February 26, 2013

Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application

Part 2

FSAR Revision 3

Update Tracking Report

Revision 0

(Non-Security Related Version)

Revision History

Revision	Date	Update Description
-	6/28/2012	COLA Revision 3 Transmittal See Luminant Letter no. TXNB-12023 Date 6/28/2012
-	05/16/2012	Updated Chapters: Ch. 8, 13 See Luminant Letter no. TXNB-12013 Date 05/16/2012 Incorporated responses to following RAIs No. 249, 255
-	05/31/2012	Updated Chapters: Ch. 9, 14, 19 See Luminant Letter no. TXNB-12016 Date 05/31/2012 Incorporated responses to following RAIs No. 248, 251
-	6/13/2012	Updated Chapters: Ch. 3, 6, 9 See Luminant Letter no. TXNB-12021 Date 6/13/2012 Incorporated responses to following RAIs No. 52 Supplemental 01, 240 Supplemental 01, 244 Supplemental 01
-	6/21/2012	Updated Chapters: Ch. 3, 9, 14 See Luminant Letter no. TXNB-12022 Date 6/21/2012 Incorporated responses to following RAIs No. 254, 257
-	7/20/2012	Updated Chapters: Ch. 14 See Luminant Letter no. TXNB-12026 Date 7/20/2012

		Incorporated responses to following RAIs No. 256
-	7/24/2012	Updated Chapters: Ch. 13 See Luminant Letter no. TXNB-12027 Date 7/24/2012 Incorporated responses to following RAIs No. 261
-	8/29/2012	Updated Chapters: Ch. 9 See Luminant Letter no. TXNB-12030 Date 8/29/2012 Incorporated responses to following RAIs No. 243 S01
-	9/10/2012	Updated Chapters: Ch. 3, 9, 14 See Luminant Letter no. TXNB-12031 Date 9/10/2012 Incorporated responses to following RAIs No. 251 S01, 252 S01
-	9/14/2012	Updated Chapters: Ch. 1, 2, 3, 8, 9, 11, 19 See Luminant Letter no. TXNB-12032 Date 9/14/2012 Incorporated responses to following RAIs No. 250
-	9/24/2012	Updated Chapters: Ch. 3, 9, 14 See Luminant Letter no. TXNB-12034 Date 9/24/2012 Incorporated responses to following RAIs No. 254 S01, 257 S01
-	9/26/2012	Updated Chapters: Ch. 1, 3 See Luminant Letter no. TXNB-12035 Date 9/26/2012 Incorporated responses to following RAIs No. 262
-	11/12/2012	Updated Chapters: Ch. 9, 14 See Luminant Letter no. TXNB-12036 Date 11/12/2012 Incorporated responses to following RAIs No. 252 S02, 254 S02, 257 S02
-	12/03/2012	Updated Chapters: Ch. 1, 9, 14

		See Luminant Letter no. TXNB-12041 Date 12/03/2012 Incorporated responses to following RAIs No. 251 S02
-	12/06/2012	Updated Chapters: Ch. 9, 10, 11, 12 See Luminant Letter no. TXNB-12042 Date 12/06/2012 Incorporated responses to following RAIs No. 135 S04
-	12/18/2012	Updated Chapters: Ch. 9 See Luminant Letter no. TXNB-12043 Date 12/18/2012 Incorporated responses to following RAIs No. 266
-	12/18/2012	Updated Chapters: Ch. 19 See Luminant Letter no. TXNB-12043 Date 12/18/2012 Incorporated responses to following RAIs No. 267
-	12/18/2012	Updated Chapters: Ch. 19 See Luminant Letter no. TXNB-12043 Date 12/18/2012 Incorporated responses to following RAIs No. 264
-	12/18/2012	Updated Chapters: Ch. 1, 19 See Luminant Letter no. TXNB-12043 Date 12/18/2012 Incorporated responses to following RAIs No. 268
-	12/18/2012	Updated Chapters: Ch. 3, 9 See Luminant Letter no. TXNB-12043 Date 12/18/2012 Incorporated responses to following RAIs No. 265
-	01/17/2013	Updated Chapters: Ch. 1, 6 See Luminant Letter no. TXNB-13001 Date 01/17/2013 Incorporated responses to following RAIs No. 271

0	2/26/2013	Updated Chapters: Ch 1, 2, 3, 8, 9, 12

Chapter 1

Chapter 1 Tracking Report Revision List

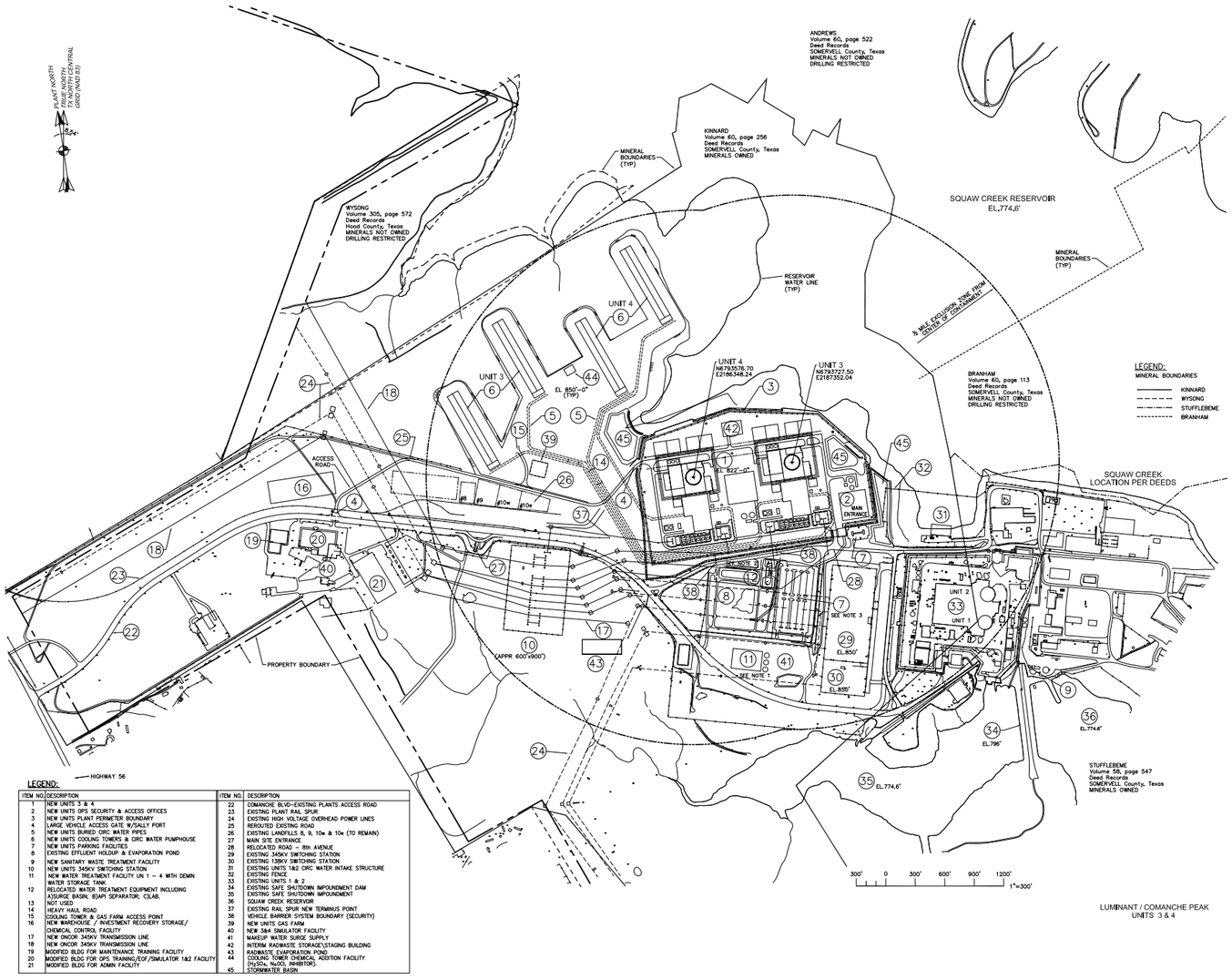
Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.03.02-9	Table 1.8-201 (Sheets 4, 6, 10, 21 of 71) Table 1.9-201 (Sheet 12 of 12) Table 1.9-206 (Sheet 1 of 2)	1.8-15 1.8-17 1.8-21 1.8-32 1.9-15 1.9-24 [1.9-25]	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 09/14/2012	Revised to incorporate RG 1.221.	-
RCOL2_03.06.01-1	Table 1.8-201 (Sheets 7, 8 of 71)	1.8-18 1.8-19	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised COL 3.6(1) and COL 3.6(4).	-
RCOL2_09.02.01-9 S02	Table 1.8-201 (Sheet 39 of 71)	1.8-50	2nd Supplemental Response to RAI No. 251 Luminant Letter no.TXNB-12041 Date 12/03/2012	Change the wording to address the need of COL evaluation for a void detection system.	-
RCOL2_19-24	Table 1.8-201 (Sheets 68, 70, 71 [68, 70, 72] of 71 [72])	1.8-79, 1.8-81, 1.8-82 [1.8-79, 1.8-81, 1.8-83]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Clarified resolution of combined license items on site specific information.	-
RCOL2_19-25	Table 1.8-201 (Sheet 70 [71] of 71 [72])	1.8-81 [1.8-82]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Included updated FSAR reference locations.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_06.02.02-5	Table 1.8-201 (Sheet 26 of 71[72])	1.8-37	Response to RAI No. 271 Luminant Letter no.TXNB-13001 Date 01/17/2013	Added FSAR Location and Resolution Category for COL Item 6.2(6).	-
CTS-01506	Figure 1.2-1R	1.2-5 1.2-6	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413) and TXNB-12038 (ML12334A026)	Figure was updated to reflect standard plant and site-specific layout	0
CTS-01506	Figure 1.2-201	1.2-8	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413) and TXNB-12038 (ML12334A026)	Figure was updated to reflect standard plant and site-specific layout and general arrangement design changes.	0
CTS-01507	Figure 1.2-202	1.2-9	Design change as described in Letter TXNB-12033 (ML12268A413)	Figure was revised to reflect the integration of the north portions of the ESWPT into the south side of the UHSRS	0
CTS-01507	Figures 1.2-203 through 1.2-210	1.2-10 through 1.2-17	Design change as described in Letter TXNB-12033 (ML12268A413), TXNB-12038 (ML12334A026), and TXNB-12030 (ML12243A456)	Figures were revised to reflect: Integration of the north portions of the ESWPT into the south side of the UHSRS. Integration of adjacent UHSRS (C and D) and (A and B) on a single foundation. ESW Pump House layout changes described in responses to RAIs 243 S01 and 254 S03.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
				Addition of an ESW Pipe Removal Shaft to the ESWPT Segment integrated to UHSRS C and D	

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

CTS-01506



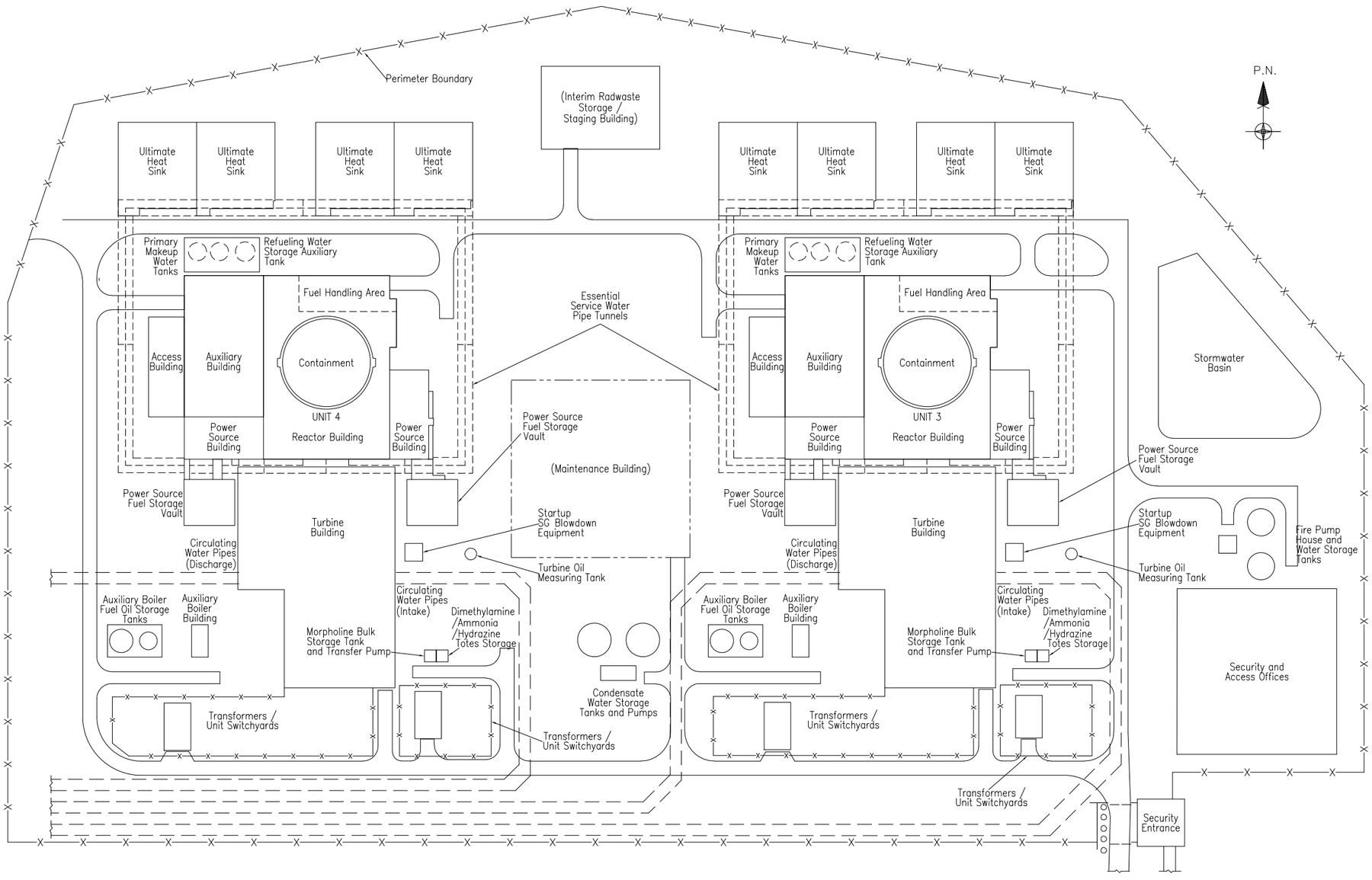
LEGEND:

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	NEW UNITS 3 & 4	22	COMANCHE BLVD–EXISTING PLANTS ACCESS ROAD
2	NEW UNITS OPS SECURITY & ACCESS OFFICES	23	EXISTING PLANT RAIL SPUR
3	NEW UNITS PLANT PERIMETER BOUNDARY	24	EXISTING HIGH VOLTAGE OVERHEAD POWER LINES
4	LARGE VEHICLE ACCESS GATE W/SALLY PORT	25	REROUTED EXISTING ROAD
5	NEW UNITS BURIED CIRC WATER PIPES	26	EXISTING LANDFILLS 8, 9, 10w & 10e (TO REMAIN)
6	NEW UNITS COOLING TOWERS & CIRC WATER PUMPHOUSE	27	MAIN SITE ENTRANCE
7	NEW UNITS PARKING FACILITIES	28	RELOCATED ROAD – 8th AVENUE
8	EXISTING EFFLUENT HOLDUP & EVAPORATION POND	29	EXISTING 345KV SWITCHING STATION
9	NEW SANITARY WASTE TREATMENT FACILITY	30	EXISTING 138KV SWITCHING STATION
10	NEW UNITS 345KV SWITCHING STATION	31	EXISTING UNITS 1&2 CIRC WATER INTAKE STRUCTURE
11	NEW WATER TREATMENT FACILITY UN 1 – 4 WITH DEMIN WATER STORAGE TANK	32	EXISTING FENCE
12	RELOCATED WATER TREATMENT EQUIPMENT INCLUDING A)SURGE BASIN; B)API SEPARATOR; C)LAB.	33	EXISTING UNITS 1 & 2
13	NOT USED	34	EXISTING SAFE SHUTDOWN IMPOUNDMENT DAM
14	HEAVY HAUL ROAD	35	EXISTING SAFE SHUTDOWN IMPOUNDMENT
15	COOLING TOWER & GAS FARM ACCESS POINT	36	SQUAW CREEK RESERVOIR
16	NEW WAREHOUSE / INVESTMENT RECOVERY STORAGE/ CHEMICAL CONTROL FACILITY	37	EXISTING RAIL SPUR NEW TERMINUS POINT
17	NEW ONCOR 345KV TRANSMISSION LINE	38	VEHICLE BARRIER SYSTEM BOUNDARY (SECURITY)
18	NEW ONCOR 345KV TRANSMISSION LINE	39	NEW UNITS GAS FARM
19	MODIFIED BLDG FOR MAINTENANCE TRAINING FACILITY	40	NEW 3&4 SIMULATOR FACILITY
20	MODIFIED BLDG FOR OPS TRAINING/EOF/SIMULATOR 1&2 FACILITY	41	MAKEUP WATER SURGE SUPPLY
21	MODIFIED BLDG FOR ADMIN FACILITY	42	INTERIM RADWASTE STORAGE\STAGING BUILDING
		43	RADWASTE EVAPORATION POND
		44	COOLING TOWER CHEMICAL ADDITION FACILITY (H2SO4, NaOCl, INHIBITOR).
		45	STORMWATER BASIN

CP COL 1.2(1)

Figure 1.2-1R Comanche Peak Units 3 & 4 Site Plan (Sheet 1 of 2)

CTS-01506



CP COL 1.2(1)

Figure 1.2-1R Comanche Peak Units 3 & 4 Site Plan (Sheet 2 of 2)

CTS-01506

(SRI)

