

**April 21, 2011**

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

**Part 2**

**FSAR Revision1**

**Update Tracking Report**

**Revision 5**

## Revision History

Revision	Date	Update Description
-	11/20/2009	COLA Revision 1 Transmittal  See Luminant Letter no. TXNB-09074 Date 11/20/2009
-	10/15/2009	Updated Chapters: Ch. 2, 3, 11  See Luminant Letter no. TXNB-09054 Date 10/15/2009  Incorporated responses to following RAIs: No. 30, 31, 33, 35, 36
-	10/19/2009	Updated Chapters: Ch. 2, 3, 5, 11, 13  See Luminant Letter no. TXNB-09055 Date 10/19/2009  Incorporated responses to following RAIs: No. 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50,
-	10/21/2009	Updated Chapters: Ch. 2, 9  See Luminant Letter no. TXNB-09057 Date 10/21/2009  Incorporated responses to following RAIs: No. 51, 52, 53
-	10/26/2009	Updated Chapters: Ch. 3, 5  See Luminant Letter no. TXNB-09058 Date 10/26/2009  Incorporated responses to following RAIs: No. 54, 55, 56, 57, 58, 59
-	10/28/2009	Updated Chapters: Ch. 2 See Luminant Letter no. TXNB-09059 Date 10/28/2009  Incorporated responses to following RAIs: No. 19

-	10/30/2009	<p>Updated Chapters: Ch. 2, 3, 5, 9 See Luminant Letter no. TXNB-09060 Date 10/30/2009</p> <p>Incorporated responses to following RAIs: No. 61, 62, 63, 64, 65</p>
-	11/5/2009	<p>Updated Chapters: Ch. 3, 13</p> <p>See Luminant Letter no. TXNB-09061 Date 11/5/2009</p> <p>Incorporated responses to following RAIs: No. 66, 67, 68, 69, 71</p>
-	11/5/2009	<p>Updated Chapters: Ch. 5, 12, 14</p> <p>See Luminant Letter no. TXNB-09062 Date 11/5/2009</p> <p>Incorporated responses to following RAIs: No. 85, 86, 87, 89</p>
-	11/11/2009	<p>Updated Chapters: Ch. 2, 3, 14</p> <p>See Luminant Letter no. TXNB-09063 Date 11/11/2009</p> <p>Incorporated responses to following RAIs: No. 72, 73, 74, 75</p>
-	11/11/2009	<p>Updated Chapters: Ch. 1, 2, 3, 9, 12, 14</p> <p>See Luminant Letter no. TXNB-09064 Date 11/11/2009</p> <p>Incorporated responses to following RAIs: No. 90, 91, 93, 94, 95, 96, 97, 98, 99, 100, 120</p>
-	11/12/2009	<p>Updated Chapters: Ch. 6, 13</p> <p>See Luminant Letter no. TXNB-09066 Date 11/12/2009</p> <p>Incorporated responses to following RAIs: No. 76, 77, 78</p>

-	11/13/2009	<p>Updated Chapters: Ch. 3, 17</p> <p>See Luminant Letter no. TXNB-09065 Date 11/13/2009</p> <p>Incorporated responses to following RAIs: No. 79, 80, 84</p>
-	11/13/2009	<p>Updated Chapters: Ch. 2, 3</p> <p>See Luminant Letter no. TXNB-09067 Date 11/13/2009</p> <p>Incorporated responses to following RAIs: No. 101, 102, 103, 104, 105, 106, 107, 110, 111, 112, 113, 114, 115,</p>
-	11/16/2009	<p>Updated Chapters: Ch. 1, 11, 12</p> <p>See Luminant Letter no. TXNB-09068 Date 11/16/2009</p> <p>Incorporated responses to following RAIs: No. 116, 117, 118, 119</p>
-	11/18/2009	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-09072 Date 11/18/2009</p> <p>Incorporated responses to following RAIs: No. 32</p>
-	11/20/2009	<p>Updated Chapters: Ch. 9</p> <p>See Luminant Letter no. TXNB-09071 Date 11/20/2009</p> <p>Incorporated responses to following RAIs: No. 109,124</p>
-	11/24/2009	<p>Updated Chapters: Ch. 2, 3</p> <p>See Luminant Letter no. TXNB-09073 Date 11/24/2009</p> <p>Incorporated responses to following RAIs: No. 60</p>

-	12/9/2009	<p>Updated Chapters: Ch. 17</p> <p>See Luminant Letter no. TXNB-09077 Date 12/9/2009</p> <p>Incorporated responses to following RAIs: No. 92</p>
-	12/10/2009	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-09078 Date 12/10/2009</p> <p>Incorporated responses to following RAIs: No. 108</p>
-	12/14/2009	<p>Updated Chapters: Ch. 2, 3</p> <p>See Luminant Letter no. TXNB-09085 Date 12/14/2009</p> <p>Incorporated responses to following RAIs: No. 122</p>
-	12/16/2009	<p>Updated Chapters: Ch. 3, 9</p> <p>See Luminant Letter no. TXNB-09081 Date 12/16/2009</p> <p>Incorporated responses to following RAIs: No. 121, 123</p>
0	1/8/2010	<p>Updated Chapters: Ch 2, 3, 8, 9, 10, 11</p>
-	2/18/2010	<p>Updated Chapters: Ch. 9</p> <p>See Luminant Letter no. TXNB-10008 Date 2/18/2010</p> <p>Incorporated responses to following RAIs: No. 126</p>

-	2/19/2010	<p>Updated Chapters: Ch. 5, 9</p> <p>See Luminant Letter no. TXNB-10007 Date 2/19/2010</p> <p>Incorporated responses to following RAIs: No. 127, 128, 10 Supplemental</p>
-	2/22/2010	<p>Updated Chapters: Ch. 1, 2, 12,13,14</p> <p>See Luminant Letter no. TXNB-10010 Date 2/22/2010</p> <p>Incorporated responses to following RAIs: No. 125, 129, 130, 131</p>
-	2/22/2010	<p>Updated Chapters: Ch. 2, 9</p> <p>See Luminant Letter no. TXNB-10011 Date 2/22/2010</p> <p>Incorporated responses to following RAIs: No. 11 Supplemental, 109 Supplemental</p>
-	2/24/2010	<p>Updated Chapters: Ch. 12</p> <p>See Luminant Letter no. TXNB-10012 Date 2/24/2010</p> <p>Incorporated responses to following RAIs: No. 133</p>
-	2/24/2010	<p>Updated Chapters: Ch. 9</p> <p>See Luminant Letter no. TXNB-10013 Date 2/24/2010</p> <p>Incorporated responses to following RAIs: No. ER GEN-09</p>

-	3/5/2010	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-10018 Date 3/5/2010</p> <p>Incorporated responses to following RAIs: No. 97 Supplemental</p>
-	3/9/2010	<p>Updated Chapters: Ch. 12</p> <p>See Luminant Letter no. TXNB-10020 Date 3/9/2010</p> <p>Incorporated responses to following RAIs: No. 136</p>
1	3/31/2010	<p>Updated Chapters: Ch 2, 11</p>
-	4/12/2010	<p>Updated Chapters: Ch. 13</p> <p>See Luminant Letter no. TXNB-10030 Date 4/12/2010</p> <p>Incorporated responses to following RAIs: No. 151</p>
-	4/20/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10032 Date 4/20/2010</p> <p>Incorporated responses to following RAIs: No. 144</p>
-	5/18/2010	<p>Updated Chapters: Ch. 8</p> <p>See Luminant Letter no. TXNB-10037 Date 5/18/2010</p> <p>Incorporated responses to following RAIs: No. 152</p>

-	5/6/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10035 Date 5/6/2010</p> <p>Incorporated responses to following RAIs: No. 141</p>
2	6/2/2010	<p>Updated Chapters: Ch 1, 2, 3, 9, 10, 12, 13, 14, 15,16,19</p>
-	6/7/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10042 Date 6/7/2010</p> <p>Incorporated responses to following RAIs: No. 155, 157, 160</p>
-	6/25/2010	<p>Updated Chapters: Ch. 1, 2, 15</p> <p>See Luminant Letter no. TXNB-10048 Date 6/25/2010</p> <p>Incorporated responses to following RAIs: No. 156, 158, 163, 164</p>
3	7/8/2010	<p>Updated Chapters: Ch 2, 11</p>
-	6/24/2010	<p>Updated Chapters: Ch. 13</p> <p>See Luminant Letter no. TXNB-10047 Date 6/24/2010</p> <p>Incorporated responses to following RAIs: No. 161</p>
-	6/24/2010	<p>Updated Chapters: Ch. 2, 19</p> <p>See Luminant Letter no. TXNB-10046 Date 6/24/2010</p> <p>Incorporated responses to following RAIs: No. 165, 166</p>

-	7/16/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10052 Date 7/16/2010</p> <p>Incorporated responses to following RAIs: No. 138, 139, 140, 143</p>
-	8/9/2010	<p>Updated Chapters: Ch. 10</p> <p>See Luminant Letter no. TXNB-10056 Date 8/9/2010</p> <p>Incorporated responses to following RAIs: No. 169</p>
-	8/9/2010	<p>Updated Chapters: Ch. 2, 3</p> <p>See Luminant Letter no. TXNB-10057 Date 8/9/2010</p> <p>Incorporated responses to following RAIs: No. 162, 167</p>
-	8/26/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10060 Date 8/26/2010</p> <p>Incorporated responses to following RAIs: No. 144, 147</p>
-	9/16/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10063 Date 9/16/2010</p> <p>Incorporated responses to following RAIs: No. 145</p>

-	9/22/2010	<p>Updated Chapters: Ch. 1, 10, 11, 12</p> <p>See Luminant Letter no. TXNB-10065 Date 9/22/2010</p> <p>Incorporated responses to following RAIs: No. 135 Supplemental</p>
-	9/29/2010	<p>Updated Chapters: Ch. 2, 13</p> <p>See Luminant Letter no. TXNB-10066 Date 9/29/2010</p> <p>Incorporated responses to following RAIs: No. 71 Supplemental, 155 Supplemental, 156 Supplemental</p>
4	10/7/2010	<p>Updated Chapters: Ch 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19</p>
-	10/6/2010	<p>Updated Chapters: Ch. 6, 13</p> <p>See Luminant Letter no. TXNB-10069 Date 10/6/2010</p> <p>Incorporated responses to following RAIs: No. 172</p>
-	10/11/2010	<p>Updated Chapters: Ch. 9</p> <p>See Luminant Letter no. TXNB-10072 Date 10/11/2010</p> <p>Incorporated responses to following RAIs: No. 178</p>
-	8/19/2010	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-10059 Date 8/19/2010</p> <p>Incorporated responses to following RAIs: No. 168</p>

-	9/29/2010	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-10066 Date 9/29/2010</p> <p>Incorporated responses to following RAIs: No. 170 Supplemental</p>
-	10/21/2010	<p>Updated Chapters: Ch. 2, 3</p> <p>See Luminant Letter no. TXNB-10073 Date 10/21/2010</p> <p>Incorporated responses to following RAIs: No. 168 Supplemental, 170 Supplemental</p>
-	10/29/2010	<p>Updated Chapters: Ch. 2, 9</p> <p>See Luminant Letter no. TXNB-10076 Date 10/29/2010</p> <p>Incorporated responses to following RAIs: No. 63 Supplemental, 110 Supplemental, 123 Supplemental, 155 Supplemental</p>
-	11/8/2010	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-10080 Date 11/8/2010</p> <p>Incorporated responses to following RAIs: No. 66 Supplemental</p>
-	11/18/2010	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-100180 Date 11/18/2010</p> <p>Incorporated responses to following RAIs: No. 180 Supplemental</p>
-	1/6/2011	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-11001 Date 1/6/2011</p> <p>Incorporated responses to following RAIs: No. 185</p>

-	1/24/2011	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-11002 Date 1/24/2011</p> <p>Incorporated responses to following RAIs: No. 195</p>
-	1/27/2011	<p>Updated Chapters: Ch. 13, 14</p> <p>See Luminant Letter no. TXNB-11003 Date 1/27/2011</p> <p>Incorporated responses to following RAIs: No. 75 Supplemental</p>
-	1/27/2011	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-11004 Date 1/27/2011</p> <p>Incorporated responses to following RAIs: No. 192, 193</p>
-	3/18/2011	<p>Updated Chapters: Ch. 2</p> <p>See Luminant Letter no. TXNB-11018 Date 3/18/2011</p> <p>Incorporated responses to following RAIs: No. 204</p>
-	3/18/2011	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-11016 Date 3/18/2011</p> <p>Incorporated responses to following RAIs: No. 146</p>
-	3/18/2011	<p>Updated Chapters: Ch. 3</p> <p>See Luminant Letter no. TXNB-11018 Date 3/18/2011</p> <p>Incorporated responses to following RAIs: No. 205</p>

-	12/16/2010	Updated Chapters: Ch. 2  See Luminant Letter no. TXNB-10087 Date 12/16/2010  Incorporated responses to following RAIs: No. 188
5	4/21/2010	Updated Chapters: Ch 1, 2, 9, 12, 14

# **Chapter 1**

## Chapter 1 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.03-12.04-1 RCOL2_12.01-4 RCOL2_12.03-12.04-7	Table 1.6-201	1.6-2	Response to RAI No.99. Luminant Letter No.TXNB-09064 Date 11/11/2009  Response to RAI No.118 and 119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add NEI 08-08 "Generic FSAR Template Guidance for Life-Cycle Minimization of Contamination", Rev.3 to Table1.6-201.	-
RCOL2_16-16	Table 1.8-201	1.8-64 1.8-65	Response to RAI No. 91 Luminant Letter no.TXNB-09064 Date 11/11/2009	Deleted COL 16.1_3.3.1(1), COL 16.1_3.3.2(1), and COL 16.1_3.3.6(1).  Corrected the description and Resolution Category for COL 16.1_3.3.5(1).  Added COL 16.1_5.5.21 (1).	-
RCOL2_12.03-12.04-1	Table 1.9-202	1.9-16	Response to RAI No.99 Luminant Letter No.TXNB-09064 Date 11/11/2009	Add RG 4.21 "Minimization of Contamination and Radioactive Waste Generation: Life Cycle Planning" to Table 1.9-202.	-
RCOL2_09.02.01-4	Table 1.8-201 (Sheet 33 of 62)	1.8-42	Response to RAI No.109 Luminant Letter No.TXNB-09071 Date 11/20/2009	COL 9.2(6) added Subsection 9.4.5.1.1.6. COL 9.2(7) Deleted subsection 9.2.1.5.4.	-
RCOL2_14.02.01-1	1.9 Table 1.9-202	1.9-16	Response to RAI No.129 Luminant Letter No.TXNB-10010 Date 2/22/2010	Change identifies that conformance with Division 4 Regulatory Guide "Quality Assurance for Radiological Monitoring Programs"	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				corresponding FSAR Chapter/Section is 12.5.	
CTS-01106	Table 1.6-201	1.6-2	Update due to issuance of NEI 07-08A Rev0	NEI 07-08 Rev.3 was updated to NEI 07-08A Rev.0.	2
CTS-01107	Table 1.6-201	1.6-2	Update due to issuance of NEI 08-08A Rev0	NEI 08-08 Rev.3 was updated to NEI 08-08A Rev.0.	2
MAP-03-023	Table 1.8-201 (sheet 5 of 62)	1.8-14	Consistency with DCD Rev2 and COLA Rev1	Corrected section number of COL 3.5(1)	2
DCD_03.06.03-19	Table 1.8-201 (Sheet 7 of 62)	1.8-16	Reflect response to DCD RAI No.485	Added COL Item COL 3.6(10) in consistent with DCD RAI response	2
DCD_03.07.01-4	Table 1.8-201 (sheet 9 of 62)	1.8-18	Reflect response to DCD RAI No.494	Revised COL Item 3.7(8) to be consistent with DCD RAI response	2
DCD_03.08.05-35	Table 1.8-201 (sheet 9 of 62)	1.8-18	Reflect response to DCD RAI No. 496	Revised COL Item 3.7(7) to be consistent with DCD RAI response	2
DCD_05.02.01.01-1	Table 1.8-201 (sheet 22 of 62)	1.8-31	Reflect response to DCD RAI No. 264 (second amendment)	Revised COL item statement.	2
DCD_14.02-120	Table 1.8-201 (sheet 53 of 62)	1.8-62	Reflect response to DCD RAI No. 521	Revised COL item 14.2(11) from "First-plant only test" to "First-plant only tests"	2
RCOL2_14.02-18	1.9	1.9-1	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Changed "operational aspect" to "operational aspects" in the first paragraph.	-
RCOL2_14.02-18	1.9.1	1.9-1	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Added "operational aspects and" in the first paragraph.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_14.02-18	Table 1.9-201	1.9-4	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Changed "COLA FSAR Status" column for RG 1.16 to "Not applicable" because RG was withdrawn.	-
RCOL2_14.02-18	Table 1.9-201	1.9-5	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Under RG 1.28 and RG 1.30 delete corresponding chapter/section "14.2.7" and add "17.3." Under RG 1.37 delete "14.2.7."	-
RCOL2_14.02-18	Table 1.9-201	1.9-9	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Under RG 1.116 delete corresponding chapter/section "14.2.7" and add "17.3."	-
RCOL2-12.03-12.04-11	Table 1.9-202	1.9-16	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added R. G. 4,21.	-
CTS-01140	1.2.1.5.4.4 1.2.1.6 1.2.1.7.1 1.2.2 1.6 1.7 1.8 1.8.1.1 1.8.1.3 1.8.1.4 1.8.2 Table 1.8-201 (Sheet 14 and 20 of 62)	1.2-1 1.2-2 1.2-3 1.2-4 1.6-1 1.7-1 1.8-1  1.8-3  1.8-23 1.8-29	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4
DCD_02-1	Table 1.8-201 (Sheet 1 of 62)	1.8-10	Reflect Response to DCD RAI No. 518	Revised the COL 2.1(1) description from "site parameters" to "site characteristics."	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
MAP-03-030	Table 1.8-201 (Sheet 5 of 62)	1.8-14	Editorial corrections	Replaced typographical errors "Pritectuib" with "Protection" and "Low-Trajectory" with "Low-Trajectory" in row COL 3.5(2)	4
MAP-03-029	Table 1.8-201 (Sheet 11 of 62)	1.8-20	Revised COL information item to be consistent with DCD	Deleted "as free field outcrop motions on the uppermost in-situ competent material" from row COL 3.7(20)	4
DCD_19-426	Table 1.8-201 (Sheet 61 of 62)	1.8-70	Reflect Response to DCD RAI No. 564	Added the following after the last sentence in COL 19.3(1): "Peer reviews for the updated PRA will be performed prior to the use of PRA to risk-informed applications."	4
CTS-01144	Table 1.9-201 (Sheet 1 through 8, 10 and 12 of 12)	1.9-4 through 1.9-11 1.9-13 1.9-15	Response to RAI No.164 Luminant Letter no.TXNB-10048 Date 6/25/2010	Made enhancements to Table 1.9-201, 1.9-202 and 1.9-203 per Regulatory Commitment 7581 made in RAI No.164	4
	Table 1.9-203	1.9-17 Through 1.9-19			
CTS-01178	1.1.5	1.1-2	Update to commercial information	Removed schedule information and replaced with commitment to provide schedule in accordance with RG 1.206 guidance	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
DCD_03.02.02-10	Table 1.8-201 (Sheet 3 of 62)	1.8-12	Reflect Response to DCD RAI No. 580	Added COL 3.2(6)	5
DCD_03.04.01-21	Table 1.8-201 (Sheet 5 of 62)	1.8-14	Reflect Response to DCD RAI No. 579	Added COL 3.4(7) corresponds to the addition of COL 3.4(7) in DCD	5

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.

