Room and TSC	13.3 and COLA Part 5, Sections II.F and II.H
13.3-2-A	Identification of EOF and Communication Interfaces with Control Room and TSC	13.3 and COLA Part 5, Sections II.F and II.H
13.3-3-A	Decontamination Facilities	13.3 and COLA Part 5, Section II.J
13.4-1-A	Operation Programs	9.5.1.15.2, 13.4
13.4-2-A	Implementation Milestones	13.4
13.5-1-A	Administrative Procedures Development Plan	13.5.1
13.5-2-A	Plant Operating Procedures Development Plan	13.5.2
13.5-3-A	Emergency Procedures Development	13.5.2
13.5-4-A	Implementation of the Plant Procedures Plan	13.5, 13.5.2
13.5-5-A	Procedures Included in Scope of Plan	13.5.2
13.5-6-A	Procedures for Calibration, Inspection, and Testing	13.5.2
13.6-6-A	Key Control	13.6.1.1.5
13.6-7-A	Redundancy and Equivalency of the CAS and Secondary Alarm Station	Evaluation of CAS/SAS Design for No Single Act
13.6-8-A	No Single Act Requirement for CAS and Secondary Alarm Station	Evaluation of CAS/SAS Design for No Single Act
13.6-9-A	Operational Alarm Response Procedures	13.6.1.1.3
13.6-10-A	Operational Surveillance Test Procedures	13.6.1.1.8
13.6-11-A	Maintenance Test Procedures	13.6.1.1.8
13.6-12-A	Operational Response Procedures to Security Events	13.6.2
13.6-13-A	Operational Alarm Response Procedures	13.6.1.1.3
13.6-14-A	Administrative Controls to Sensitive Cabinets	13.6.1.1.5
13.6-15-A	Administrative Controls to Sensitive Equipment	13.6.1.1.5

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Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed

Item No.	Subject/Description of Item	FSAR Section
13.6-16-A	External Bullet Resisting Enclosures	13.6.2 COLA Part 8
13.6-17-A	Site-Specific Locations of Security Barriers	13.6.2
13.6-18-A	Ammunition for Armed Responders	13.6.2
13.6-19-A	Site-Specific Update of the ESBWR Safeguards Assessment Report	13.6.2
13.6-20-A	Physical Security ITAAC	13.6.2
14.2-1-A	Description - Initial Test Program Administration	14.2.2.1, Appendix 14AA
14.2-2-A	Startup Administrative Manual	14.2.2.1
14.2-3-A	Test Procedures	14.2.2.2
14.2-4-A	Test Program Schedule and Sequence	14.2.7
14.2-5-A	Site Specific Tests	14.2.9
14.2-6-A	Site Specific Test Procedures	14.2.9
14.3-1-A	Emergency Planning ITAAC	14.3.8
14.3-2-A	Site-Specific ITAAC	14.3.9
14.3A-1-1	Establish a Schedule for Design Acceptance Criteria ITAAC Closure	14.3A.1
16.0-1-A	COL Applicant Bracketed Items	5.3.1.5, COLA Part 4
17.2-1-A	QA Program for the Construction and Operations Phases	17.2 17.5
17.2-2-A	QA Program for Design Activities	17.2 17.5
17.3-1-A	Quality Assurance Program Document	17.3 17.5
17.4-1-A	Identification of Site-Specific SSCs Within the Scope of the RAP	17.4.1, 17.4.6
17.4-2-A	Operation Reliability Assurance Activities	17.4.1, 17.4.6, 17.4.9, 17.4.10, and 17.6
18.13-1-A	Milestone for HPM Implementation	18.13.3
19.2.6-1-A	Seismic High Confidence Low Probability of Failure Margins	19.2.3.2.4

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Table 1.10-202 Summary of FSAR Sections Where ESP COL Action Items and Permit Conditions Are Addressed