CP COL 1.8(1) **Figure 1.2-201 Ultimate Heat Sink and ESW Pipe Tunnel Plan View**

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-202 ESW Pipe Tunnel Sectional View A-A

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-203 Ultimate Heat Sinks A and B at Elevation 791'-0" - Plan View

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-204 Ultimate Heat Sinks A and B at Elevation 828'-0" - Plan View

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-205 Ultimate Heat Sinks A and B at Elevation 846'-0" - Plan View

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-206 Ultimate Heat Sinks A and B - Sectional Views

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-207 Ultimate Heat Sinks C and D at Elevation 791'-0" - Plan View

CTS-0150
7

(SRI)

CP COL 1.8(1)

Figure 1.2-208 Ultimate Heat Sinks C and D at Elevation 828'-0" - Plan View

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-209 Ultimate Heat Sinks C and D at Elevation 846'-0" - Plan View

CTS-01507

(SRI)

CP COL 1.8(1)

Figure 1.2-210 Ultimate Heat Sinks C and D - Sectional Views

Chapter 2

Chapter 2 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.03.02-9	Table 2.0-1R (Sheet[s] 1, [2] of 13) 2.3.1.2.2 2.3.2.3	2.0-2 [2.0-2, 2.0-3] 2.3-13 2.3-37	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 09/14/2012	Revised to incorporate RG 1.221.	-
CTS-01514	Table 2.0-1R (Sheets 3, 4,5,6 of 13)	2.0-4 2.0-5 2.0-6 2.0-7	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413)	Updated to reflect revised X/Q values.	0
CTS-01514	Table 2.3-338 (Sheets 1,3 of 3)	2.3-244 2.3-246	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413)	Updated to reflect revised source and receptor locations.	0
CTS-01514	Table 2.3-339 (Sheet 1 of 2)	2.3-247	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413)	Updated to reflect revised X/Q values.	0
CTS-01513	Figure 2.1-201 2.3-380	- -	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413)	Updated to reflect standard plant and site-specific layout.	0

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Table 2.0-1R (Sheet 4 of 13)
Key Site Parameters

CP COL 2.3(2)

Atmospheric dispersion factors (χ/Q values) for main control room (MCR) heating, ventilation, and air conditioning (HVAC) intake for specified release points[2]*:*

Plant vent[5] 0-8 hrs 8-24 hrs 1-4 days 4-30 days	1.1×10^{-3} s/m^3 6.6×10^{-4} s/m^3 4.2×10^{-4} s/m^3 2.8×10^{-4} s/m^3	East HVAC Intake 0 – 2 hours: 6.3E-04 2 – 8 hours: 4.~~1~~0E-04 8 – 24 hours: 1.7E-04 1 – 4 days: 1.1E-04 4 – 30 days: 9.0E-05	West HVAC Intake 0 – 2 hours: 9.4E-04 2 – 8 hours: 7.3E-04 8 – 24 hours: 3.~~1~~0E-04 1 – 4 days: 1.9E-04 4 – 30 days: 1.6E-04
Ground-level containment releases[4] 0-8 hrs 8-24 hrs 1-4 days 4-30 days	2.2×10^{-3} s/m^3 1.3×10^{-3} s/m^3 8.3×10^{-4} s/m^3 5.5×10^{-4} s/m^3	East HVAC Intake Containment Shell 0 – 2 hours: 7.5E-04 2 – 8 hours: 5.~~1~~0E-04 8 – 24 hours: 2.~~2~~1E-04 1 – 4 days: 1.4E-04 4 – 30 days: 1.2E-04	West HVAC Intake Containment Shell 0 – 2 hours: 8.7E-04 2 – 8 hours: 6.1E-04 8 – 24 hours: 2.7E-04 1 – 4 days: 1.7E-04 4 – 30 days: 1.4E-04

CP COL 2.3(2)

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Table 2.0-1R (Sheet 5 of 13)
Key Site Parameters

CP COL 2.3(2)

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Main steam relief valve and safety valve releases[6] 0-8 hrs 8-24 hrs 1-4 days 4-30 days	5.3×10^{-3} s/m^3 3.1×10^{-3} s/m^3 2.0×10^{-3} s/m^3 1.3×10^{-3} s/m^3	East HVAC Intake Main Steam Relief Valves 0 – 2 hours: 2.9E-03 2 – 8 hours: 1.7E-03 8 – 24 hours: 6.~~9~~8E-04 1 – 4 days: 4.9E-04 4 – 30 days: 3.9E-04	West HVAC Intake Main Steam Relief Valves 0 – 2 hours: 3.~~4~~5E-03 2 – 8 hours: 2.~~4~~5E-03 8 – 24 hours: ~~9.9~~ 1.0E-04 1 – 4 days: 6.6E-04 4 – 30 days: 4.5E-04
		East HVAC Intake Main Steam Safety Valves 0 – 2 hours: 3.3E-03 2 – 8 hours: 1.9E-03 8 – 24 hours: 7.6E-04 1 – 4 days: 5.~~4~~5E-04 4 – 30 days: 3.8E-04	West HVAC Intake Main Steam Safety Valves 0 – 2 hours: 4.~~1~~2E-03 2 – 8 hours: 2.7E-03 8 – 24 hours: 1.1E-03 1 – 4 days: 8.1E-04 4 – 30 days: 5.1E-04

Table 2.0-1R (Sheet 6 of 13)
Key Site Parameters

CP COL 2.3(2)

Steam line break releases[8] 0-8 hrs 8-24 hrs 1-4 days 4-30 days	1.9×10^{-2} s/m^3 1.1×10^{-2} s/m^3 7.1×10^{-3} s/m^3 4.7×10^{-3} s/m^3	East HVAC Intake Main Steam Line 0 – 2 hours: 1.6E-02 2 – 8 hours: 8.~~3~~38E-03 8 – 24 hours: 3.~~5~~56E-03 1 – 4 days: 2.~~5~~56E-03 4 – 30 days: 1.~~7~~78E-03	West HVAC Intake Main Steam Line 0 – 2 hours: 6.6E-03 2 – 8 hours: 4.~~3~~32E-03 8 – 24 hours: 1.~~8~~87E-03 1 – 4 days: 1.3E-03 4 – 30 days: 8.9E-04
Fuel handling area releases[7] 0-8 hrs 8-24 hrs 1-4 days 4-30 days	1.1×10^{-3} s/m^3 6.4×10^{-4} s/m^3 4.1×10^{-4} s/m^3 2.7×10^{-4} s/m^3	East HVAC Intake 0 – 2 hours: 9.~~6~~55E-04 2 – 8 hours: 7.5E-04 8 – 24 hours: 3.1E-04 1 – 4 days: 2.0E-04 4 – 30 days: 1.7E-04	West HVAC Intake 0 – 2 hours: 5.4E-04 2 – 8 hours: 4.1E-04 8 – 24 hours: 1.7E-04 1 – 4 days: 1.1E-04 4 – 30 days: 7.~~8~~87E-05
Atmospheric dispersion factors (χ/Q values) for MCR inleak for specified release points[3]*:*			

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CP COL 2.3(2)

Table 2.3-338 (Sheet 1 of 3)
Main Control Room and TSC HVAC Intake Distances and Directions

Main Control Room/Class 1E Electrical Room East HVAC Intake Distances and Directions

Release Point	Distance (m)	Direction to Source (°)
Plant Vent	66.~~1~~0	307.~~5~~°
Main Steam Line	17.~~1~~0	241~~3.5~~°
Fuel Handling Area	76.0~~5.9~~	353.~~5~~°
Relief Valves	27.~~4~~0	290.~~5~~°
Safety Valves	24.~~1~~0	268.~~5~~°
Containment Shell	27.0~~6.8~~	311.~~5~~°

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Main Control Room/Class 1E Electrical Room West HVAC Intake Distances and Directions

Release Point	Distance (m)	Direction to Source (°)
Plant Vent	51.0~~0.9~~	11.~~5~~°
Main Steam Line	25.0~~4.7~~	87~~6.5~~°
Fuel Handling Area	102.0~~1.8~~	33.~~5~~°
Relief Valves	27.~~4~~0	52.~~5~~°
Safety Valves	24.~~1~~0	74.~~5~~°
Containment Shell	27.0~~6.8~~	31.~~5~~°

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Above Grade Elevations of the Main Control Room and Class 1E Electrical Room HVAC Intakes

Receptor	Elevation (m)
Control Room HVAC Intake	13.9
Class 1E Electrical Room HVAC Intake	13.9

CP COL 2.3(2)

Table 2.3-338 (Sheet 3 of 3)
Main Control Room and TSC HVAC Intake Distances and Directions

Release Heights

Release Point	Elevation Above Grade (m)
Plant Vent	69.9
Main Steam Line (East)	13.2~~2.8~~
Main Steam Line (West)	26.~~3~~2
Fuel Handling Area	5.9
Main Steam Relief Valve (East)	40.7
Main Steam Relief Valve (West)	40.7
Main Steam Safety Valve (East)	38.8
Main Steam Safety Valve (West)	38.8
Containment Shell	49.5

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Note:

The sampling system line, air lock and equipment hatch release locations (sources) listed in the DCD (Figure 15A-1) are not considered above because they are interior to the Auxiliary Building. ~~Likewise, the Reactor Building Door is not evaluated because it is an interior door. The Auxiliary Building intake location is not specifically evaluated because this pathway is bounded by the main control room HVAC pathway.~~The Auxiliary Building Door and the Auxiliary Building intake locations are not specifically evaluated because the pathways are bounded by the main control room HVAC pathway.

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Table 2.3-339 (Sheet 1 of 2)
Main Control Room and TSC Atmospheric Dispersion Factors (χ/Q) for Accident Dose Analysis

CP COL 2.3(2)

Main Control Room χ/Q (s/m^3) at the East HVAC Intake

Time Interval	Plant Vent	Main Steam Line	Fuel Handling Area
0 – 2 hours	6.3E-04	1.6E-02	9.~~6~~5E-04
2 – 8 hours	4.~~1~~0E-04	8.~~3~~8E-03	7.5E-04
8 – 24 hours	1.7E-04	3.~~5~~6E-03	3.1E-04
1 – 4 days	1.1E-04	2.~~5~~6E-03	2.0E-04
4 – 30 days	9.0E-05	1.~~7~~8E-03	1.7E-04

Time Interval	Main Steam Relief Valves	Main Steam Safety Valves	Containment Shell
0 – 2 hours	2.9E-03	3.3E-03	7.5E-04
2 – 8 hours	1.7E-03	1.9E-03	5.~~1~~0E-04
8 – 24 hours	6.~~9~~8E-04	7.6E-04	2.~~2~~1E-04
1 – 4 days	4.9E-04	5.~~4~~5E-04	1.4E-04
4 – 30 days	3.9E-04	3.8E-04	1.2E-04

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Main Control Room and TSC Atmospheric Dispersion Factors (χ/Q) for Accident Dose Analysis

Main Control Room χ/Q (s/m^3) at the West HVAC Intake

Time Interval	Plant Vent	Main Steam Line	Fuel Handling Area
0 – 2 hours	9.4E-04	6.6E-03	5.4E-04
2 – 8 hours	7.3E-04	4.~~3~~2E-03	4.1E-04
8 – 24 hours	3.~~1~~0E-04	1.~~8~~7E-03	1.7E-04
1 – 4 days	1.9E-04	1.3E-03	1.1E-04
4 – 30 days	1.6E-04	8.9E-04	7.~~8~~7E-05

Time Interval	Main Steam Relief Valves	Main Steam Safety Valves	Containment Shell
0 – 2 hours	3.~~4~~5E-03	4.~~1~~2E-03	8.7E-04
2 – 8 hours	2.~~4~~5E-03	2.7E-03	6.1E-04
8 – 24 hours	~~9.9E-04~~1.0E-03	1.1E-03	2.7E-04
1 – 4 days	6.6E-04	8.1E-04	1.7E-04
4 – 30 days	4.5E-04	5.1E-04	1.4E-04

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CTS-01513

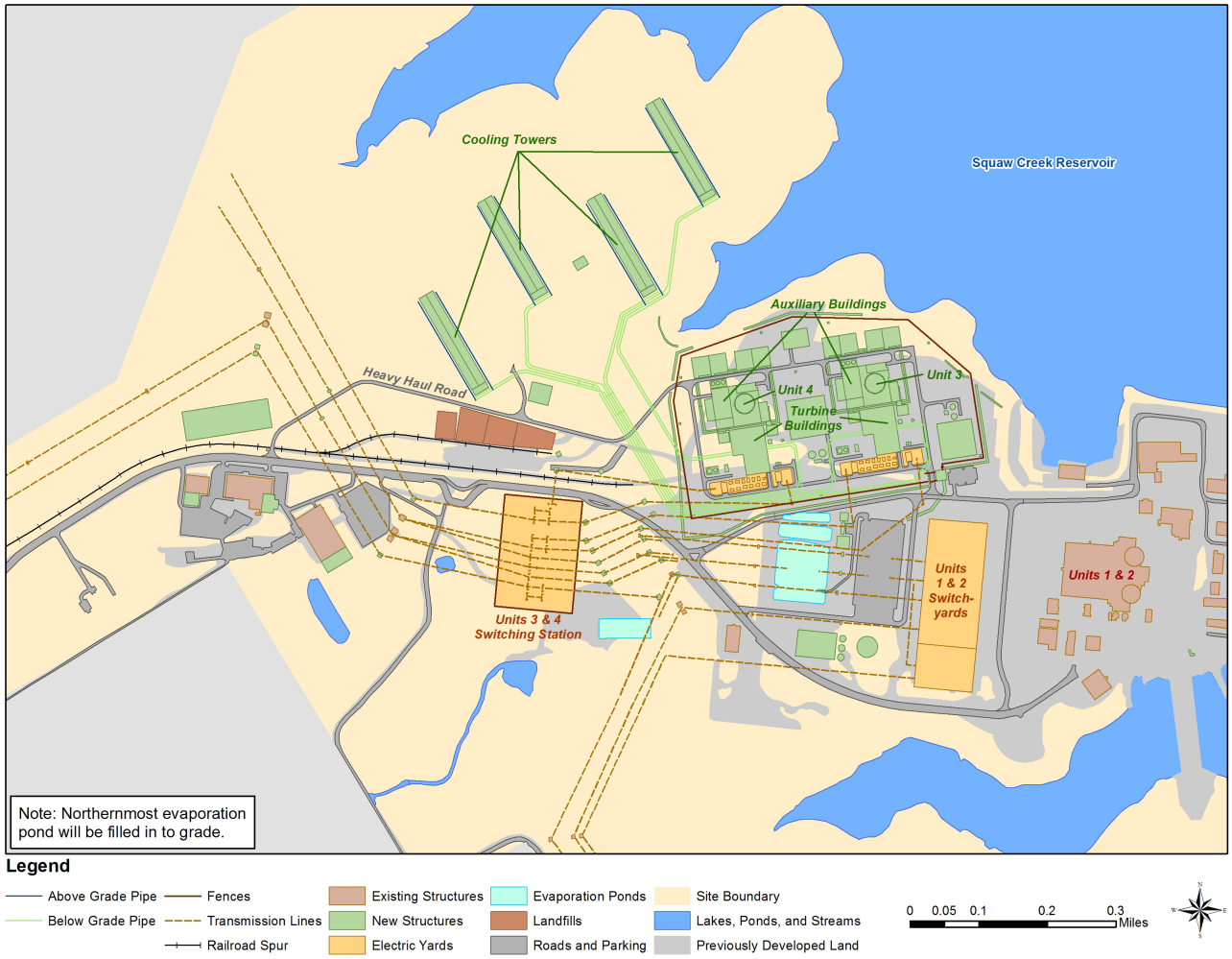


Figure 2.1-201 Site Plot Plan

CTS-01513

Figure 2.3-380 Location of CPNPP Meteorological Tower and Plant Structures

Chapter 3

Chapter 3 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.0 9.06-22 S01	3.9.6 3.9.10	3.9-2 [3.9-2, 3.9-3] 3.9-6	Supplemental Response to RAI No. 244 Luminant Letter no.TXNB-12021 Date 6/13/2012	Deleted references to NUREG-1482 Rev. 2.	-
RCOL2_14.03.07-38	3.8.4.1.3.2	3.8-6	Response to RAI No. 254 Luminant Letter no.TXNB-12022 Date 6/21/2012	Clarified design criteria.	-
RCOL2_09.02.05-25 S01	3.6.1.3 3.6.4 Table 3.6-201	3.6-1 3.6-2 3.6-3	Supplemental 01 Response to RAI No. 252 Luminant Letter no.TXNB-12031 Date 09/10/2012	Added Table for site-specific high and moderate energy fluid systems.	-
RCOL2_03.03.02-9	3.3 3.3.2.1 (New Subsection) 3.3.2.2.1 (New Subsection) 3.3.2.2.4 3.3.2.3 3.3.3 3.5.1.4 (New Subsection) 3.5.1.5 3.5.2 3.5.4 3.7.3.9 3.8.4.1.3.1	3.3-1 3.3-2, 3.3-3 3.3-3 [3.3-4] 3.5-3 3.5-3 [3.5-4] 3.5-5 [3.5-6] 3.7-11 3.8-4	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 09/14/2012	Revised to incorporate RG 1.221.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
	3.8.4.1.3.2 3.8.4.4.3.2 Table 3.8-203 3.12.5.3.6 3.12.7 3LL.2	3.8-5 3.8-6 [3.8-5 through 3.8-7] 3.8-11 [3.8-11, 3.8-12] 3.8-21 3.12-1 3.12-2 3LL-1			
RCOL2_14.0 3.07-38 S01	Table 3.2-201 (Sheets 2, 3 of 3)	3.2-4 3.2-5	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Following SSCs for freeze protection are added to the table: - Drain lines from ESWS piping - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_14.0 3.07-38 S01	Table 3D-201 (Sheets 4 through 11 of 11)	3D-5 through 3D-12	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Following SSCs for freeze protection are added to the table. - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_03.06.01-1	3.6.1.3	3.6-1 [3.6-1 through 3.6-2]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised COL 3.6(1).	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.06.01-1	3.6.2.1	3.6-2 [3.6-3]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised COL 3.6(4).	-
RCOL2_09.05.04-1	3.8.4.1.3.1	3.8-5	Response to RAI No. 265 Luminant Letter no.TXNB-12043 Date 12/18/2012	Description for environmental conditions of ESWPT and a temporary ventilation system are added.	-
CTS-01515	3.5.1.6	3.5-4 [3.5-5]	Consistency with DCD and site-specific changes as described in Letter. TXNB-12033 (ML12268A413)	Updated aircraft hazards evaluation to reflect changes in plant layout.	0
CTS-01512	Figure 3K-201 [Sheet 1, 2 of 2]	3K-2 [3K-3]	Consistency with DCD and site-specific changes as described in Letter. TXNB-12033 (ML12268A413)	Overall General Arrangement plan replaced with the updated version; and minor editorial correction.	0

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

In order to maintain P_{FA} less than the order of 10^{-7} for both Units 3 and 4, the above equation is rearranged to solve for N using values of C, A and w determined below:

$N = P_{FA} / (C \times A/w)$ = ~~19,300~~35,300 operations per year CTS-01515

NUREG-0800, SRP 3.5.1.6 provides a value of $C = 4 \times 10^{-10}$ for commercial aircraft. A table within SRP 3.5.1.6 also provides values for C for various distances up to 10 statute miles from the end of the runway, and notes data are not available for military aircraft greater than 5 statute miles from the end of runway. Since the probability of military crashes is otherwise similar or less than the probability of commercial air carriers within 5 statute miles of the end of runway, the value of $C = 4 \times 10^{-10}$ provides a conservative approach for determining the probability of in-route crashes on military airways. This methodology is also consistent with the determination for the probability of in-flight military aircraft crash in "The Annual Probability of an Aircraft Crash on the U.S. Department of Energy Reservation in Oak Ridge, Tennessee" (Reference 3.5-201), Subsection 3.3.1.