**Comanche Peak Nuclear Power Plant, Units 3 & 4  
COL Application  
Part 2, FSAR**

**Table 1.8-201 (Sheet 3 of 63)**

**Resolution of Combined License Items for Chapters 1 - 19**

COL Item No.	COL Item	FSAR Location	Resolution Category
COL 2.4(1)	The COL Applicant is to provide sufficient information to verify that hydrologic-related events will not affect the safety-basis for the US-APWR.	2.4	3a
COL 2.5(1)	The COL Applicant is to provide sufficient information regarding the seismic and geologic characteristics of the site and the region surrounding the site.	2.0 2.5	3a
COL 3.1(1)	The COL Applicant is to provide a design that allows for the appropriate inspections and layout features of the ESWS.	3.1.4.16.1	3a
COL 3.2(1)	Deleted from the DCD.		
COL 3.2(2)	Deleted from the DCD.		
COL 3.2(3)	Deleted from the DCD.		
COL 3.2(4)	The COL Applicant is to identify the site-specific, safety-related systems and components that are designed to withstand the effects of earthquakes without loss of capability to perform their safety function; and those site-specific, safety-related fluid systems or portions thereof; as well as the applicable industry codes and standards for pressure-retaining components.	3.2.1.2 Table 3.2-201.	3a
COL 3.2(5)	The COL Applicant is to identify the equipment class and seismic category of the site-specific, safety-related and non safety-related fluid systems, components (including pressure retaining), and equipment as well as the applicable industry codes and standards.	3.2.2 Table 3.2-201	3a
<u>COL 3.2(6)</u>	<u>The COL Applicant is to apply DCD methods of equipment classification and seismic categorization of risk-significant, non-safety related SSCs based on their safety role assumed in the PRA and treatment by the D-RAP.</u>	<u>3.2.2.5</u> <u>Table 3.2-201</u>	<u>3a</u>

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**Comanche Peak Nuclear Power Plant, Units 3 & 4  
COL Application  
Part 2, FSAR**

**Table 1.8-201 (Sheet 5 of 63)**

**Resolution of Combined License Items for Chapters 1 - 19**

COL Item No.	COL Item	FSAR Location	Resolution Category
COL 3.4(5)	The COL Applicant is to identify and design, if necessary, any site-specific flood protection measures such as levees, seawalls, floodwalls, site bulkheads, revetments, or breakwaters per the guidelines of RG 1.102 (Reference 3.4-3), or dewatering system if the plant is not built above the DBFL.	3.4.1.2	3a
COL 3.4(6)	The COL Applicant is to identify any site-specific physical models used to predict prototype performance of hydraulic structures and systems.	3.4.2	3a
<u>COL 3.4(7)</u>	<u>The COL Applicant is responsible for the protection from internal flooding for those site-specific SSCs that provide nuclear safety-related functions or whose postulated failure due to internal flooding could adversely affect the ability of the plant to achieve and maintain a safe shutdown condition.</u>	<u>3.4.1.3</u>	<u>3a</u>
COL 3.5(1)	The COL Applicant is to have plant procedures in place prior to fuel load that specify unsecured equipment, including portable pressurized gas cylinders, located inside or outside containment and required for maintenance or undergoing maintenance is to be removed from containment prior to operation, moved to a location where it is not a potential hazard to SSCs important to safety, or seismically restrained to prevent it from becoming a missile.	<del>3.5.1.1.2.1</del> <u>3.5.1.1.4</u>	2
COL 3.5(2)	The COL Applicant is to commit to actions to maintain P1 within this acceptable limit as outlined in RG 1.115, " <del>Protectuib</del> <u>Protection</u> Against Low-Trajectory Turbine Missiles" (Reference 3.5-6) and SRP Section 3.5.1.3, "Turbine Missiles" (Reference 3.5-7).	3.5.1.3.2	2

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## **Chapter 2**

## Chapter 2 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.02.01-02.02.02-1	2.2.1	2.2-1	Response to RAI No.30 Luminant Letter No. TXNB- 09054 Date 10/15//2009	Removed bullet for DeCordova Steam Electric Station (SES).	-
RCOL2_02.02.01-02.02.02-1	2.2.2.1	2.2-3	Response to RAI No.30 Luminant Letter No. TXNB- 09054 Date 10/15//2009	Added clarification for the location of the DeCordova	-
RCOL2_02.02.01-02.02.02-1	2.2.3.1.1.2	2.2-12	Response to RAI No.30 Luminant Letter No. TXNB- 09054 Date 10/15//2009	Removed “the DeCordova SES”	-
RCOL2_02.02.01-02.02.02-2	2.2.2.2.10	2.2-5	Response to RAI No.30 Luminant Letter No. TXNB- 09054 Date 10/15//2009	Added hypochlorite and percent	-
RCOL2_02.02.03-1	Table	2.2-43	Response to	Revised table to	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	2.2-214		RAI No.31 Luminant Letter No. TXNB- 09054 Date 10/15//2009	show hypochlorite and dimethylamine.	
RCOL2_02.03.02-1	Table 2.3-284	2.3-162	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Corrected headers by changing the "Upper Level" to "Lower Level" at each location.	-
RCOL2_02.03.02-2 RCOL2_02.03.02-3	Table 2.3-327	2.3-220 through 2.3-222	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Replaced table with updated data and removed "Annual" from the title.	-
RCOL2_02.03.02-2	Table 2.3-328	2.3-223 through 2.3-225	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Replaced table with updated data and removed "Annual" from the title.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.02-2 and RCOL2_02.03. 02-3	Table 2.3-329	2.3-226 through 2.3-228	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Replaced table with updated data and removed "Annual" from the title.	-
RCOL2_02.03.02-2	Table 2.3-330	2.3-229 through 2.3-231	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Replaced table with updated data and removed "Annual" from the title.	-
RCOL2_02.03.02-2	Figure 2.3-373	-	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Revised graph based on updated data and removed the word "Annual" from the title.	-
RCOL2_02.03.02-2	Figure 2.3-374	-	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Revised graph based on updated data and removed the word "Annual" from the title.	-
RCOL2_02.03.02-2	Figure 2.3-375	-	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Revised graph based on updated data and removed the word "Annual" from the title.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.02-2	Figure 2.3-376	-	Response to RAI No.45 Luminant Letter No. TXNB- 09055 Date 10/19/2009	Revised graph based on updated data and removed the word "Annual" from the title.	-
RCOL2_02.03.03-3 RCOL2_02.03.03-5 RCOL2_02.03.03-7	2.3.3.1	2.3-36	Response to RAI No. 46 Luminant Letter no.TXNB-09055 Date 10/19/2009	Expanded explanation of instrumentation.	-
RCOL2_02.03.03-3 RCOL2_02.03.03-5 RCOL2_02.03.03-7	2.3.3.3	2.3-37	Response to RAI No. 46 Luminant Letter no.TXNB-09055 Date 10/19/2009	Expanded explanation of calibration and surveillance.	-
RCOL2_02.03.03-6	2.3.3.3	2.3-37	Response to RAI No. 46 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added a sentence to state how often the guy wires are inspected.	-
RCOL2_02.03.01-1	Acronyms and Abbreviations	2liv 2lviii	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Added acronym ASHRAE and NOAA to support new text added to subsection 2.3.1.2.10.	-
RCOL2_02.03.01-1	2.3.1.2.10	2.3-21	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Added text after sentence to describe the temperature values.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.01-2	2.3.1.2.3	2.3-12	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Changed the number of tornados from 148 to 246.	-
RCOL2_02.03.01-2	2.3.1.2.3	2.3-13	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Updated values to reflect 95 percent upper limit.	-
RCOL2_02.03.01-2	2.3.7	2.3-49	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Updated reference citation information for Reference number 2.3-210.	-
RCOL2_02.03.01-3	2.3.1.2.6	2.3-15	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Revised last paragraph to support the response.	-
RCOL2_02.03.01-5	2.3.1.2.8	2.3-20	Response to RAI No. 51 Luminant Letter no.TXNB-09057 Date 10/21/2009	Added a sentence to discuss assumption made to enough safety in the most extreme winter condition.	-
RCOL2_02.05.05-1	Accronyms and Abreviation	2-liv	Response to RAI No. 19 Luminant Letter no. TXNB- 09059 Date 10/28/2009	Removed and added text a <sub>y</sub> yield acceleration from the "Acronyms and Abreviation" list	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.05-1	2.5.5.2.4 2.5.5.2.5 2.5.5.2.6 2.5.5.2.7	2.5-225 through 2.5-227	Response to RAI No. 19 Luminant Letter no. TXNB- 09059 Date 10/28/2009	Revised Subsection for RAI response	-
RCOL2_02.05.05-1	Table 2.5.5-203	2.5-440	Response to RAI No. 19 Luminant Letter no. TXNB- 09059 Date 10/28/2009	Revised entire last column of the table	-
RCOL2_02.05.05-1	2.5.7	2.5-451	Response to RAI No. 19 Luminant Letter no. TXNB- TXNB-09059 Date 10/28/2009	Removed references 2.5-425 and 2.5-427	-
RCOL2_02.05.05-1	Figures 2.5.5-213 Through 2.5.5-216	-	Response to RAI No. 19 Luminant Letter no. TXNB- TXNB-09059 Date 10/28/2009	Removed references 2.5-425 and 2.5-427	-
RCOL2_02.03.04-1	2.3.4.2	2.3-42	Response to RAI No. 72 Luminant Letter No. TXNB- 09063 Date 11/11/2009	Revised to provide updated text, including a reference to the US-APWR DCD parameters justifying the conservative assumptions.	-
RCOL2_02.03.04-2	2.3.4.2	2.3-43	Response to RAI No. 72 Luminant Letter No. TXNB- 09063 Date 11/11/2009	Revised to indicate the x/Q values include a 10 % margin.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.04-3	2.3.4.1	2.3-39	Response to RAI No. 72 Luminant Letter No. TXNB- 09063 Date 11/11/2009	Revised to clarify the years of data used in the accident x/Q	-
RCOL2_02.04-1	2.4.1 2.4.2 2.4.3 2.4.4 2.4.5 2.4.6 2.4.7 2.4.8	2.4-2 2.4-14 2.4-20 2.4-26 2.4-32 2.3-34 2.4-35 2.4-37	Response to RAI No.95 Luminant Letter No. TXNB- 09064 Date 11/11/2009	Revised the introductory sentence to remove "Replace the content" with "Add the following at the end" and deleted the last portion of the sentence "with the following."	-
RCOL2_02.03.04-4	Table 2.0-1R Table 2.3-338 Table 2.3-339	2.0-4 Through 2.0-7 2.3-240 Through 2.3-245 2.3-246 Through 2.3-245	Response to RAI No. 72 Luminant Letter No. TXNB- 09063 Date 11/11/2009	Revised to reflect a more precise location for the main control room receptors.	-
RCOL2_02.04.07-2	2.4.7	2.4-36	Response to RAI No.104 Luminant Letter No. TXNB- 09067 Date 11/13/2009	Reference numbers 2.4-269 and 2.4-270 were changed to 2.4-271 and 2.4-272.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.07-2	2.4.7	2.4-36	Response to RAI No.104 Luminant Letter No. TXNB- 09067 Date 11/13/2009	Revised to clarify coincident wind wave and to be consistent with FSAR Subsection 2.4.3.6.	-
RCOL2_02.04.04-4	2.4.4.1	2.4-27	Response to RAI No. 111 Luminant Letter no.TXNB-09067 Date 11/13/2009	Added text to clarify assumption that reservoirs are at normal water surface elevations with no turbine discharges.	-
RCOL2_02.02.03-7	2.2.3.1	2.2-11	Response to RAI No.32 Luminant Letter No. TXNB- 09072 Date 11/18/2009	Added “and radionuclide releases at adjacent units.”	-
RCOL2_02.02.03-7	2.2.3.1.7	2.2-20 2.2-11	Response to RAI No.32 Luminant Letter No. TXNB- 09072 Date 11/18/2009	Added subsection to provide information on radiological releases.	-
CTS-00916	Table 2.0-1R (Sheet 11 of 12)	2.0-12	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-00916	2.5.2.5 2.5.2.5.1	2.5-114 2.5-115 2.5-116	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
RCOL2_03.07.02-1	2.5.2.5.2.1	2.5-116	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed “new EPRI” to “2004 EPRI” in the first paragraph.	-
RCOL2_03.07.02-1	2.5.2.5.2.1	2.5-117	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed “Vs ± Variability values” to “Vs ±1 sigma Variability values” in the third paragraph.	-
CTS-00916	2.5.2.5.2.1	2.5-117	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
RCOL2_03.07.02-5	2.5.2.5.2.1	2.5-117	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added “(strain- independent)” after “linearly” in the fourth paragraph.  Correct typo in fourth paragraph.  Add sensitivity study for strain- dependent modulus in the fourth paragraph.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.07.02-1	2.5.2.5.2.1	2.5-119	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for the peak strain in the soil column in the 6 through 8 paragraphs.	-
CTS-00916	2.5.2.5.2.1	2.5-120	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
CTS-00916	2.5.2.6.1	2.5-120	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
RCOL2_03.07.02-1	2.5.2.6.1.1	2.5.121	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for horizontal GMRS spectrum in the 1 and 7 through 11 paragraphs.	-
CTS-00916	2.5.2.6.1.1 2.5.2.6.1.2	2.5-122 2.5-123 2.5-123 2.5-124	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
RCOL2_03.07.02-1	2.5.2.6.2	2.5-126	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for Foundation Input Response Spectrum in the 8 and 9 paragraphs.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-00916	2.5.2.6.2	2.5-126	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Revised typographical error	-
RCOL2_03.07.02-1	Figure 2.5.2-253	-	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added Figures for maximum strain for the 4 cases. 1. 500 ft of GMRS/FIRS1 profiles $1 \times 10^{-5}$ 2. 500 ft of GMRS/FIRS1 profiles $1 \times 10^{-6}$ 3. 50 ft of FIRS4 profiles $1 \times 10^{-5}$ 4. 50 ft of FIRS4 profiles $1 \times 10^{-6}$	-
RCOL2-03.08.04-43	2.5.4.5.4	2.5-190	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the description for the fill.	-
RCOL2_02.05.02-16 S01	2.5.2.4.4 2.5.2.5	2.5-112 2.5-113 2.5-115	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Removed text after words "CAV filter."and Added Meers Fault to discussion	-
CTS-01098	2.5.2.5.1	2.5-115 2.5-116	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Word "Uncertainty was corrected to "Uncertainty"	-
RCOL2_02.05.02-16 S01	2.5.2.5.2.1	2.5-116	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Removed multiple of before "60 synthetic profiles"	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.02-16 S01	2.5.2.6.1.1	2.5-121	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Removed words "the NRC standard"	-
RCOL2_02.05.02-16 S01	2.5.2.6.1.1	2.5-123	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Word "inside was corrected to "in site"  Last 3 paragraphs of the section were revised, second to last paragraph was removed	-
CTS-01098	2.5.2.6.1.1	2.5-123	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Word "was" was corrected to "is"	-
RCOL2_02.05.02-16 S01	2.5.2.6.1.2	2.5-124	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Figure number was updated from 233 to 234	-
RCOL2_02.05.02-16 S01	2.5.2.6.2	2.5-126	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Removed text on FIRS spectra	-
CTS-01098	Table 2.5.2-230 Through Table 2.5.2-237	2.5-343 Through 2.5-351	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date 12/14/2009	Tables were updated due to calculation revision.	-
RCOL2_02.05.02-16 S01	Figures 2.5.2-215 through 2.5.2-226 Figures	-	Response to RAI No. 11 Luminant Letter no.TXNB-09084 Date	Figures were updated due to calculation revision	

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	2.5.2-229 through 2.5.2-231 Figures 2.5.2-233 through 2.5.2-239 Figures 2.5.2-246 through 2.5.2-251 Figure 3.7-201		12/14/2009		
CTS-01092	2.2.2.7.1	2.2-9	Correction	Corrected reference notation from (Reference 2.2-229) to (Reference 2.2- 233) in the sentence that reads: "As of 2007, the airport had approximately 32,850 aircraft..." and corrected reference notation from (Reference 2.2-230) to (Reference 2.2- 235) in the sentence that reads: "As of 2006, the airport had approximately 58,400 aircraft..."	0
CTS-01092	2.2.5	2.2-24	Correction	Added reference citations to account for the reference notations in Subsection 2.2.2.7.1 and revised current reference numbers: 2.2-229 to 2.2-233;	0

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				2.2-230 to 2.2-235 and 2.2-231 to 2.2-337. Reference citations added include: 2.2-229 through 2.2-232; 2.2-234; and 2.2-236	
CTS-01093	2.4.12.2.4 2.4.13.3	2.4-52 2.4-67	Correction	Corrected years from "August 2007 to February 2007" to "August 2007 to February 2008."	0
RCOL2_06.04-7	Table 2.2-214	2.2-43 2.2-44	Response to RAI No.125 Luminant Letter No.TXNB- 10010 Date 02/22/2010	Added the refrigerant of chiller units in the Table 2.2-214.	-
RCOL2_02.05.02-16 S02	2.5.2.1.3.1	2.5-72 2.5-73	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Reflected additional earthquake in analysis	-
RCOL2_02.05.02-16 S02	2.5.2.2	2.5-76	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Reflected changes in seismic sources	-
RCOL2_02.05.02-16 S02	2.5.2.2.1	2.5-77 2.5-78	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Reflected changes in seismic sources	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.02-16 S02	2.5.2.2.1.1	2.5-78	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Clarified that Meers fault was replaced	-
RCOL2_02.05.02-16 S02	2.5.2.2.1.2	2.5-79	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Dames & Moore screening analysis	-
RCOL2_02.05.02-16 S02	2.5.2.2.1.3	2.5-80	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Law Engineering screening analysis	-
RCOL2_02.05.02-16 S02	2.5.2.2.1.4	2.5-81	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Rondout Associates screening analysis	-
RCOL2_02.05.02-16 S02	2.5.2.2.1.5	2.5-82	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Weston Geophysical screening analysis	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.02-16 S02	2.5.2.2.1.6	2.5-83	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Woodward-Clyde screening analysis and clarified that Meers fault was replaced	-
RCOL2_02.05.02-16 S02	2.5.2.4.2.2	2.5-96	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Reflects additional material and reorganization of subsections	-
RCOL2_02.05.02-16 S02	2.5.2.4.2.2.2	2.5-97	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Law Engineering screening analysis	-
RCOL2_02.05.02-16 S02	2.5.2.4.2.2.3	2.5-98	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Impact of replacing Meers fault	-
RCOL2_02.05.02-16 S02	2.5.2.4.2.2.4	2.5-99	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Rondout Associates screening analysis	-
RCOL2_02.05.02-16 S02	2.5.2.4.2.2.5	2.5-99 2.5-100	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-	Added sources to Weston Geophysical screening analysis	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			10011 Date 02/22/2010		
RCOL2_02.05.02- 16 S02	Figure 2.5.2-204	-	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Added sources to Law Engineering screening analysis	-
RCOL2_02.05.02- 16 S02	Figure 2.5.2-206	-	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Added sources to Rondout Associates screening analysis	-
RCOL2_02.05.02- 16 S02	Figure 2.5.2-207	-	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Added sources to Weston Geophysical screening analysis	-
RCOL2_02.05.02- 16 S02	Figure 2.5.2-208	-	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Added sources with updated Mmax distributions and weights	-
RCOL2_02.05.02- 16 S02	2.5.2	2.5-256	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB- 10011 Date 02/22/2010	Added new Ref 2.5-478 and 2.5- 479	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.02-16 S02	Table 2.5.2-202	2.5-305	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Clarified that Meers fault was replaced	-
RCOL2_02.05.02-16 S02	Table 2.5.2-203	2.5-307 2.5-308	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Dames & Moore screening analysis	-
RCOL2_02.05.02-16 S02	Table 2.5.2-204	2.5-309	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Law Engineering screening analysis	-
RCOL2_02.05.02-16 S02	Table 2.5.2-205	2.5-310	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Rondout Associates screening analysis	-
RCOL2_02.05.02-16 S02	Table 2.5.2-206	2.5-311	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Weston Geophysical screening analysis	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.05.02-16 S02	Table 2.5.2-207	2.5-312 2.5-313	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources to Woodward-Clyde screening analysis and clarified that Meers fault was replaced	-
RCOL2_02.05.02-16 S02	Table 2.5.2-210	2.5-316	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Added sources with updated Mmax distributions and weights	-
RCOL2_02.05.02-16 S02	Table 2.5.2-233	2.5-346	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Errata	-
RCOL2_02.05.02-16 S02	Table 2.5.2-236	2.5-349	Response to RAI No.11 Supplemental. Luminant Letter No.TXNB-10011 Date 02/22/2010	Errata	-
CTS-01112	2.1.1.1	2.1-2	Erratum	Corrected the error for Unit 3 Northing reported as 357406 to 3574606 as described in ER Section 2.1.	1
CTS-01105	2.1.2.2	2.1-4	Access change to SCR	Revised specific information with regards to SCR use and access control.	1

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01105	2.1.2.3	2.1-4	Access change to SCR	Added specific information with regards to SCR use and access control.	1
CTS-01105	2.1.3.3.2.1	2.1-8	Access change to SCR	Added specific information with regards to SCR use and access control.	1
CTS-01105	2.2.2.4	2.2-7	Access change to SCR	Added specific information with regards to SCR use and access control.	1
CTS-01105	2.2.2.4	2.2-7	Clarification	Clarified intake structure location.	1
CTS-01105	2.2.3.1.5	2.2-20 [2.2-21]	Access change to SCR and correction/enha nced description	Replaced existing evaluation of collisions with the intake structure in SCR with an evaluation in Lake Granbury.	1
CTS-01105	2.2.3.1.6	2.2-20 [2.2-22]	Access change to SCR and correction/enha nced description	Clarified the existing evaluation of liquid spills in SCR and added an evaluation of liquid spills in Lake Granbury.	1
RCOL2_02.04.05-5	2.4.5	2.4-32	Response to RAI No.144 Luminant Letter No.TXNB- 10032 Date 4/20/2010	Revised the text to clarify ANSI/ANS 2.8-1992 guidance criteria for considering regions of occurrence for the moving squall lines.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.07-4	2.4.7.	2.4-36	Response to RAI No. 141 Luminant Letter no.TXNB-10035 Date 5/6/2010	Revised text to justify the bounding conservatism of the icing effect analysis, giving consideration to icing under extreme conditions.	-
CTS-01125	Table 2.0-1R (Sheet 7 of 12)	2.0-8	Consistency between the DCD Table 2.0- 1 and FSAR Table 2.0-1R	Revised information for the plant vent.	2
CTS-01125	Table 2.0-1R (Sheet 1, 6, 7, 9 and 11 of 12)	2.0-2 2.0-7 2.0-8 2.0-10 2.0-12	Consistency between the DCD Table 2.0- 1 and FSAR Table 2.0-1R	Revised information to be consistent with Table 2.0-1 in DCD Revision 2.	2
CTS-01125	Table 2.0-1R (Sheet 12 of 12)	2.0-13	Consistency between the DCD Table 2.0- 1 and FSAR Table 2.0-1R	Revised information for settlement and maximum tilt values.	2
CTS-01125	Table 2.0-1R (Sheet 1, 3, 4, 5, 6, 7, 8 and 12 of 12)	2.0-2 2.0-4 2.0-5 2.0-6 2.0-7 2.0-8 2.0-9 2.0-13	Consistency between the DCD Table 2.0- 1 and FSAR Table 2.0-1R	Revised notes.	2
CTS-01125	Table 2.0-1R (Sheet 3 of 12)	2.0-4	Erratum	Corrected typographical error from the revision for RCOL2_02.03.04-4	2
CTS-01120	2.2.3.1.1.3	2.2-14 [2.2-13]	Erratum	Corrected typographical error to reflect correct subsection in DCD Revision 2.	2

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01120	2.3	2.3-1	Erratum	Corrected typographical error for the referenced table number.	2
CTS-01120	2.3.4 2.3.4.1 2.3.4.2	2.3-39 [2.3-40]	Errata	Removed the COLA item instructions and added COLA items to be consistent with DCD Rev 2.	2
CTS-01120	2.3.5 2.3.5.1 2.3.5.2	2.3-43 [2.3-45]	Errata	Removed the COLA item instructions and added COLA items to be consistent with DCD Rev 2.	2
CTS-01121	2.5.1.1.2	2.5-5	Erratum	Corrected typographical error to reflect correct figure references.	2
CTS-01126	2.5.2.1.3.2	2.5-74	Erratum	Corrected reference number "Ref 2.5.2-213" to "Reference 2.5.2-378" and set as a link in red text.	2
CTS-01126	2.5.2.5.2.1	2.5-120	Erratum	Removed the notation in the text for Reference TXUT-001-PR-007 from the revision for RCOL2_03.07.02-5.	2
CTS-01110	Table 2.5.1-206 Through 2.5.1-220	2.5-281 Through 2.5-302 [2.5-285 through 2.5-302]	Duplicated information	Deleted duplication of tables from Subsection 2.5.2.	2