Item No.	Subject/Description of Item	Section
ESP 2.1-1	Provide Latitude, Longitude, and UTM Coordinates	2.1.1
ESP 2.1-2	Control of Lake in Exclusion Area	2.1.2
ESP 2.2-1	Evaluate Industrial Hazards Near the Site	2.2
ESP 2.2-2	Interactions between Existing Units	2.2
ESP 2.3-1	Cooling Towers Impacts	2.3
ESP 2.3-2	Dispersion to Control Room	2.3
ESP 2.3-3	Verify Long-Term Atmospheric Dispersion Characteristics	2.3
ESP 2.4-1	Layout of Intake and Discharge Tunnels (Plant Service Water and Circulating Water System)	1.12
ESP 2.4-2	Plant Shutdown Protocol for Minimum Lake Level	2.4.14
ESP 2.4-4	Grading for Drainage	2.4.2
ESP 2.4-5	Local Probable Maximum Precipitation (PMP) Flooding Protection Needs	2.4.2
ESP 2.4-6	Engineered Underground Ultimate Heat Sink (UHS) Design	2.4.4
ESP 2.4-7	Engineered Underground UHS Capacity	2.4.4
ESP 2.4-8	Address Safety-Related Withdrawals from Lake	2.4.8
ESP 2.4-9	Slope Embankment Protection for Intake Structure	2.4.10
ESP 2.4-10	Cooling Water Needs at Low Lake Levels	2.4.11
ESP 2.5-1	Perform Additional Borings	2.5.1
ESP 2.5-2	Plot Plans and Profiles	2.5.4
ESP 2.5-3	Provide Excavation and Backfill Plans	2.5.4
ESP 2.5-4	Groundwater Conditions	2.5.4
ESP 2.5-5	Perform Additional Soil Column Amplification and Attenuation Analyses	2.5.4
ESP 2.5-6	Safety-Related Facilities Stability Analysis	2.5.4
ESP 2.5-7	Design-Related Criteria for Structural Design	2.5.4

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Table 1.10-202 Summary of FSAR Sections Where ESP COL Action Items and Permit Conditions Are Addressed

Item No.	Subject/Description of Item	Section
ESP 2.5-8	Provide Ground Improvement Plans	2.5.4
ESP 2.5-9	Average Shear Wave Velocity Under Reactor Containment	2.5.4
ESP 2.5-10	Dynamic Analysis of Slope Stability	2.5.5
ESP 2.5-11	Safety Related Slopes	2.5.5
ESP 11.1-1	Offsite Doses and Maintaining Doses ALARA	11.3.1
ESP 13.6-1	Design of Protected Area Barriers	13.6
Permit Condition 3.E(1)	Exclusion Area Control	2.1.2
Permit Condition 3.E(2)	Cooling for a Second New Unit	Not applicable to Unit 3
Permit Condition 3.E(3)	Accidental Releases	2.4.13
Permit Condition 3.E(4)	Weathered or Fractured Rock	2.5.1
Permit Condition 3.E(5)	Engineered Fill	2.5.1
Permit Condition 3.E(6)	NRC Notification	2.5.1 and 2.5.4
Permit Condition 3.E(7)	Improved Soils	2.5.4

1.11 Technical Resolutions of Task Action Plan Items, New Generic Issues, New Generic Safety Issues and Chernobyl Issues

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.11.1 Approach

Add the following at the end of this section.

NAPS COL 1.11-1-A

[Table 1.11-201](#) supplements [DCD Table 1.11-1](#) to address the site-specific aspects of items that refer to Notes (2) and (7).

NAPS SUP 1.11-2

New generic issues in Table II of NUREG-0933 through Supplement 34 ([Reference 1.11-201](#)) that were not listed in Supplement 30 ([DCD Reference 11.1-1](#)) are also addressed in [Table 1.11-201](#).

NAPS SUP 1.11-1

[Table 1.11-202](#) supplements [DCD Table 1.11-1](#) to provide references to FSAR locations that provide additional information on specific issues.

1.11.2 COL Information

1.11-1-A **Address Table 1.11-1 Items that refer to Notes (2) and (7)**

NAPS COL 1.11-1-A

This COL item is addressed in [Section 1.11](#) and [Table 1.11-201](#).

1.11.3 References

NAPS SUP 1.11-2

1.11-201 U.S. Nuclear Regulatory Commission, "A Prioritization of Generic Safety Issues," NUREG-0933 and its Supplements through Supplement 34, December 2011.