The effective area of each unit is conservatively determined as 0.09~~07~~90 square miles from the sum of the aircraft shadow area (A_S), skid area (A_K), and footprint area (A_B), calculated using a bounding power block volume by enveloping the outer boundaries of the R/B complex, UHSRS, ESWPT and PSFSVs~~, access building (AC/B), A/B, power source buildings (PS/Bs), and T/B~~ of ~~490~~600 ft wide by ~~650~~690 ft long by 230 ft high. CTS-01515 CTS-01515

A_S = 230 ft x ~~650~~690 ft = ~~149,500~~158,700 ft^2, where the shadow length is conservatively determined using a 45 degree angle from the tallest point of the power block, and the shadow width is equal to the widest dimension of the power block.

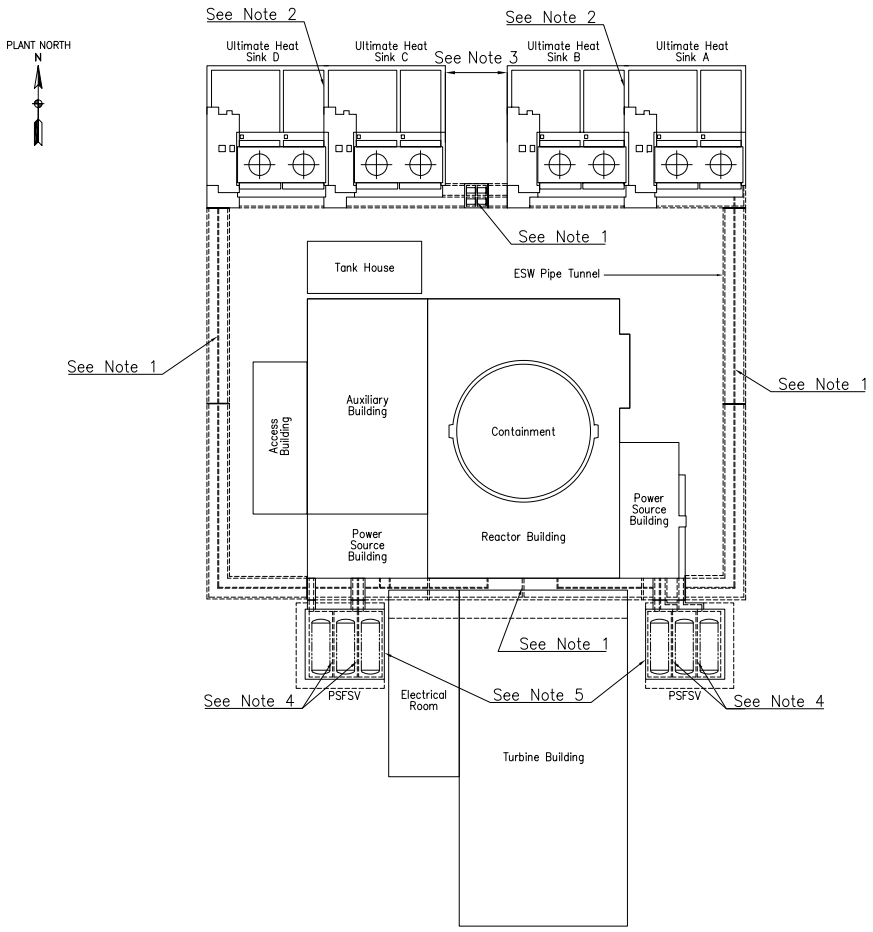
A_K = 0.6 miles (skid length) x ~~650~~690 ft = ~~2,059,200~~2,185,920 ft^2, where the skid length for military aircraft is determined from Reference 3.5-201, and the width of skid is equal to the widest dimension of the power block. CTS-01515

A_B = ~~490~~600 ft x ~~650~~690 ft = ~~318,500~~414,000 ft^2 as the total land occupied by the power block. CTS-01515

The annual number of aircraft operations on military training route VR-158 noted in Subsection 2.2.2.7.2 confirms operations are less than ~~19,300~~35,300 operations per year. Therefore, neither an air crash nor an air transportation accident is required to be considered as part of the design basis. CTS-01515

3.5.2 Structures, Systems, and Components to be Protected from Externally Generated Missiles

CTS-01512



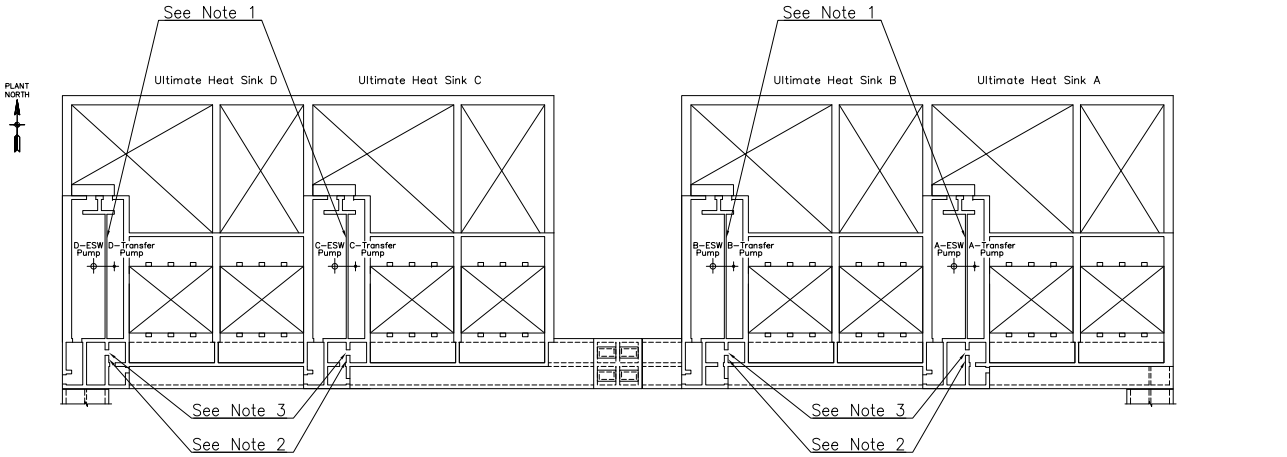
NOTES:

1. CONCRETE WALL BARRIER PROVIDES DIVISIONAL SEPARATION AND PREVENTS FLOODING BETWEEN ESWPT DIVISIONS.
2. CONCRETE WALLS BETWEEN EACH ULTIMATE HEAT SINK RELATED STRUCTURE PREVENT FLOODING COMMUNICATION BETWEEN THEM.
3. ULTIMATE HEAT SINK BASINS 'B' AND 'C' ARE PHYSICALLY SEPARATED WITH EXTERIOR CONCRETE WALL TO PREVENT FLOODING COMMUNICATION BETWEEN THEM.
4. CONCRETE WALLS BETWEEN EACH FUEL STORAGE TANK ENCLOSURE PREVENT FLOODING COMMUNICATION BETWEEN THEM.
5. POWER SOURCE FUEL STORAGE VAULTS ARE PHYSICALLY SEPARATED WITH EXTERIOR CONCRETE WALLS TO PREVENT FLOODING COMMUNICATION BETWEEN THEM.

CP COL 3.4(7)

Figure 3K-201 Location of Flood Barrier Walls UHSRS, ESWPT, and PSFSV (Sheet 1 of 2)

CTS-01512



NOTES:

1. CONCRETE WALLS BETWEEN ESW PUMP ROOMS AND TRANSFER PUMP ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.
2. CONCRETE WALLS BETWEEN ESW PIPING ROOMS AND UHS TRANFER PIPING ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.
3. WATER-TIGHT DOORS ARE PROVIDED IN DOOR OPENINGS BETWEEN ESW PIPING ROOMS AND UHS TRANFER PIPING ROOMS PREVENT FLOODING COMMUNICATION BETWEEN THEM.

Figure 3K-201 Location of Flood Barrier Walls UHSRS, ESWPT, and PSFSV (Sheet 2 of 2)

Chapter 4

Chapter 4 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 5

Chapter 5 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 6

Chapter 6 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_06.04-15	6.4.4.2	6.4-2 6.4-3	Supplemental 01 Response to RAI No. 240 Luminant Letter no.TXNB-12021 Date 6/13/2012	Figure 1 was added to the response due to inadvertently omitted in the original response. No changed in FSAR due to Supplemental Response to RAI No. 240.	-
RCOL2_06.02.02-5	6.2.2.3.2 6.2.8	6.2-2 6.2-2 [6.2-3]	Response to RAI No. 271 Luminant Letter no.TXNB-13001 Date 01/17/2013	Added discussion of administrative programs to maintain RMI, fiber insulation, and aluminum within design-basis limits.	-

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 7

Chapter 7 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 8

Chapter 8 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_08.01-3	8.1.2.1	8.1-1	Response to RAI No. 249 Luminant Letter no.TXNB-12013 Date 05/16/2012	Subsection 8.1.2.1 was revised to state that the switching station equipment shared between Units 3 and 4 includes the circuit breakers, and that no important to safety SSCs are shared between Units 3 and 4, under any operating scenario (normal or emergency).	-
RCOL2_03.03.02-9	8.2.1.2.1.1	8.2-4	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	-
CTS-01508	Figure 8.3.1-201	8.3-21	Revised to reflect common foundation and the new plant layout	Figure was updated to reflect standard plant and site-specific layout changes.	0

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

CTS-01508

(SRI)

CP COL 8.3(2)

Figure 8.3.1-201 Ground Grid and Lightning Protection System

Chapter 9

Chapter 9 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.01-7	9.2.1.3	9.2-5 [9.2-6]	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Added discussion regarding CCW heat exchanger backflush procedure including valve alignment and identification as a maintenance outage train.	-
RCOL2_09.02.01-8	9.2.1.2.2.5	9.2-4	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Revised to discuss the ESWS piping material and inspection.	-
RCOL2_09.02.01-9	9.2.5.5	9.2-21 [9.2-22 9.2-23]	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Revised to clarify that level switches are utilized to prevent water hammer and are non safety-related.	
RCOL2_09.0 1.05-1 S01	9.1.5.3 9.1.5 (New Section) 9.1.5.1(New Subsection) 9.1.5.3 (New Subsection) 9.1.5.4 (New Subsection) 9.1.5.6 (New Subsection) 9.1.6	9.1-1 [9.1-1 through 9.1-5] 9.1-2 [9.1-5]	Supplemental 01 Response to RAI No. 52 Luminant Letter no.TXNB-12021 Date 6/13/2012	The heavy load handling program description is enhanced to satisfy the requirements of COL item 9.1 (6).	-
RCOL2_14.03.07-38	9.2.5.2.1 9.2.5.3	9.2-12 [9.2-13] 9.2-18 [9.2-20]	Response to RAI No. 254 Luminant Letter no.TXNB-12022 Date 6/21/2012	Added design criteria for cooling tower spray nozzle sizing. Clarified design criteria.	-
RCOL2_14.02-21	9.2.5.2.1 9.2.5.2.2	9.2-12 [9.2-13] 9.2-15	Response to RAI No. 257 Luminant Letter no.TXNB-12022 Date 6/21/2012	Added discussion about UHS fan speed and direction. Added discussion	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
		[9.2-16]		about level switches.	
RCOL2_09.0 4.05-23 S01	9.4.5.3.6	9.4-6	Supplemental 01 RAI No. 243 Luminant Letter no.TXNB-12030 Date 08/29/2012	Added the design information about the wall separating the ESW pump room from the transfer pump room.	-
RCOL2_09.0 4.05-23 S01	Table 9.4-202	9.4-11	Supplemental 01 Response to RAI No. 243 Luminant Letter no.TXNB-12030 Date 08/29/2012	Changed the capacity of UHS ESW Pump House Ventilation System Equipment.	-
RCOL2_09.0 4.05-23 S01	9A.3.101 9A.3.102 9A.3.104 9A.3.105 9A.3.107 9A.3.108 9A.3.110 9A.3.111	9A-2 9A-3 9A-5 9A-6 9A-8 9A-9 9A-10 9A-12 9A-13	Supplemental 01 Response to RAI No. 243 Luminant Letter no.TXNB-12030 Date 08/29/2012	Changed or added fire protection design features for UHS basins, ESW pump rooms and transfer pump rooms.	-
RCOL2_09.02.01-9 S01	9.2.1.2.3.1 9.2.5.2.2 9.2.5.5	9.2-4 9.2-15 [9.2-17] 9.2-22 [9.2-25]	Supplemental 01 Response to RAI No. 251 Luminant Letter no.TXNB-12031 Date 9/10/2012	Removed description of level switches located in the UHS cooling tower riser piping.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.05-18 S01	9.2.5.2.1	9.2-12	Supplemental 01 Response to RAI No. 252 Luminant Letter no.TXNB-12031 Date 09/10/2012	Added description to discuss UHS cooling tower plume discharge.	-
RCOL2_03.03.02-9	9.2.5.2.1 9.2.5.2.2 9.4.5.3.6 9.4.5.4.6	9.2-12 [9.2-13] 9.2-15 [9.2-17] 9.4-7	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	-
RCOL2_14.0 3.07-38 S01	9.2.1.3 9.2.5.2.2 9.2.10	9.2-5 9.2-15 9.2-24	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Description is added regarding freeze protection of the UHS and ESWS. Table 9.2.5-201 is added for address of CP COL 9.2(19).	-
RCOL2_14.0 3.07-38 S01	Table 9.2.5-201 (New Table)	9.2-35	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	New table is introduced to describe electric power division for clarification.	-
RCOL2_14.0 3.07-38 S01	Figure 9.2.5-1R (Sheets 1, 2 of 2)	9.2-38 9.2-39	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to show the newly introduced drain lines for freeze protection.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_14.0 3.07-38 S01	9.4.5.1.1.6 9.4.5.2.6	9.4-3 9.4-4 through 9.4-6	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Supply areas are added to the UHS ESW Pump House Ventilation System and to for freeze protection of the UHSS and ESWS.	-
RCOL2_14.0 3.07-38 S01	Table 9.4-202	9.4-11	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	ESW piping room unit heaters and UHS transfer piping room unit heaters are added to the table.	-
RCOL2_14.0 3.07-38 S01	Table 9.4-203 (Sheet 3 of 6)	9.4-14	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	ESW piping room unit heaters and UHS transfer piping room unit heaters are added to the table.	-
RCOL2_14.0 3.07-38 S01	Figure 9.4-201	9.4-18	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to add newly introduced dampers to inlets and exhausts of the ventilation system.	-
RCOL2_09.02.05-18 S02	9.2.5.2.1	9.2-12	Supplemental 02 Response to RAI No. 252 Luminant Letter no.TXNB-12036 Date 11/12/2012	Corrected vertical distance value for distance between UHS CT discharge and other intakes; Revised description to indicate pump house intakes on the south side take advantage of the prevailing wind direction.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.05-20 S02	9.2.5.2.2	9.2-15	Supplemental 02 Response to RAI No. 252 Luminant Letter no.TXNB-12036 Date 11/12/2012	Revised description to indicate that vortex is not a concern during simultaneous pump operation of ESWP and UHS Transfer Pump.	-
RCOL2_14.03.07-38 S02	9.2.1.3	9.2-5 [9.2-6]	Supplemental 02 Response to RAI No. 254 Luminant Letter no.TXNB-12036 Date 11/12/2012	Revised to include description that ESWPT is below grade and therefore freezing is not a concern.	-
RCOL2_09.02.01-9 S02	9.2.1.2.3.1 9.2.5.5 9.2.10	9.2-4 [9.2-4, 9.2-5] 9.2-21 [9.2-24] 9.2-25 [9.2-29]	Supplemental 02 Response to RAI No. 251 Luminant Letter no.TXNB-12041 Date 12/03/2012	Revise the location of the DCD reference location and add the evaluation of why void detection is not required. Change LMN from “STD COL 9.2(24) to STD COL 9.2(32)”. Delete “9.2.5.5” from 9.2(32) Void dection system.	-
RCOL2_12.03-12.04-11 S04	9.2.6.2 (New section)	9.2-22	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Revised to state that the CST for CPNPP Unit 3 is located on west side of Unit 3 as depicted on Figure 12.3-201, while the CPNPP Unit 4 CST is located on the east side of Unit 4, as depicted on Figure 12.3-202.	-