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01111	Table 2.5.2-234 2.5.2-235 2.5.2-237	2.5-352 3.5-353 2.5-355 2.5-356	Errata	Corrected typographical errors that represented incorrect numbers.	2
CTS-00921	Figure 2.5.4-227	-	Errata	Corrected few plot points that were misscolored and did not comply with the Legend of this Figure.	2
CTS-00921	Figure 2.5.5-205 through 2.5.5-212	-	Revised to clarify geologic layers	The colors related to soil on the figures are revised, to be consistent with the revision to figures in provided for RCOL2_02.05.05-1	2
RCOL2_02.03.01-9	Table 2.0-1R (Sheet 2 of 12)	2.0.3	Response to RAI No. 155 Luminant Letter no.TXNB-10042 Date 6/7/2010	Site specific wind speed information has been corrected from 90 mph to 96 mph	-
RCOL2_02.03.01-10	2.3.1.2.1	2.3-10 2.3-11	Response to RAI No. 155 Luminant Letter no.TXNB-10042 Date 6/7/2010	Information on extreme weather conditions was added to the text.	-
RCOL2_02.0 3.01-10	2.3.3.1	2.3-38 2.3-39	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added a discussion to clarify the humidity at the CPNPP site.	-
RCOL2_02.0 3.03-10	Table 2.3-351	2.3-300	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added table to summarize the Monthly average humidity.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.0 3.03-10	Figure 2.3-383 Through 2.3-386	-	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added figures on humidity between different sites including CPNPP	-
RCOL2_02.0 3.03-11	Table 2.3-332	2.3-245	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Corrected table value unit.	-
RCOL2_02.0 3.03-12	2.3.3.1	2.3-39	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added information on Unit 1 and 2 meteorological program.	-
RCOL2_02.0 3.03-13	2.3.3.1	2.3-37	Response to RAI No. 157 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added information on Meteorological instrumentation for Unit 1 and 2.	-
RCOL2_02.0 3.05-3	2.3.5.2.1	2.3-47 2.3-48	Response to RAI No. 160 Luminant Letter no.TXNB-10042 Date 6/7/2010	Added information on normal effluent release atmospheric dispersion evaluations at CPNPP.	-
RCOL2_02.0 3.05-4	2.3.5	2.3-51	Response to RAI No. 160 Luminant Letter no.TXNB-10042 Date 6/7/2010	Removed information on x/Q.	-
RCOL2_02 .03.04-9	Table 2.0-1R	2.0-13 through 2.0-15	Response to RAI No 158 Luminant letter TXNB-10048 Date 6/25/2010	Added x/Q information for TSC HVAC intake and inleak	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.0 3.04-12	2.3.4.3	2.3-46	Response to RAI No 158 Luminant letter TXNB-10048 Date 6/25/2010	Added x/Q information for Control Room HVAC	-
RCOL2_02.0 3.04-10	Table 2.3-338	2.3-257	Response to RAI No 158 Luminant letter TXNB-10048 Date 6/25/2010	Revised table information on release heights	-
RCOL2_02.0 3.02-04	2.3.2.2.4	2.3-35 2.3-36	Response to RAI No 156 Luminant letter TXNB-10048 Date 6/25/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005, Rev. 3.	-
RCOL2_02.0 3.02-04	Tables 2.3- 319 through 2.3-331	2.3-215 2.3-216 2.3-227 2.3-231 2.3-232 2.3-233 2.3-237 2.3-238 2.3-239 2.3-243 2.3-244 2.3-245	Response to RAI No 156 Luminant letter TXNB-10048 Date 6/25/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005, Rev. 3.	-
RCOL2_02.0 3.02-04	Figures 2.3-372 through 2.3-379	-	Response to RAI No 157 Luminant letter TXNB-10048 Date 6/25/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005.	-
CTS-01105	2.3.5.2.1	2.3-46 [2.3-50]	Access change to SCR	Revised text to reflect the inclusion of receptor locations on Squaw Creek Reservoir	3

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				(SCR).	
CTS-01105	Table 2.3-336	2.3-237 [2.3-252]	Access change to SCR	Revised table to reflect the inclusion of receptor locations on SCR.	3
CTS-01105	Table 2.3-348 (Sheet 14 of 15) (Sheet 15 of 5)	2.3-281 [2.3-297] [2.3-298]	Access change to SCR	Revised table to reflect the inclusion of SCR.	3
CTS-01105	Table 2.3-350	2.3-283 [2.3-299]	Access change to SCR	Revised table to reflect the inclusion of SCR.	3
RCOL2_19-13	2.3.1.2.2	2.3- 11 [2.3-13]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added the formula provided by Kaplan and Demaria on calculating the tropical cyclone wind speed after landfall with a correction factor accounting for inland distance and a prediction for the upper bound of possible hurricane wind speed at the CPNPP site.	-
RCOL2_03 .08.04-72	Table 2.0-1R (Sheet 10 and 11 of 14)	2.0-11 2.0-12	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised site Specific FIRS information due to RAI response	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03 .08.04-63	2.5.1.2.5.2 2.5.2.5 2.5.2.6.2 2.5.4 2.5.4.3 2.5.4.4.2.1 2.5.4.7.4 2.5.4.8	2.5-56 2.5-118 2.5-129 2.5-140 2.5-179 2.5-186 2.5-207 2.5-208 2.5-209	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Deleted any mention of Seismic Category I shallow embedded duct banks	-
RCOL2_03 .08.04-72	2.5.2.6.1.1 2.5.2.6.1.2 2.5.2.6.2	2.5-126 2.5-127 2.5-128 2.5-130 2.5-131	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised site Specific FIRS information due to RAI response	-
RCOL2_03 .08.04-72	Table 2.5.2-236	2.5-355	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised site Specific FIRS information due to RAI response	-
RCOL2_03 .08.04-72	Table 2.5.2-237	2.5-356 2.5-357 2.5-358	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised GMRS information due to RAI response	-
RCOL2_03 .08.04-72	Figure 2.5.2-247 Through 2.5.2-252 Figure 2.5.2-257 and 2.5.2-258	-	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised site Specific FIRS information due to RAI response	-
RCOL2_02.04.01-6	2.4.1.1	2.4-3	Response to RAI No 138 Luminant letter TXNB-10052 Date 7/16/2010	Revised FSAR to clarify how flooding at the site and Brazos river were factored into the site flooding conditions.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.01-6	2.4.1.2	2.4-4 2.4-5 2.4-6	Response to RAI No 138 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to elaborate on contributing and non-contributing watersheds.	-
RCOL2_02.04.01-6	2.4.1.2	2.4-6 2.4-7	Response to RAI No 138 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to elaborate on dam failures	-
RCOL2_02.04.01-7	2.4.1.2	2.4-7 2.4-8	Response to RAI No 138 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to elaborate on dam failures	-
RCOL2_02.04.01-6	2.4.1.2.2	2.4-12	Response to RAI No 138 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to elaborate on dam failures	-
RCOL2_02.04.04-5	2.4.4	2.4-34 2.4-35	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised to provide clarification on how upstream dams are evaluated.	-
RCOL2_02.04.04-5	2.4.4.1	2.4-35 Through 2.4-42	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised to provide qualitative assessment of dam failure.	-
RCOL2_02.04.04-6 RCOL2_02.04.04-7	2.4.4.1	2.4-42	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised to provide wind set up analysis.	-
RCOL2_02.04.04-7	2.4.4.1	2.4-43 Through 2.4-50	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised to provide wind set up analysis.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.04-5	2.4.4.1	2.4-50 2.4-51 2.4-106 2.4-107	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Removed former assumptions for the dam failure analysis and added appropriate references.	-
RCOL2_02.04.04-7	2.4.4.3	2.4-53 2.4-54 2.4-106 2.4-107	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised to provide wind set up analysis and added appropriate references.	-
RCOL2_02.04.04-7	Figure 2.4-202 Figure 2.4-203	2.4-53 2.4-54 2.4-106 2.4-107	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Revised figures to reflect clarification and revisions provided in the RAI response.	-
RCOL2_02.04.04-5	Table 2.4-201	2.4-149 Through 2.4-156	Response to RAI No 140 Luminant letter TXNB-10052 Date 7/16/2010	Added a table to summarize dam information.	-
RCOL2_02.04.02-2	2.4.1.2.4	2.0-10	Response to RAI No 139 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe the conservative and bounding nature of the probable maximum flood analysis.	-
RCOL2_02.04.02-2	2.4.2.3	2.4-15 2.4-16 2.4-17 2.4-19 2.4-20 2.4-21	Response to RAI No 139 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe the conservative and bounding nature of the probable maximum flood analysis.	-
RCOL2_02.04.02-2	Table 2.4.11-202	2.4-111	Response to RAI No 139 Luminant letter TXNB-10052 Date 7/16/2010	Revised table to reflect the revised analysis.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.03-5	Table 2.0-1R	2.0-10	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised maximum flood (or tsunami) level for SCR to 793.66 ft msl and to 820.90 ft msl for local intense precipitation at Units 3 and 4.	-
RCOL2_02.04.03-5	2.4.3	2.4-25	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to address the RAI response.	-
RCOL2_02.04.03-5	2.4.3.1	2.4-25 2.4-26 2.4-27	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe Basins as described in the RAI response.	-
RCOL2_02.04.03-5	2.4.3.2	2.4-27	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe Basins as described in the RAI response.	-
RCOL2_02.04.03-5	2.4.3.3	2.4-28 2.4-29 2.4-30	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe flooding conditions as described in the RAI response.	-
RCOL2_02.04.03-5	2.4.3.4	2.4-31	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe flooding conditions as described in the RAI response.	-
RCOL2_02.04.03-5	2.4.3.5	2.4-31 2.4-32	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe flooding conditions as described in the RAI response.	-
RCOL2_02.04.03-5	2.4.3.6	2.4-32 2.4-33	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised subsection to describe flooding conditions as described in the RAI response.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.03-5	2.4.16	2.4-107	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Added reference for revisions made to FSAR to support RAI response.	-
RCOL2_02.04.03-5	Table 2.4.3-203	2.4-137 2.4 -138 2.4-139	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised table to reflect Basin 2 incremental PMP estimates.	-
RCOL2_02.04.03-5	Table 2.4.3-205	2.4-141 2.4-142 2.4-143	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised table to reflect incremental PMP estimates for Paluxy River Watershed Subbasin.	-
RCOL2_02.04.03-5	Table 2.4.3-206	2.4-144	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Removed table as the information is no longer used/supported in the text.	-
RCOL2_02.04.03-5	Table 2.4.3-207	2.4-145	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised watershed subbasin characteristics to support the RAI response.	-
RCOL2_02.04.03-5	Table 2.4.3-208	2.4-146	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Added new table to summarize SCR Watershed basin 1.6 hour to support RAI response.	-
RCOL2_02.04.03-5	Table 2.4.3-209	2.4-147	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Added new table to summarize SCR Sub-basin 1 hour to support RAI response.	-
RCOL2_02.04.03-5	Table 2.4.3-210	2.4-147	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Added new table to summarize Synder's Unit Hydrograph results to support RAI response.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.03-5	Figures 2.4.3-203 through 2.4.3-209	-	Response to RAI No 143 Luminant letter TXNB-10052 Date 7/16/2010	Revised figure to reflect revisions to the PMF analysis.	-
RCOL2_02.04.05-6	2.4.5	2.4-56 2.4-57	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to describe the mechanisms that could result in a conservative estimate of landslide induced seiches.	-
RCOL2_02.04.05-6	Figures 2.5.4-201 2.5.4-202	-	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Added figures to depict the conceptual model used to show mechanisms that could result in a conservative estimate of landslide induced seiches.	-
RCOL2_02.04.05-6	Table 2.4.5-201	2.4-165	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Added table to describe the slope geometry for SCR shoreline.	-
RCOL2_02.04.05-6	Table 2.4.5-202	2.4-166 2.4-167	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Added table to describe the SCR slope line shoreline analysis.	-
RCOL2_02.04.05-6	Table 2.4.5-203	2.4-168 2.4-169	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Added table summarize the SCR slope stability analysis for extreme worse case.	-
RCOL2_02.04.05-7	2.4.5	2.4-55	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to describe conservative comparison to Barberopoulou's	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				publication.	
RCOL2_02.04.05-7	2.4.16	2.4-107	Response to RAI No 144 Luminant letter TXNB-10060 Date 8/26/2010	Added references for new sources cited in revision for Subsection 2.4.5.	-
RCOL2_02.04.12- 9, 13, 14, and 15	2.4.12.2.4	2.4-75 2.4-76 2.4-77 2.4-78	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to clarify monitoring well information and groundwater elevation data.	-
RCOL2_02.04.12- 9, 13, 14, and 15	2.4.12.3	2.4-80 2.4-81	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to describe conservative groundwater pathway travel time assumption.	-
RCOL2_02.04.12- 9, 13, 14, and 15	2.4.12.3.1	2.4-82 2.4-83 2.4-84 2.4-85 2.4-87	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to describe the possible pathway scenarios and site specific factors considered.	-
RCOL2_02.04.12- 9, 13, 14, and 15	Table 2.4.12- 211	2.4-216 2.4-217 2.4-218 2.4-219 2.4-220	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised table to provide summary of pathway conditions as described in the revised model.	-
RCOL2_02.04.12- 9, 13, 14, and 15	Figure 2.4.12-210 (sheet 1 through 4 of 12)	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised figure sheet numbers to show only the potentiometric surface for groundwater in the hydrogeologic Zone A.	-
RCOL2_02.04.12- 9, 13, 14, and 15	Figure 2.4.12-210 (Sheet 1 through 12 of	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Removed groundwater gradient maps depicting the potentiometric	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	12)			surface in the hydrogeologic zones B and C.	
RCOL2_02.04.12-9, 13, 14, and 15	Figure 2.4.12-212	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised figure to depict the possible flow pathways.	-
RCOL2_02.04.12-9, 13, 14, and 15	Figure 2.4.12-213	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised figure to depict post construction release flow path #1 described in the 2.4.12 conceptual model.	-
RCOL2_02.04.12-9, 13, 14, and 15	Figure 2.4.12-214	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised figure to depict post construction release flow path #2 described in the 2.4.12 conceptual model.	-
RCOL2_02.04.12-9	2.5.1.2.5.5	2.5-58	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised subsection to describe groundwater consistent with the model described in revised subsection 2.4.12.	-
RCOL2_02.04.12-9	Figure 2.5.5-204	-	Response to RAI No 147 Luminant letter TXNB-10060 Date 8/26/2010	Revised figure to depict the current grading and drainage plan.	-
RCOL2_02.04.13-7	2.4.13.1	2.4-89	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Clarified that the source term concentrations utilized in the tank failure analysis are from the BTP 11-6 guidance.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01142	2.4.13.1	2.4-89	Erratum	Deleted dash between reactor and coolant.	-
RCOL2_02.04.13-7	2.4.13.1	2.4-90	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised the discussion to indicate that the source term concentration was generated using the RATAF code and deleted the reference to dilution factor of 4.4E10 gal.	-
RCOL2_02.04.13-7	2.4.13.1	2.4-91	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised text to indicate that all radionuclides generated from the RATAF code were evaluated in the analysis, not only Cs-134 and Cs-137.	-
RCOL2_02.04.12-7	2.4.13.2	2.4-91	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised subsection to reflect elimination of vertical pathway to Twin Mountains formation.	-
RCOL2_02.04.12-7	2.4.13.2	2.4-92	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised text to reflect RAI 147 changes on alternate pathways considered in analysis and to be consistent with 2.4.12.	-
CTS-01157	2.4.13.3	2.4-94	Erratum	Revised to reflect correct Figure number.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01158	2.4.13.3	2.4-94	Erratum	Removed the word 'see' from the figure reference to be consistent with the COLA format.	-
RCOL2_02.04.12-5	2.4.13.4	2.4-94	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Changed title of section for clarity.	-
RCOL2_02.04.13-5	2.4.13.4	2.4-95	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added additional information to substantiate elimination of vertical pathway to Twin Mountains Formation.	-
CTS-01154	2.4.13.4	2.4-95	Erratum	Corrected reference to Subsection.	-
RCOL2_02.04.13-5	2.4.13.4	2.4-96	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added additional information to substantiate elimination of vertical pathway to Twin Mountains Formation.	-
RCOL2_02.04.13-7	2.4.13.5	2.4-96 2.4-97 2.4-98 2.4-99 2.4-100 2.4-101	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised subsection title and subsection to remove the previous discussion and add a new discussion regarding the tank failure analysis.	-
RCOL2_02.04.13-7	2.4.13.5.1	2.4-101 2.4-102 2.4-103	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Bounding Unit 3 Pathway Scenario.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.13-7	2.4.13.5.2	2.4-103 2.4-104 2.4-105	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Modeling Equations Used in Tank Failure Analysis.	-
RCOL2_02.04.13-7	2.4.13.5.3	2.4-105 2.4-106	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Infiltration Area of Existing Fill Groundwater and Effect on Volumetric Flow Rate into SCR.	-
RCOL2_02.04.13-7	2.4.13.5.4	2.4-107	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Dilution Effect of the Existing Fill Groundwater.	-
RCOL2_02.04.13-7	2.4.13.5.5	2.4-107 2.4-108	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Effects of Circulating Water Pump Operation on Mixing and Dilution.	-
RCOL2_02.04.13-7	2.4.13.5.6	2.4-108 2.4-109 2.4-110	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Dilution Effect and Mixing of SCR	-
RCOL2_02.04.13-7	2.4.13.5.7	2.4-110 2.4-111	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new subsection entitled Summary to summarize the overall tank failure analysis.	-
RCOL2_02.04.13-7	2.4.13.6	2.4-111	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Deleted subsection to reflect new analysis and results.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.13-7	2.4.13.7	2.4.112 2.4.113	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Deleted subsection to reflect new analysis and results.	-
RCOL2_02.04.13-7	References	2.4-123	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added references used in the new analysis described in the revised text.	-
RCOL2_02.04.13-7	Tables 2.4.13-202 2.4.13-203 2.4.13-204 2.4.13-205 2.4.13-206 2.4.13-207 2.4.13-208 2.4.13-209	2.4-223 through 2.4-237	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Added new tables to reflect new tank failure analysis.	-
RCOL2_02.04.13-7	Figures 2.4-12-212 2.4-12-213	-	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	Revised figures eliminate previous analysis cross sections and show stormwater pond east of Unit 3.	-
RCOL2_02.04.13-7	Figures 2.4.13-201 2.4.13-202 2.4.13-203 2.4.13-204 2.4.13-205 2.4.13-206 2.4.13-207	-	Response to RAI No 145 Luminant letter TXNB-10063 Date 9/16/2010	New figures added to reflect new subsection 2.4.13.5 discussion.	-
RCOL2_02 .03.01-6 S01	Table 2.0-1R (Sheet 2 of 15) Table 2.3-202 (Sheet 4 of 4)	2.0-3 2.3-61	Supplemental Response to RAI No. 155 Luminant letter TXNB-10066 Date 9/29/2010	100 yr temperatures were added to the tables	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02 .03.01-6 S01	2.3.7	2.3-55	Supplemental Response to RAI No. 155 Luminant letter TXNB-10066 Date 9/29/2010	New reference added	-
RCOL2_02.0 3.02-04 S01	2.3.2.2.4	2.3-35 2.3-36	Supplemental Response to RAI No 156 Luminant letter TXNB-10066 Date 9/29/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005, Rev. 4.	-
RCOL2_02.0 3.02-04 S01	Tables 2.3-319 through Table 2.3-331	2.3-215 through 2.3-227  2.3-231 through 2.3-233  2.3-237 through 2.3-239  2.3-243 through 2.3-245  2.3-249 through 2.3-252	Supplemental Response to RAI No 156 Luminant letter TXNB-10066 Date 9/29/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005, Rev. 4.	-
RCOL2_02.0 3.02-04 S01	Figures 2.3-372 through Figure 2.3-379	-	Supplemental Response to RAI No 156 Luminant letter TXNB-10066 Date 9/29/2010	Revised text to be consistent with revisions and corrections made to TXUT-001-ER- 5.3-CALC-005, Rev. 3.	-
CTS-01140	2.1 2.1.4	2.1-1 2.1-11	Standardization	Changed LMN to STD and where needed, removed or replaced reference to	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				CPNPP Units 3 and 4	
CTS-01143	2.5.3.4	2.5-130 [2.5-136]	Erratum	Added reference to Subsection 2.5.1.2.4.2	4
CTS-01143	Table 2.5.4-202	2.5-367 [2.5-369]	Erratum	Corrected Pit A dimension of 68 ft. to 55 ft.	4
RCOL2_02 .05.02-22	2.5.2.2.1 2.5.2.2.1.1  2.5.2.2.1.4 2.5.2.2.1.5 2.5.2.2.1.6 2.5.2.4.2.2.3 2.5.2.4.2.2.4 2.5.2.4.2.2.5	2.5-78 2.5-80 2.5-81 2.5-82 2.5-83 2.5-84 2.5-100	Response to RAI No 168 Luminant letter TXNB-10059 Date 8/19/2010	Updated FSAR text with source zones and seismic hazard information	-
RCOL2_02 .05.02-27	2.5.2.4.2.3.2. 2 2.5.2.4.2.3.2. 3 2.5.2.4.2.3.2. 4	2.5-107 2.5-108 2.5-109	Response to RAI No 168 Luminant letter TXNB-10059 Date 8/19/2010	Updated FSAR text to account for new figure Figure 2.5.2- 259	-
RCOL2_02 .05.02-22	Table 2.5.2-203 (Sheet 2 of 2) Table 2.5.2-210	2.5-314 2.5-320	Response to RAI No 168 Luminant letter TXNB-10059 Date 8/19/2010	Updated FSAR text with source zones and seismic hazard information	-
RCOL2_02 .05.02-27	Figure 2.5.2-259	-	Response to RAI No 168 Luminant letter TXNB-10059 Date 8/19/2010	New figure – Logic Tree of Return Period and Characteristic Magnitude for the Meers Fault	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02 .05.02-24 S01	2.5.2.1.3.1	2.5-72	Supplemental Response to RAI No 168 Luminant letter TXNB-10073 Date 10/21/2010	Updated FSAR text with source zones and seismic hazard information	-
RCOL2_02 .05.02-22 S01	2.5.2.4.2.2.3	2.5-100	Supplemental Response to RAI No 168 Luminant letter TXNB-10073 Date 10/21/2010	Updated FSAR text with source zones and seismic hazard information	-
RCOL2_02 .05.02-24 S01	Table 2.5.2-201 (Sheet 3 of 6)	2.5-307	Supplemental Response to RAI No 168 Luminant letter TXNB-10073 Date 10/21/2010	Updated FSAR text with source zones and seismic hazard information	-
RCOL2_02 .05.04-22 S01	Figure 2.5.4-246 through 2.5.4-261	-	Supplemental Response to RAI No 170 Luminant letter TXNB-10073 Date 10/21/2010	Added Preliminary SRI Excavation figures to the COLA.	-
RCOL2_02 .05.04-22 S01	2.5.4.5	2.5-190	Supplemental Response to RAI No 170 Luminant letter TXNB-10073 Date 10/21/2010	Added text introducing the Preliminary SRI Excavation figures into the COLA.	-
RCOL2_02 .05.04-23 S01	2.5.4.3	2.5-179	Supplemental Response to RAI No 170 Luminant letter TXNB-10073 Date 10/21/2010	Added text to confirm that there no site-specific seismic CAT I structures resting on backfill.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.01-06 S02	Table 2.0-1R (Sheet 2 of 15)	2.0-3	Supplemental Response to RAI No 155 Luminant letter TXNB-10076 Date 10/29/2010	FSAR Table 2.01R has been revised to show the 100-year return period temperatures in a new row so as to not confuse them with the 0 percent exceedance values	-
RCOL2_02.03.01-11	Table 2.0-1R	2.0-3	Response to RAI No 195 Luminant letter TXNB-11002 Date 1/24/2011	Table 2.0-1R has been revised to show direct comparison between the CPNPP 100-year return period maximum (and minimum) recorded temperatures and the US-APWR 0 percent exceedance temperatures	-
RCOL2_02.3.01-12	Table 2.0-1R	2.0-3	Response to RAI No 204 Luminant letter TXNB-11018 Date 3/18/2011	Table 2.0-1R has been revised to list the 100 year return non-coincident wet bulb temperature to compare with the 0% exceedance non-coincident wet bulb temperatures.	-
ROC2_02.04.03-12	2.4.3	2.4-25	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Corrected the Squaw Creek Dam elevation from 755.24 ft msl to 761.11 ft msl.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.02.03-12	2.4.3.1	2.4-26	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised the hourly temporal distribution to two- thirds.	-
RCOL2_02.02.03-12	2.4.3.1	2.4-27	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised the hourly temporal distribution to two- thirds and clarified the Basin numbers.	-
CTS-01167	2.4.3.2	2.4-27	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Corrected a typographical error made in the previous revision of Q02.04.03-05	-
RCOL2_02.04.03-12	2.4.3.4	2.4-31	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised RCOL2_02.04.03-5 revisions to use two-thirds temporal distribution.	-
RCOL2_02.04.03-12	2.4.3.4	2.4-31	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Corrected the maximum backwater flow on the downstream end of the Squaw Creek Dam from 88,130 cfs to 181,880 cfs.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.04.02-12	2.4.3.5	2.4-32	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Corrected the water surface elevation and the resulting elevation.	-
RCOL2_02.04.02-12	Table 2.4.3-205	2.4-146 through 2.4-148	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised Basin 3 and Basin 4 incremental numerical values.	-
RCOL2_02.04.03-12	Figure 2.4.3-204	-	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised graph and figure title.	-
RCOL_02.04.03-12	Figure 2.4.3-205	-	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised figure to depict layout concurrent with text.	-
RCOL_02.04.03-12	Figure 2.4.3-212	-	Response to RAI No 188 Luminant letter TXNB-10087 Date 12/16/2010	Revised graph and figure title.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01168	Table 2.0-1R (Sheet 2 of 15)	2.0-3	Clarification	Clarified text in the table to mention 100-year return period for windspeed value of 96 mph	5
DCD_02.03.04-9	Table 2.0-1R (Sheet 4 through 9, 13 through 15)	2.0-5 through 2.0-10 2.0-14 [2.0-15 2.0-16]	Consistency with DCD Revision 3	Revised X/Q values to match values in the DCD	5
CTS-01169	Table 2.0-1R (Sheet 13 through 15 of 15)	2.0-14 [2.0-15 2.0-16]	Editorial	Removed second 0 after decimal point for consistency with the presentation of other values in the table.	5
CTS-01168	2.3.1.2.11	2.3-21 [2.3-24]	Clarification	Clarified text in the subsection to mention 50-year return period for windspeed value of 90 mph	5
CTS-01169	Table 2.3- 339 (Sheet 2 of 2)	2.3-247 [2.3-268]	Erratum	Corrected the main steam relief and safety valve 2-8 hour X/Qs which were an order of magnitude higher	5