**NAPS COL 1.11-1-A Table 1.11-201 COL Item Resolutions Related to NUREG-0933 Table II
 Task Action Plan Items and New Generic Issues**

Action Plan Item/ Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
Task Action Plan Items		
A-33	NEPA Review of Accident Risks	This environmental issue involves consideration of accidents on a risk specific basis. This subject is addressed in ESP-ER Chapter 7 and COLA Part 3, Chapter 7 .
B-1	Environmental Technical Specifications	Issue is addressed in COLA Part 4, Sections 5.5.1 and 5.5.3 , which address the Offsite Dose Calculation Manual and Radioactive Effluent Controls Program. See also Sections 11.5.4.5 and 11.5.4.6 .
B-28	Radionuclide/Sediment Transport Program	Issue is addressed in COLA Part 4, Sections 5.5.1 and 5.5.3 , which address the Offsite Dose Calculation Manual and Radioactive Effluent Controls Program. See also Sections 11.5.4.5 and 11.5.4.6 .
B-37	Chemical Discharges to Receiving Waters	Issue is addressed in ESP-ER Section 5.3 and COLA Part 3, Sections 3.3, 3.6, and 5.2 .
B-38	Reconnaissance Level Investigations	Issue is addressed in ESP-ER Chapter 2 and SSAR Chapter 2 .
B-39	Transmission Lines	Issue is addressed in COLA Part 3, Sections 3.7, 4.3, and 5.6 .
B-40	Effects of Power Plant Entrainment on Plankton	Issue is addressed in ESP-ER Section 5.3.1.2 .
B-41	Impacts on Fisheries	Impact of power plant operation on fishery resources is addressed in ESP-ER Sections 5.3.1.2.4 and 5.3.2.2.2 .
B-42	Socioeconomic Environmental Impacts	Issue is addressed in ESP-ER Sections 2.5, 4.4, and 5.8 . COLA Part 3, Section 5.8 provides supplementary information on this issue.

**NAPS COL 1.11-1-A Table 1.11-201 COL Item Resolutions Related to NUREG-0933 Table II
 Task Action Plan Items and New Generic Issues**

Action Plan Item/ Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
B-43	Value of Aerial Photographs for Site Evaluation	Work completed to date on this issue is published in NUREG/CR-2861. The use of aerial photography is discussed in SSAR Sections 2.4.9, 2.5.1 and 2.5.3 . Results of a visual impact study are presented in COLA Part 3, Section 5.8 .
C-16	Assessment of Agricultural Land in Relation to Power Plant Siting and Cooling System Selection	(3) The impact of construction and power plant operation on agricultural land use is addressed in ESP-ER Sections 4.1 and 5.1 . Water use for agricultural lands is addressed in ESP-ER Sections 2.3.2 and 2.3.3 . COLA Part 3 contains no additional information on this topic.
New Generic Issues		
184	Endangered Species	Issue is addressed in ESP-ER Sections 2.4.1.6, 2.4.2.2.5, 4.3.1.2, 4.3.2, 5.3.1.2.3, 5.3.3.2, and 5.4.4 . COLA Part 3, Sections 2.4.1.6, 4.3.1.2, 4A.2, and 4B.2.4 provide supplementary information on this issue.
199	Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States	This issue was considered and addressed (1) during the development of the horizontal and vertical SSE ground response spectra at foundation level requirements for the ESBWR reference site (i.e., DCD Figures 2.0-1 and 2.0-2), (2) during the development of the site-specific ground response spectra at foundation level requirements for the Seismic Category I structures, (3) through the performance of site-specific SSI analyses, and (4) through the redefinition of the SSE for the site to account for exceedances of the ESBWR reference site ground response spectra, with the site-specific SSE definition as described in Section 3.7.1 .
201	Small-Break LOCA and Loss of Offsite Power Scenario	Generic Issue 201 was dropped with no action required.

NAPS SUP 1.11-2

**NAPS COL 1.11-1-A Table 1.11-201 COL Item Resolutions Related to NUREG-0933 Table II
Task Action Plan Items and New Generic Issues**

Action Plan Item/ Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
202	Spent Fuel Pool Leakage Limits	Generic Issue 202 was dropped with no action required.
203	Potential Safety Issues with Cranes that Lift Spent Fuel Casks	Generic Issue 203 was dropped with no action required.