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.0 4.05-26	Table 9.4-201 (Sheet 1 of 2)	9.4-9 [9.4-10]	Response to RAI No. 266 Luminant Letter no.TXNB-12043 Date 12/18/2012	MCR/Class 1E Electrical HVAC Equipment Room In-duct Heater Capacity “Non-heating” is added for Train A and D.	-
RCOL2_09.0 4.05-27	9.4.3.2.2	9.4-2	Response to RAI No. 266 Luminant Letter no.TXNB-12043 Date 12/18/2012	The LMN “CP COL 9.4(4)” and description of supplemental heating is added.	-
RCOL2_09.05.04-1	9.5.4.2.2.1	9.5-21	Response to RAI No. 265 Luminant Letter no.TXNB-12043 Date 12/18/2012	Temperature condition of PSFSV is added.	-
CTS-01509	Table 9.4-201	9.4-9 9.4-10 [9.4-11]	To reflect impacts on heating and cooling capacity due to layout changes.	Heating and cooling capacity and in-duct heater capacity in Table 9.4-201 have been changed.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01517	Figure 9.5.1-202	9.5-148	Design change as described in Luminant ISCP Letter ML12268A413	Reflected new site plan.	0
CTS-01516	9A.3	9A-1	Correction	Changed “Pumping Station” to “Pump House” in first bullet.	0
CTS-01518	9A.3	9A-1	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added bullets ESW-Piping Room and UHS-Transfer Piping Room.	0
CTS-01518	9A.3	9A-2	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed the DCD Subsection to 9A.3.153.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.101 [9A.3.201]	9A-2	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed Section 9A.3.101 to 9A.3.201 and changed title to FA7-201-01.	0
CTS-01516	9A.3.101 [9A.3.201]	9A-2	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.101 [9A.3.201]	9A-2	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.101 [9A.3.201]	9A-2 [9A-3]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Deleted “The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.”	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.202 [New]	9A-3 and [9A-4]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new subsection 9A.3.202, FA7-201-02 A-ESW Piping Room	0
CTS-01518	9A.3.102 [9A.3.203]	9A-3 [9A-5]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed Section 9A.3.102 to 9A.3.203 and changed fire area to FA7-202 to fire zone FA7-202-01.	0
CTS-01516	9A.3.102 [9A.3.203]	9A-3 [9A-5]	Correction	Changed “D” to “C or D.”	0
CTS-01516	9A.3.102 [9A.3.203]	9A-3 [9A-5]	Correction	Changed “exceed” to “exceeding”	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01516	9A.3.102 [9A.3.203]	9A-3 [9A-5]	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.204 [New]	9A-4 [9A-6, 9A-7]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.204, FA7-202-02 A-UHS Transfer Piping Room.	0
CTS-01518	9A.3.103 [9A.3.205]	9A-4 [9A-7]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.103 to 9A.3.205 and changed fire area from FA7-203 to fire zone FA7-203-01.	0
CTS-01518	9A.3.104 [9A.3.206]	9A-5 [9A-8]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.104 to 9A.3.206 and changed fire area from FA7-204 to fire zone FA7-204-01.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01516	9A.3.104 [9A.3.206]	9A-5 [9A-8]	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.104 [9A.3.206]	9A-5 [9A-9]	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.104 [9A.3.206]	9A-6 [9A-9]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Deleted “The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.”	0
CTS-01518	9A.3.207 [New]	9A-6 [9A-10, 9A-11]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.207, FA7-204-02 B-ESW Piping Room.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.105 [9A.3.208]	9A-6 [9A-11]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.105 to 9A.3.208 and changed fire area from FA7-205 to fire zone FA7-205-01.	0
CTS-01516	9A.3.105 [9A.3.208]	9A-6 [9A-11]	Correction	Changed “D” to “C or D.”	0
CTS-01516	9A.3.105 [9A.3.208]	9A-6 [9A-11]	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.105 [9A.3.208]	9A-6 [9A-12]	Correction	Added 3.2.1.j.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.209 [New]	9A-7 [9A-13, 9A-14]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.209, FA7-205-02 B-UHS Transfer Piping Room.	0
CTS-01518	9A.3.106 [9A.3.210]	9A-7 [9A-14]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.106 to 9A.3.210 and changed fire area from FA7-206 to fire zone FA7-206-01.	0
CTS-01518	9A.3.107 [9A.3.211]	9A-8 [9A-15]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.107 to 9A.3.211 and changed fire area from FA7-207 to fire zone FA7-207-01.	0
CTS-01516	9A.3.107 [9A.3.211]	9A-8 [9A-15]	Correction	Changed “exceed” to “exceeding”	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01516	9A.3.107 [9A.3.211]	9A-9 [9A-15]	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.107 [9A.3.211]	9A-9 [9A-16]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Deleted “The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.”	0
CTS-01518	9A.3.212 [New]	9A-9 [9A-16, 9A-17, 9A-18]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.212, FA7-207-02 C-ESW Piping Room.	0
CTS-01518	9A.3.108 [9A.3.213]	9A-10 [9A-18]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.108 to 9A.3.213 and changed fire area from FA7-208 to fire zone FA7-208-01.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01516	9A.3.108 [9A.3.213]	9A-10 [9A-18]	Correction	Changed “A” to “A or B.”	0
CTS-01516	9A.3.108 [9A.3.213]	9A-10 [9A-18]	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.108 [9A.3.213]	9A-10 [9A-18]	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.214 [New]	9A-11 [9A-19, 9A-20]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.214, FA7-208-02 C-UHS Transfer Piping Room.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.109 [9A.3.215]	9A-11 [9A-20]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.109 to 9A.3.215 and changed fire area from FA7-209 to fire zone FA7-209-01.	0
CTS-01518	9A.3.110 [9A.3.216]	9A-12 [9A-21]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.110 to 9A.3.216 and changed fire area from FA7-210 to fire zone FA7-210-01.	0
CTS-01516	9A.3.110 [9A.3.216]	9A-12 [9A-21]	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.110 [9A.3.216]	9A-12 [9A-22]	Correction	Added 3.2.1.j.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.110 [9A.3.216]	9A-13 [9A-23]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Deleted “The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.”	0
CTS-01518	9A.3.217 [New]	9A-13 [9A-23, 9A-24]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.217, FA7-210-02 D-ESW Piping Room.	0
CTS-01516	9A.3.111 [9A.3.218]	9A-13 [9A-24]	Correction	Changed section from 9A.3.111 to 9A.3.218 and changed fire area from FA7-211 to fire zone FA7-211-01.	0
CTS-01516	9A.3.111 [9A.3.218]	9A-13 [9A-24]	Correction	Changed “A” to “A or B.”	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01516	9A.3.111 [9A.3.218]	9A-13 [9A-24]	Correction	Changed “exceed” to “exceeding”	0
CTS-01516	9A.3.111 [9A.3.218]	9A-13 [9A-25]	Correction	Added 3.2.1.j.	0
CTS-01518	9A.3.219 [New]	9A-14 [9A-26, 9A-27]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Added new Subsection 9A.3.219, FA7-211-02 D-UHS Transfer Piping Room.	0
CTS-01518	9A.3.112 [9A.3.220]	9A-14 [9A-27]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed section from 9A.3.112 to 9A.3.220 and changed fire area from FA7-212 to fire zone FA7-212-01.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	9A.3.113 [9A.3.221]	9A-15 [9A-28]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed subsection 9A.3.113 to 9A.3.221	0
CTS-01518	9A.3.114 [9A.3.222]	9A-17 [9A-29]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Changed subsection 9A.3.114 to 9A.3.222	0
CTS-01518	Table 9A-201 [Sheet 1,2 of 2]	9A-19 [9A-31, 9A-32]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Revised table to include new fire zones.	0
CTS-01518	Table 9A-202 (Sheet 1 through 25 of 25 [Sheet 1 through 33 of 33])	9A-20 – 9A-44 [9A-33 through 9A-65]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Revised summary sheets associated with Fire Areas FA7-201 through 212 to reflect new fire zone information Revised summary sheets for Fire Zones FA7-301-01 through 13 to reflect revised FHA section.	0

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01518	Table 9A-203 [Sheet 1,2 of 2]	9A-45 [9A-66, 9A-67]	Design change as described in Supplemental Response to RAI No. 254 (ML12334A026) and the ISCP (ML 12268A413).	Revised table to include new fire zones.	0
CTS-01519	Figure 9A-201	9A-46 [9A-68]	Design change as described in Luminant ISCP Letter ML12268A413 and Supplemental Responses to RAIs No. 243 (ML12243A456) and No. 254 (ML12334A026)	Figure is revised to reflect: Integration of the north portions of the ESWPT into the south side of the UHSRS. Integration of adjacent UHSRS (C and D) and (A and B) on a single foundation. ESW Pump House layout changes described in responses to RAIs 243 S01 and 254 S03. New fire areas for ESW Piping Room and UHS Transfer Piping Room	0
CTS-01519	Figure 9A-202	9A-47 [9A-69]	Design change as described in Luminant ISCP Letter ML12268A413 and Supplemental Responses to RAIs No. 243 (ML12243A456) and No. 254 (ML12334A026)	Revised roadway north of Transformer Yard.	0

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

CP COL 9.4(4)

Table 9.4-201 (Sheet 1 of 2)

Equipment Design Data

Main Control Room Air Handling Unit		
Heating Coil Capacity	40 kW	
Auxiliary Building Air Handling Unit		
Cooling Coil Capacity	~~9,200,000~~10,400,000 Btu/hr	CTS-01509
Heating Coil Capacity	~~4,750,000~~5,380,000 Btu/hr (Steam)	
Non-Class 1E Electrical Room Air Handling Unit		
Cooling Coil Capacity	~~1,330,000~~1,310,000 Btu/hr	CTS-01509
Heating Coil Capacity	Non-heating	
Main Steam / Feedwater Piping Area Air Handling Unit		
Cooling Coil Capacity	450,000 Btu/hr	
Heating Coil Capacity	9 kW	
Technical Support Center Air Handling Unit		
Cooling Coil Capacity	~~550,000~~560,000 Btu/hr	CTS-01509
Heating Coil Capacity	30 kW	
Class 1E Electrical Room Air Handling Unit		
Heating Coil Capacity	~~45~~65 kW - Train A, B ~~65~~85 kW - Train C, D	CTS-01509
Class 1E I&C Room In-duct Heater Capacity	~~18~~20.1 kW - Train A, D ~~16.3~~16.6 kW - Train B, C	
MCR/Class 1E Electrical HVAC Equipment Room In-duct Heater Capacity	2.2 kW - Train ~~B~~A, ~~C~~D Non-heating - Train ~~A~~B, ~~D~~C	RCOL2_09.04.05-26
Remote Shutdown Console Room In-duct Heater Capacity	~~10.9~~9.9 kW	CTS-01509
Class 1E Battery Room In-duct Heater Capacity	~~3.2~~3.4 kW - Train A, B, C 3.7 kW - Train D	
Safeguard Component Area Air Handling Unit		
Heating Coil Capacity	27 kW	
Emergency Feedwater Pump (M/D) Area Air Handling Unit		
Heating Coil Capacity	~~2~~3 kW	CTS-01509

CP COL 9.4(4)

Table 9.4-201 (Sheet 2 of 2)

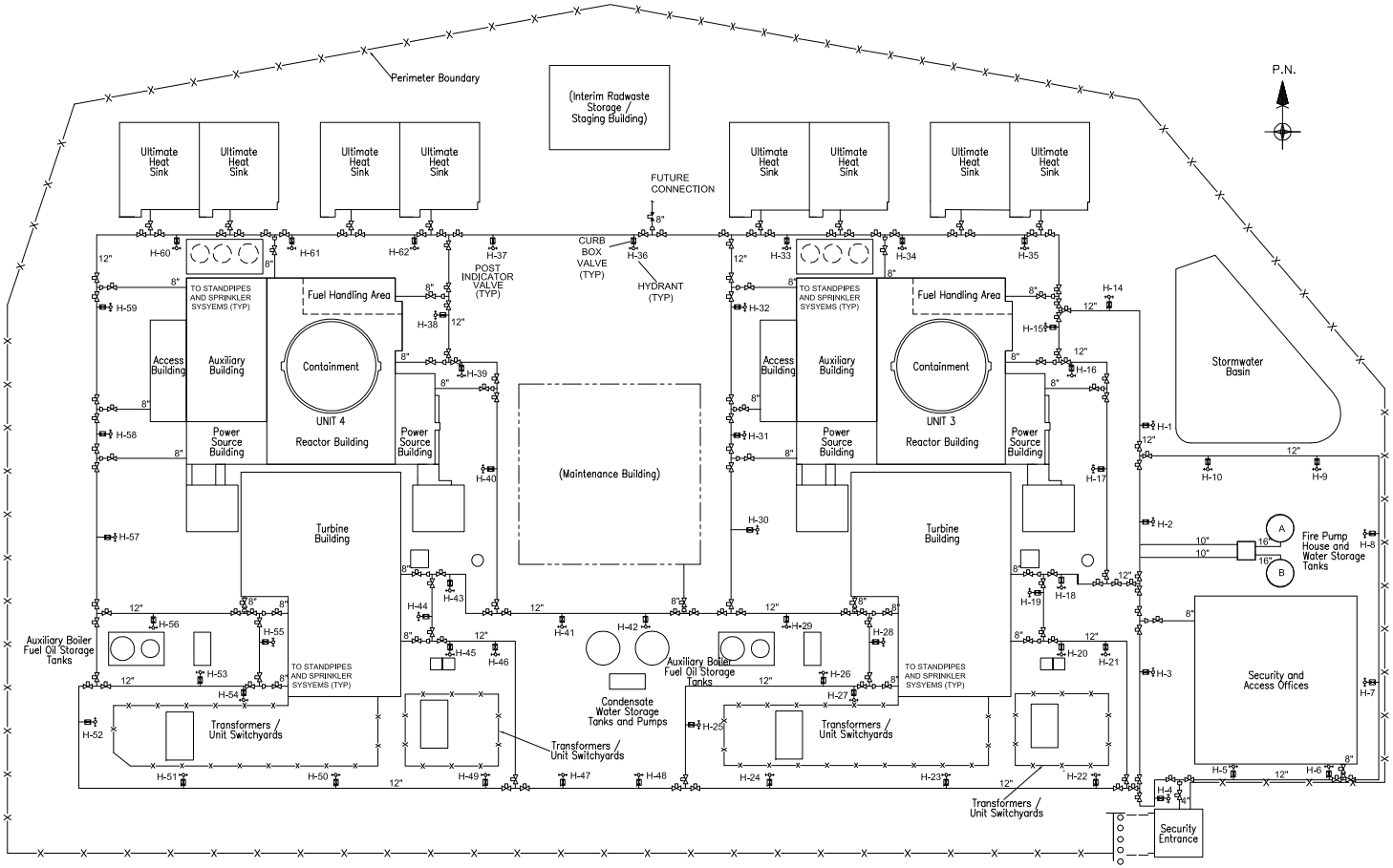
Equipment Design Data

Emergency Feedwater Pump (T/D) Area Air Handling Unit	
Heating Coil Capacity	6 kW
Safety Related Component Area Air Handling Unit	
Penetration Area Air Handling Unit Heating Coil Capacity	~~35~~41 kW
Annulus Emergency Filtration Unit Area Air Handling Unit Heating Coil Capacity	~~12~~11 kW
Charging Pump Area Air Handling Unit Heating Coil Capacity	~~6~~5 kW
CCW Pump Area Air Handling Unit Heating Coil Capacity	~~3~~4 kW
Essential Chiller Unit Area Air Handling Unit Heating Coil Capacity	5 kW
SFP Pump Area Air Handling Unit Heating Coil Capacity	5 kW
Containment Low Volume Purge Air Handling Unit	
Cooling Coil Capacity	190,000 Btu/hr
Heating Coil Capacity	30 kW
Containment High Volume Purge Air Handling Unit	
Cooling Coil Capacity	2,820,000 Btu/hr
Heating Coil Capacity	440 kW

CTS-01509

CTS-01509

CTS-01517



CP COL 9.5(2)

Figure 9.5.1-202 CPNPP Units 3 & 4 Fire Main System

APPENDIX 9A FIRE HAZARD ANALYSIS

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

9A.1 INTRODUCTION

CP COL 9.5(2) Add the following information after the first paragraph in DCD Subsection 9A.1.

This fire hazard analysis (FHA) is performed on the basis of one unit. The fire zones and arrangement of CPNPP Units 3 and 4 are identical. When unit specificity is required, the fire area and fire zone designation if prefixed with a “3” or “4” numeral. For example, Fire Zone “FA1-101-01” within the FHA is designated as “3-FA1-101-01” for Unit 3, and as “4-FA1-101-01” for Unit 4.

9A.3 FIRE HAZARD ANALYSIS RESULTS

STD COL 9.5(2) Add the following information after second paragraph in DCD Subsection 9A.3.

The FHA is also conducted for the following site-specific plant structures and associated fire area and/or fire zones which are depicted in Figures 9A-201 and 9A-202.

- Essential Service Water (ESW) ~~Pumping Station~~Pump House CTS-01516
- ESW - Piping Room CTS-01518
- UHS - Transfer Piping Room
- Ultimate Heat Sink (UHS)
- Transformer Yard
- Plant Support Buildings

Plant buildings are located such that unacceptable exposure to environmental impact such as wildfires does not occur. Structures are located such that non-safety related structures do not pose unacceptable exposure to safety-related structures. For a fire zone by fire zone review, Table 9A-202 identifies the type and quantity of combustible materials in each fire zone of the site-specific plant structures and provides a summary of the FHA for the associated fire zone. The discussion below reviews the fire hazards for each fire area on an area by area basis. Table 9A-203 shows the fire zone to fire zone interface which also depicts

fire area to fire area boundaries that must be protected for 3-hour fire rated boundaries.