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01170	2.4.2.2	2.4-15 [2.4-20]	Erratum	Corrected water surface level from 774.99 to 760.68 to be consistent with RAI 188 Question 02.04.03-12.	5
CTS-01170	2.4.4.3	2.4-31 [2.4-53]	Erratum	Corrected maximum water surface elevation at the confluence of Brazos River and Paluxy River cross section from 774.99 to 760.02 to be consistent with RAI 188 Question 02.04.03-12.	5
CTS-01170	2.4.4.3	2.4-31 [2.4-54]	Erratum	Corrected confluence water surface elevation from 760.71 to 760.68 to be consistent with RAI 188 Question 02.04.03-12.	5
CTS-01196	2.3.1.2.11	2.3-21 [2.3-24]	Editorial	Changed "100-yr" to '100-year" for consistency with nomenclature used in Table 2.0-1R and section 2.3.1.2.11	5

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.

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**Table 2.0-1R (Sheet 2 of 15)**  
**Key Site Parameters**

CP COL 2.1(1) CP COL 2.2(1) CP COL 2.3(1) CP COL 2.3(2)	Extreme wind speed (other than in tornado)	155 mph for 3-second gusts at 33 ft aboveground level based on 100-year return period, with importance factor of 1.15 for seismic category I/II structures	<del>99</del> 96 mph for-3-second gust wind speed at 33-ft aboveground <u>based on 100-year return period</u>	RCOL2_02 .03.01-9 CTS-01168
	Ambient design air temperature <del>(1% exceedance maximum)</del>	<u>1% exceedance maximum:</u> 100°F dry bulb, 77°F coincident wet bulb, 81°F non-coincident wet bulb	<u>1% exceedance maximum:</u> 99°F dry bulb, 75°F coincident wet bulb, 78°F non-coincident wet bulb	RCOL2_02 .03.01-11
	<del>Ambient design air temperature- (0% exceedance maximum)</del>	<u>0% exceedance maximum:</u> 115°F dry bulb, 80°F coincident wet bulb, 86°F non-coincident wet bulb, historical limit excluding peaks <2 hr	<u>0% exceedance maximum:</u> 112°F dry bulb, 78°F coincident wet bulb, 83°F non-coincident wet bulb, historical limit excluding peaks <2 hr <u>100-year return period maximum:</u> <u>115°F dry bulb,</u> <u>78°F coincident wet bulb</u> <u>86°F non-coincident wet bulb</u>	RCOL2_02 .03.01-11  RCOL2_02 .03.01-6 S01 RCOL2_02 .03.01-12 RCOL2_02 .03.01-6 S02 RCOL2_02 .03.01-11
	Ambient design air temperature <del>(1% exceedance minimum)</del>	<u>1% exceedance minimum:</u> -10°F dry bulb	<u>1% exceedance minimum:</u> 25°F dry bulb	
CP COL 2.3(3) CP COL 2.4(1) CP COL 2.5(1)	<del>Ambient design air temperature (0% exceedance minimum)</del>	<u>0% exceedance minimum:</u> -40°F dry bulb, historical limit excluding peaks <2 hr	<u>0% exceedance minimum:</u> -0.5°F dry bulb, historical limit excluding peaks <2 hr <u>100-year return period minimum:</u> <u>-5°F dry bulb</u>	RCOL2_02 .03.01-6 S01 RCOL2_02 .03.01-6 S02
Atmospheric dispersion factors ( $\chi/Q$ values) for on-site locations:				

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**Table 2.0-1R (Sheet 4 of 15)**  
**Key Site Parameters**

CP COL 2.4(1)  
 CP COL 2.5(1)

Plant vent <sup>(e)</sup> <sub>(5)</sub>		East HVAC Intake		West HVAC Intake	
0-8 hrs	$1.1 \times 10^{-3} \text{ s/m}^3$	0 – 2 hours	<del>6.9E-</del> <del>04</del> <u>6.3E-04</u>	0 – 2 hours	<del>1.0E-</del> <del>03</del> <u>9.4E-04</u>
8-24 hrs	$6.6 \times 10^{-4} \text{ s/m}^3$	2 – 8 hours	<del>4.4E-</del> <del>04</del> <u>4.1E-04</u>	2 – 8 hours	<del>7.6E-</del> <del>04</del> <u>7.3E-04</u>
1-4 days	$4.2 \times 10^{-4} \text{ s/m}^3$	8 – 24 hours	<del>1.8E-</del> <del>04</del> <u>1.7E-04</u>	8 – 24 hours	<del>3.2E-</del> <del>04</del> <u>3.1E-04</u>
4-30 days	<del>1.9</del> <u>2.8</u> $\times 10^{-4} \text{ s/m}^3$	1 – 4 days	<del>1.2E-</del> <del>04</del> <u>1.1E-04</u>	1 – 4 days	<del>2.0E-</del> <del>04</del> <u>1.9E-04</u>
		4 – 30 days	<del>9.8E-</del> <del>05</del> <u>9.0E-05</u>	4 – 30 days	<del>1.7E-</del> <del>04</del> <u>1.6E-04</u>

RCOL2\_02  
 .03.04-4

DCD\_02.03  
 .04-9

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**Table 2.0-1R (Sheet 5 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)  
 CP COL 2.2(1)  
 CP COL 2.3(1)  
 CP COL 2.3(2)  
 CP COL 2.3(3)  
 CP COL 2.4(1)  
 CP COL 2.5(1)

Ground-level containment releases <sup>(e)(4)</sup>		East HVAC Intake Containment Shell	West HVAC Intake Containment Shell
0-8 hrs	$2.2 \times 10^{-3} \text{ s/m}^3$	0 – 2 hours	0 – 2 hours
8-24 hrs	$1.3 \times 10^{-3} \text{ s/m}^3$	2 – 8 hours	2 – 8 hours
1-4 days	$8.3 \times 10^{-4} \text{ s/m}^3$	8 – 24 hours	8 – 24 hours
4-30 days	$3.65 \times 10^{-4} \text{ s/m}^3$	1 – 4 days	1 – 4 days
		4 – 30 days	4 – 30 days

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 RCOL2\_02  
 .03.04-4  
 DCD\_02.03  
 .04-9

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**Table 2.0-1R (Sheet 6 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)  
 CP COL 2.2(1)  
 CP COL 2.3(1)  
 CP COL 2.3(2)  
 CP COL 2.3(3)  
 CP COL 2.4(1)  
 CP COL 2.5(1)

Main steam relief valve and safety valve releases <del>(4)</del> <u>(6)</u>	$5.3 \times 10^{-3} \text{ s/m}^3$ $3.1 \times 10^{-3} \text{ s/m}^3$ $2.0 \times 10^{-3} \text{ s/m}^3$ $8.71.3 \times 10^{-4.3} \text{ s/}$ $\text{m}^3$	East HVAC Intake Main Steam Relief Valves		West HVAC Intake Main Steam Relief Valves	
		0 – 2 hours	<del>3.4</del> <u>2.9</u> E-03	0 – 2 hours	<del>3.7</del> <u>3.4</u> E-03
		2 – 8 hours	<del>1.8</del> <u>1.7</u> E-03	2 – 8 hours	<del>2.7</del> <u>2.4</u> E-03
		8 – 24 hours	<del>7.3</del> <u>6.9</u> E-04	8 – 24 hours	<del>1.1</del> <u>9.9</u> E-04
		1 – 4 days	<del>5.3</del> <u>4.9</u> E-04	1 – 4 days	<del>7.2</del> <u>6.6</u> E-04
		4 – 30 days	<del>4.2</del> <u>3.9</u> E-04	4 – 30 days	<del>4.9</del> <u>4.5</u> E-04
		East HVAC Intake Main Steam Safety Valves		West HVAC Intake Main Steam Safety Valves	
		0 – 2 hours	<del>3.6</del> <u>3.3</u> E-03	0 – 2 hours	<del>4.6</del> <u>4.1</u> E-03
		2 – 8 hours	<del>2.0</del> <u>1.9</u> E-03	2 – 8 hours	<del>3.0</del> <u>2.7</u> E-03
		8 – 24 hours	<del>8.3</del> <u>7.6</u> E-04	8 – 24 hours	<del>1.2</del> <u>1.1</u> E-03
		1 – 4 days	<del>6.4</del> <u>5.4</u> E-04	1 – 4 days	<del>8.9</del> <u>8.1</u> E-04
		4 – 30 days	<del>4.2</del> <u>3.8</u> E-04	4 – 30 days	<del>5.6</del> <u>5.1</u> E-04

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 .03.04-4

DCD\_02.03  
 .04-9

RCOL2\_02  
 .03.04-4

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**Table 2.0-1R (Sheet 7 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)  
 CP COL 2.2(1)  
 CP COL 2.3(1)  
 CP COL 2.3(2)  
 CP COL 2.3(3)  
 CP COL 2.4(1)  
 CP COL 2.5(1)

Steam line break releases <sup>(8)</sup>		East HVAC Intake Main Steam Line	West HVAC Intake Main Steam Line
0-8 hrs	$1.9 \times 10^{-2} \text{ s/m}^3$	0 – 2 hours	0 – 2 hours
8-24 hrs	$1.1 \times 10^{-2} \text{ s/m}^3$	2 – 8 hours	2 – 8 hours
1-4 days	$7.1 \times 10^{-3} \text{ s/m}^3$	8 – 24 hours	8 – 24 hours
4-30 days	$3.14.7 \times 10^{-3} \text{ s/m}^3$	1 – 4 days	1 – 4 days
		4 – 30 days	4 – 30 days
Fuel handling area releases <sup>(e)(7)</sup>		East HVAC Intake	West HVAC Intake
0-8 hrs	$9.9 \times 10^{-4} \text{ s/m}^3$	0 – 2 hours	0 – 2 hours
8-24 hrs	$1.1 \times 10^{-3} \text{ s/m}^3$	2 – 8 hours	2 – 8 hours
1-4 days	$5.9 \times 10^{-4} \text{ s/m}^3$	8 – 24 hours	8 – 24 hours
4-30 days	$6.4 \times 10^{-4} \text{ s/m}^3$	1 – 4 days	1 – 4 days
	$3.7 \times 10^{-4} \text{ s/m}^3$	4 – 30 days	4 – 30 days
	$4.1 \times 10^{-4} \text{ s/m}^3$		
	$1.6 \times 10^{-4} \text{ s/m}^3$		
	$2.7 \times 10^{-4} \text{ s/m}^3$		

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**Comanche Peak Nuclear Power Plant, Units 3 & 4**  
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**Table 2.0-1R (Sheet 8 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)  
 CP COL 2.2(1)  
 CP COL 2.3(1)  
 CP COL 2.3(2)  
 CP COL 2.3(3)  
 CP COL 2.4(1)  
 CP COL 2.5(1)

<del>Auxiliary building (A/B) releases (reactor-coolant system sample line)</del> <del>0-8 hrs</del> <del>8-24 hrs</del> <del>1-4 days</del> <del>4-30 days</del>	<del><math>2.2 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>1.3 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>8.4 \times 10^{-4} \text{ s/m}^3</math></del> <del><math>3.7 \times 10^{-4} \text{ s/m}^3</math></del>	<del>Dispersion of releases from the reactor-coolant sample line are bounded by the dispersion values for the plant vent.</del>
<del>Air lock releases in containment</del> <del>0-8 hrs</del> <del>8-24 hrs</del> <del>1-4 days</del> <del>4-30 days</del>	<del><math>4.7 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>2.8 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>1.8 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>7.7 \times 10^{-4} \text{ s/m}^3</math></del>	<del>Air lock <math>\chi/Q</math> values bounded by the <math>\chi/Q</math> values for the Containment Shell release.</del>
Atmospheric dispersion factors ( $\chi/Q$ values) for MCR inleak for specified release points <sup>(h)(3)</sup> :		
Plant vent <del>to reactor building (R/B) door<sup>(h)(9)</sup></del> 0-8 hrs 8-24 hrs 1-4 days 4-30 days	<del><math>1.3 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>7.77.8 \times 10^{-4} \text{ s/m}^3</math></del> <del><math>4.9 \times 10^{-4} \text{ s/m}^3</math></del> <del><math>2.23.3 \times 10^{-4} \text{ s/m}^3</math></del>	<del>Bounded by the <math>\chi/Q</math> values calculated for the Main Control Room HVAC intakes bound those for the Reactor Building door</del>  See plant vent to Main Control Room intake (above) <sup>(h)(13)</sup>
Plant vent <del>to A/B HVAC intake<sup>(k)(10)</sup></del> 0-8 hrs 8-24 hrs 1-4 days 4-30 days	<del><math>1.4 \times 10^{-3} \text{ s/m}^3</math></del> <del><math>8.0 \times 10^{-4} \text{ s/m}^3</math></del> <del><math>5.1 \times 10^{-4} \text{ s/m}^3</math></del> <del><math>2.23.3 \times 10^{-4} \text{ s/m}^3</math></del>	<del>Bounded by the <math>\chi/Q</math> values calculated for the Main Control Room HVAC intakes bound those for the A/B HVAC intake</del>  See plant vent to Main Control Room intake (above) <sup>(h)(13)</sup>

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**Table 2.0-1R (Sheet 9 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)	Ground-level containment releases to Class		<del>γ/Q values calculated for the Main Control Room-</del>	CTS-01125
CP COL 2.2(1)	1E electrical room HVAC intake <del>(e)</del> (4)		<del>HVAC intakes bound those for the Class 1E electrical-</del>	
CP COL 2.3(1)	0-8 hrs	$2.4 \times 10^{-3} \text{ s/m}^3$	<del>room HVAC intake-</del>	
CP COL 2.3(2)	8-24 hrs	$1.4 \times 10^{-3} \text{ s/m}^3$	See ground-level containment releases to Main	
CP COL 2.3(3)	1-4 days	$9.1 \times 10^{-4} \text{ s/m}^3$	Control Room intake (above) <del>(f)</del> (13)	DCD_02.03
CP COL 2.4(1)	4-30 days	<del>4.0</del> 6.0 $\times 10^{-4} \text{ s/m}^3$		.04-9
CP COL 2.5(1)	Main steam relief valve and safety valve		See main steam relief valve and safety valve	
	releases <del>(e)</del> (6)		releases to Main Control Room intake (above) <del>(f)</del> (13)	
	0-8 hrs	$5.3 \times 10^{-3} \text{ s/m}^3$		
	8-24 hrs	$3.1 \times 10^{-3} \text{ s/m}^3$		
	1-4 days	$2.0 \times 10^{-3} \text{ s/m}^3$		DCD_02.03
	4-30 days	<del>8.7</del> 1.3 $\times 10^{-4}$ <del>3</del> $\text{ s/m}^3$		.04-9
	Steam line break releases <sup>(8)</sup>		See steam line break releases to Main Control Room	CTS-01125
	0-8 hrs	$1.9 \times 10^{-2} \text{ s/m}^3$	intake (above) <del>(f)</del> (13)	
	8-24 hrs	$1.1 \times 10^{-2} \text{ s/m}^3$		
	1-4 days	$7.1 \times 10^{-3} \text{ s/m}^3$		
	4-30 days	<del>3.1</del> 4.7 $\times 10^{-3} \text{ s/m}^3$		DCD_02.03
	Fuel handling area releases <del>(e)</del> (7)		See fuel handling area releases to Main Control	CTS-01125
	0-8 hrs	$1.1 \times 10^{-3} \text{ s/m}^3$	Room intake (above) <del>(f)</del> (13)	
	8-24 hrs	$6.7 \times 10^{-4} \text{ s/m}^3$		
	1-4 days	$4.3 \times 10^{-4} \text{ s/m}^3$		
	4-30 days	<del>4.0</del> 2.8 $\times 10^{-4} \text{ s/m}^3$		DCD_02.03
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**Table 2.0-1R (Sheet 13 of 15)**  
**Key Site Parameters**

CP COL 2.1(1)  
CP COL 2.2(1)  
CP COL 2.3(1)  
CP COL 2.3(2)

Subsurface stability – shear wave velocity for defining hard rock	8000 ft/s	The site does not meet the Vs for a hard rock site	
Subsurface stability – liquefaction potential	None (for seismic category I structures)	The site strata is not prone to liquefaction	
<u>Settlement</u>	<u>Total settlement of R/B complex foundation<sup>(14)(15)</sup></u> <u>6.0 in.</u> <u>Differential settlement across R/B complex foundation<sup>(14)(15)</sup></u> <u>2.0 in.</u> <u>Maximum differential settlement between buildings<sup>(14)(16)</sup></u> <u>0.5 in.</u> <u>Maximum tilt of R/B complex foundation generated during operational life of the plant<sup>(14)(16)</sup></u> <u>1/2000</u>	<u>Maximum and differential settlement of all the seismic Category I buildings and structures including R/B, PS/B, ESWPT, UHSRS and PSFSV is less than 1/2 in.</u>	
<u>Atmospheric dispersion factors (<math>\chi/Q</math> values) for Technical Support Center (TSC) HVAC intake for specified release points<sup>(2)</sup>:</u>			
<u>Plant Vent<sup>(5)</sup></u>		<u>0-2 hrs</u>	<u><math>1.1 \times 10^{-3}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>1.4 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>6.9 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>8.0 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>8-24 hrs</u>	<u><math>2.8 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>5.1 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>1-4 days</u>	<u><math>2.1 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>3.3 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>1.3 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>Ground-level containment releases<sup>(4)</sup></u>		<u>0-2 hrs</u>	<u><math>8.0 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>1.9 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>5.1 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>1.1 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>8-24 hr</u>	<u><math>2.3 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>7.2 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>1-4 days</u>	<u><math>1.6 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>4.8 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>1.1 \times 10^{-4}</math> s/m<sup>3</sup></u>

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**Table 2.0-1R (Sheet 14 of 15)**  
**Key Site Parameters**