NAPS SUP 1.11-2

**Table 1.11-202 Supplementary Resolutions Related to
 NUREG-0933 Table II TMI Action
 Plan Items and Human Factors Issues**

Action Plan Item/ Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
TMI Action Plan Items		
1.A.1.1	Shift Technical Advisor	Sections 13.1.2.1.2.9 and DCD Section 18.6
1.A.1.2	Shift Supervisor Administrative Duties	Sections 13.1.2.1.2.5 and 13.1.2.1.2.6
1.A.1.3	Shift Manning	Section 13.1.2.1.4 , Table 13.1-202 , Figure 13.1-203 , and DCD Section 18.6
1.A.2.1(1)	Qualifications – Experience	Section 13.1.3.1 , Table 13.1-201 , Section 17.5 , and DCD Section 18.6
1.C.3	Shift Supervisor Responsibilities	Sections 13.1.2.1.2.5 and 13.1.2.1.2.6
1.F.2(6)	Increase the Size of Licensees' QA Staff	Table 13.1-201 and Section 17.5
1.F.2(9)	Clarify Organizational Reporting Levels for the QA Organization	Section 13.1.1.2.7 , Table 13.1-201 , and Section 17.5
II.B.3	Post Accident Sampling	Appendix 12BB
III.D.3.3	In-Plant Radiation Monitoring	Appendix 12BB
Human Factors Issues		
HF1.1	Shift Staffing	Table 13.1-202 and Section 13.1.2.1.4

NAPS SUP 1.12-1

1.12 Impact of Construction Activities on Units 1 and 2

1.12.1 Introduction

Paragraph 10 CFR 52.79(a)(31) requires that the FSAR include the following information:

For nuclear power plants to be operated on multi-unit sites, an evaluation of the potential hazards to the structures, systems, and components important to safety of operating units resulting from construction activities, as well as a description of the managerial and administrative controls to be used to provide assurance that the limiting conditions for operation are not exceeded as a result of construction activities at the multi-unit sites.

Accordingly, the evaluation of the potential impact of the construction of Unit 3 on Units 1 and 2 structures, systems, and components (SSCs) important to safety is summarized below, along with a description of the managerial and administrative controls used to provide assurance that Units 1 and 2 limiting conditions for operation (LCOs) are not exceeded as a result of Unit 3 construction activities. This evaluation involves several sequential steps:

- Identification of potential construction activity hazards
- Identification of SSCs important to safety
- Identification of LCOs
- Identification of impacted SSCs and LCOs
- Identification of applicable managerial and administrative controls

1.12.2 Potential Construction Activity Hazards

Unit 3 is located on the existing NAPS site on a parcel of land adjacent to and generally west of the two operating units, Units 1 and 2, as shown in [Figure 2.1-201](#).

Based on experience from similar projects, the scope of work necessary to construct Unit 3 is well understood. In general, it includes, but is not necessarily limited to, activities such as site exploration, grading, clearing and installation of drainage and erosion control measures; boring, drilling, dredging, demolition and excavating; storage and warehousing of equipment; and construction, erection and fabrication of new facilities. These activities involve major ESBWR standard plant structures such as the Reactor Building, Control Building, Fuel Building, Turbine Building,

Radioactive Waste Building and Electrical Building; as well as related support facilities such as transformers, switchyard(s), transmission lines, cooling water structures and systems, water treatment facilities, storage tanks, etc.

The applicable time period for such activities starts when work is first performed under the COL for Unit 3 and ends for each Unit 3 SSC when responsibility for that SSC is transferred to the accountable operating organization.

Each of the types of construction activities necessary to build a new unit was examined to identify the potential hazards to the existing units. The resulting list of construction activities and potential hazards is shown in [Table 1.12-201](#).

1.12.3 Structures, Systems and Components Important to Safety

Consistent with 10 CFR 50.34 and 10 CFR 50, Appendix A, Units 1 and 2 SSCs important to safety were identified in Chapter 3 of the NAPS Updated Final Safety Analysis Report (UFSAR) ([Reference 1.12-201](#)); additionally, information in Chapters 4, 5, 6, 7, 8 and 9 of the NAPS UFSAR was utilized.

1.12.4 Limiting Conditions for Operation

Pursuant to 10 CFR 50.36, LCOs are the lowest functional capability or performance levels of equipment required for safe operation of a facility and are established in operating unit technical specifications for each item meeting one or more of the following criteria:

- Criterion 1 – Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2 – A process variable, design feature, or operating restriction that is an initial condition of a design basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 3 – A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 4 – A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The applicable LCOs are found in the Units 1 and 2 Technical Specifications ([Reference 1.12-202](#)).