CP COL 9.5(2) Add the following new subsections after DCD Subsection 9A.3.1~~00~~53. CTS-01518

CP COL 9.5(2) **9A.3.~~4~~201 FA7-201-01 A-ESW Pump Room**

The A-ESW pump room is shown on Figure 9A-201. The room contains the train A ESW pump, circuits, and controls. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the ESW pump installation is lube oil and electrical cables. CTS-01516 RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources. RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A ESW system. ~~The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.~~ As such, a fire in this area could only adversely impact the safety train A safe-shutdown functions. The fire would be confined to this area, by fire rated barriers and/or by physical separation. Therefore, equipment within safety trains B, C, and D would remain free of fire damage and able to obtain and maintain safe-shutdown. CTS-01518

Radioactive Release to Environment Evaluation

The ESW pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.202 FA7-201-02 A-ESW Piping Room CTS-01518

The A-ESW Piping Room is shown on Figure 9A-201.The room contains the train A ESW piping connecting between the ESWPT and ESW Pump Room and unit heaters for pipe freeze protection. The walls, floor and ceiling of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. Only the wall and the door between the ESW Piping Room and the Transfer Piping Room and the floor between ESW piping room and ESW Pipe Tunnel B below are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW Piping Room. There are also no significant combustible loading in the

yard area adjacent to the ESW Piping Room. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources. The floor between A-ESW Piping Room and ESW Pipe Tunnel A below is not required to be fire rated because the A-ESW Piping Room and the ESW Pipe Tunnel A contain the same mechanical and electrical train. CTS-01518

Fire Detection and Suppression Features

The ESW Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the A-ESW Piping Room would be confined to this area.The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the A-ESW Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A ESW system. As such, a fire in this area could only impact the safety train A safe-shutdown functions. The fire would be confined to this area by fire rated barriers and/or by physical separation.Therefore, equipment within safety trains B, C, and D would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The ESW piping room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~102~~203 FA7-202-01 A-UHS Transfer Pump Room

CTS-01518

The A-UHS transfer pump room is shown on Figure 9A-201. The room contains an UHS transfer pump capable of transferring water from the A-cooling tower basin. Its circuits and controls are powered by either the C or D Class 1E bus. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the UHS transfer pump installation is lube oil and electrical cables.

CTS-01516

CTS-01516

RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources.

RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized in damage and does not compromise adjacent fire zones and safety-related equipment.

CTS-01516

STD COL 9.5(2)

Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The

fire suppression system is installed under a QA program that ensures system integrity.

CP COL 9.5(2) Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C or D depending on the manual breaker alignment. The transfer pump circuits are protected from a fire in the adjacent ESW pump room to assure the transfer pump can perform its safe-shutdown function for a fire in the train A ESW pump room. As such, a fire in this area could only adversely impact the transfer pump functions from the A-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains A, B, C, or D would remain free of fire damage and able to obtain and maintain safe-shutdown.

STD COL 9.5(2) Radioactive Release to Environment Evaluation

The UHS transfer pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2) **9A.3.204 FA7-202-02 A-UHS Transfer Piping Room** CTS-01518

The A-UHS Transfer Piping Room is shown on Figure 9A-201. The room contains the train A UHS transfer piping and unit heaters for pipe freeze protection. Its circuits and controls are powered by either C or D Class 1E bus. The floor and walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. The floor of this room and the wall and the door between the ESW Piping Room and the UHS Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components. All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the UHS Transfer Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources.

Fire Detection and Suppression Features

The Transfer Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the A-UHS Transfer Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability. CTS-01518

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the A-UHS Transfer Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C or D depending on the manual breaker alignment. These circuits are protected from a fire in the adjacent A-ESW Piping Room to assure the UHS transfer system can perform its safe-shutdown function in the event of a fire in the train A-ESW Piping Room. As such, a fire in this area could only impact the transfer pump functions from the A-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains A, B, C or D would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The A-UHS Transfer Piping Room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~103~~205 FA7-203-01 A-UHS

The A-UHS is shown on Figure 9A-201. A-UHS is a two-fan unit non-combustible constructed cooling tower that serves as the environmental heat sink for safety-related cooling loads served by safety train A ESW system. The unit has two redundant air circulating fans and is constructed chiefly of reinforced concrete.

Fire Detection and Suppression Features

The principal fire protection feature of the UHS cooling tower safety train A is that it is constructed on non-combustible construction. A-UHS is fully separated from the adjacent B-UHS by a 3-hour fire rated wall of reinforced concrete. Since the

combustible materials associated with the cooling tower structure are minimal and a fire would be confined to this specific safety train, no automatic fire detection or suppression feature are provided.

STD COL 9.5(2) Smoke Control Features

The cooling tower structure is an outside component and any smoke from a fire such as associated with a fan motor would be freely released to the surrounding plant environment and not constitute an impediment to fire brigade response.

Fire Protection Adequacy Evaluation

Based on the minimal combustible material and the confinement of any fire that could occur to the location of occurrence, fire protection provided by the noncombustible construction is deemed adequate.

Fire Protection System Integrity

Fire protection of the cooling tower is inherent in its non-combustible design. Therefore, the cooling tower structure does not require automatic or manual fire suppression systems. The fire protection system integrity for this area is assured by the significant fire protection provided by the cooling tower's concrete structure, which provides fire separation.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A ESW system and the associated ESW cooling for the train A CCW safe-shutdown cooling functions. As such, a fire in this are could adversely impact safety train A safe-shutdown functions. Since the fire would be confined to this area, equipment within safety trains B, C, and D would remain free of fire damage and able to obtain safe-shutdown.

Radioactive Release to Environment Evaluation

The A-UHS is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the cooling tower structure is not deemed capable of producing a radioactive release.

CP COL 9.5(2) **9A.3.~~104~~206 FA7-204-01 B-ESW Pump Room** CTS-01518

The B-ESW pump room is shown on Figure 9A-201. The room contains the train B ESW pump, circuits, and controls. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with CTS-01516 RCOL2_09.04.05-23 S01

3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the ESW pump installation is lube oil and electrical cables. RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources. RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train B ESW system. ~~The electrical circuits from other safety trains in this area will be protected by a one hour fire rated wrap.~~ As such, a fire in this area could only CTS-01518

adversely impact safety train B safe-shutdown functions. The fire would be confined to this area, by fire rated barriers and/or by physical separation. Therefore, equipment within safety trains A, C and D would remain free of fire damage and able to obtain and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The ESW pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.207 FA7-204-02 B-ESW Piping Room

CTS-01518

The B-ESW Piping Room is shown on Figure 9A-201. The room contains the train B ESW piping connecting between the ESWPT and ESW Pump Room and unit heaters for pipe freeze protection. The walls, floor and ceiling of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. Only the wall and the door between the ESW Piping Room and the Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW Piping Room. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources. The floor between B-ESW Piping Room and ESW Pipe Tunnel B below is not required to be fire rated because the B-ESW Piping Room and the ESW Pipe Tunnel B contain the same mechanical and electrical train.

Fire Detection and Suppression Features

The ESW Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the B-ESW Piping Room would be confined to this area.The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries. CTS-01518

Fire Protection System Integrity

Since there are no automatic or manual systems within the B-ESW Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train B ESW system. As such, a fire in this area could only impact the safety train B safe-shutdown functions. The fire would be confined to this area by fire rated barriers and/or by physical separation.Therefore, equipment within safety trains A, C, and D would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The ESW piping room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~105~~208 FA7-205-01 B-UHS Transfer Pump Room

The B-UHS transfer pump room is shown on Figure 9A-201. The room contains an UHS transfer pump capable of transferring water from the B-cooling tower basin. Its circuits and controls are powered by either the C or D Class 1E bus. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the UHS transfer pump installation is lube oil and electrical cables. CTS-01516 CTS-01516 RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources. RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area. RCOL2_09.04.05-23 S01

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

CP COL 9.5(2) Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C or D depending on the manual breaker alignment. The transfer pump circuits are protected from a fire in the adjacent ESW pump room to assure the transfer pump can perform its safe-shutdown function for a fire in the train B ESW pump room. As such, a fire in this area could only adversely impact the transfer pump functions from the B-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains A, B, C, or D would remain free of fire damage and able to obtain and maintain safe-shutdown.

STD COL 9.5(2) Radioactive Release to Environment Evaluation

The UHS transfer pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within

the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.209 FA7-205-02 B-UHS Transfer Piping Room

CTS-01518

The B-UHS Transfer Piping Room is shown on Figure 9A-201.The room contains the train B UHS transfer piping and unit heaters for pipe freeze protection. Its circuits and controls are powered by either C or D Class 1E bus. The floor and walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. The floor of this room and the wall and the door between the ESW Piping Room and the UHS Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the UHS Transfer Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources.

Fire Detection and Suppression Features

The Transfer Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the B-UHS Transfer Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the B-UHS Transfer Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C or D depending on the manual breaker alignment. These circuits are protected

from a fire in the adjacent B-ESW Piping Room to assure the UHS transfer system can perform its safe-shutdown function in the event of a fire in the train B-ESW Piping Room. As such, a fire in this area could only impact the transfer pump functions from the B-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains A, B, C or D would remain free of fire damage and able to achieve and maintain safe-shutdown. CTS-01518

Radioactive Release to Environment Evaluation

The B-UHS Transfer Piping Room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~106~~210 FA7-206-01 B-UHS

The B-UHS is shown on Figure 9A-201. B-UHS is a two-fan unit non-combustible constructed cooling tower that serves as the environmental heat sink for safety-related cooling loads served by safety train B ESW system. The unit has two redundant air circulating fans and is constructed chiefly of reinforced concrete.

Fire Detection and Suppression Features

The principal fire protection feature of the UHS cooling tower safety train B is that it is constructed on non-combustible construction. B-UHS is fully separated from the adjacent A-UHS by a 3-hour fire rated wall of reinforced concrete. Since the combustible materials associated with the cooling tower structure are minimal and a fire would be confined to this specific safety train, no automatic fire detection or suppression feature are provided.

STD COL 9.5(2)

Smoke Control Features

The cooling tower structure is an outside component and any smoke from a fire such as associated with a fan motor would be freely released to the surrounding plant environment and not constitute an impediment to fire brigade response.

Fire Protection Adequacy Evaluation

Based on the minimal combustible material and the confinement of any fire that could occur to the location of occurrence, fire protection provided by the noncombustible construction is deemed adequate.

Fire Protection System Integrity

Fire protection of the cooling tower is inherent in its non-combustible design. Therefore, the cooling tower structure does not require automatic or manual fire suppression systems. The fire protection system integrity for this area is assured

by the significant fire protection provided by the cooling tower's concrete structure, which provides fire separation.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train B ESW system and the associated ESW cooling for the train B CCW safe-shutdown cooling functions. As such, a fire in this are could adversely impact safety train B safe-shutdown functions. Since the fire would be confined to this area, equipment within safety trains A, C, and D would remain free of fire damage and able to obtain safe-shutdown.

Radioactive Release to Environment Evaluation

The B-UHS is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the cooling tower structure is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~107~~211 FA7-207-01 C-ESW Pump Room

CTS-01518

The C-ESW pump room is shown on Figure 9A-201. The room contains the train C ESW pump, circuits, and controls. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the ESW pump installation is lube oil and electrical cables.

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The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources.

RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is

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minimized and does not compromise adjacent fire zones and safety-related equipment.

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C-ESW system. ~~The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.~~ As such, a fire in this area could only adversely impact the safety train C safe-shutdown functions. The fire would be confined to this area, by fire rated barriers and/or by physical separation. Therefore, equipment within safety trains A, B, and D would remain free of fire damage and able to obtain and maintain safe-shutdown. CTS-01518

Radioactive Release to Environment Evaluation

The ESW pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2) **9A.3.212 FA7-207-02 C-ESW Piping Room** CTS-01518

The C-ESW Piping Room is shown on Figure 9A-201. The room contains the train C ESW piping connecting between the ESWPT and ESW Pump Room and unit heaters for pipe freeze protection. The walls, floor and ceiling of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. Only the wall and the

door between the ESW Piping Room and the Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading. CTS-01518

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW Piping Room. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources. The floor between C-ESW Piping Room and ESW Pipe Tunnel C below is not required to be fire rated because the C-ESW Piping Room and the ESW Pipe Tunnel C contain the same mechanical and electrical train.

Fire Detection and Suppression Features

The ESW Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the C-ESW Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the C-ESW Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C ESW system. As such, a fire in this area could only impact the safety train C safe-shutdown functions. The fire would be confined to this area by fire rated barriers and/or by physical separation. Therefore, equipment within safety trains A, B, and D would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The ESW piping room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release. CTS-01518

CP COL 9.5(2)

9A.3.~~108~~213 FA7-208-01 C-UHS Transfer Pump Room

The C-UHS transfer pump room is shown on Figure 9A-201. The room contains an UHS transfer pump capable of transferring water from the C-cooling tower basin. Its circuits and controls are powered by either the A or B Class 1E bus. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the UHS transfer pump installation is lube oil and electrical cables. CTS-01516 CTS-01516 RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources. RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized in damage and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2)

Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

CP COL 9.5(2) Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A or B depending on the manual breaker alignment. The transfer pump circuits are protected from a fire in the adjacent ESW pump room to assure the transfer pump can perform its safe-shutdown function for a fire in the train C ESW pump room. As such, a fire in this area could only adversely impact the transfer pump functions from the C-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains C, D, A, or B would remain free of fire damage and able to obtain and maintain safe-shutdown.

STD COL 9.5(2) Radioactive Release to Environment Evaluation

The UHS transfer pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2) **9A.3.214 FA7-208-02 C-UHS Transfer Piping Room** CTS-01518

The C-UHS Transfer Piping Room is shown on Figure 9A-201.The room contains the train C UHS transfer piping and unit heaters for pipe freeze protection. Its circuits and controls are powered by either A or B Class 1E bus. The floor and walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. The floor of this room and the wall and the door between the ESW Piping Room and the UHS Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the UHS Transfer Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources.

Fire Detection and Suppression Features

The Transfer Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers. CTS-01518

Smoke Control Features

Any smoke generated within the C-UHS Transfer Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the C-UHS Transfer Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A or B depending on the manual breaker alignment. These circuits are protected from a fire in the adjacent C-ESW Piping Room to assure the UHS transfer system can perform its safe-shutdown function in the event of a fire in the train C-ESW Piping Room. As such, a fire in this area could only impact the transfer pump functions from the C-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains C, D, A or B would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The C-UHS Transfer Piping Room is a non-radiological area with no piping system containingradioactive material and no other radioactive material located within the area. Assuch, any fire that could occur within the piping room is not deemed capable ofproducing a radioactive release.

CP COL 9.5(2)

9A.3.~~109~~215 FA7-209-01 C-UHS

STD COL 9.5(2)

The C-UHS is shown on Figure 9A-201. C-UHS is a two-fan unit non-combustible constructed cooling tower that serves as the environmental heat sink for safety-related cooling loads served by safety train C ESW system. The unit has two redundant air circulating fans and is constructed chiefly of reinforced concrete.

Fire Detection and Suppression Features

The principal fire protection feature of the UHS cooling tower safety train C is that it is constructed on non-combustible construction. C-UHS is fully separated from the adjacent D-UHS by a 3-hour fire rated wall of reinforced concrete. Since the combustible materials associated with the cooling tower structure are minimal and a fire would be confined to this specific safety train, no automatic fire detection or suppression feature are provided.

Smoke Control Features

The cooling tower structure is an outside component and any smoke from a fire such as associated with a fan motor would be freely released to the surrounding plant environment and not constitute an impediment to fire brigade response.

Fire Protection Adequacy Evaluation

Based on the minimal combustible material and the confinement of any fire that could occur to the location of occurrence, fire protection provided by the noncombustible construction is deemed adequate.

Fire Protection System Integrity

Fire protection of the cooling tower is inherent in its non-combustible design. Therefore, the cooling tower structure does not require automatic or manual fire suppression systems. The fire protection system integrity for this area is assured by the significant fire protection provided by the cooling tower's concrete structure, which provides fire separation.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train C ESW system and the associated ESW cooling for the train C CCW safe-shutdown cooling functions. As such, a fire in this are could adversely impact safety train C safe-shutdown functions. Since the fire would be confined to this area, equipment within safety trains A, B, and D would remain free of fire damage and able to obtain safe-shutdown.

Radioactive Release to Environment Evaluation

The C-UHS is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the cooling tower structure is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~110~~216 FA7-210-01 D-ESW Pump Room

CTS-01518

The D-ESW pump room is shown on Figure 9A-201. The room contains the train D ESW pump, circuits, and controls. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump

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room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the ESW pump installation is lube oil and electrical cables. RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources. RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area.

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train D ESW system. ~~The electrical circuits from other safety trains in this area will be protected by a one-hour fire rated wrap.~~ As such, a fire in this area could only adversely impact the safety train D safe-shutdown functions. The fire would be confined to this area, by fire rated barriers and/or by physical separation. Therefore, equipment within safety trains A, B and C would remain free of fire damage and able to obtain and maintain safe-shutdown. CTS-01518

Radioactive Release to Environment Evaluation

The ESW pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.217 FA7-210-02 D-ESW Piping Room CTS-01518

The D-ESW Piping Room is shown on Figure 9A-201.The room contains the train D ESW piping connecting between the ESWPT and ESW Pump Room and unit heaters for pipe freeze protection. The walls, floor and ceiling of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. Only the wall and the door between the ESW Piping Room and the Transfer Piping Room and the floor between ESW piping room and ESW Pipe Tunnel C below are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components.All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW Piping Room. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources. The floor between D-ESW Piping Room and ESW Pipe Tunnel D below is not required to be fire rated because the D-ESW Piping Room and the ESW Pipe Tunnel D contain the same mechanical and electrical train.