<u>Main steam relief valve and safety valve<sup>(6)</sup></u> <u>0-8 hrs</u> <u>8-24 hrs</u> <u>1-4 days</u> <u>4-30 days</u>	<u><math>1.7 \times 10^{-3} \text{ s/m}^3</math></u>	<u>0-2 hrs</u>	<u><math>1.3 \times 10^{-3} \text{ s/m}^3</math></u>	RCOL2_02 .03.04-9 CTS-01169  DCD_02.03 .04-9
	<u><math>9.9 \times 10^{-4} \text{ s/m}^3</math></u>	<u>0-8 hrs</u>	<u><math>9.6 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>6.3 \times 10^{-4} \text{ s/m}^3</math></u>	<u>8-24 hrs</u>	<u><math>3.9 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>4.2 \times 10^{-4} \text{ s/m}^3</math></u>	<u>1-4 days</u>	<u><math>2.7 \times 10^{-4} \text{ s/m}^3</math></u>	
		<u>4-30 days</u>	<u><math>2.0 \times 10^{-4} \text{ s/m}^3</math></u>	
<u>Steam line break releases<sup>(8)</sup></u> <u>0-8 hrs</u> <u>8-24 hrs</u> <u>1-4 days</u> <u>4-30 days</u>	<u><math>1.4 \times 10^{-3} \text{ s/m}^3</math></u>	<u>0-2 hrs</u>	<u><math>1.3 \times 10^{-3} \text{ s/m}^3</math></u>	DCD_02.03 .04-9
	<u><math>8.4 \times 10^{-4} \text{ s/m}^3</math></u>	<u>0-8 hrs</u>	<u><math>9.6 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>5.3 \times 10^{-4} \text{ s/m}^3</math></u>	<u>8-24 hrs</u>	<u><math>3.9 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>3.5 \times 10^{-4} \text{ s/m}^3</math></u>	<u>1-4 days</u>	<u><math>3.2 \times 10^{-4} \text{ s/m}^3</math></u>	
		<u>4-30 days</u>	<u><math>2.4 \times 10^{-4} \text{ s/m}^3</math></u>	
<u>Fuel handling area releases<sup>(7)</sup></u> <u>0-8 hrs</u> <u>8-24 hrs</u> <u>1-4 days</u> <u>4-30 days</u>	<u><math>6.7 \times 10^{-4} \text{ s/m}^3</math></u>	<u>0-2 hrs</u>	<u><math>4.4 \times 10^{-4} \text{ s/m}^3</math></u>	DCD_02.03 .04-9
	<u><math>3.9 \times 10^{-4} \text{ s/m}^3</math></u>	<u>0-8 hrs</u>	<u><math>2.8 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>2.5 \times 10^{-4} \text{ s/m}^3</math></u>	<u>8-24 hrs</u>	<u><math>1.1 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>1.7 \times 10^{-4} \text{ s/m}^3</math></u>	<u>1-4 days</u>	<u><math>8.5 \times 10^{-5} \text{ s/m}^3</math></u>	
		<u>4-30 days</u>	<u><math>5.0 \times 10^{-5} \text{ s/m}^3</math></u>	
<u>Atmospheric dispersion factors (<math>\chi/Q</math> values) for TSC inleak for specified release points<sup>(3)</sup>:</u>				
<u>Plant Vent<sup>(5)</sup></u> <u>0-8 hrs</u> <u>8-24 hrs</u> <u>1-4 days</u> <u>4-30 days</u>	<u><math>1.4 \times 10^{-3} \text{ s/m}^3</math></u>	<u>0-2 hrs</u>	<u><math>1.1 \times 10^{-3} \text{ s/m}^3</math></u>	DCD_02.03 .04-9
	<u><math>8.0 \times 10^{-4} \text{ s/m}^3</math></u>	<u>0-8 hrs</u>	<u><math>6.9 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>5.1 \times 10^{-4} \text{ s/m}^3</math></u>	<u>8-24 hrs</u>	<u><math>2.8 \times 10^{-4} \text{ s/m}^3</math></u>	
	<u><math>3.3 \times 10^{-4} \text{ s/m}^3</math></u>	<u>1-4 days</u>	<u><math>2.1 \times 10^{-4} \text{ s/m}^3</math></u>	
		<u>4-30 days</u>	<u><math>1.3 \times 10^{-4} \text{ s/m}^3</math></u>	

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**Table 2.0-1R (Sheet 15 of 15)**  
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<u>Ground-level containment releases<sup>(4)</sup></u>		<u>0-2 hrs</u>	<u><math>8.0 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>1.9 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>5.1 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>1.1 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>8-24 hrs</u>	<u><math>2.3 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>7.2 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>1-4 days</u>	<u><math>1.6 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>4.8 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>1.1 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>Main steam relief valve and safety valve<sup>(6)</sup></u>		<u>0-2 hrs</u>	<u><math>1.3 \times 10^{-3}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>1.7 \times 10^{-3}</math> s/m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>9.6 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>9.9 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>8-24 hrs</u>	<u><math>3.9 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>6.3 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>1-4 days</u>	<u><math>2.7 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>4.2 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>2.0 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>Steam line break releases<sup>(8)</sup></u>		<u>0-2 hrs</u>	<u><math>1.3 \times 10^{-3}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>1.4 \times 10^{-3}</math> s/ m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>9.6 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>8.4 \times 10^{-4}</math> s/ m<sup>3</sup></u>	<u>8-24 hrs</u>	<u><math>3.9 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>5.3 \times 10^{-4}</math> s/ m<sup>3</sup></u>	<u>1-4 days</u>	<u><math>3.2 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>3.5 \times 10^{-4}</math> s/ m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>2.4 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>Fuel handling area releases<sup>(7)</sup></u>		<u>0-2 hrs</u>	<u><math>4.4 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>0-8 hrs</u>	<u><math>6.7 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>0-8 hrs</u>	<u><math>2.8 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>8-24 hrs</u>	<u><math>3.9 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>8-24 hrs</u>	<u><math>1.1 \times 10^{-4}</math> s/m<sup>3</sup></u>
<u>1-4 days</u>	<u><math>2.5 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>1-4 daysr</u>	<u><math>8.5 \times 10^{-5}</math> s/m<sup>3</sup></u>
<u>4-30 days</u>	<u><math>1.7 \times 10^{-4}</math> s/m<sup>3</sup></u>	<u>4-30 days</u>	<u><math>5.0 \times 10^{-5}</math> s/m<sup>3</sup></u>

NOTES:

a)1. The specified missiles are assumed to have a vertical speed component equal to 2/3 of the horizontal speed.

b)2. These dispersion factors are chosen as the maximum values at all intake points.

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**2.3.1.2.11 Extreme Winds**

Estimated extreme winds (fastest mile) for the general area based on the Frechet distribution are:

Return Period (year)	Wind Speed (mi per hr)
2	51
10	61
50	71
100	76

Fastest mile winds are sustained winds, normalized to 30 ft aboveground and include all meteorological phenomena except tornadoes (Reference 2.3-205).

The design basis wind velocity is based on the data from ANSI/ASCE 7-05 (Reference 2.3-220). From Figure 6-1 of ANSI/ASCE 7-05, the 3-second gust wind speed at 33 ft (10 m) aboveground for a 50-year return period for the CPNPP site is 90 mph (40 m/sec). The 3-second gust wind speed for a 100-year return period is 96 mph. The importance factor is 1.15 and the exposure category is C. Wind loadings for the site are discussed in Subsection 3.3.1.

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**2.3.2 Local Meteorology**

CP COL 2.3(1) Replace the content of DCD Subsection 2.3.2 with the following.

**2.3.2.1 Normal and Extreme Values of Meteorological Parameters**

The CPNPP site is located approximately equidistant between Cleburne and Stephenville, Texas, west of the Brazos River. The site elevation is approximately 822 ft mean sea level (msl). The terrain slopes gradually from 300 to 700 ft msl southeast of the site to 1200 to 1800 ft msl northwest of the site (Reference 2.3-205).

**2.3.2.1.1 General**

In this subsection, the normal and extreme statistics of wind, temperature, water vapor, precipitation, fog, and atmospheric stability are described. Long-term data from proximal weather stations (Figure 2.3-207) have been used to supplement the shorter-term on-site data.

**2.3.2.1.2 Surface Winds**

Annually, the prevailing surface winds in the region are from the south to southeast while the average wind speed is about 10 mi per hour (mph) based

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**Table 2.3-339 (Sheet 2 of 2)**  
**Main Control Room and TSC Atmospheric Dispersion Factors**  
**( $\chi/Q$ ) for Accident Dose Analysis**

CP COL 2.3(2)

TSC $\chi/Q$ (s/m <sup>3</sup> ) at the TSC HVAC Intake			
Time Interval	Plant Vent	Main Steam Line	Fuel Handling Area
0 – 2 hours	1.1E-03	1.3E-03	4.4E-04
2 – 8 hours	6.9E-04	9.6E-04	2.8E-04
8 – 24 hours	2.8E-04	3.9E-04	1.1E-04
1 – 4 days	2.1E-04	3.2E-04	8.5E-05
4 – 30 days	1.3E-04	2.4E-04	5.0E-05
Time Interval	Main Steam Relief Valves	Main Steam Safety Valves	Containment Shell
0 – 2 hours	1.3E-03	1.3E-03	8.0E-04
2 – 8 hours	9.3E-03 <del>04</del>	9.6E-03 <del>04</del>	5.1E-04
8 – 24 hours	3.8E-04	3.9E-04	2.3E-04
1 – 4 days	2.7E-04	2.7E-04	1.6E-04
4 – 30 days	1.9E-04	2.0E-04	1.1E-04

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The ~~type of~~ summary results of the events evaluated to determine the worst potential flood ~~include~~ are provided as follows:

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- Probable maximum precipitation (PMP) on the total watershed and critical sub-watersheds, including seasonal variations and potential consequent dam failures, with a corresponding water surface elevation of ~~790.9~~ 793.66 ft msl (discussed in Subsection 2.4.3).
- Dam failures, including a postulated domino-type failures of three upstream dams coincident with the Probable Maximum Flood (PMF), with a corresponding water surface level of ~~774.99~~ 760.68 ft msl (discussed in Subsection 2.4.4).
- Two year coincident wind waves with a corresponding water surface level of ~~807.87~~ 810.64 ft msl (discussed in Subsection 2.4.3).

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4.02-2

Specific analysis of Brazos River flood levels resulting from ocean front surges, seiches, and tsunamis is not required because of the inland location and elevation characteristics of the CPNPP site. Additional details are provided in **Subsections 2.4.5 and 2.4.6**. Snowmelt and ice effect considerations are unnecessary because of the temperate zone location of CPNPP. Additional details are provided in **Subsection 2.4.3 and Subsection 2.4.7**. Flood waves from landslides into reservoirs required no specific analysis, in part because of the absence of major elevation relief. In addition, elevation characteristics of the vicinity relative to the associated water features, combined with limited slide volumes prohibit significant landslide induced flood waves. Additional details are provided in **Subsection 2.4.9**.

The maximum flood level at CPNPP Units 3 and 4 is elevation ~~790.9~~ 793.66 ft msl. This elevation would result from a PMP on the Squaw Creek watershed, as described in **Subsection 2.4.3**. Coincident wind waves would create maximum waves of ~~46.97~~ 16.98 ft resulting in a design basis flood elevation of ~~807.87~~ 810.87 ft msl. CPNPP Units 3 and 4 safety-related plant elevation is 822 ft msl, providing more than ~~44~~ 11 ft of freeboard under the worst potential flood considerations.

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#### **2.4.2.3 Effects of Local Intense Precipitation**

CPNPP Units 3 and 4 drainage system was evaluated for the PMP on the local area. The site is graded such that overall runoff will drain away from safety-related structures directly to the SCR. The PMP flood analysis assumes that storm drainage structures within the local area are non-functioning. Computed water surface elevations in the vicinity of safety-related structures are below site grade elevation of 822 ft msl. The site grading and drainage plan is shown in **Figure 2.4.2- 202**.

The local intense PMP is defined by Hydrometeorological Report No. 51 (HMR 51) and No. 52 (HMR 52). PMP values for durations from 6-hr. to 72-hr. are determined using the procedures as described in HMR No. 51 for areas of 10-sq

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**2.4.4.3 Water Level at Plant Site**

The potential backwater effect from flooding on the Brazos River is examined based on the assumed hydrologic domino-type dam failures coincident with the PMF. As described above, the assumed hydrologic domino-type dam failures of ~~the Hubbard Creek Dam~~ Fort Phantom Hill Dam, the proposed Cedar Ridge Dam, the Lake Stamford Dam, the Morris Sheppard Dam, and the DeCordova Bend Dam coincident with the PMF, is transposed to the confluence of the Paluxy River and the Brazos River without any attenuation. Squaw Creek is a tributary of the Paluxy River. Utilizing ~~FlowMaster~~ HEC-RAS computer software (Reference 2.4-241 2.4-234), the ~~Manning's friction method formula is used~~ stream course model described in Subsection 2.4.3.3 is used as a basis to determine the water surface elevation at the confluence.

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4.04-7

~~The confluence cross section is determined based on USGS 7.5 minute topographic quadrangles containing 10 ft contour intervals. The bank full elevation of the Brazos River at the confluence is approximately elevation 560 ft msl. (2.4-214) The confluence cross section stations and elevations in ft msl are shown in Figure 2.4.4-202.~~

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4.04-7

~~A Manning's roughness coefficient of  $n = 0.10$  is estimated for the Brazos River channel based on published tables by Chow. (2.4-233) To account for variability and uncertainty of the Brazos River channel on the downstream side of the DeCordova Dam, sensitivity analyses were performed for Manning's roughness coefficient, channel geometry and channel slope. The HEC-RAS stream course model is appended to include cross sections for the Brazos River. The selected cross sections are identified in Figure 2.4.4-202. As discussed in Subsection 2.4.3.3, a Manning's Roughness coefficient of 0.15 is also used for the Brazos River. The peak flows from the HEC-HMS model described in Subsection 2.4.3 for the Paluxy River and Squaw Creek were included as inputs for the Brazos River tributaries. The transposed 6,730,000 cfs from the dam failure scenario is included as the Brazos River input. The HEC-RAS model was run using steady state conditions to determine the water surface elevation at the confluence.~~

The resulting maximum water surface elevation at the confluence of Brazos River and Paluxy River cross section is ~~774.99~~ 760.02 ft msl for the total transposed flow ~~of 6.7 million cfs~~ combined with the peak tributary flows as shown in Figure 2.4.4-203. ~~CPNPP Units 3 and 4 safety-related facilities are located at elevation 822 ft msl, providing almost 47 ft of freeboard. Additionally, t~~ The resulting water surface elevation is below the Squaw Creek Dam crest elevation of 796 ft. Therefore, coincident wind wave activity results would be equivalent to the wind wave activity for SCR (See Subsection 2.4.3.6). In the unlikely event of achieving the water surface elevation described above, possible headcutting on the downstream slope of Squaw Creek Dam could result in failure of the Squaw Creek Dam. However, failure would lower the water surface elevation of SCR. In the event of Squaw Creek Dam failure the fetch length determined by the wind wave activity in Subsection 2.4.3.6 would not be increased.

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Elevations are provided with reference to the National Geodetic Vertical Datum of 1929 (NGVD 29). The plant site elevation is referenced to the North American Vertical Datum of 1988 (NAVD 88). According to the National Geodetic Survey, the datum shift of NAVD 88 minus NGVD 29 is equal to between 0 and +0.66 in for the site. Therefore, it is conservative to account for a maximum conversion of +0.66 ft when comparing water surface elevations determined using NGVD 29 to elevations at the site in NAVD 88. Considering conversion, the confluence water surface elevation of 760.68 ft NAVD 88 is well below the CPNPP Units 3 and 4 safety-related structures elevation of 822 ft NAVD 88.