1.12.5 Impacted Structures, Systems and Components and Limiting Conditions for Operation

The information described in Sections 1.12.2–1.12.4 was evaluated to identify Units 1 and 2 SSCs and LCOs that might be impacted by Unit 3 construction activities. For example, internal/in-plant Units 1 and 2 LCO parameters such as “Shutdown Bank Insertion Limits,” “RCS Minimum Temperature for Criticality” and “Secondary Specific Activity” were eliminated by examination. Similarly, SSCs both internal and specific to Units 1 and 2 are not affected. These include items such as the accumulators, fuel storage racks and rod cluster control assemblies.

For each of the potential hazards listed in [Table 1.12-201](#), [Table 1.12-202](#) presents the potential consequences to the SSCs of the existing units that were identified in the above process.

1.12.6 Managerial and Administrative Controls

Managerial and administrative controls are utilized to identify preventive and mitigative measures and provide notification of hazardous activity initiation in order to prevent or minimize exposure of SSCs to the identified hazards. Applicable managerial and administrative controls are listed in [Table 1.12-203](#).

Specific hazards, impacted SSCs, and managerial and administrative controls including safety/security interfaces will be developed and implemented as work progresses on site. For example, prior to construction activities that involve the use of large construction equipment such as cranes, managerial and administrative controls will be in place to prevent adverse impacts on Units 1 and 2 overhead power lines, switchyard, security boundary, etc., by providing the necessary restrictions on the use of large construction equipment.

Additional controls are established during construction as addressed in [Section 13AA.1.9, Management and Review of Construction Activities](#). Periodic assessment during construction is addressed in [Section 13AA.1.9](#).

NAPS ESP COL 2.4-1

The layout of the Unit 3 Circulating Water System (CIRC) intake and discharge piping and the construction techniques to be used for this

pipings will be provided to the NRC for review at least 60 days before the commencement of construction activities for this piping.

1.12.7 **References**

- 1.12-201 North Anna Power Station, Units 1 and 2, Updated Final Safety Analysis Report, Revision 38.
- 1.12-202 North Anna Power Station, Units 1 and 2, Technical Specifications, Amendments 231/212.

NAPS SUP 1.12-1

Table 1.12-201 Potential Hazards to Units 1 and 2 from Unit 3 Construction Activities

Construction Activity	Potential Hazards
Site Exploration, Grading, Clearing, Installation of Drainage and Erosion Control Measures, etc.	Impact on Overhead Power Lines
	Impact on Transmission Towers
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact on Site Access and Egress
	Impact on Drainage Facilities and Structures
	Impact on Onsite Transportation Routes
	Impact on Slope Stability
	Impact of Increased Soil Erosion and Local Flooding
	Impact of Construction-Generated Dust and Equipment Exhausts
	Impact of Encroachment on Plant Protected or Vital Areas
Boring, Drilling, Pile Driving, Dredging, Demolition, Excavation, etc.	Impact of Encroachment on Structures and Facilities
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact on Foundation Integrity
	Impact on Structural Integrity
	Impact on Slope Stability
	Impact of Ground Vibration
Equipment Movement, Material Delivery, Vehicle Traffic. etc.	Impact of Overpressure from Use of Explosives
	Impact on Overhead Power Lines
	Impact on Transmission Towers
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact of Crane Load Drops
	Impact of Crane or Crane Boom Failures
	Impact of Vehicle Accidents
Impact of Vehicle Runaways	

NAPS SUP 1.12-1

Table 1.12-201 Potential Hazards to Units 1 and 2 from Unit 3 Construction Activities

Construction Activity	Potential Hazards
Equipment And Material Laydown, Storage, Warehousing, etc.	Impact of Releases of Stored Flammable, Hazardous or Toxic Materials
	Impact of Increase Local Flooding
	Impact of Wind-Generated, Construction-Related Debris and Missiles
General Construction, Erection, Fabrication, etc.	Impact on Instrumentation and Control Systems and Components
	Impact on Electrical Systems and Components
	Impact on Cooling Water Systems and Components
	Impact on Radioactive Waste Release Points and Parameters
	Impact of Abandonment of SSCs
Connection, Integration, Tie-In, Testing, etc.	Impact of Relocation of SSCs
	Impact on Instrumentation and Control Systems and Components
	Impact on Electrical and Power Systems and Components
General Site Construction Activities	Impact on Cooling Water Systems and Components
	Impact on Site Security Systems

NAPS SUP 1.12-1

Table 1.12-202 Potential Consequences to Units 1 and 2 Due to Potential Hazards Resulting from Unit 3 Construction Activities