Fire Detection and Suppression Features

The ESW Piping Room is provided manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the D-ESW Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the D-ESW Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train D ESW system. As such, a fire in this area could only impact the safety train D safe-shutdown functions. The fire would be confined to this area by fire rated barriers and/or by physical separation.Therefore, equipment within safety trains A, B, and C would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The ESW piping room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CTS-01518

CP COL 9.5(2)

9A.3.~~111~~218 FA7-211-01 D-UHS Transfer Pump Room

The D-UHS transfer pump room is shown on Figure 9A-201. The room contains an UHS transfer pump capable of transferring water from the D-cooling tower basin. Its circuits and controls are powered by either the A or B Class 1E bus. The walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. ~~The door and all openings or penetrations into this room~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals or components. The wall between the pump rooms is water tight. The combustible material associated with the UHS transfer pump installation is lube oil and electrical cables.

CTS-01516

CTS-01516

RCOL2_09.04.05-23 S01

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the ESW pump house. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant pump houses with no intervening combustible material or ignition sources.

RCOL2_09.04.05-23 S01

Each floor drain consists of a single straight pipe that extends down below the lower water level of the basin. This arrangement will preclude the transfer of fire between the pump rooms through the basin area. RCOL2_09.04.05-23 S01

Fire Detection and Suppression Features

The room is provided with automatic fire detection and automatic wet-pipe sprinkler fire suppression in accordance with RG 1.189 Positions 3.1.1.k, 3.2.1.j and 6.1.9. This will assure that any fire damage occurring within this room is minimized in damage and does not compromise adjacent fire zones and safety-related equipment. CTS-01516

STD COL 9.5(2) Smoke Control Features

The room's HVAC exhaust will normally ventilate any smoke generated within the room. The plant fire brigade using portable fans and flexible ducting can supplement smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and low combustible fire loading. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

The wet-pipe sprinkler system and standpipe is seismically supported such that the failure of the system piping during a design basis seismic event will not damage any of the safety-related equipment in the room. The fire suppression system is designed to NFPA codes and standards, using approved material. The fire suppression system is installed under a QA program that ensures system integrity.

CP COL 9.5(2) Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train A or B depending on the manual breaker alignment. The transfer pump circuits are protected from a fire in the adjacent ESW pump room to assure the transfer pump can perform its safe-shutdown function for a fire in the train D ESW pump room. As such, a fire in this area could only adversely impact the transfer pump functions from the D-cooling tower basin. Since the fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains C, D, A, or B would remain free of fire damage and able to obtain and maintain safe-shutdown.

STD COL 9.5(2) Radioactive Release to Environment Evaluation

The UHS transfer pump room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the pump room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.219 FA7-211-02 D-UHS Transfer Piping Room

CTS-01518

The D-UHS Transfer Piping Room is shown on Figure 9A-201.The room contains the train D UHS transfer piping and unit heaters for pipe freeze protection. Its circuits and controls are powered by either A or B Class 1E bus. The floor and walls of this room are of reinforced concrete construction which easily provides a fire resistive capability exceeding 3-hour fire resistance as defined by ASTM E-119. The floor of this room and the wall and the door between the ESW Piping Room and the UHS Transfer Piping Room are required to have a 3-hour fire rating. All openings and penetrations in the 3-hour fire rated barriers are protected with3-hour fire resistive seals or components. All cables running through this area are enclosed in covered wire-ways and therefore do not contribute to the combustible fire loading.

The ceiling and all exterior walls are not required to be fire rated because there are no redundant or dedicated shutdown systems within the yard area adjacent to the UHS Transfer Piping Room. There are also no significant combustible loading in the yard area adjacent to the ESW pump house. There is approximately 100 feet between redundant piping rooms with no intervening combustible material or ignition sources.

Fire Detection and Suppression Features

The Transfer Piping Room is provided with manual fire alarm pull station. Primary fire suppression is provided from portable fire extinguishers.

Smoke Control Features

Any smoke generated within the D-UHS Transfer Piping Room would be confined to this area. The plant fire brigade using portable fans and flexible ducting can be employed to provide smoke removal capability.

Fire Protection Adequacy Evaluation

A fire is not expected to occur within this area due to the limited ignition sources and negligible combustible fire loading from transients only. Should a fire occur, it would not propagate outside the fire area boundaries.

Fire Protection System Integrity

Since there are no automatic or manual systems within the D-UHS Transfer Piping Room, the fire protection system integrity for this area is assured by the structural fire protection.

Safe Shutdown Evaluation

CTS-01518

The electrical circuits located within this area are associated with the safety train A or B depending on the manual breaker alignment. These circuits are protected from a fire in the adjacent D-ESW Piping Room to assure the UHS transfer system can perform its safe-shutdown function in the event of a fire in the train D-ESW Piping Room. As such, a fire in this area could only impact the transfer pump functions from the D-cooling tower basin. The fire would be confined to this area by the 3-hour fire rated walls. Therefore, equipment within safety trains C, D, A or B would remain free of fire damage and able to achieve and maintain safe-shutdown.

Radioactive Release to Environment Evaluation

The D-UHS Transfer Piping Room is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the piping room is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~112~~220 FA7-212-01 D-UHS

STD COL 9.5(2)

The D-UHS is shown on Figure 9A-201. D-UHS is a two-fan unit non-combustible constructed cooling tower that serves as the environmental heat sink for safety-related cooling loads served by safety train D ESW system. The unit has two redundant air circulating fans and is constructed chiefly of reinforced concrete.

Fire Detection and Suppression Features

The principal fire protection feature of the UHS cooling tower safety train D is that it is constructed on non-combustible construction. D-UHS is fully separated from the adjacent C-UHS by a 3-hour fire rated wall of reinforced concrete. Since the combustible materials associated with the cooling tower structure are minimal and a fire would be confined to this specific safety train, no automatic fire detection or suppression feature are provided.

Smoke Control Features

The cooling tower structure is an outside component and any smoke from a fire such as associated with a fan motor would be freely released to the surrounding plant environment and not constitute an impediment to fire brigade response.

Fire Protection Adequacy Evaluation

Based on the minimal combustible material and the confinement of any fire that could occur to place of occurrence, fire protection provided by the non-combustible construction is deemed adequate.

Fire Protection System Integrity

Fire protection of the cooling tower is inherent in its non-combustible design. Therefore, the cooling tower structure does not require automatic or manual fire suppression systems. The fire protection system integrity for this area is assured by the significant fire protection provided by the cooling tower's concrete structure, which provides fire separation.

Safe Shutdown Evaluation

The electrical circuits located within this area are associated with the safety train D ESW system and the associated ESW cooling for the train D CCW safe-shutdown cooling functions. As such, a fire in this are could adversely impact safety train D safe-shutdown functions. Since the fire would be confined to this area, equipment within safety trains A, B, and C would remain free of fire damage and able to obtain safe-shutdown.

Radioactive Release to Environment Evaluation

The D-UHS is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the cooling tower structure is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~113~~221 FA7-301 Transformer Yard

CTS-01518

The transformer yard is shown in Figure 9A-202. The area is located on the south end of each unit's turbine building. Due to the significant plant impact of a transformer fire, the transformer yard is designated as fire area FA7-301. The fire zones in FA7-301 are presented in Table 9A-201.

The transformer yard is located closer than 50 ft. to the turbine building and the 345kV GIS Building for the RATs due to site space restrictions. To compensate for the close spacing, a freestanding 3-hour fire rated barrier separates the transformer yard from the turbine building. A one-hour fire rated barrier separates each transformer from any adjacent transformer. The separation features meet RG 1.189, NFPA 804, and nuclear property insurer's requirements.

STD COL 9.5(2)

Provision for drainage and oil spill containment is in accordance with NFPA 804, and IEEE 980.

Fire Detection and Suppression Features

Each transformer is provided with an automatic fire detection system (heat detectors) which alarms to the plant fire alarm system and actuates an automatic water spray system installed in accordance with NFPA 15 (Reference 9.5.1-22) requirements.

Smoke Control Features

The transformers are outside components and any smoke from a fire such as associated with a transformer fluid fire would be freely released to the surrounding plant environment and not constitute an impediment to fire brigade response.

Fire Protection Adequacy Evaluation

The fire protection features installed for the transformer yard, fire walls, automatic fire detection and water spray systems, meet industry accepted practices, NFPA code guidance, NRC guidance, and nuclear plant property insurer's recommendations. On this basis, the fire protection features are considered adequate for the fire hazard present.

Fire Protection System Integrity

The firewalls for the transformer yard are freestanding walls designed for wind resistance and seismic occurrences. The fire protection systems are designed, installed, and tested in accordance with NFPA codes and standards under a nuclear quality assurance program. This assures a high degree of fire protection system integrity required for an operating nuclear power plant.

Safe Shutdown Evaluation

A fire involving one of the transformer yard's units would likely necessitate plant shutdown. The yard is located away from safety-related systems, components, and structures and would not spread to impact such features due to the firewalls, automatic fire detection and suppression systems provided. Since none of the four safety trains of equipment provided to assure plant shutdown would be affected, no adverse impact of safe-shutdown would result from a fire in the transformer yard.

Radioactive Release to Environment Evaluation

The transformer yard is a non-radiological area with no piping system containing radioactive material and no other radioactive material located within the area. As such, any fire that could occur within the transformer yard is not deemed capable of producing a radioactive release.

CP COL 9.5(2)

9A.3.~~114~~222 Miscellaneous Plant Support Structures

CTS-01518

The CPNPP Units 3 and 4 design features a number of miscellaneous plant support structures such as the office building, security structures, warehouse, fire pump house, makeup pumping station, circulating water system cooling towers, maintenance and storage building, auxiliary boiler building, etc. These structures do not contain any equipment that performs a safety-related function. The structures are located on the CPNPP Units 3 and 4 site such that they do not represent an unacceptable fire exposure to any safety-related structure, system, or component.

CP COL 9.5(2)

Table 9A-201 (Sheet 1 of 2) CTS-01518

Fire Areas and Fire Zones

Building	Train	Fire Area	Fire Area Designation	Fire Zone	Fire Zone Designation	
O/B	A	FA7-201	A-ESW Pump Room	FA7-201-01	A-ESW Pump Room	
O/B	A	FA7-201	A-ESW Piping Room	FA7-201-02	A-ESW Piping Room	CTS-01518
O/B	D	FA7-202	A-UHS Transfer Pump Room	FA7-202-01	A-UHS Transfer Pump Room	
O/B	D	FA7-202	A-UHS Transfer Piping Room	FA7-202-02	A-UHS Transfer Piping Room	CTS-01518
O/B	A	FA7-203	A-UHS	FA7-203-01	A-UHS	
O/B	B	FA7-204	B-ESW Pump Room	FA7-204-01	B-ESW Pump Room	
O/B	B	FA7-204	B-ESW Piping Room	FA7-204-02	B-ESW Piping Room	CTS-01518
O/B	D	FA7-205	B-UHS Transfer Pump Room	FA7-205-01	B-UHS Transfer Pump Room	
O/B	D	FA7-205	B-UHS Transfer Piping Room	FA7-205-02	B-UHS Transfer Piping Room	CTS-01518
O/B	B	FA7-206	B-UHS	FA7-206-01	B-UHS	
O/B	C	FA7-207	C-ESW Pump Room	FA7-207-01	C-ESW Pump Room	
O/B	C	FA7-207	C-ESW Piping Room	FA7-207-02	C-ESW Piping Room	CTS-01518
O/B	A	FA7-208	C-UHS Transfer Pump Room	FA7-208-01	C-UHS Transfer Pump Room	
O/B	A	FA7-208	C-UHS Transfer Piping Room	FA7-208-02	C-UHS Transfer Piping Room	CTS-01518
O/B	C	FA7-209	C-UHS	FA7-209-01	C-UHS	
O/B	D	FA7-210	D-ESW Pump Room	FA7-210-01	D-ESW Pump Room	
O/B	D	FA7-210	D-ESW Piping Room	FA7-210-02	D-ESW Piping Room	CTS-01518
O/B	A	FA7-211	D-UHS Transfer Pump Room	FA7-211-01	D-UHS Transfer Pump Room	
O/B	A	FA7-211	D-UHS Transfer Piping Room	FA7-211-02	D-UHS Transfer Piping Room	CTS-01518
O/B	D	FA7-212	D-UHS	FA7-212-01	D-UHS	
O/B	N	FA7-301	Transformer Yard	FA7-301-01	Main Generator Excitation Transformer Zone	
O/B	N	FA7-301	Transformer Yard	FA7-301-02	A-Unit Auxiliary Transformer Zone	
O/B	N	FA7-301	Transformer Yard	FA7-301-03	B-Unit Auxiliary Transformer Zone	
O/B	N	FA7-301	Transformer Yard	FA7-301-04	C-Unit Auxiliary Transformer Zone	
O/B	N	FA7-301	Transformer Yard	FA7-301-05	Spare Unit Auxiliary Transformer Zone	

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Table 9A-201 (Sheet 2 of 2)

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Fire Areas and Fire Zones

Building	Train	Fire Area	Fire Area Designation	Fire Zone	Fire Zone Designation
O/B	N	FA7-301	Transformer Yard	FA7-301-06	Spare Main Transformer Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-07	C-Main Transformer Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-08	B-Main Transformer Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-09	A-Main Transformer Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-10	Reserve Auxiliary Transformer 1 Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-11	Reserve Auxiliary Transformer 2 Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-12	Reserve Auxiliary Transformer 4 Zone
O/B	N	FA7-301	Transformer Yard	FA7-301-13	Reserve Auxiliary Transformer 3 Zone

Table 9A-202 (Sheet 1 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-201-01**
Building:	**ESW Pump~~ing Station~~ House**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~95~~201**

Area Designation:	**A-ESW Pump Room**
Zone Designation:	**A-ESW Pump Room**
Associated Safety Division(s)	**A**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-02	**~~-~~FA7-203-01**	-
	FA7-202-01		
	FA7-203-01		
	FA7-206-01		

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection – Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression – Primary	**Fire Suppression - Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~8.1E+03~~1.0E+04**
Maximum Anticipated Combustible Loading:	**~~9.8E+03~~1.2E+04**

Floor Area (ft^2)
~~1650~~ 1,300

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.**

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Table 9A-202 (Sheet 2 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-201-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.202
Area Designation:	A-ESW Piping Room
Zone Designation:	A-ESW Piping Room
Associated Safety Division(s)	A

Applicable Regulatory and Code Ref(s): IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-01 FA7-202-02 FA7-203-01	FA7-101-01 FA7-102-01	-

Fire Barrier Description:
Only the wall and the floor between ESW piping room and B-ESW piping tunnel are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3- hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
200

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.

Table 9A-202 (Sheet 3 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-202-01**
Building:	**ESW Pump~~ing Station~~ House**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~06~~203**
Area Designation:	**A-UHS Transfer Pump Room**
Zone Designation:	**A-UHS Transfer Pump Room**
Associated Safety Division(s)	**D**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-01 FA7-202-02 FA7-203-01	~~-~~FA7-203-01	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3 hour fire resistance rating form the boundaries of this room. The door to the room is 3 hour fire rated and all openings and penetrations into the room are rated to provide 3 hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression – Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	~~8.9~~2.1**E+04**	
Maximum Anticipated Combustible Loading:	~~1.1E+05~~2.5E+04	~~150~~650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train.** **Trains A, B, C, and D ESW functions remain free of fire damage.**

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Table 9A-202 (Sheet 4 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-202-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.204

Area Designation:	A-UHS Transfer Piping Room
Zone Designation:	A-UHS Transfer Piping Room
Associated Safety Division(s)	D

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-02 FA7-202-01 FA7-203-01	FA7-102-01	-

Fire Barrier Description:
The wall with exception of the wall between transfer pump room and UHS transfer piping room, and floor are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
90

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Trains A, B, C, and D ESW functions remain free of fire damage.

Table 9A-202 (Sheet 5 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-203-01**
Building:	**UHS**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~07~~205**
Area Designation:	**A-UHS**
Zone Designation:	**A-UHS**
Associated Safety Division(s)	**A**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-01	**-**	**~~-~~FA7-201-01**
	FA7-201-02		**FA7-202-01**
	FA7-202-01		
	FA7-202-02		
	FA7-206-01		

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~The pump bay ceiling is 3-hour fire rated. The walls are made of reinforced concrete or other material that can provide a minimum of 3-hour fire rating. They form the boundaries of this fire area.

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Potential Combustibles	
Item	Heat Release (Btu)
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
There is no automatic detection.	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Fire Hose Station	**Portable Fire Extinguisher**

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**An unsuppressed fire would self extinguish due to lack of combustible continuity but potentially result in loss of the cooling tower function. Trains B, C, and D remain free of fire damage.**

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Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	**~~7.9~~8.2E+02**	**~~13,600~~ 13,050**
Maximum Anticipated Combustible Loading:	**~~9.5~~9.9E+02**	

Table 9A-202 (Sheet 6 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-204-01**			
Building:	**ESW Pump~~ing Station~~ House**	Area Designation:	**B-ESW Pump Room**	Applicable Regulatory and Code Ref(s): **IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804** RCOL2_09.04.05-23 S01
Floor(s):	**1**	Zone Designation:	**B-ESW Pump Room**	
DCD Fig:	**9A-201**			
DCD Sect:	**9A.3.~~98~~206**	Associated Safety Division(s)	**B**	CTS-01518

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-204-02 **FA7-205-01** **FA7-206-01**	**~~-~~FA7-206-01**	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression – Primary	**Fire Suppression - Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	**~~8.1E+03~~1.0E+04**	**~~1650~~ 1,300**
Maximum Anticipated Combustible Loading:	**~~9.8E+03~~1.2E+04**	

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.**

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Table 9A-202 (Sheet 7 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-204-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.207
Area Designation:	B-ESW Piping Room
Zone Designation:	B-ESW Piping Room
Associated Safety Division(s)	B

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-204-01 FA7-205-02 FA7-206-01	FA7-102-01	-

Fire Barrier Description:
Only the wall is required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
100

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.