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## **Chapter 3**

### Chapter 3 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2-03.05.01.05-01	3.5.1.5	3.5-2	Response to RAI No. 33 Luminant Letter no.TXNB-09054 Date 10/15/2009	Change paragraph in 3.5.1.5 to clarify no missile hazard from unit 1 and 2.	-
RCOL2_03.02.01-02	Table 3.2-201 (Sheet 1 of 3)	3.2-3	Editorial correction Response to RAI No. 47 Luminant Letter no.TXNB-09055 Date 10/19/2009	Change Valve IDs "ESW-HVC-2000" to "ESW-HCV-2000"	-
RCOL2_03.07.01-2	3.7.1.1	3.7-2	Response to RAI No. 55 Luminant Letter no.TXNB-09058 Date 10/26/2009	Revise description to clarify that the calculation of FIRS and GMRS is outlined in Subsection 2.5.2.5 and 2.5.2.6.	-
RCOL2_03.07.01-4	Table 3LL-2 Table 3LL-3	3LL-6 3LL-7	Response to RAI No. 55 Luminant Letter no.TXNB-09058 Date 10/26/2009	Editorial change: Change "0.4" to "0.04" in damping ratio.	-
RCOL2_03.09.06-6	Table 3.9-203 (Sheet 2 through 6 of 6)	3.9-8 through 3.9-12	Response to RAI No. 57 Luminant Letter no.TXNB-09058 Date 10/26/2009	Clarification of the column "Valve type".	-
RCOL2_03.09.06-7	Table 3.9-203 (Sheet 2 through 6 of 6)	3.9-8 through 3.9-12	Response to RAI No. 57 Luminant Letter no.TXNB-09058 Date 10/26/2009	Clarification of the columns "Inservice Testing Type and Frequency and "IST Note".	-
DCD-3.9.6-13	3.9.6.3.1 3.9.9	3.9-3 3.9-4	Response to DCD RAI No.288 MHI Letter no. UAP-HF-09245 Date 5/25/2009 Response to RAI No. 57 Luminant Letter no.TXNB-09058 Date 10/26/2009	Delete COL item 3.9(9)	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.07.03-1	3KK.5	3KK-7	Response to RAI No. 64 Luminant Letter no.TXNB-09060 Date 10/30/2009	Add reference to 3KK-9	-
RCOL2_03.07.03-2	3KK.2	3KK-3 3KK-4 3KK-5	Response to RAI No. 64 Luminant Letter no.TXNB-09060 Date 10/30/2009	Delete the last paragraph and provide further detailed explanation	-
RCOL2_03.07.03-2	Table 3KK-7	3KK-13	Response to RAI No. 64 Luminant Letter no.TXNB-09060 Date 10/30/2009	Add Table 3KK-7	-
RCOL2_03.07.03-2	Figure 3KK-4	3KK-30	Response to RAI No. 64 Luminant Letter no.TXNB-09060 Date 10/30/2009	Add Figure 3KK-4	-
RCOL2_03.03.02-3	3.3.1.2	3.3-1 3.3-2	Response to RAI No. 66 Luminant Letter no.TXNB-09061 Date 11/05/2009	Add description to clarify the applied wind forces for UHSRS	-
RCOL2_03.03.02-6	3.3.2.2.2	3.3-2	Response to RAI No. 66 Luminant Letter no. TXNB-09061 Date 11/05/2009	Add description to clarify the tornado atmospheric forces for UHS basins and cooling tower enclosure.	-
RCOL2_03.03.02-4	3.3.1.2 3.3.2.2.2 3.3.2.2.4	3.3-2 3.3-3	Response to RAI No. 66 Luminant Letter no. TXNB-09061 Date 11/05/2009	Add description to clarify the tornado atmospheric forces for the portions of the duct bank and chases.	-
RCOL2_03.11-4	3.11	3.11-1	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added "electrical and mechanical" before EQ records in the first sentence for CP COL 3.11 (1).	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.11-5	3.11	3.11-1	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added "The features of the US-APWR Equipment Environmental Qualification Program Technical Report MUAP-08015 (Reference 3.11-3) is included in the CPNPP Units 3 and 4 EQ Program." after the last sentence for CP COL 3.11(4).	-
RCOL2_03.11-3	3.11.1.1	3.11-2	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added "The provision in the US-APWR DCD for environmental qualification (EQ) of mechanical equipment will be applied to the plant-specific systems." after the last sentence for CP COL 3.11(5).	-
RCOL2_03.11-6	3.11.1.2	3.11-2	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Replaced the 2nd paragraph with "Plant Specific EQ parameters are documented in the corresponding equipment specifications, drawings, procedures, instructions, and qualification packages" for CP COL 3.11(9).	-
RCOL2_03.11-8	3.11.4	3.11-3	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added "as described in Technical Report MUAP-08015 (Reference 3.11-3)" in the last sentence for CP COL 3.11(6).	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.11-8	3.11.5	3.11-3	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added “as described in Technical Report MUAP-08015 (Reference 3.11-3)” in the last sentence for CP COL 3.11(7).	-
RCOL2_03.11-8	3.11.6	3.11-3	Response to RAI No. 73 Luminant Letter no.TXNB-09063 Date 11/11/2009	Added “as described in Technical Report MUAP-08015 (Reference 3.11-3)” in the last sentence for CP COL 3.11(8).	-
RCOL2_03.05.02-1	3.5.2	3.5-4	Response to RAI No. 80 Luminant Letter no.TXNB-09065 Date 11/13/2009	Changed the second paragraph to clarify the basis for externally generated missiles.	-
RCOL2_03.09.03-2	Table 3.9-201	3.9-5	Response to RAI No. 84 Luminant Letter no. TXNB-09065 Date 11/13/2009	Revised Table 3.9-201 to clarify the UHS transfer pump operation and be consistent with the DCD Table 3.9-7.	-
RCOL2_03.11-15	3.11	3.11-1	Response to RAI No. 97 Luminant Letter no.TXNB-09064 Date 11/11/2009	Replaced “Reference 3.11-3” with “the operational EQ program” in the 3rd sentence of 2nd paragraph for CP COL 3.11(4).	-
RCOL2_03.11-16	3.11.1.1	3.11-2	Response to RAI No. 97 Luminant Letter no.TXNB-09064 Date 11/11/2009	Replaced “or” with “and” in the 2nd sentence of 2nd paragraph for CP COL 3.11(5).	-
RCOL2_03.11-13	3.11.3	3.11-2	Response to RAI No. 97 Luminant Letter no.TXNB-09064 Date 11/11/2009	Deleted “site specific” and added “The COL applicant has a responsibility to maintain the project records until issuance	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				of the COL” after the 2nd sentence of 2nd paragraph for CP COL 3.11(2).	
RCOL2_03.08.01-5	3.8.1.6 3.8.4.7	3.8-1 3.8-10	Response to RAI No. 106 Luminant Letter no. TXNB-09067 Date 11/13/2009	Change paragraph in COL 3.8(7) and 3.8(22) to clarify the monitoring for degradation by aggressive ground water.	-
RCOL2_03.08.01-6	3.8.1.7	3.8-1 3.8-2	Response to RAI No. 106 Luminant Letter no. TXNB-09067 Date 11/13/2009	Add sentences into Subsection 3.8.1.7 to clarify the description of Prestressed Concrete Containment Vessel ISI and IST.	-
RCOL2_03.08.05-1	3.8.5.1.3.1	3.8-11	Response to RAI No. 115 Luminant Letter no. TXNB-09067 Date 11/13/2009	To clarify the usage of steel reinforcement for fill concrete.	-
RCOL2_03.08.05-4	3.8.5.5	3.8-12	Response to RAI No. 115 Luminant Letter no. TXNB-09067 Date 11/13/2009	Clarification of seismic Category I structure.	-
RCOL2_03.08.05-5	3.8.5.5 Table 3.8-202	3.8-12 3.8-16	Response to RAI No. 115 Luminant Letter no. TXNB-09067 Date 11/13/2009	Add description and table for the calculation of bearing capacity.	-
RCOL2_03.08.05-3	3.8.5.5 Table 3.8-	3.8-12	Response to RAI No. 115	Add description and table for factor of	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	203	3.8-17	Luminant Letter no. TXNB-09067 Date 11/13/2009	safety for overturning, sliding and flotation.	
RCOL2_03.07.02-1	3.7.1.1	3.7-2	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Revised section number to break down the reference section number	-
RCOL2_03.07.02-9	3.7.2.4.1	3.7-10	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Added description for envelopment of site- specific variation in T/B and A/B in the 15 <sup>th</sup> paragraph.	-
RCOL2_03.07.02-6	3.7.2.4.1	3.7-10	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Added description for envelopment of site- specific variation in PS/B in the last paragraph.	-
RCOL2_03.07.02-16	3KK.1 3KK.2	3KK-1 3KK-2 3KK-3	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Added description for SSI analysis	-
RCOL2_03.07.02-11	3KK.2	3KK-3 3KK-6	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Added description for SSI analysis	-
RCOL2_03.07.02-16	3KK.3	3KK-7 3KK-8	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Added description for SSI analysis in third and fifth paragraph.	-
RCOL2_03.07.02-15	3KK.4	3KK-8	Response to RAI No. 60 Luminant Letter no. TXNB-09073 Date 11/24/2009	Changed description for ISRS.	-
RCOL2_03.07.02-11	Table 3KK-8	3KK-17	Response to RAI No. 60 Luminant Letter no. TXNB-09073	Added Table for the summary of analysis	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			Date 11/24/2009		
RCOL2_03.07.02-16	Table 3KK-9	3KK-18	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added Table for the comparison of ANSIS and SSI	-
RCOL2_03.07.02-16	3LL.1 3LL.2	3LL-1	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis	-
RCOL2_03.07.02-11	3LL.2	3LL-2	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis in sixth paragraph.	-
RCOL2_03.07.02-16	3LL.2	3LL-2 3LL-3	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for SSI analysis in seventh through tenth paragraph.	-
RCOL2_03.07.02-11	3LL.2	3LL-3 3LL-4	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis in eighth through 15 <sup>th</sup> paragraph.	-
RCOL2_03.07.02-16	3LL.2	3LL-4	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for SSI analysis in ninth paragraph.	-
RCOL2_03.07.02-13	3LL.3 3LL.4	3LL-5 3LL-5 3LL-6	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis	-
RCOL2_03.07.02-15	3LL.4	3LL-6	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Deleted description for peak clipping	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.07.02-12	Table 3LL-6 Table 3LL-7 Table 3LL-8	3LL-12 3LL-13 3LL-14	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for note 1.	-
RCOL2_03.07.02-13	Table 3LL-9 Table 3LL-10 Table 3LL-11	3LL-15 3LL-16 3LL-17	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for note 1.	-
RCOL2_03.07.02-11	Table 3LL-14	3LL-20	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added Table for the summary of SSI analysis	-
RCOL2_03.07.02-16	Table 3LL-15	3LL-21	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added table for the major structural modes of Tunnel Segment 2 of ESWPT.	-
RCOL2_03.07.02-16	3MM.1 3MM.2	3MM-1 3MM-2	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for SSI analysis	-
RCOL2_03.07.02-11	3MM.2	3MM-3	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis in 8 <sup>th</sup> paragraph.	-
RCOL2_03.07.02-16	3MM.2	3MM-3	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for SSI analysis in 9 <sup>th</sup> through 15 <sup>th</sup> paragraphs.	-
RCOL2_03.07.02-11	3MM.2	3MM-4	Response to RAI No. 60 Luminant Letter	Changed description for SSI analysis in 17 <sup>th</sup> through 20 <sup>th</sup>	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no.TXNB-09073 Date 11/24/2009	paragraphs.	
RCOL2_03.07.02-11	3MM.3	3MM-5	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for SSI analysis in 1 and 2 paragraphs.	-
RCOL2_03.07.02-15	3MM.4	3MM-6	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Deleted description for peak clipping	-
RCOL2_03.07.02-14	Table 3MM-6	3MM-12	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed description for note 1.	-
RCOL2_03.07.02-11	Table 3MM-8	3MM-14	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added Table for the summary of SSI analysis	-
RCOL2_03.07.02-16	Table 3MM-9	3MM-15	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added table for the major structural modes of PSFSV.	-
RCOL2_03.07.02-5	3NN.2	3NN-2	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Changed the description for subgrade properties.	-
RCOL2_03.07.02-2	3NN.2	3NN-2 3NN-3	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added description for backfill properties	-
RCOL2_03.07.02-8	3NN.4 Table 3NN-12	3NN-6 3NN-17	Response to RAI No. 60 Luminant Letter	Added description and tables for maximum acceleration	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	Table 3NN-13 Table 3NN-14	3NN- 18 3NN- 19	no.TXNB-09073 Date 11/24/2009		
RCOL2_03.07.02-2	Table 3NN-16	3NN- 21	Response to RAI No. 60 Luminant Letter no.TXNB-09073 Date 11/24/2009	Added table for backfill properties	-
RCOL2_03.08.04-2	3.8.4.1.3	3.8-3	Response to RAI No. 108 Luminant Letter no.TXNB-09078 Date 12/10/2009	Revised to incorporate a site-specific specification for the expansion/separation joint	-
RCOL2_03.08.04-1	3.8.4.1.3.1	3.8-4 3.8-5	Response to RAI No. 108 Luminant Letter no.TXNB-09078 Date 12/10/2009	Revised to add more discussion concerning the design of the ESWPT	-
RCOL2_03.08.04-2	3.8.4.1.3.2	3.8-5	Response to RAI No. 108 Luminant Letter no.TXNB-09078 Date 12/10/2009	Revised to incorporate a site-specific specification for the expansion/separation joint	-
RCOL2_03.08.04-3	3.8.4.1.3.2	3.8-6	Response to RAI No. 108 Luminant Letter no.TXNB-09078 Date 12/10/2009	Revised to incorporate an appropriate reference to the safety-related components in Table 3.2-201 that are protected from tornado missile impacts and to clarify the statement.	-
RCOL2-03.08.04- 43	3NN.2  3NN.3	3NN-3  3NN-5 3NN-6	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the description for the fill.	-
RCOL2-03.08.04- 51	3.7.1.3 3NN.2	3.7-6 3NN-2	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Add description for fill concrete.	-
RCOL2_03.08.04-	3.8.4.4.3.2 3KK.2	3.8-11 3KK-7	Response to RAI No. 122	Clarify the description for spring model	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
19			Luminant Letter no.TXNB-09085 Date 12/14/2009		
RCOL2_03.08.04-32	3.8.4.4.3.2 3KK.2 3KK.3	3.8-11 3KK-6 3KK-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the description for soil spring model for UHSRS	-
RCOL2_03.08.04-20	3KK.1 3MM.1 3NN.1	3KK-1 3MM-1 3NN-1	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for input motion	-
RCOL2_03.08.04-18	3KK.2 Table 3KK-9	3KK-1 3KK-2 3KK-4 3KK-19	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for mesh model	-
RCOL2_03.08.04-21	3KK.2	3KK-2	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for separation joint	-
RCOL2_03.08.04-27	3KK.2	3KK-2 3KK-6	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added explanation not performing analysis including adjacent structure.	-
RCOL2_03.08.04-23	3KK.2	3KK-2	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added reference to Appendix 3NN	-
RCOL2_03.08.04-24	3KK.2	3KK-3	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for fill considered in the analysis	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-25	3KK.2	3KK-4	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Add description of modeling for basemat and concrete fill.	-
RCOL2_03.08.04-26	3KK.2 3KK.5	3KK-4 3KK-10	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the technical basis and the reference of equation for the cracked out-of plane flexural stiffness.	-
RCOL2_03.08.04-31	3KK.2 3KK.3	3KK-7 3KK-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the design input response spectra	-
RCOL2_03.08.04-28	3KK.3	3KK-7 3KK-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the base shear and moment demands on walls.	-
RCOL2_03.08.04-30	3KK.3	3KK-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Provided the technical basis for the factor.	-
RCOL2_03.08.04-33	3KK.4 3LL.4 3MM.4	3KK-9 3LL-6 3MM-6	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the effect of out-of-plane wall flexibility	-
RCOL2_03.08.04-35	3LL.1	3LL-1	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description of wave effect.	-
RCOL2_03.08.04-36	3LL.2	3LL-1	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the separation from the adjacent structure.	-
RCOL2_03.08.04-40	3LL.2	3LL-1 3LL-3	Response to RAI No. 122 Luminant Letter	Clarify the soil considered in the SSI analysis.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no.TXNB-09085 Date 12/14/2009		
RCOL2_03.08.04-37	3LL.2	3LL-2	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the shell elements connected to brick elements	-
RCOL2_03.08.04-34	3LL.2	3LL-2 through 3LL-5	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the soil model	-
RCOL2_03.08.04-44	3LL.2	3LL-4	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the response spectra analysis	-
RCOL2_03.08.04-41	3LL.2 3LL.3	3LL-5	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the combination of cross-directional contribution	-
RCOL2_03.08.04-42	Table 3LL-1	3LL-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added Note 2 in Table 3LL-1.	-
RCOL2_03.08.04-45	Table 3LL-13	3LL-20	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added allowable bearing capacity in Table 3LL-13	-
RCOL2_03.08.04-47	3MM.2	3MM-2	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the modeling of fuel oil tank	-
RCOL2_03.08.04-48	3MM.2	3MM-3	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Provide detail information for the modeling of backfill	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-46	3MM.2	3MM-5	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the soil pressure	-
RCOL2_03.08.04-49	3MM.3  Figure 3MM-2	3MM-6 3MM-19	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the symmetrical load distribution	-
RCOL2_03.08.04-50	3MM.4	3MM-6	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarify the basis of the seismic design	-
RCOL2_03.08.04-60	3NN	3NN-I 3NN-1	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Corrected the typographical error in the title of the appendix	-
RCOL2_03.08.04-52	3NN.2 Table 3NN-1	3NN-2 3NN-10	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added the description for backfill and corrected the abbreviation of Upper Bound	-
RCOL2_03.08.04-22	3NN.2	3NN-3	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for backfill properties	-
RCOL2_03.08.04-53	3NN.2  3NN.3	3NN-3 3NN-5 3NN-6	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for backfill properties	-
RCOL2_03.08.04-54	3NN.2	3NN-3 3NN-4	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Move the description for time step in SSI analysis and revised the description for the backfill properties in SSI analysis.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-57	3NN.3	3NN-4 3NN-5	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for modeling of rigid link	-
RCOL2_03.08.04-58	3NN.3  Table 3NN-6	3NN-5 3NN-14	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Clarified the description for Table 3NN-6	-
RCOL2_03.08.04-56	3NN.3	3NN-7	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added description for transfer function	-
RCOL2_03.08.04-55	3NN.4	3NN-8	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added the description for the cutoff frequency.	-
CTS- 01090	Table 3NN-2	3NN-10	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Corrected the typographical error in the title of Table 3NN-2	-
RCOL2_03.08.04-59	Table 3NN-12 Table 3NN-13 Table 3NN-14	3NN-19 through 3NN-24	Response to RAI No. 122 Luminant Letter no.TXNB-09085 Date 12/14/2009	Added the enveloped acceleration of COL and DCD	-
RCOL2_09.02.05-02	Table 3.2-201 (Sheet 2 of 3)	3.2-4	Response to RAI No. 121 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added a line item under 2. UHS, "UHS basin makeup piping and valves" and associated information.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.05-03	3.8.4.1.3.2	3.8-5	Response to RAI No. 121 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added description to the second paragraph on the cementitious membrane on the basin walls to minimize water seepage.	-
RCOL2_09.02.05-03	3.8.4.1.3.2	3.8-6	Response to RAI No. 121 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added description to the end of the ninth paragraph that tornado differential pressure was considered in the design of fan motors and associated equipment.	-
RCOL2_09.02.05-03	3.8.4.1.3.2	3.8-6	Response to RAI No. 121 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added tenth paragraph to provide description that the exterior parts of the cooling tower enclosure are designed to prevent becoming full penetration tornado missiles.	-
RCOL2_09.02.05-04	Table 3.7.1-3R	3.7-16	Response to RAI No. 121 Luminant Letter no.TXNB-09081 Date 12/16/2009	Revised the fifth note to say, "Each mat foundation supports one UHS basin with one pool."	-
RCOL2_09.04.05-04	3.8.4.1.3.2	3.8-6	Response to RAI No. 123 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added seventh paragraph to provide description that tornado missile shields are provided for air intake and air outlets for the ESWS pump house HVAC.	-
RCOL2_09.04.05-06	3.5.1.1.2	3.5-1	Response to RAI No. 123 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added new Subsection 3.5.1.1.2, "High-Speed Rotating Equipment"	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01089	3.4.1.4	3.4-2	Clarification	Break down the reference section number	0
CTS-00922	3.7.1.3 3.7.4.3 Table 3.7-201 3KK.2 3KK.3 3MM.2 3LL.2	3.7-6 3.7-16 3.7-21  3KK-2 3KK-9 3MM-3 3LL-2	Clarification	Clarify the sentence to Delete “major” and breakdown the reference section number.	0
MAP-00-201	Table 3.9-202	3.9-6	The change of numbering rule of Tag number	Change Tag numbers	0
MAP-00-201	Table 3.9-203 (Sheet 5, 6 of 6)	3.9-11 3.9-12	The change of numbering rule of Tag number	Change Tag numbers	0
MAP-00-201	Table 3D-201 (Sheet 1 through 10 of 10)	3D-2 through 3D-11	The change of numbering rule of Tag number	Change Tag numbers	0
RCOL2_03.11-12 S01	3.11	3.11-1	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “Assume EQ Responsibilities for Unit 3” and “Assume EQ Responsibilities for Unit 4” with “Operational EQ Program established”.	-
RCOL2_03.11-12 S01	3.11	3.11-1	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “CPNPP Units 3 and 4, at time of license issuance, assumes full responsibility for the” with “Prior to unit fuel load, the Licensee establishes and implements an Operational”.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.11-12 S01	3.11	3.11-1	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Added “and” between “EQ program” and “assemblies”.	-
RCOL2_03.11-12 S01	3.11	3.11-1	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Deleted “Environmental” and replaced “is” with “are”.	-
RCOL2_03.11-16 S01	3.11.1.1	3.11-2	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “safety- related equipment and important to safety equipment” with “safety-related equipment and non- safety-related equipment which is important to safety”.	-
RCOL2_03.11-16 S01	3.11.1.1	3.11-2	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “The provision in the US- APWR DCD for environmental qualification EQ of mechanical equipment will be applied to the plant-specific systems” with “The provisions in the US-APWR DCD for the environmental qualification of mechanical equipment are applied to the plant-specific systems”	-
RCOL2_03.11-12 S01	3.11.1.2	3.11-2	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “Plant Specific” with “Plant- specific”.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.11-13 S01	3.11.3	3.11-2	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Added “or” and deleted “or is held for permit verification”.	-
RCOL2_03.11-13 S01	3.11.3	3.11-2	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “The COL applicant has a responsibility to maintain the project records until issuance of the COL. The license holder for CPNPP Unit 3 and 4 assumes full responsibility for the EQ program at time of license issuance” with “Documentation for the qualification of safety-related equipment and non-safety-related equipment which is important to safety is ultimately the responsibility of the COL Applicant who, later as the licensee, maintains a complete set of EQ records”.	-
RCOL2_03.11-17 S01	3.11.4	3.11-3	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “an equivalent qualification process to that delineated for the US-APWR standard plant as” with “the process”.	-
RCOL2_03.11-17 S01	3.11.5	3.11-3	Response to RAI No. 97 Supplemental Luminant Letter no.TXNB-10018 Date 3/5/2010	Replaced “an equivalent qualification process to that delineated for the US-APWR standard plant as” with “the process”.	-
RCOL2_03.11-17 S01	3.11.6	3.11-3	Response to RAI No. 97 Supplemental Luminant Letter	Replaced “an equivalent qualification process to that delineated for the US-	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no.TXNB-10018 Date 3/5/2010	APWR standard plant as” with “the process”.	
CTS-01115	3.5.1.1.2	3.5-1	Subsection 3.5.1.1.2 was created in response to RAI 123 and the left margin notation was not added.	Added COL item CP SUP 3.5(1) in the left margin notation to subsection 3.5.1.1.2	2
DCD_03.06.03-19	3.6.3.3.1 3.6.4	3.6-2 [3.6-3]	Reflect response to DCD RAI No.485	Added new subsection 3.6.3.3.1 and STD COL 3.6(10)	2
CTS-01122	3.8.4.7	3.8-14	Clarification	Clarified reference to the DCD	2
CTS-01123	3.11	3.11-1	Clarification	Corrected the words of COL item 3.11(4)	2
MAP-03-027	APPENDIX 3K	- 3K-i 3K-1	Consistency with DCD Rev2	Added Appendix 3K	2
RCOL2_03.08.04- 61	3.8.4.1.3 3.8.4.1.3.2	3.8-3 3.8-5	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added description to provide an alternate option to use waterproof joint sealants in lieu of expansion joints.	-
RCOL2_03.08.04- 62	3MM.2	3MM-5	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added description to clarify acceleration applied to the PSFSV fuel tank for base slab design.	-
RCOL2_03.08.04- 62	Table 3MM-5	3MM- 12	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised note 2 to describe the method of calculating acceleration applied to the tanks for basemat design.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-62	Table 3MM-6	3MM-13	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised values of maximum component forces and moments in the “basemat” row of Table 3MM-6.	-
RCOL2_03.08.04-63	3.3.1.2 3.3.2.2.2 3.3.2.2.4 3.7.2.4.1 3.8.4.1.3.4	3.3-2 3.3-3 3.7-9 3.8-7	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Deleted any mention of Seismic Category I shallow embedded duct banks.	-
RCOL2_03.08.04-64	3.7.1.1	3.7-3	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised to clarify the description of site-specific SSE.	-
RCOL2_03.08.04-64	Table 3.7-201 Table 3.7-202 Figure 3.7-202 Figure 3.7-203	3.7-19 3.7-20 3.7-24 3.7-25	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised Table and Figure titles to include SSE in addition to FIRS.	-
RCOL2_03.08.04-65	3.8.4.4.3.1	3.8-9	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Deleted statement from 2 <sup>nd</sup> paragraph “Since the support below the structure (fill concrete and rock) will not exhibit long term settlement effects,”	-
RCOL2_03.08.04-66	3KK.3	3KK-9	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added sentence to 7 <sup>th</sup> paragraph confirming the seismic demands calculated using the ANSYS model exceed the seismic demands calculated using the SASSI analysis.	-
RCOL2_03.08.04-68	3.8.4.4.3.2	3.8-10	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Revised 2 <sup>nd</sup> paragraph to change “two step” to “multi-step” analysis.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-69	3.8.4.4.3.1 3.8.4.4.3.2 3.8.4.4.3.3	3.8-9 3.8-11 3.8-12	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added explanation "the same stiffness is applied to all springs" to each applicable section.	-
RCOL2_03.08.04-70	Table 3KK-9	3KK-19	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added Note 4 in Table 3KK-9 to address modal participation factors.	-
RCOL2_03.08.04-72	Table 3.7-201 Table 3.7-202	3.7-19 3.7-20	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added control point rows "E" to both tables which correspond to a frequency of 0.1 Hz.	-
RCOL2_03.08.04-72	Figure 3.7-201 (Sheet 1 of 2)	3.7-22	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Replaced the GMRS and FIRS spectra which consisted of 7 frequencies with smooth GMRS and FIRS spectra consisting of 39 frequencies. Extended plot of nominal horizontal GMRS and FIRS to intercept the frequency axis at corresponding min points.	-
RCOL2_03.08.04-72	Figure 3.7-202 Figure 3.7-203	3.7-24 3.7-25	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added control point "E" to the plot of each site-specific SSE and FIRS.	-
RCOL2_03.08.04-78	3LL.1	3LL-1	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added statement to address wave passage effects on the seismic design of the tunnel.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_03.08.04-81	3MM.2	3MM-5	Response to RAI No. 167 Luminant Letter no.TXNB-10057 Date 8/9/2010	Added paragraph to describe how fuel tank flexibility is accounted for in the base slab design.	-
CTS-01148	3.1.4.16.1	3.1-1	Correction	Changed description of location from “fourth and fifth” sentences to “third, fourth, and fifth” sentences	4
CTS-01153	Table 3.2-201 (Sheet 1 of 3) Table 3D-201 (Sheet 10 of 10)	3.2-3 3D-11	Consistency Corrections	Changed valve Tag Number to “ESW-HCV-010” “ESW-HCV-011” “ESW-HCV-012” “ESW-HCV-013”	4
CTS-01149	Table 3.2-201 (Sheet 2 of 3)	3.2-4	Editorial and Clarification	Removed “sink” from description “UHS sink transfer...” in 1 <sup>st</sup> column, 6 <sup>th</sup> row; added comma to 3 <sup>rd</sup> column, 6 <sup>th</sup> row; and added “ESWPT” with a comma to 3 <sup>rd</sup> column, 7 <sup>th</sup> row	4
CTS-01140	3.3.2.3 3.3.3 3.4.1.2 3.4.1.4 3.4.2 3.4.3 3.5.1.1.4  3.5.4  3.6.1.3 3.6.2.1 3.7.2.8  3.7.5	3.3-2 [3.3-3] 3.4-1 3.4-2 3.4-3  3.5-1 [3.5-2] 3.5-4 [3.5-5] 3.6-1 3.6-2 3.7-10 [3.7-11] 3.7-13 [3.7-14]	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	3.8.1.6 3.8.4.3.7.1  3.8.4.7  3.8.5.1  3.8.5.4.4   3.8.6   3.9.3.3.1 3.9.6.2 3.9.9 3.10.4.1 3.10.5 3.11.1.1 3.11.1.2  3.11.3 Through 3.11.7 Appendix 3D Table 3D-201	3.8-1 3.8-6 [3.8-8] 3.8-9 [3.8-13] 3.8-10 [3.8-14] 3.8-11 [3.8-15]  3.8-13 [3.8-16 through 3.8-18] 3.9-1 3.9-2 3.9-4 3.10-2  3.11-2  3.11-3  3.11-4 3D-1 through 3D-11			
CTS-01161	3.6.1.3	3.6-1	Clarification	Added the statement of “within the protective walls of the ESWPT and UHSRSs,” and “within these protective walls.” Also added a comma for punctuation.	4
CTS-01161	3.6.2.1	3.6-2	Clarification	Added the statement of “within the protective walls of the ESWPT and UHSRSs.” Also added descriptive clarifying statements “As noted in	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				Subsection 3.6.1.3, there”, “moderate-energy piping”, and replaced “failure” with “crack” in the 1 <sup>st</sup> paragraph.	
MAP-03-028	Table 3.7.1-3R	3.7-15 [3.7-16]	Clarification	Clarified dimensions as distances between column lines of exterior wall and corrected Note 3.	4
CTS-01150	3.9.3.4.2.5 3.9.6.2 3.9.6.3	3.9-2	Editorial	Deleted “that” in 1 <sup>st</sup> sentence on page 3.9-2 “...to assure that snubber functionality...”; replaced “frequency is” with “frequencies are” in 1 <sup>st</sup> sentence of Section 3.9.6.2; replaced “type of testing and frequency...is” with “types of testing and frequencies...are” in 1 <sup>st</sup> sentence of Section 3.9.6.	4
MAP-03-031	3.10	3.10-1	Clarification	Replaced “safety related and important to safety” with “seismic category I and II” in 3 <sup>rd</sup> sentence; deleted period and added “the duration of” to 4 <sup>th</sup> sentence; added “operational” to 5 <sup>th</sup> sentence to improve sentence clarity	4
MAP-03-031	3.10.4.1	3.10-2	Consistency with MUAP-08015 Rev1. US-APWR Equipment Qualification Program	Deleted “Environmental” and added DCD reference “(DCD Reference 3.11-3)” to 1 <sup>st</sup> sentence	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01151	3.12.5.6	3.12-1	Clarification	Added "second sentence of the" to the description of location	4
MAP-03-031	3D	3D-1	Clarification	Deleted "US-APWR" from title "US-APWR EQUIPMENT QUALIFICATION..."	4
CTS-01152	3D	3D-1	Correction	Deleted "Add the following new table in DCD Appendix 3D" and added wording to correctly state the relationship between Table 3D-201 and DCD Table 3D-2	4
RCOL2_02 .05.04-23 S01	3.7.1.1 3.7.2.3.1  3.7.2.4.1 3.8.4.1.3.4	3.7-3 3.7-7 3.7-8 3.7-9 3.8-7	Supplemental Response to RAI No 170 Luminant letter TXNB-10073 Date 10/21/2010	Revised to reflect that there are no other Seismic Category I structures( i.e. shallow embedded duct banks).	-
RCOL2_03.03.02-4 S01	3.3.1.2 3.3.2.2.2 3.3.2.2.4	3.3-2 3.3-3	Supplemental Response to RAI No 66 Luminant letter TXNB-10080 Date 11/8/2010	Deleted all references to shallow-embedded duct banks or pipe chases	-
RCOL2_03.02.02-5	3.2.1.2	3.2-1	Response to RAI No. 180 Luminant Letter no.TXNB-10081 Date 11/18/2010	Revised to reference Table 3.2-202.	-
RCOL2_03.02.02-5	Table 3.2-202	3.2-6 3.2-7	Response to RAI No. 180 Luminant Letter no.TXNB-10081 Date 11/18/2010	Added new table 3.2-202, which contains a list of the major codes and standards applicable to the design.	-
RCOL2_03.07.01-6	3KK.2 Table 3KK-10	3KK-2 3KK-12	Response to RAI No. 193 Luminant Letter no.TXNB-11004 Date 1/27/2011	Added new Table 3KK-10 and description for it.	-
RCOL2_03.07.01-6	3LL.2 Table	3LL-2 3LL-17	Response to RAI No. 193	Added new Table 3LL-16 and 3LL-17 and	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	3LL-16 Table 3LL-17		Luminant Letter no.TXNB-11004 Date 1/27/2011	description for it.	
RCOL2_03.07.02-6	3MM.2 Table 3MM-10	3MM-3 3MM-11	Response to RAI No. 193 Luminant Letter no.TXNB-11004 Date 1/27/2011	Added new Table 3MM-10 and description for it.	-
RCOL2_03.07.02-19	3KK.2	3KK-3	Response to RAI No. 192 Luminant Letter no.TXNB-11004 Date 1/27/2011	Added justification of design approach for cracked and uncracked concrete	-
RCOL2_03.07.02-20	3MM.2	3MM-2	Response to RAI No. 192 Luminant Letter no.TXNB-11004 Date 1/27/2011	Added justification of design approach for cracked and uncracked concrete	-
RCOL2_03.08.04-86	3KK.2	3KK-6	Response to RAI No. 185 Luminant Letter No. TXNB-11001 Date 01/06/2011	Added description for impulsive liquid mass	-
RCOL2_03.07.04-2 S01	3.7.4.1 3.7.4.2 3.7.4.4	3.7-12 3.7-13 3.7-14	Supplemental Response to RAI No. 146 Luminant Letter No. TXNB-11016 Date 03/18/2011	Changed subsection 3.7.4.1 and added subsections 3.7.4.2 and 3.7.4.4 to state free-field instrument at grade in the plant yard.	-
RCOL2_03.07.01-7	3NN.2	3NN-4	Response to RAI No. 205 Luminant Letter No. TXNB-11018 Date 03/18/2011	Changed reference section of site response analysis from 2.5.4 to 2.5.2	-