Potential Hazard	Potential Consequences
Containment Structure	
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion
Control Room Emergency HVAC Systems	
Impact of Construction-Generated Dust and Equipment Exhausts	Effects of Construction-Generated Dust and Equipment Exhausts on Control Room Habitability Systems Air Intakes
Impact of Releases of Flammable, Hazardous or Toxic Materials	Effects of Releases of Flammable, Hazardous or Toxic Materials on Control Room Habitability Systems Design Basis
Impact of Vehicle Accidents	Effects of Releases of Flammable, Hazardous or Toxic Materials on Control Room Habitability Systems Design Basis
Diesel Generators	
Impact of Construction-Generated Dust and Equipment Exhausts	Effects of Construction-Generated Dust and Equipment Exhausts on Emergency Diesel Generator Combustion Air Intakes
Fire Protection System	
Impact on Underground Conduits, Piping, Tunnels, etc.	Degradation of FPS Availability or Capacity
Impact of the Relocation of SSCs	Degradation of FPS Availability or Capacity
Fuel Building	
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Gaseous Radioactive Waste Management System	
Impact on Radioactive Waste Release Points and Parameters	Building and Facility Effects on Gaseous Release X/Q and D/Q Assumptions

NAPS SUP 1.12-1

Table 1.12-202 Potential Consequences to Units 1 and 2 Due to Potential Hazards Resulting from Unit 3 Construction Activities

Potential Hazard	Potential Consequences
Offsite Power System	
Impact on overhead power lines	Transmission line disruptions due to grading or clearing, equipment movement, crane boom failures, etc.
Impact on transmission towers	Transmission line disruptions due to grading or clearing, equipment movement, crane boom failures, etc.
Impact of vibratory ground motion	Operability disruptions due to vibration induced spurious trips
Impact on electrical systems and components	Operability disruptions due to equipment movement, system interconnections, etc.
Onsite Power Systems	
Impact of vibratory ground motion	Operability disruptions due to vibration induced spurious trips
Impact on electrical systems and components	Operability disruptions due to vibration induced spurious trips, system interconnections, etc.
Service Building	
Impact of crane or crane boom failures	Building degradation due to crane boom failure
Impact of wind-generated construction-related debris and missiles	Construction-related debris or missile
Service Water System	
Impact on underground conduits, piping, tunnels, etc.	Degradation of Service Water System availability or capacity
Impact on cooling water systems and structures	Degradation of Service Water System availability or capacity
Impact of the relocation of SSCs	Degradation of Service Water System availability or capacity
Ultimate Heat Sink	
Impact on underground conduits, piping, tunnels, etc.	Degradation of UHS availability or capacity
Impact on cooling water systems and components	Degradation of UHS availability or capacity

NAPS SUP 1.12-1

Table 1.12-203 Managerial and Administrative Controls for Unit 3 Construction Activity Hazards

Hazard	Control
Impact on overhead power lines	Administrative controls for appropriate standoff and/or installation of temporary support towers
Impact on transmission towers	Administrative controls for appropriate standoff and/or installation of temporary support towers
Impact on underground conduits, piping, tunnels, etc.	Administrative controls to identify potentially affected SSCs; evaluation to ensure structural integrity during construction; and/or temporary measures to mitigate impacts
Impact of construction-generated dust and equipment exhausts	Administrative controls to avoid or minimize construction dust (for example, use of water spray trucks) and/or enhanced monitoring of potentially affected system intakes, filters, etc.
Impact of overpressure from use of explosives	Administrative controls to coordinate transport, storage and use of explosives and/or temporary measures to mitigate impacts
Impact of vehicle accidents	Administrative controls to respond to site accidents (for example, construction fire brigade and/or hazardous materials response team)
Impact of ground vibration	Administrative controls to identify potentially affected SSCs, and/or temporary measures to mitigate impacts
Impact of crane or crane boom failures	Administrative controls for appropriate standoff and/or load limits (for example, minimum standoff distances and/or load limitations)
Impact of releases of flammable, hazardous or toxic materials	Administrative controls on quantities and types of flammable, hazardous or toxic materials
Impact of wind-generated, construction-related debris and missiles	Administrative controls on equipment and material storage and transport, and for reducing power or shutting down Units 1 and 2 during high winds or high wind warnings
Impact on electrical systems and components	Administrative controls to identify potentially affected SSCs; evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts
Impact on cooling water systems and components	Administrative controls to identify potentially affected SSCs; evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts

NAPS SUP 1.12-1

**Table 1.12-203 Managerial and Administrative Controls for Unit 3
Construction Activity Hazards**

Hazard	Control
Impact on radioactive waste release points and parameters	Enhanced monitoring and control to ensure releases are within limits
Impact of relocation of SSCs	Administrative controls to identify potentially affected SSCs effects of releases of flammable, hazardous or toxic materials on control room habitability systems design basis evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts
Impact on site security systems	Administrative controls to coordinate construction activities with Units 1 and 2 physical protection personnel and procedures

Appendix 1A Response to TMI Related Matters

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Table 1A-1, 10 CFR 50.34(f)(3)(i), TMI Item I.C.5

Add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

ESBWR construction and operations engineers are also continually involved in reviewing industry experience from these same sources in accordance with the administrative procedures described in [DCD Section 18.3.2](#).

Table 1A-1, 10 CFR 50.34(f)(3)(iii), TMI Item I.F.2

Add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

The Quality Assurance Program described in [Chapter 17](#) also meets the requirements of issue I.F.2 as they apply to the construction and operation of the ESBWR.

Table 1A-1, 10 CFR 50.34(f)(3)(vii), TMI Item II.J.3.1

Add "13.1" as an "Associated Location(s)" and add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

The ESBWR construction and operations teams have also developed a management plan for the ESBWR project that consists of a properly structured organization with open lines of communication, clearly defined responsibilities, well-coordinated technical efforts, and appropriate control channels.

The organizational structure is discussed in [Section 13.1](#).

Appendix 1B Plant Shielding to Provide Access to Areas and Protect Safety Equipment for Post-Accident Operation [II.B.2]

This section of the referenced DCD is incorporated by reference with no departures or supplements.

Appendix 1C Industry Operating Experience

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Appendix 1C.1 Evaluation

Replace the last paragraph with the following.

STD COL 1C.1-1-A
STD COL 1C.1-2-A
STD SUP 1C-1

DCD Tables 1C-1 and 1C-2 are supplemented by Tables 1C-201 and 1C-202. These tables address Generic Letters and Bulletins that have been in effect/issued up to six months before the COL application submittal date, and after the SRP revisions that are applicable to this FSAR. They also address Generic Letter 82-39 and IE Bulletin 2005-02, which were identified in the DCD as the responsibility of the COL applicant.

Appendix 1C.2 COL Information

1C.1-1-A Handling of Safeguards Information

STD COL 1C.1-1-A

This COL item is addressed in Section 1C.1 and the Table 1C-201 entry for Generic Letter 82-39.

1C.1-2-A Emergency Preparedness and Response Actions

STD COL 1C.1-2-A

This COL item is addressed in Section 1C.1 and the Table 1C-202 entry for IE Bulletin 2005-02.

Table 1C-201 Operating Experience Review Results Summary—Generic Letters

	No.	Issue Date	Title	Evaluation Result or Location(s) Where Discussed
STD COL 1C.1-1-A	82-39	12/22/82	Problems with the Submittals of 10 CFR 73.21 Safeguards Information Licensing Review	Not Applicable. Is an administrative communication. The site has an approved procedure for handling Safeguards Information including how to mail such information to authorized recipients.
NAPS DEP 11.4-1	81-38	11/10/81	Storage of Low-Level Radioactive Wastes at Power Reactor Sites	The Radwaste Building includes space for processing and storage of low level waste. Storage space is provided for at least 10 years of packaged Class B and C waste and at least 3 months worth of packaged Class A waste. Section 11.4 addresses DEP 11.4-1.
NAPS SUP 1C-2	07-01	02/07/07	Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients	Applicable. Monitoring of underground cable is addressed in Section 17.6.4 .

Table 1C-202 Operating Experience Review Results Summary—IE Bulletins

	No.	Issue Date	Title	Evaluation Result or Location(s) Where Discussed
STD COL 1C.1-2-A	2005-02	07/18/05	Emergency Preparedness and Response Actions for Security-Based Events	COLA Part 5 , Emergency Plan

Appendix 1D Summary of Tier 2* Information

This section of the referenced DCD is incorporated by reference with no departures or supplements.

NAPS SUP 1AA.1-1

Appendix 1AA ESP Information

[SSAR Chapter 1](#) is incorporated here by reference for historical purposes.