Table 9A-202 (Sheet 8 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-205-01**
Building:	**ESW Pump~~ing Station~~ House**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~99~~208**
Area Designation:	**B-UHS Transfer Pump Room**
Zone Designation:	**B-UHS Transfer Pump Room**
Associated Safety Division(s)	**D**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-204-01 FA7-205-02 FA7-206-01	~~-~~FA7-206-01	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression – Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	~~8.9~~2.1E+04	~~150~~650
Maximum Anticipated Combustible Loading:	~~1.1E+05~~2.5E+04	

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train.** **Trains A, B, C, and D ESW functions remain free of fire damage.**

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Table 9A-202 (Sheet 9 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-205-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.209
Area Designation:	B-UHS Transfer Piping Room
Zone Designation:	B-UHS Transfer Piping Room
Associated Safety Division(s)	D

Applicable Regulatory and Code Ref(s): IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-204-02 FA7-205-01 FA7-206-01	FA7-102-01	-

Fire Barrier Description: The wall with exception of the wall between transfer pump room and UHS transfer piping room, and floor are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
90

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Trains A, B, C, and D ESW functions remain free of fire damage.

Table 9A-202 (Sheet 10 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-206-01**
Building:	**UHS**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~400~~210**
Area Designation:	**B-UHS**
Zone Designation:	**B-UHS**
Associated Safety Division(s)	**B**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-201-01 FA7-203-01 FA7-204-01 FA7-204-02 FA7-205-01 FA7-205-02	-	~~-~~FA7-204-01 FA7-205-01

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~The pump bay ceiling is 3-hour fire rated. The walls are made of reinforced concrete or other material that can provide a minimum of 3-hour fire rating. They form the boundaries of this fire area.

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Potential Combustibles	
Item	Heat Release (Btu)
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection – Backup
There is no automatic detection.	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Fire Hose Station	**Portable Fire Extinguisher**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~7.9~~8.2E+02**
Maximum Anticipated Combustible Loading:	**~~9.5~~9.9E+02**

Floor Area (ft^2)
~~13,600~~ 13,050

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**An unsuppressed fire would self extinguish due to lack of combustible continuity but potentially result in loss of the cooling tower function. Trains A, C, and D remain free of fire damage.**

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Table 9A-202 (Sheet 11 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-207-01**				
Building:	**ESW Pump~~ing Station~~ House**	Area Designation:	**C-ESW Pump Room**	Applicable Regulatory and Code Ref(s):	**IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804**
Floor(s):	**1**	Zone Designation:	**C-ESW Pump Room**		
DCD Fig:	**9A-201**				
DCD Sect:	**9A.3.~~404~~211**	Associated Safety Division(s)	**C**		

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-207-02	**~~-~~FA7-209-01**	**-**
	FA7-208-01		
	FA7-209-01		
	FA7-212-01		

Fire Barrier Description:

~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection – Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.**

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Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~8.1E+03~~1.0E+04**
Maximum Anticipated Combustible Loading:	**~~9.8E+03~~1.2E+04**

Floor Area (ft^2)
~~1650~~ 1,300

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Table 9A-202 (Sheet 12 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-207-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.212
Area Designation:	C-ESW Piping Room
Zone Designation:	C-ESW Piping Room
Associated Safety Division(s)	C

Applicable Regulatory and Code Ref(s): IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-207-01 FA7-208-02 FA7-209-01	FA7-103-01	-

Fire Barrier Description: Only the wall is required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
100

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.

Table 9A-202 (Sheet 13 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-208-01**
Building:	**ESW Pump~~ing Station~~ House**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~402~~213**
Area Designation:	**C-UHS Transfer Pump Room**
Zone Designation:	**C-UHS Transfer Pump Room**
Associated Safety Division(s):	**A**
Applicable Regulatory and Code Ref(s):	**IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804**

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-207-01 FA7-208-02 FA7-209-01	~~-~~FA7-209-01	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression – Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~8.9~~2.1E+04**
Maximum Anticipated Combustible Loading:	**~~1.1E+05~~2.5E+04**

Floor Area (ft^2)
~~150~~650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train.** **Trains A, B, C, and D ESW functions remain free of fire damage.**

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Table 9A-202 (Sheet 14 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-208-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.214
Area Designation:	C-UHS Transfer Piping Room
Zone Designation:	C-UHS Transfer Piping Room
Associated Safety Division(s)	A

Applicable Regulatory and Code Ref(s): IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-207-02 FA7-208-01 FA7-209-01	FA7-103-01	-

Fire Barrier Description:
The wall with exception of the wall between transfer pump room and UHS transfer piping room, and floor are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
90

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Trains A, B, C, and D ESW functions remain free of fire damage.

Table 9A-202 (Sheet 15 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-209-01**
Building:	**UHS**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~403~~215**
Area Designation:	**C-UHS**
Zone Designation:	**C-UHS**
Associated Safety Division(s)	**C**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-207-01	**-**	**~~-~~FA7-207-01**
	FA7-212-01		**FA7-208-01**
	FA7-207-02		
	FA7-208-01		
	FA7-208-02		

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~The pump bay ceiling is 3-hour fire rated. The walls are made of reinforced concrete or other material that can provide a minimum of 3-hour fire rating. They form the boundaries of this fire area.

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Potential Combustibles	
Item	Heat Release (Btu)
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
There is no automatic detection.	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Fire Hose Station	**Portable Fire Extinguisher**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~7.0~~8.2E+02**
Maximum Anticipated Combustible Loading:	**~~9.5~~9.9E+02**

Floor Area (ft^2)
~~13,600~~ 13,050

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**An unsuppressed fire would self extinguish due to lack of combustible continuity but potentially result in loss of the cooling tower function. Trains A, B, and D remain free of fire damage.**

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Table 9A-202 (Sheet 16 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-210-01**				
Building:	**ESW Pump~~ing Station~~ House**	Area Designation:	**D-ESW Pump Room**	Applicable Regulatory and Code Ref(s):	**IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804**
Floor(s):	**1**	Zone Designation:	**D-ESW Pump Room**		
DCD Fig:	**9A-201**				
DCD Sect:	**9A.3.~~404~~216**	Associated Safety Division(s)	**D**		

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-110-02 FA7-211-01 FA7-212-01	~~-~~FA7-212-01	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression – Primary	**Fire Suppression - Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	~~8.1E+03~~1.0E+04	~~1650~~ 1,300
Maximum Anticipated Combustible Loading:	~~9.8E+03~~1.2E+04	

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train.** **Three trains remain free from the fire damage.**

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Table 9A-202 (Sheet 17 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-210-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.217
Area Designation:	C-UHS Transfer Piping Room
Zone Designation:	C-UHS Transfer Piping Room
Associated Safety Division(s)	D

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 13, 14, 72 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-210-01 FA7-211-02 FA7-212-01	FA7-103-01 FA7-104-01	-

Fire Barrier Description:
Only the wall and the floor between ESW piping room and C-ESW piping tunnel are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3- hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
200

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Three trains remain free from the fire damage.

Table 9A-202 (Sheet 18 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-211-01**				
Building:	**ESW Pump~~ing Station~~ House**	Area Designation:	**D-UHS Transfer Pump Room**	Applicable Regulatory and Code Ref(s):	**IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804**
Floor(s):	**1**	Zone Designation:	**D-UHS Transfer Pump Room**		
DCD Fig:	**9A-201**				
DCD Sect:	**9A.3.~~105~~218**	Associated Safety Division(s)	**A**		

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-210-01 FA7-211-02 FA7-212-01	~~-~~FA7-212-01	-

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3 hour fire resistance rating form the boundaries of this room. The door to the room is 3 hour fire rated and all openings and penetrations into the room are rated to provide 3 hour fire resistance.~~Only the floor and the wall between the ESW pump room and the transfer pump room are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

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Potential Combustibles	
Item	Heat Release (Btu)
Lube Oil	**5.15E+05**
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Low Voltage Cable	**2.14E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
Automatic Fire Detection System	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression – Backup**
Wet Pipe Sprinkler	**Fire Hose Station**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~8.9~~2.1E+04**
Maximum Anticipated Combustible Loading:	**~~1.1E+05~~2.5E+04**

Floor Area (ft^2)
~~150~~650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**A fire in this fire zone could damage the few functions of 1 safe-shutdown train.** **Trains A, B, C, and D ESW functions remain free of fire damage.**

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Table 9A-202 (Sheet 19 of 33)
Fire Hazard Analysis Summary

Fire Zone:	FA7-211-02
Building:	ESW Pump House
Floor(s):	1
DCD Fig:	9A-201
DCD Sect:	9A.3.219
Area Designation:	D-UHS Transfer Piping Room
Zone Designation:	D-UHS Transfer Piping Room
Associated Safety Division(s)	A

Applicable Regulatory and Code Ref(s): IBC, RG 1.189; NFPA 10, 13, 14, 72, 80 and 804

Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-210-01 FA7-211-02 FA7-212-01	FA7-103-01	-

Fire Barrier Description:
The wall with exception of the wall between transfer pump room and UHS transfer piping room, and floor are required to have a 3-hour fire rating. The ceiling and all exterior walls are not required to be fire rated. All openings and penetrations in the 3-hour fire rated barriers are protected with 3-hour fire resistive seals and components.

Potential Combustibles	
Item	Heat Release (Btu)
Transients Only	

Fire Detection – Primary	Fire Detection - Backup
There is no automatic detection.	Manual Fire Alarm Pull Station
Fire Suppression – Primary	**Fire Suppression - Backup**
Portable Fire Extinguisher	There is no backup suppression system.

Fire Zone Combustible Summary	
-	BTU/ft^2
Anticipated Combustible Loading:	nil
Maximum Anticipated Combustible Loading:	nil

Floor Area (ft^2)
90

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	A fire in this fire zone could damage the few functions of 1 safe-shutdown train. Trains A, B, C, and D ESW functions remain free of fire damage.

Table 9A-202 (Sheet 20 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-212-01**
Building:	**UHS**
Floor(s):	**1**
DCD Fig:	**9A-201**
DCD Sect:	**9A.3.~~406~~220**
Area Designation:	**D-UHS**
Zone Designation:	**D-UHS**
Associated Safety Division(s)	**D**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-110-02 FA7-207-01 FA7-209-01 FA7-210-01 FA7-211-01 FA7-211-02	-	~~-~~FA7-210-01 FA7-211-01

Fire Barrier Description:
~~Walls of reinforced concrete or other material providing a minimum 3-hour fire resistance rating form the boundaries of this room. The door to the room is 3-hour fire rated and all openings and penetrations into the room are rated to provide 3-hour fire resistance.~~The pump bay ceiling is 3-hour fire rated. The walls are made of reinforced concrete or other material that can provide a minimum of 3-hour fire rating. They form the boundaries of this fire area.

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Potential Combustibles	
Item	Heat Release (Btu)
Grease	**1.84E+06**
High Voltage Cable	**2.46E+06**
Control Cable	**3.09E+06**
Instrumentation Cable	**3.29E+06**

Fire Detection - Primary	Fire Detection - Backup
There is no automatic detection.	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Fire Hose Station	**Portable Fire Extinguisher**

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the safety-related equipment consistent with GDC-3.	**An unsuppressed fire would self extinguish due to lack of combustible continuity but potentially result in loss of the cooling tower function. Trains A, B, and C remain free of fire damage.**

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Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**~~7.0~~8.2E+02**
Maximum Anticipated Combustible Loading:	**~~9.5~~9.9E+02**

Floor Area (ft^2)
~~13,600~~ 13,050

Table 9A-202 (Sheet 21 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-01**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~107~~221**
Area Designation:	**Transformer Yard**
Zone Designation:	**Main Generator Excitation Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA6-101-02 **FA7-301-02** **FA7-301-09**	**-**	**-**

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding firewall rated for 3-hours separate this zone from the turbine building and a freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**7.84E+08**

Fire Detection - Primary	Fire Detection – Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression – Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**4.8E+05**
Maximum Anticipated Combustible Loading:	**5.7E+05**

Floor Area (ft^2)
1650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 22 of 33)
Fire Hazard Analysis Summary)

Fire Zone:	**FA7-301-02**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~107~~221**
Area Designation:	**Transformer Yard**
Zone Designation:	**A-Unit Auxiliary Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA6-101-02	**-**	**-**
	FA7-301-01		
	FA7-301-03		
	FA7-301-08		
	FA7-301-09		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding firewall rated for 3-hours separate this zone from the turbine building and a freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**7.84E+08**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	BTU/ft^2	Floor Area (ft^2)
Anticipated Combustible Loading:	**4.8E+05**	
Maximum Anticipated Combustible Loading:	**5.7E+05**	**1650**

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 23 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-03**
Building:	**Transformer Yard**
Floor(s):	**N/A**
Area Designation:	**Transformer Yard**
Zone Designation:	**B-Unit Auxiliary Transformer Zone**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~107~~221**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA6-101-02	**-**	**-**
	FA7-301-02		
	FA7-301-04		
	FA7-301-07		
	FA7-301-08		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding firewall rated for 3-hours separate this zone from the turbine building and a freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**7.84E+08**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**4.8E+05**
Maximum Anticipated Combustible Loading:	**5.7E+05**

Floor Area (ft^2)
1650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 24 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-04**			
Building:	**Transformer Yard**	Area Designation:	**Transformer Yard**	Applicable Regulatory and Code Ref(s): **IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804**
Floor(s):	**N/A**	Zone Designation:	**C-Unit Auxiliary Transformer Zone**	
DCD Fig:	**9A-202**			
DCD Sect:	**9A.3.~~407~~221**	Associated Safety Division(s)	**N**	

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA6-101-02	**-**	**-**
	FA7-301-03		
	FA7-301-05		
	FA7-301-07		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding firewall rated for 3-hours separate this zone from the turbine building and a freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**9.60E+08**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary		Floor Area (ft^2)
	BTU/ft^2	
Anticipated Combustible Loading:	**5.8E+05**	**1650**
Maximum Anticipated Combustible Loading:	**7.0E+05**	

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 25 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-05**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Spare Unit Auxiliary Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-04 **FA7-301-06** **FA7-301-10**	**-**	**-**

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**9.60E+08**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**5.8E+05**
Maximum Anticipated Combustible Loading:	**7.0E+05**

Floor Area (ft^2)
1650

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 26 of 33)
Fire Hazard Analysis Summary)

Fire Zone:	**FA7-301-06**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Spare Main Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-05	**-**	**-**
	FA7-301-07		
	FA7-301-10		
	FA7-301-11		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.88E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**7.0E+05**
Maximum Anticipated Combustible Loading:	**8.4E+05**

Floor Area (ft^2)
2700

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 27 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-07**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**C-Main Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-03	**-**	**-**
	FA7-301-04		
	FA7-301-06		
	FA7-301-08		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.88E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**7.0E+05**
Maximum Anticipated Combustible Loading:	**8.4E+05**

Floor Area (ft^2)
2700

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 28 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-08**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**B-Main Transformer Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-02	**-**	**-**
	FA7-301-03		
	FA7-301-07		
	FA7-301-09		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.88E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**7.0E+05**
Maximum Anticipated Combustible Loading:	**8.4E+05**

Floor Area (ft^2)
2700

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 29 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-09**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation: **Transformer Yard**

Zone Designation: **A-Main Transformer Zone**

Associated Safety Division(s): **N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, 15, 24, 72 and 804

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Adjacent Fire Zones (Primary Inter face Listed See Table 9A-203 For Complete Listing)

Wall	Floor	Ceiling
FA7-301-01 **FA7-301-02** **FA7-301-08**	**-**	**-**

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.88E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**7.0E+05**
Maximum Anticipated Combustible Loading:	**8.4E+05**

Floor Area (ft^2)
2700

Table 9A-202 (Sheet 30 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-10**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Reserve Auxiliary Transformer 1 Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-05	-	-
	FA7-301-06		
	FA7-301-11		
	FA7-301-13		

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.38E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**5.5E+05**
Maximum Anticipated Combustible Loading:	**6.6E+05**

Floor Area (ft^2)
2500

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 31 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-11**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Reserve Auxiliary Transformer 2 Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-06 **FA7-301-10** **FA7-301-12**	**-**	**-**

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.38E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**5.5E+05**
Maximum Anticipated Combustible Loading:	**6.6E+05**

Floor Area (ft^2)
2500

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 32 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-12**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Reserve Auxiliary Transformer 4 Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 14, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-11 **FA7-301-13**	**-**	**-**

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.69E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**6.8E+05**
Maximum Anticipated Combustible Loading:	**8.1E+05**

Floor Area (ft^2)
2500

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no or safe-shutdown circuit in this zone to be damaged.**

Table 9A-202 (Sheet 33 of 33)
Fire Hazard Analysis Summary

Fire Zone:	**FA7-301-13**
Building:	**Transformer Yard**
Floor(s):	**N/A**
DCD Fig:	**9A-202**
DCD Sect:	**9A.3.~~407~~221**

Area Designation:	**Transformer Yard**
Zone Designation:	**Reserve Auxiliary Transformer 3 Zone**
Associated Safety Division(s)	**N**

Applicable Regulatory and Code Ref(s):
IBC, RG 1.189; NFPA 10, 15, 24, 72 and 804

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Adjacent Fire Zones: (Primary Inter face Listed See Table 9A-203 For Complete Listing)	Wall	Floor	Ceiling
	FA7-301-10 **FA7-301-12**	-	-

Fire Barrier Description:
This zone is surrounded with freestanding fire barriers and open space. A freestanding 1-hour rated firewall separates this zone from surrounding transformers.

Potential Combustibles	
Item	Heat Release (Btu)
Transformer Oil	**1.69E+09**

Fire Detection - Primary	Fire Detection - Backup
Automatic heat	**Manual Fire Alarm Pull Station**
Fire Suppression - Primary	**Fire Suppression - Backup**
Water Spray System	**Yard Hydrant**

Fire Zone Combustible Summary	
	BTU/ft^2
Anticipated Combustible Loading:	**6.8E+05**
Maximum Anticipated Combustible Loading:	**8.1E+05**

Floor Area (ft^2)
2500

Fire Impact to Zone	
Suppression System Operates	Suppression System Fails to Op.
A quickly detected and suppressed fire in this room will minimize fire damage to the transformer.	**There is no safe-shutdown circuit in this zone to be damaged.**

Table 9A-203 (Sheet 1 of 2)

Fire Zone/Fire Area Interfaces

Fire Zone	Interface	Adjacent Fire Zones
FA6-101-02	Wall	FA7-301-01, FA7-301-02, FA7-301-03, FA7-301-04
FA7-101-01	~~Wall~~ Ceiling	~~FA7-201-01, FA7-202-01,~~FA7-201-02
FA7-102-01	~~Wall~~ Ceiling	~~FA7-204-01, FA7-205-01~~FA7-201-02, FA7-202-02, FA7-204-02, FA7-205-02
FA7-103-01	~~Wall~~ Ceiling	~~FA7-207-01, FA7-208-01~~FA7-207-02, FA7-208-02, FA7-210-02, FA7-211-02
FA7-104-01	~~Wall~~ Ceiling	~~FA7-210-01, FA7-211-01~~FA7-210-02
FA7-201-01	Floor	FA7-203-01
	Wall	FA7-201-02, FA7-202-01, FA7-203-01, FA7-206-01~~, FA7-101-01~~
FA7-201-02	Floor	FA7-101-01, FA7-102-01
	Wall	FA7-201-01, FA7-202-02, FA7-203-01
FA7-202-01	Floor	FA7-203-01
	Wall	FA7-201-01, ~~FA7-101-01~~FA7-202-02, FA7-203-01
FA7-202-02	Floor	FA7-102-01
	Wall	FA7-201-02, FA7-202-01, FA7-203-01
FA7-203-01	Ceiling	FA7-201-01, FA7-202-01
	Wall	FA7-201-01, FA7-201-02, FA7-202-01, FA7-202-02, FA7-206-01
FA7-204-01	Floor	FA7-206-01
	Wall	FA7-204-02, FA7-205-01, FA7-206-01~~, FA7-102-01~~
FA7-204-02	Floor	FA7-102-01
	Wall	FA7-204-01, FA7-205-02, FA7-206-01
FA7-205-01	Floor	FA7-206-01
	Wall	FA7-204-01, ~~FA7-102-01~~FA7-205-02, FA7-206-01
FA7-205-02	Floor	FA7-102-01
	Wall	FA7-204-02, FA7-205-01, FA7-206-01
FA7-206-01	Ceiling	FA7-204-01, FA7-205-01
	Wall	FA7-201-01, FA7-203-01, FA7-204-01, FA7-204-02, FA7-205-01, FA7-205-02
FA7-207-01	Floor	FA7-209-01
	Wall	FA7-207-02, FA7-208-01, FA7-209-01, FA7-212-01~~, FA7-103-01~~

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Table 9A-203 (Sheet 2 of 2)

Fire Zone/Fire Area Interfaces

Fire Zone	Interface	Adjacent Fire Zones
FA7-207-02	Floor	FA7-103-01
	Wall	FA7-207-01, FA7-208-02, FA7-209-01
FA7-208-01	Wall	FA7-207-01, FA7-103-01
FA7-208-02	Floor	FA7-103-01
	Wall	FA7-207-02, FA7-208-01, FA7-209-01
FA7-209-01	Ceiling	FA7-207-01, FA7-208-01
	Wall	FA7-207-01, FA7-207-02, FA7-208-01, FA7-208-02, FA7-212-01
FA7-210-01	Floor	FA7-212-01
	Wall	FA7-210-02, FA7-211-01, FA7-212-01~~, FA7-104-01~~
FA7-210-02	Floor	FA7-103-01, FA7-104-01
	Wall	FA7-210-01, FA7-211-02, FA7-212-01
FA7-211-01	Floor	FA7-212-01
	Wall	FA7-210-01, ~~FA7-104-01~~FA7-211-02, FA7-212-01
FA7-211-02	Floor	FA7-103-01
	Wall	FA7-210-02, FA7-211-01, FA7-212-01
FA7-212-01	Ceiling	FA7-210-01, FA7-211-01
	Wall	FA7-207-01, FA7-209-01, FA7-210-01, FA7-210-02, FA7-211-01, FA7-211-02
FA7-301-01	Wall	FA6-101-02, FA7-301-02, FA7-301-09
FA7-301-02	Wall	FA6-101-02, FA7-301-01, FA7-301-03, FA7-301-08 FA7-301-09
FA7-301-03	Wall	FA6-101-02, FA7-301-02, FA7-301-04, FA7-301-07 FA7-301-08
FA7-301-04	Wall	FA6-101-02, FA7-301-03, FA7-301-05, FA7-301-07
FA7-301-05	Wall	FA7-301-04, FA7-301-06, FA7-301-10
FA7-301-06	Wall	FA7-301-05, FA7-301-07, FA7-301-10, FA7-301-11
FA7-301-07	Wall	FA7-301-03, FA7-301-04, FA7-301-06, FA7-301-08
FA7-301-08	Wall	FA7-301-02, FA7-301-03, FA7-301-07, FA7-301-09
FA7-301-09	Wall	FA7-301-01, FA7-301-02, FA7-301-08
FA7-301-10	Wall	FA7-301-05, FA7-301-06, FA7-301-11, FA7-301-13
FA7-301-11	Wall	FA7-301-06, FA7-301-10, FA7-301-12
FA7-301-12	Wall	FA7-301-11, FA7-301-13
FA7-301-13	Wall	FA7-301-10, FA7-301-12

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CP COL 9.5(2)

Figure 9A-201 Fire Zones and Fire Areas ESW Pump Rooms and UHS

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9

(SRI)

Figure 9A-202 Fire Zones and Fire Area Transformer Yard

Chapter 10

Chapter 10 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.03-12.04-11 S04	10.4.8.2.1	10.4-7 through 10.4-8	Supplemental 04 Response to RAI No. 135 Luminant Letter no. TXNB-12042 Date 12/6/2012	Revised to refer to Figures 12.3-201 and 12.3-202	-

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 11

Chapter 11 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.03.02-9	11.4.2.3	11.4-3	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	-
RCOL2_12.03-12.04-11 S04	11.2.3.4	11.2-8	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Clarified the description of the piping run for Unit 3 and Unit 4.	-

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 12

Chapter 12 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.03-12.04-11 S04	12.3.6	12.3-4	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Added Figure 12.3-202.	-
RCOL2_12.03-12.04-11 S04	Table 12.3-201 (Sheets 1, 4 of 5)	12.3-6, 12.3-9	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Clarified the description of the piping run for Unit 3 and Unit 4.	-
RCOL2_12.03-12.04-11 S04	Figure 12.3-201	12.3-12	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Clarified the description of the piping run from the T/B to the yard.	-
RCOL2_12.03-12.04-11 S04	Figure 12.3-202 (New Figure)	[12.3-13]	Supplemental 04 Response to RAI No. 135 Luminant Letter no.TXNB-12042 Date 12/6/2012	Revised figure to show that it is now only applicable to CPNPP Unit 3 and added new figure for CPNPP Unit 4 yard piping routing and building penetration schematic.	-
CTS-01510	Figure 12.3-1R (Sheet 1 of 34)	12.3-11	Consistency with DCD as described in Letter. TXNB-12033 (ML12268A413)	Figure was updated to reflect standard plant and site-specific layout changes.	0

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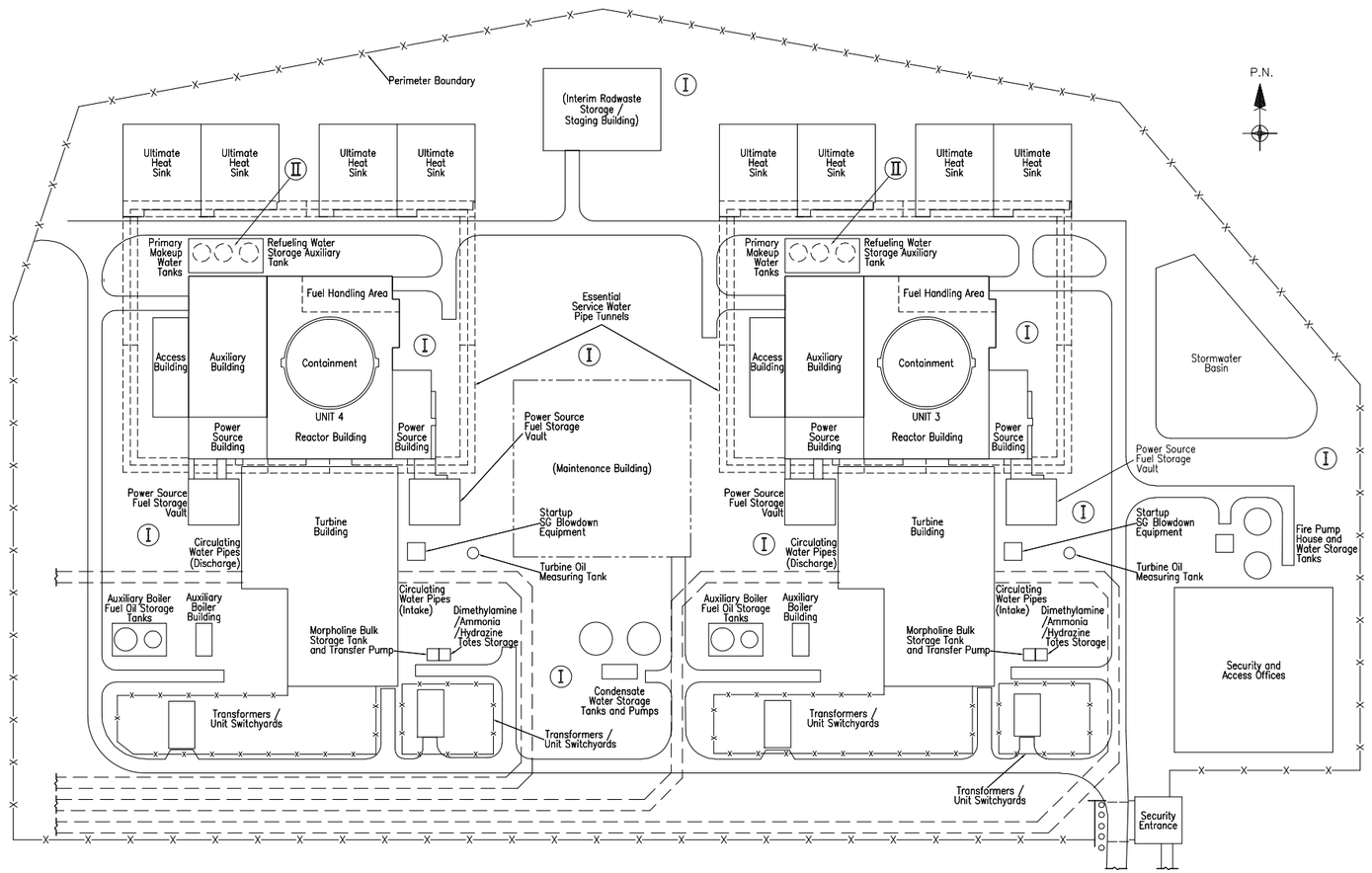
CTS-01510



Zone	Maximum Design Dose Rate
I	≦ 0.25 mrem/h
II	≦ 1 mrem/h
III	≦ 2.5 mrem/h
IV	≦ 15 mrem/h
V	≦ 100 mrem/h
VI	≦ 1 rem/h
VII	≦ 10 rem/h
VIII	≦ 100 rem/h
IX	≦ 500 rad/h
X	> 500 rad/h

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Figure 12.3-1R Radiation Zones for Normal Operation/Shutdown Site (Sheet 1 of 34)

Chapter 13

Chapter 13 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_13.04-6	Table 13.4-201 (Sheet 6 of 11)	13.4-7	Response to RAI No. 255 Luminant Letter no.TXNB-12013 Date 05/31/2012	Deleted 10 CFR 52.78 has as a Program Source for Item 11, Program Title, “Non licensed Plant Staff Training Program” in FSAR Table 13.4-201.	-
RCOL2_01.05-3	13.3.2 13.3.5 (new section)	13.3-1 13.3-2	Response to RAI No. 261 Luminant Letter no.TXNB-12027 Date 7/24/2012	Added evaluation of emergency staffing in accordance with NEI 12-01 Added reference to the NEI 12-01	-

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Chapter 14

Chapter 14 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.01-6	14.2.12.1.113	14.2-5	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Revised item A.2 to clarify that ESW pumps and UHS transfer pumps are demonstrated to have adequate NPSH and no vortex formation at minimum basin water level.	-
RCOL2_14.02-21	14.2.12.1.113	14.2-5 14.2-6 [14.2-7]	Response to RAI No. 257 Luminant Letter no.TXNB-12022 Date 6/21/2012	Clarified preoperational test objectives, methods, and acceptance criteria. Added preoperational test acceptance criteria for water hammer prevention.	-
RCOL2_09.02.01-9 S01	14.2.12.1. 113	14.2-5 through 14.2-6 [14.2-5 through 14.2-7]	Supplemental 01 Response to RAI No. 251 Luminant Letter no.TXNB-12031 Date 9/10/2012	Removed description of level switches located in the UHS cooling tower riser piping.	-
RCOL2_09.02.05-20 S02	14.2.12.1.113	14.2-5 14.2-6	Supplemental 02 Response to RAI No. 252 Luminant Letter no.TXNB-12036 Date 11/12/2012	Revised UHS Preoperational Test to include simultaneous operation of ESWP and UHS Transfer Pump with no interfering vortices.	-
RCOL2_14.02-21 S02	14.2.12.1.113	14.2-6 [14.2-7]	Supplemental 02 Response to RAI No. 257 Luminant Letter no.TXNB-12036 Date 11/12/2012	Corrected to remove reference to electrical heat tracing.	-

RCOL2_09.02.01-9 S02	14.2.12.1.113	14.2-5, 14.2-6 [14.2-5 through 14.2-7]	Supplemental 02 Response to RAI No. 251 Luminant Letter no.TXNB-12041 Date 12/03/2012	Revise the description about water hammer/ voids in the spray header or nozzles.	-

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 15

Chapter 15 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 16

Chapter 16 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 17

Chapter 17 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 18

Chapter 18 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R

*Page numbers for the attached marked-up pages may differ from the revision 3 page numbers due to text additions and deletions. When the page numbers for the attached pages do differ, the page number for the attached page is shown in brackets.

Chapter 19

Chapter 19 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 3 Page	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-19	19.1.5	19.1-9	Response to RAI No. 248 Luminant Letter no.TXNB-12016 Date 05/31/2012	Information for extreme wind bounding assessment added for LPSD and at power operation.	-
RCOL2_19-19	Table 19.1-205 (Sheets 24 through 25 of 35)	19.1-74 through 19.1-75	Response to RAI No. 248 Luminant Letter no.TXNB-12016 Date 05/31/2012	Information added to address risk from extreme winds.	-
RCOL2_03.03.02-9	19.1.5 Table 19.1-205 (Sheet 12, 16, 24 of 35) Table 19.1-206 (Sheet 2 of 2)	19.1-6 19.1-62 19.1-66 19.1-74 19.1-87	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	-
RCOL2_19-23	19.2.6.4 19.2.6.6	19.2-4	Response to RAI No. 267 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated values from using more recent dollar values in calculation.	-
RCOL2_19-21	19.1.5	19.1-9, 19.1-10	Response to RAI No. 264 Luminant Letter no.TXNB-12043 Date 12/18/2012	Clarified screening criteria used for external events and results of screening.	-
RCOL2_19-21	Table 19.1-205 (Sheets 24 through 25 of 35)	19.1-74 through 19.1-75	Response to RAI No. 264 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated wording on extreme wind screening discussion.	-
RCOL2_19-22	19.1.5	19.1-5 through 19.1-6, 19.1-10	Response to RAI No. 264 Luminant Letter no.TXNB-12043 Date 12/18/2012	Clarified results of external flooding screening.	-

RCOL2_19-22	Table 19.1-205 (Sheets 27 through 31 of 35)	19.1-77 through 19.1-81	Response to RAI No. 264 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated wording on external flooding screening discussion.	-
RCOL2_19-24	19.1.2.3 (New Subsection)	19.1-2 [19.1-3]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Clarified expectations on requirements to demonstrate technical adequacy.	-
RCOL2_19-24	19.1.4.1.2	19.1-4 [19.1-5, 19.1-6]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Capture requirements to update PRA following construction to capture changes.	-
RCOL2_19-24	19.3.3	19.3-1 [19.3-1, 19.3-2]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Update FSAR location references for PRA update requirements.	-
RCOL2_19-25	19.1 19.1.1.2.1 19.1.1.3.1 (New Subsection) 19.1.1.3.2 (New Subsection)	19.1-1 19.1-1 19.1-1 [19.1-2] 19.1-1 [19.1-2]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated and expanded FSAR section cross-references for risk informed applications.	-

RCOL2_19-25	19.1.7 (New Subsection)	19.1-13 [19.1-14, 19.1-15]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated and expanded FSAR section cross-references for risk informed applications.	-
RCOL2_19-25	Table 19.1-207 (Sheets 1, 2 of 2) (New Table)	19.1-89 [19.1-91, 19.1-92]	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated and expanded FSAR section cross-references for risk informed applications.	-
RCOL2_19-25	19.3.3	19.3-1	Response to RAI No. 268 Luminant Letter no.TXNB-12043 Date 12/18/2012	Updated and expanded FSAR section cross-references for risk informed applications.	-
DCD_16-117	Table 19.1-119R (Sheets 19, 34)	19.1-21 19.1-36	Response to RAI No. 161 MHI Letter No. UAP-HF-12022 Date 02/08/2012	Incorporated new key insights regarding administrative controls for AAC and demineralized water storage tank during atpower operation and SIS during LPSD operation	-
DCD_19-494	Table 19.1-119R (Sheet 34)	19.1-36	Response to RAI No. 669 MHI Letter No. UAP-HF-12023 Date 02/08/2012	Incorporated a new key insight regarding administrative controls for SIS during LPSD operation	-

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