\*Page numbers for the attached marked-up pages may differ from the revision 1 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 4**

## Chapter 4 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
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\*Page numbers for the attached marked-up pages may differ from the revision 1 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. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_05.02.01.01-1	5.2.1.1	5.2-1	Responses to RAI No. 40, Luminant Letter TXNB-09055 Dated 10/19/2009	Replaced sentence in DCD Section 5.2.1.1 and applied the same ASME Code editions in DCD Table 5.2.1-1 and section 3.9.10	-
RCOL2_05.02.05-1	5.2.5.9	5.2-2 5.2-3	Responses to RAI No. 58, Luminant Letter no. TXNB-09058 Dated 10/26/2009	Added operational procedures regarding conversion of the referenced leak detection instruments and procedures for operator response to prolonged low-level leakage description.	-
RCOL2_05.02.05-1	Table 1.8-208 (Sheet 29 of 68)	1.8-38	Responses to RAI No. 58, Luminant Letter no. TXNB-09058 Dated 10/26/2009	Added procedures for conversion into common leakage rate and procedures for determining the existence of and operator response to prolonged low-level leakage conditions.	-
RCOL2_05.03.01-2	5.3.1.6.1	5.3-1	Responses to RAI No. 65, Luminant Letter no. TXNB - 09060 Dated 10/30/2009	Added test specimen and capsules description under section 5.3.1.6.1.	-
RCOL2_05.02.04-1	5.2.4.1	5.2-2	Responses to RAI No. 87, Luminant Letter no. TXNB-09062 Dated 11/5/2009	Added Boric Acid Corrosion Control Program (BACCP) for CPNPP Units 3 and 4 procedures for determining pressure boundary locations by boric acid corrosion and description for performing visual inspection of accessible and observable	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				components during system walkdowns and during plant outages.	
RCOL2_05.02.05-3	5.2.5.9	5.2-3 5.2.4	Responses to RAI No. 127 Luminant Letter no. TXNB-10007 Dated 2/19/2010	Added procedure guidance as described in RG 1.45 to identify, monitor and respond to leakages.	-
RCOL2_05.03.01-3	5.3.1.6.1	5.3-2	Responses to RAI No. 128 Luminant Letter no. TXNB-10007 Dated 2/19/2010	Added a statement about the recommended general capsule withdrawal schedule to the surveillance program.	-
CTS-01140	5.2.1.1 5.2.1.2 5.2.4.1 5.2.6  5.3.1.6.1 5.3.1.6.3 5.3.2.3 5.3.2.4 5.3.3.7 5.3.4	5.2-1  5.2-2 5.2-3 5.2-4 [5.2-5] 5.3-1 5.3-2 5.3-3  5.3-4	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 6**

## Chapter 6 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-00915	6.2.2.3	6.2-1	Response to RAI No. 76 Luminant Letter no.TXNB-09066 Date 11/12/2009	Revised the location of the replaced sentence and paragraph.	-
RCOL2_06.02.02-3	6.2.2.3	6.2-1	Response to RAI No. 76 Luminant Letter no.TXNB-09066 Date 11/12/2009	Add the cleanliness program items.	-
RCOL2_06.04-1	6.4.4.2	6.4-3	Response to RAI No. 77 Luminant Letter no.TXNB-09066 Date 11/12/2009	Add the description of the periodic surveys.	-
RCOL2_06.04-5	6.4.4.2	6.4-3	Response to RAI No. 77 Luminant Letter no.TXNB-09066 Date 11/12/2009	Add the description of operator actions in the event of a toxic gas release.	-
CTS-01140	6.4.3 6.4.6 6.4.7	6.4-1 6.4-3 [6.4-4]	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4
RCOL2_06.04-8	6.4.4.2	6.4-3	Response to RAI No.172 Luminant Letter no.TXNB-10069 Date 10/6/2010	Added text to refer to Ch. 13 for procedure and training requirements to satisfy RG 1.196.	-
RCOL2_06.04-9	6.4.4.2	6.4-2 6.4-3	Response to RAI No.172 Luminant Letter no.TXNB-10069 Date 10/6/2010	Updated MCR Habitability analysis with most conservative conditions from sensitivity analysis.	-

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## **Chapter 7**

## Chapter 7 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01140	7.4.1.6 7.4.4 Table 7.4-202 7.5.1.1 7.5.4	7.4-1  7.4-3  7.5-1 7.5-2	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 8**

## Chapter 8 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
MAP-08-201	Figure 8.1-1R	8.1-3	Consistency with DCD Revision 2	Deleted one feeder line between Class 1E LC and MCC, since two feeder lines were incorrectly depicted between Class 1E LC and MCC (editorial change). Added feeder lines from Class 1E MCC to MOV inverter. Changed the inputs to N21 and N22 UPS Units.	0
RCOL2_08.02-27	8.2.1.2	8.2-3	Response to RAI No. 152 Luminant Letter no.TXNB-10037 Date 5/18/2010	Added two paragraphs after the eleventh paragraph.	-
CTS-01140	8.2.1.2 8.2.3  8.2.4 Table 8.3.1-4R  Figure 8.3.1-1R Sheet 5 and 6 of 7) Figure 8.3.1-2R Sheet 18 through 21 of 24)	8.2-3 8.2-12 8.2-13 8.2-14 8.3-6 Through 8.3-9 8.3-11 8.3-12  8.3-17 Through 8.3-20	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 9**

## Chapter 9 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.01.05-1	9.1.5	9.1-1	Responses to RAI No. 52 Luminant Letter no. TXNB-09057 Dated 10/21/2009	Added Subsection 9.1.5, Overhead Heavy Load Handling System	-
RCOL2_09.01.05-1	9.1.6	9.1-2	Responses to RAI No. 52 Luminant Letter no. TXNB-09057 Dated 10/21/2009	Added COL Item CP COL 9.1(6), The establishment of a Heavy Load Handling Program.	-
RCOL2_09.04.01-1	9.4.1.2	9.4-1	Responses to RAI No. 63 Luminant Letter no. TXNB-09060 Dated 10/30/2009	Provided clarification on the design basis MCR temperature that the heating coils are designed to.	-
RCOL4_16-6	9.2.5.2.2	9.2-9	Responses to RAI No. 90 Luminant Letter no. TXNB-09064 Dated 11/11/2009	Each cooling tower fan starts automatically on an actual or simulated actuation signal.	-
RCOL2_09.02.01-1	9.2.1.2.2.1	9.2-2	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Added System head losses and basis for available NPSH.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.01-2	9.2.1.3	9.2-3	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Described plant procedures in the second bullet.  Describe that heat tracing is activated upon low ambient temperature.  Describe heat exchanger backflush operation.	-
RCOL2_09.02.01-5	9.2.1.3	9.2-3	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Except for a design basis seismic event, the ESWS is not required to supply water to the FSS during any other design basis event including a LOCA.	-
RCOL2_09.02.01-4	9.2.1.5.4	9.2-4	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Deleted CP COL 9.2(7)	-
RCOL2_09.02.01-1	9.2.5.3	9.2-11	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Provided clarification of the volume for a cooling tower basin.	-
RCOL2_09.02.02-4	9.2.10	9.2-13	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Revised CP Col 9.2(6) to add "and the mode of cooling the pump motor."  Added reference to Subsection	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				9.4.5.1.1.6.	
RCOL2_09.02.02-4	9.2.10	9.2-14	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Deleted reference to Subsection 9.2.1.5.4 In CP COL 9.2(7).	-
RCOL2_09.02.02-4	9.4.5.1.1.6	9.4-2	Responses to RAI No. 109 Luminant Letter no. TXNB-09071 Dated 11/20/2009	Added statement that the ESWP is installed at a location in the pump house where air is adequately circulated to cool the motor.	-
RCOL2_09.02.05-01	9.2.5.1	9.2-8	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Replaced the last bullet of Subsection 9.2.5.1 with a bullet to explain that the UHS components and structures are designed to seismic cat. I and equipment class 3. Also see Change ID RCOL2_09.02.05-04.	-
RCOL2_09.02.05-01	9.2.5.2.1	9.2-8	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added description to the second paragraph that the cooling tower components are designed per equipment class 3 and quality group C requirements.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.05-01	9.2.5.2.1	9.2-9	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added seventh paragraph to describe the ESW intake basin.	-
RCOL2_09.02.05-02	9.2.5.3	9.2-14	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added third paragraph to explain that the UHS seismic Cat. I SSC's and Non-seismic SSC's are separated and that failure of the non-seismic SSC's will not affect the seismic Cat. I SSC's.	-
RCOL2_09.02.05-04	9.2.5.1	9.2-8	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Replaced the last bullet of Subsection 9.2.5.1 with a bullet to explain that the UHS components and structures are designed to seismic cat. I and equipment class 3. Also see Change ID RCOL2_09.02.05-01.	-
RCOL2_09.02.05-04	9.2.5.2.1	9.2-9	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added ninth paragraph to provide description on the normal maintained water level of the UHS basin.	-
RCOL2_09.02.05-04	9.2.5.2.2	9.2-11	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added eighth paragraph to provide description that all transfer pumps discharge into a common header. This change worked	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				in conjunction with Change ID RCOL2_09.02.05-06.	
RCOL2_09.02.05-04	9.2.5.2.2	9.2-11	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added description to the end of the tenth paragraph regarding the power supply for the transfer pumps.	-
RCOL2_09.02.05-04	Figure 9.2.5-201 (sheets 1 and 2)	9.2-24 9.2-25	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added notes to Figure 9.2.5-201, Sheets 1 and 2.	-
RCOL2_09.02.05-05	9.2.5.2.1	9.2-8	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added fourth and fifth paragraphs to provide description for the cooling towers design conditions	-
RCOL2_09.02.05-05	9.2.5.2.3	9.2-12	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the last sentence of third paragraph to say recirculation penalty instead of margin.	-
RCOL2_09.02.05-05	9.2.5.2.3	9.2-12	Response to RAI Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the fourth paragraph to provide description that the 83 degrees F wet bulb temperature from Table 2.0-1R corresponds with the 0% exceedance value and is used to establish the cooling	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				tower basin water temperature surveillance requirements.	
RCOL2_09.02.05-05	9.2.5.2.3	9.2-13	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the sixth paragraph to add "...using industry standard methodology..."	-
RCOL2_09.02.05-05	9.2.5.2.3	9.2-13	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the eighth and ninth paragraphs to provide clarification on the operational peak heat loads during shutdown with LOOP is used for cooling tower design.	-
RCOL2_09.02.05-05	9.2.5.3	9.2-14	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised sixth paragraph to provide clarification on the 30 day cooling water capacity as 8.40 million gallons or approx. 2.80 million gallons for each basin.	-
RCOL2_09.02.05-05	9.2.5.3	9.2-14 9.2-15	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the seventh paragraph to provide description on UHS basin water temperature.	-
RCOL2_09.02.05-05	Table 9.2.5-201	9.2-23	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the following to Table 9.2.5-201 for UHS system design data: Design air flow, fan speed, cooling tower design life and design approach. Also	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				added a note at the bottom of the table.	
RCOL2_09.02.05-06	9.2.5.2.2	9.2-11	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added seventh paragraph to provide clarification that there are four 100% capacity UHS transfer pumps.	-
RCOL2_09.02.05-06	9.2.5.2.2	9.2-11	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added eighth paragraph to provide description that all transfer pumps discharge into a common header. This change worked in conjunction with Change ID RCOL2_09.02.05-04	-
RCOL2_09.02.05-07	9.2.5.2.2	9.2-11	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added ninth paragraph to provide description for the UHS transfer pump design features such as TDH and NPSH.	-
RCOL2_09.02.05-09	9.2.5.2.2	9.2-10	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added fourth, fifth and sixth paragraphs to provide description of how the ESWS and the UHS together minimize the effects of water hammer.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.02.05-10	9.2.5.2.1	9.2-9	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the twelfth paragraph in conjunction with Change ID RCOL2_09.02.05-11 to provide description of the intake structure design minimizes debris, algae and grass into the makeup water.	-
RCOL2_09.02.05-11	9.2.5.2.1	9.2-9	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the twelfth paragraph in conjunction with Change ID RCOL2_09.02.05-11 to provide description of the intake structure design minimizes debris, algae and grass into the makeup water.	-
RCOL2_09.02.05-12	9.2.5.2.1	9.2-9	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the tenth paragraph to provide description for the chemical injection system for the UHS and ESWS.	-
RCOL2_09.02.05-12	9.2.5.4	9.2-15 9.2-16	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the third paragraph to clarify industry operating experience was used for periodic inspections and testing of cooling tower components. Also, added the fourth through the eleventh paragraphs in conjunction with Change ID's RCOL2_09.02.05-13 and 14 to provide	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				description of inspection and testing requirements.	
RCOL2_09.02.05-13	9.2.5.4	9.2-15 9.2-16	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the fourth through the eleventh paragraphs in conjunction with Change ID's RCOL2_09.02.05-12 and 14 to provide description of inspection and testing requirements.	-
RCOL2_09.02.05-14	9.2.5.4	9.2-15	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the fourth paragraph to provide description of inspection and testing requirements in accordance with Tech. Specs..	-
RCOL2_09.02.05-16	9.2.5.1	9.2-7	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the bullet to add description that the performance of the UHS is based on 30 years of site specific wet bulb temperature conditions.	-
RCOL2_09.02.05-16	9.2.5.2	9.2-8	Responses to RAI No. 121 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added to the end of the third paragraph a reference to Subsection 10.4.5.2.2.2.11.	-
RCOL2_09.04.05-03	9.4.5.2.6	9.4-5	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added sixth paragraph to clarify that the UHS ESW pump house ventilation contains no ductwork.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.04.05-03	9.4.5.2.6	9.4-6	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added twelfth paragraph to provide description that the failure of non-safety-related components in the UHS ESW pump house will not damage any of the safety-related components in the pump house.	-
RCOL2_09.04.05-03	Figure 9.4-201	9.4-17	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added four notes to Figure 9.4-201.	-
RCOL2_09.04.05-04	9.4.5.3.6	9.4-6	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added a new bullet to provide clarification that the ESW pump house air intakes and air outlets are protected from tornado missiles.	-
RCOL2_09.04.05-07	9.4.5.1.1.6	9.4-2	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the first paragraph by providing clarification on the ventilation system temperature range.	-
RCOL2_09.04.05-07	9.4.5.2.6	9.4-4	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised the first sentence of the ninth paragraph to clarify that the unit heaters maintain room temperatures during normal and emergency plant operations.	-
RCOL2_09.04.05-08	9.4.5.2.6	9.4-4 9.4-5 9.4-6	Responses to RAI No. 123 Luminant Letter	Revised Subsection 9.4.5.2.6 in conjunction with	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no. TXNB-09081 Dated 12/16/2009	Change ID's RCOL2_09.04.05-07, 09, 10 and 12.	
RCOL2_09.04.05-09	9.4.5.2.6	9.4-5	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised seventh paragraph of Subsection 9.4.5.2.6 in conjunction with Change ID's RCOL2_09.04.05-12	-
RCOL2_09.04.05-10	9.4.5.2.6	9.4-5	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added the tenth paragraph regarding backdraft dampers.	-
RCOL2_09.04.05-10	9,4,5,3,6	9.4-6	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised last sentence of the third bullet item to read "All ventilation system components..."	-
RCOL2_09.04.05-10	9.4.5.5.6	9.4-7	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added a new bullet item identifying temporary switches.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_09.04.05-10	Table 9.4-203 (sheets 1 thru 5)	9.4-12 Thru 9.4-16	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Added Table 9.4-203 (Sheets 1 thru 5)	-
RCOL2_09.04.05-12	9.4.5.2.6	9.4-5	Responses to RAI No. 123 Luminant Letter no. TXNB-09081 Dated 12/16/2009	Revised seventh paragraph of Subsection 9.4.5.2.6 in conjunction with Change ID's RCOL2_09.04.05-09.	-
DCD_09.04.05-1	9.4.5.3.6 Table 9.4-203 (Sheet 1, 2 of 5)	9.4-4	Consistency with DCD	Change the sentence about the effect analysis of single active failure. And newly add Table 9.4-203 as FMEA.	0
MAP-00-201	Table 9.2.5-202 Figure 9.2.1-1R Figure 9.2.5-201 Figure 9.4-201	9.2-19 through 9.2-22 9.2-24 9.2-25 9.4-10	The change of numbering rule of Tag number	Change Tag numbers.	0
RCOL2_09.02.04-02	9.2.4.1	9.2-4	Response to RAI No. 126 Luminant Letter no. TXNB-10008 Date 2/18/2010	Deleted first bullet.	-
RCOL2_09.02.04-02	9.2.4.2	9.2-5	Response to RAI No. 126 Luminant Letter no. TXNB-10008 Date 2/18/2010	Added Subsection 9.2.4.2. CP COL 9.2(11)	-
RCOL2_09.02.04-02	9.2.4.2.1	9.2-5	Response to RAI No. 126 Luminant Letter	Revised second paragraph to clarify that the PSWS does	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no. TXNB-10008 Date 2/18/2010	not share between any radiological controlled systems.	
RCOL2_09.02.04-03	9.2.4.2.2.4	9.2-6	Response to RAI No. 126 Luminant Letter no. TXNB-10008 Date 2/18/2010	Added Subsection 9.2.4.2.2.4. CP COL 9.2(13)	-
RCOL2_09.05.01-8 S01	9.5.1.6.4.2.4	9.5-14 9.5-15 9.5-16	Response to RAI No. 10 Supplemental Luminant Letter no. TXNB-10007 Date 2/19/2010	Revised Subsection to add more detail regarding combustibles control program.	-
RCOL2_09.02.01-5 S01	Figure 9.2.1-1R	9.2-26	Response to RAI No. 109 Supplemental Luminant Letter No. TXNB-10011 Date 2/22/10	Revised figure to reference Figure 9.5.1-201.	-
RCOL2_09.02.01-5 S01	Figure 9.5.1-201 (Sheet 1 of 2)	9.5-148	Response to RAI No. 109 Supplemental Luminant Letter No. TXNB-10011 Date 2/22/10	Added "Sheet 1 of 2" to Figure 9.5.1-201.	-
RCOL2_09.02.01-5 S01	Figure 9.5.1-201 (Sheet 2 of 2)	9.5-149	Response to RAI No. 109 Supplemental Luminant Letter No. TXNB-10011 Date 2/22/10	Added second sheet to Figure 9.5.1-201.	-
RAI GEN-09	Figure 9.2.4-2R (Sheet 2 of 2)	9.2-29	Response to RAI GEN-09 Luminant Letter No. TXNB- 10013 Date	Added new figure to FSAR Ch 9 to supplement Figure 9.2.4-1R, this figure	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			2/24/2010	was not added correctly and the name will be changed to 9.2.4-201 in the next UTR, in addition Luminant requests that the title be changed to "Sanitary Water System Flow Diagram" and "sheet 2 of 2" will be removed	
RAI GEN-09	Figure 9.2.4-1R (Sheet 1 of 2)	9.2-28	Response to RAI GEN-09 Luminant Letter No. TXNB-10013 Date 2/24/2010	<p>Added (sheet 1 of 2) to account for above new figure</p> <p>The title of this figure will be modified in the next UTR to comply with the DCD</p> <p>New title: "Potable and Sanitary Water System Flow Diagram" to reflect the DCD</p> <p>In additon "Sheet 1 of 2" will be removed.</p>	-
CTS-01109	Figure 9.2.4-1R	9.2-28	Errata	Corrected figure title.	2
CTS-01109	Figure 9.2.4-201	9.2-29	Errata	Corrected figure number and title.	2
CTS-01140	9.1.2.1 9.1.5.3 9.1.6 9.2.1.2.1	9.1-1 9.1-2 9.2-1	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP	4



Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	45, 47, 48 and 51 of 51)  Table 9.5.1-2R Sheet 1 through 16, 23, 28, 29, 35, 36, 38 through 46, 49, 50, 61 through 71 of 71)  9A.3 9A.3.101 Through 9A.3.114	9.5-63 9.5-64 9.5-69 9.5-71 9.5-72 9.5-75  9.5-76 Through 9.5-91 9.5-98 9.5-103 9.5-104 9.5-110 9.5-111 9.5-113 Through 9.5-121 9.5-124 9.5-125 9.5-136 Through 9.5-146 9A-1 Through 9A-17			
CTS-01155	Table 9.5.1-2R (Sheet 5 of 71)	9.5-80	Erratum	Changed LMN to COL 9.5(1) to be consistent with Subsection 9.5.1.6	4
RCOL2_09.05.02- 2	9.5.2.2.5.2	9.5-21	Response to RAI No. 178 Luminant Letter no.TXNB-10072 Date 10/11/2010	Revised first paragraph on page 9.5-21 to delete the words "and operations support center."	-
RCOL2_02.03.01- 06 S02	9.4.1.2	9.4-1	Supplemental Response to RAI No 155 S02 Luminant letter TXNB-10076 Date 10/29/2010	Heater capacity has been revised based on -5 degree F 100 year return period temperature	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_02.03.01-06 S02	9.4.5.1.1.6	9.4-2	Supplemental Response to RAI No 155 S02 Luminant letter TXNB-10076 Date 10/29/2010	Ventilation system design temperature has been revised based on 115 degree F 100 year return period temperature	-
CTS-01171	9.4.5.3.6	9.4-4 [9.4-6]	Response to RAI No.123 Luminant Letter no.TXNB-09081 Date 12/16/2009	Added new internal flooding -related information to Subsection 9.4.5.3.6 per Regulatory Commitment 6901 made in RAI No. 123.	5

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.

**Comanche Peak Nuclear Power Plant, Units 3 & 4**  
**COL Application**  
**Part 2, FSAR**

temperature conditions in these areas. These alarms are an indication of a loss of ventilation or a loss of heating.

RCOL2\_09.0  
4.05-8

The UHS ESW pump houses each contain a wet-pipe sprinkler system, hose station and smoke detection system. These fire protection components are classified as non -safety-related. With the exception of standpipes supplying manual hose stations, these fire protection components are seismically supported such that their failure during a design basis seismic event will not damage any of the safety-related equipment in the areas. The standpipe systems supplying hose stations are designed to remain functional under safe shutdown earthquake loadings for manual fire suppression in areas containing equipment required for safe-shutdown.

RCOL2\_09.0  
4.05-3

CP COL 9.4(6) Add the following new subsection after **DCD Subsection 9.4.5.3.5**

**9.4.5.3.6 UHS ESW Pump House Ventilation System**

- The ESW pump room exhaust fan and the UHS transfer pump room exhaust fan located in each UHS ESW pump house are powered by the different Class 1E buses.
- The ESW pump room exhaust fan and the UHS transfer pump room exhaust fan are separated by a three-hour fire rated barrier. Therefore, each fan powered by different Class 1E power supplies is protected and remains functional in the event of a fire in either room.
- The safety function of the UHS ESW pump house ventilation system is assured by the physical separation provided by the four separate and independent UHS ESW pump houses. All ventilation system ~~equipment and~~ components are classified as equipment class 3, seismic category I.
- The ESW pump room exhaust fans and the UHS transfer pump room exhaust fans are capable of performing its safety function under all associated design basis accidents coincident with LOOP.
- The ESW pump room exhaust fans and UHS transfer pump room exhaust fans are capable of performing required safety functions under all postulated internal flooding events as described in Subsection 3.4.1.3.
- As shown in Table 9.4-203, Failure of a single active component in one of the UHS ESW pump house ventilation system exhaust fans does not result in a loss of the system's safety function.
- The UHS ESW pump house ventilation system components are protected from tornado generated missiles by their location inside a seismic category I structure.
- Backdraft dampers are capable of withstanding the affects of tornado wind and atmospheric differential pressure loading.

RCOL2\_09.0  
4.05-10

CTS-01171

DCD\_09.04.  
05-1

## **Chapter 10**

## Chapter 10 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_11.0 5-2	10.4.8.2.1	10.4-7	Response to RAI No. 50 Luminant Letter no.TXNB-09055 Date 10/19/2009	Revised the sentence about the location and other technical details of the SGBDS radiation monitor as below; The location and other technical details of the monitor (RMS-RE-110) is described in Subsection 11.5.2.5.3 and Table 11.5-201.	-
MAP-10-201	10.4.5.2.1	10.4-1	Editorial	Revise from “jockey pumps” to “priming pumps”.	0
CTS-01119	10.3.6.3.1.6	10.3-4	Remove site specific language from Standard COL Item.	Deleted “CPNPP Units 3 and 4” from the second sentence.	2
RCOL2_10.02.03-2	10.2.3.5	10.2-1	Response to RAI No. 169 Luminant Letter no.TXNB-10056 Date 8/9/2010	Added a statement to clarify the consistency of turbine inservice inspection procedure between DCD and COLA FSAR.	-
RCOL2-12.03-12.04-11	10.4.8.2.1	10.4-7	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added the piping information of the SG blowdown discharge line in response to RG 4.21.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01140	10.4.8.2.1  10.4.8.2.3  10.4.8.5 10.4.12	10.4-6 10.4-7 [10.4-8] 10.4-8 [10.4-9] 10.4-9 [10.4-10]	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 11**

## Chapter 11 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_11.03-1	Figure 11.3-201 (Sheet 3 of 3)	11.3-14	Response to RAI No. 35 Luminant Letter no.TXNB-09054 Date 10/15/2009	Added a note about equipment class.	-
RCOL2_11.04-1	11.4.4.5	11.4-4	Response to RAI No. 38 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added following sentences in Subsection 11.4.4.5. "Applicable regulatory requirements and guidance, such as Regulatory Guide 1.143, are addressed by lease or purchase agreements associated with the use of a mobile dewatering subsystem for spent resin dewatering. The lease or purchase agreements include applicable criteria such as testing, inspection, interfacing requirements, operating procedures, and vendor oversight."	-
RCOL2_11.02-6	11.2.1.6	11.2-1	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added descriptions about design features and approaches for the prevention of spread of contamination of the facility.	-
RCOL2_11.02-8	11.2.2	11.2-2	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added descriptions that the evaporation pond is not part of the LWMS.	-
RCOL2_11.02-8	11.2.3.1	11.2-4	Response to RAI No. 49 Luminant Letter	Added a following description. "Rainfall is the primary	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no.TXNB-09055 Date 10/19/2009	contributing source for dilution of the pond. “	
CTS-00902	11.2.3.1	11.2-4	Editorial Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Changed from “The pond design includes a discharge line and transfer pump to keep...” to “The pond design includes a transfer pump and discharge line to keep...”.	-
RCOL2_11.0 2-8	11.2.3.4	11.2-6	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added a following description; “Texas Administrative Code (TAC), Title 30 on Environmental Quality, Part 1 Texas Commission on Environmental Quality (TCEQ), Chapter 321, Rule 321.255 on Requirements for Containment of Wastes and pond(s). “	-
RCOL2_11.0 2-8	11.2.3.4	11.2-7	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added following descriptions as the other applicable guidance and standards;  Industry standards such as ANSI / HI - 2005 “Pump standard” will be used in designing the pumps  Geosynthetic Research Institute Standard GM13 will be utilized for HDPE	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_11.0 2-8	11.2.3.4	11.2-8	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Changed the volume of evaporation pond from “1.4 million gallon” to “2.1 million gallon”.  Changed the surface area of evaporation pond from “1 acre” to “1.5 acre”.	-
RCOL2_11.0 2-8	11.2.3.4	11.2-8	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	Added descriptions about programs and procedures associated with the pond.	-
RCOL2_11.0 2-9	Table 11.2-14R (Sheet 1 of 2)	11.2-18	Response to RAI No. 49 Luminant Letter no.TXNB-09055 Date 10/19/2009	“Goats” was added as the Animals considered for milk pathway.	-
RCOL2_11.0 5-2	11.5.2.5.3 11.5.2.5.4	11.5-1	Response to RAI No. 50 Luminant Letter no.TXNB-09055 Date 10/19/2009	Newly added Subsection 11.5.2.5.3 and 11.5.2.5.4	-
RCOL2_11.0 5-2	11.5.5	11.5-3	Response to RAI No. 50 Luminant Letter no.TXNB-09055 Date 10/19/2009	Combined License Information about CP COL 11.5 (1) was revised from “This COL item is addressed in Subsection 11.5.2.9.” to “This COL item is addressed in Subsections 11.5.2.5.3, 11.5.2.5.4 and 11.5.2.9.”	-
RCOL2_ 11.05-2	Table 11.5-201	11.5-3	Response to RAI No. 50 Luminant Letter no.TXNB-09055 Date 10/19/2009	Newly added Table 11.5-201.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_11.05-2	Figure 11.5-201	11.5-3	Response to RAI No. 50 Luminant Letter no.TXNB-09055 Date 10/19/2009	Newly added Figure11.5-201.	-
RCOL2_12.03-12.04-4	11.4.2.3	11.4-3	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add "10 CFR 20.1801, 10 CFR 50 Appendix A, GDC 61 and 63" after "10CFR 20" in the eighth paragraph of Section 11.4.2.3.	-
MAP-11-201	11.2.3.1	11.2-3	Consistency with DCD rev.2	Add a sentence to be consistent with DCD Rev.2	0
MAP-11-201	11.2.3.2	11.2-6	Consistency with DCD rev.2	Add a sentence to be consistent with DCD Rev.2	0
MAP-11-201	11.4.2.3	11.4-2	Consistency with DCD rev.2	Add a sentence to be consistent with DCD Rev.2	0
MAP-11-201	11.5.2.6	11.5-1	Consistency with DCD rev.2	Add a sentence to be consistent with DCD Rev.2	0
MAP-11-201	11.5.2.9	11.5-2	Consistency with DCD rev.2	Add a sentence to be consistent with DCD Rev.2	0
MAP-00-201	Figure 11.2-201 (Sheet 9 of 10)	11.2-29	The change of numbering rule of Tag number	Change Tag numbers of waste monitor tank and pump.	0
CTS-01105	11.2.3.1 Table 11.2-15R	11.2-5 [11.2-6] 11.2-20 [11.2-22]	Access change to SCR	Revised individual dose calculations.	1
CTS-01105	Table 11.2-14R (Sheet 1 of 2)	11.2-18 [11.2-19]	Access change to SCR	Revised input parameters for the LADTAP II code.	1
CTS-01105	11.3.3.1	11.3-2 [11.3-3]	Access change to SCR	Revised text to include a discussion of the doses to the maximally	3

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				exposed individual at Squaw Creek Reservoir and clarify requirements.	
CTS-01105	Table 11.3-8R	11.3-4 [11.3-5] [11.3-6]	Access change to SCR	Revised table to include the input parameters for the GASPAR II Code for SCR.	3
CTS-01105	Table 11.3-9R	11.3-5 11.3-6 [11.3-7] [11.3-8]	Access change to SCR	Revised table to update doses for SCR access.	3
CTS-01105	Table 11.3-203	11.3-9 [11.3-12] [11.3-13]	Access change to SCR	Revised table to include the input parameters for dose calculation from the evaporation pond for SCR.	3
CTS-01105	Table 11.3-204	11.3-10 [11.3-14]	Access change to SCR	Revised table to update doses for SCR access.	3
CTS-01105	Table 11.3-205	11.3-11 [11.3-16]	Access change to SCR	Revised table to update doses for SCR access.	3
CTS-01105	Table 11.3-206	11.3-11 [11.3-18]	Access change to SCR	Created new table to reflect the total gaseous doses to the maximally exposed individual at SCR.	3
RCOL2-12.03-12.04-11	11.2.2	11.2-2	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Replaced "the bypass valve" with "the piping and the valves inside the buildings."	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2-12.03-12.04-11	11.2.3.4	11.2-8	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Revised the information of the LWMS effluent release piping to show compliance with RG 4.21.	-
CTS-01140	11.2.1.6 11.2.4  11.3.7 Figure 11.3-201  11.4.1.3 11.4.1.6 11.4.2.1.1 11.4.3.2 11.4.4.5 11.4.8 Figure 11.4-201 11.5.2.7 11.5.2.8 11.5.2.9 11.5.2.10 11.5.2.11 11.5.5	11.2-1 11.2-10 [11.2-11] 11.3-3 11.3-12 Through 11.3-14 11.4-1  11.4-2 11.4-4  11.4-5 11.4-6  11.5-2 11.5-3  11.5-4	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 12**

## Chapter 12 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.02-1	12.2.1.1.10	12.2-1	Response to RAI No.85. Luminant Letter No.TXNB- 09062 Date 11/5/2009	COL 12.2(1) was revised to assure that the site will be able to track the source type, quantity, form, location, and use such that the facility design will accommodate the activity and types of sources procured and temporarily utilized on site during the construction and operational phase.	-
RCOL2_12.02-2	12.2.1.1.10	12.2-1	Response to RAI No.89. Luminant Letter No.TXNB- 09062 Date 11/5/2009	COL 12.2(1) was revised to describe the evaporation pond as a miscellaneous source.	-
RCOL2_12.02-2	Table 12.2- 201 (Sheet 1 of 2) (Sheet 2 of 2)	12.2-4	Response to RAI No.89. Luminant Letter No.TXNB- 09062 Date 11/5/2009	Table 12.2-201 was added to present the estimated fission and corrosion product activity in the evaporation pond water.	-
RCOL2_12.05-3	12.1.1.3.1 12.1.1.3.2 12.1.1.3.3 12.1.3	12.1-1 12.1-2 12.5-1	Response to RAI No.117. Luminant Letter No.TXNB-	Delete "in combination with existing or modified CPNPP Units 1 and 2 site program information" after	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	12.5		09068 Date 11/16/2009	"NEI 07-08 (Reference 12.1-2)" in Section 12.1.1.3.1, 12.1.1.3.2 and 12.1.1.3.2, after "NEI 07-03A (Reference 12.1-25)" in the second paragraph of Section 12.1.3 and after "NEI 07-08, Generic FSAR Template Guidance for Ensuring that Occupational Radiation Exposures are as Low as is Reasonably Achievable (ALARA), Revision 3" in the third paragraph of Section 12.5.	
RCOL2_12.03-12.04-2	12.2.1.1.10	12.2-1	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Change "Title 10, Code of Federal Regulations (CFR) Part 20" to "10 CFR 20, 10 CFR 50, Appendix A, GDC 61 and 63" in the second paragraph of Section 12.2.1.1.10. Add "and Generic Letter 81.38. The Interim Radwaste Storage Building design criteria is described in Subsection 11.4.2.3." at the end of the second paragraph of Section 12.2.1.1.10.	-
RCOL2_12.03-12.04-6	12.4.1.9	12.4-1	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add following sentences at the end of the second paragraph of Section 12.4.1.9; "Once CPNPP Unit 3 completes 5% power ascension testing and proceeds to commercial operation, the remaining	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				<p>construction workers doses will be maintained ALARA in accordance with 10 CFR 20.1301 as described in Section 12.5, Operational Radiation Protection Program. Subsection 13.4 provides an implementation milestones for the Operational Radiation Protection Program that meets the regulations provided in 10 CFR Parts 20.1101 (a) and (b), 1301 and 1302. Once CPNPP Units 3 and 4 become operational, the estimated dose for remaining construction workers will be maintained ALARA at less than 2 mrem/hr.”</p>	
RCOL2_12.05-3	12.5	12.5-1	<p>Response to RAI No.117. Luminant Letter No.TXNB-09068 Date 11/16/2009</p>	<p>Add following paragraphs after the fourth paragraph of Section 12.5;  “Add the following information after the first paragraph in Subsection 12.5.3.2 of NEI 07-03A.  The selection and calibration of this instrumentation and equipment is based on relevant industry standards such as ANSI N42.17A-1989, as it relates to the accuracy and overall performance of portable survey instrumentation, and ANSI N323A-1997, as it relates to the calibration</p>	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				and maintenance of portable radiation survey instruments.”	
RCOL2_12.03-12.04-8	12.4.1.9.2.1	12.4-2	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add following paragraph after the fourth paragraph of Section 12.4.1.9.2.1; “The CPNPP site will be continually monitored during the construction period and appropriate actions will be taken as necessary to ensure that the construction workers are protected from radiation exposure. Use of radioactive materials and sources during construction, such as sources used in radiography, will be controlled and monitored to maintain construction worker doses ALARA.”	-
RCOL2_12.03-12.04-6	12.4.1.9.4.3	12.4-5	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add following paragraph after the first paragraph of Section 12.4.9.4.3; “The location for the Units 3 and 4 liquid waste management system (LWMS) connection to the Units 1 and 2 is an open pit near the existing Units 1 and 2 waste treatment ponds (Northeast corner of Units 1 and 2 radioactive waste treatment facility). The CPNPP Units 3 and 4 effluent tap will be made into CPNPP Units 1 and 2	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				at the pipe inside the Unit 1 Turbine Building. In accordance with the Radiation Protection Program established (see FSAR Subsection 13.4 and Table 13.4-201), the construction worker dose for this connection tie-in will be ALARA and meet the limits established in 10 CFR 20.1301. Pre-staging of the connection, health physics surveys and other effective techniques will be utilized to ensure that worker doses are ALARA in accordance with an approved Radiation Work Permit.”	
RCOL2_12.03-12.04-3	12.5	12.5-1	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add following paragraphs after the fourth paragraph of Section 12.5; “Add the following information after the first paragraph in Subsection 12.5.3.2 of NEI 07-03A. The selection and calibration of this instrumentation and equipment is based on relevant industry standards such as ANSI N42.17A-1989, as it relates to the accuracy and overall performance of portable survey instrumentation, and ANSI N323A-1997, as it relates to the calibration and maintenance of portable radiation survey instruments.”	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.05-4	12.5	12.5-1	Response to RAI No.117. Luminant Letter No.TXNB- 09068 Date 11/16/2009	Add following paragraphs after the sixth paragraph of Section 12.5; “Add the following information prior to the last paragraph in Subsection 12.5.4.1 of NEI 07-03A. Calibration of portable and non-portable radiation protection equipment is normally performed onsite by station personnel, although, calibration by a qualified vendor is allowed. Calibration is performed using written procedures and radioactive sources traceable to the National Institute of Standards (NIST) or using transfer instruments, such as electrometers, which have been calibrated using NIST traceable sources.”	-
RCOL2_12.03- 12.04-2	12.5	12.5-1	Response to RAI No.119. Luminant Letter No.TXNB- 09068 Date 11/16/2009	Change the tenth paragraph of Section 12.5 to read as follows; “The locations and radiological controls of the radiation zones on plant layout drawings are located in DCD Subsection 12.3.1.2. Administrative controls for restricting access to Very High Radiation Areas are incorporated into plant procedures which require approval by the Plant Manager (or designee) for each entry. Entry will be controlled through the	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				Radiation Work Permit (RWP) process. Physical access controls for Very High Radiation Areas are provided by physical barriers such as lockable gates or doors which prevent unauthorized access. It's not necessary to enter these areas periodically. DCD Subsection 12.3.1.2 includes detailed drawings of the very high radiation areas and indicates the physical access controls. Table 12.5-201 summarizes the plant areas with the potential to become very high radiation areas. Radiation monitor locations for each area are indicated in DCD Subsection 12.3.4."	
RCOL2_12.03-12.04-1 RCOL2_12.01-4 RCOL2_12.03-12.04-7	12.5	12.5-2	Response to RAI No.99. Luminant Letter No.TXNB-09064 Date 11/11/2009  Response to RAI No.118 and 119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add following paragraphs after the twelfth paragraph of Section 12.5; "Add the following information at the end of Subsection 12.5.4.8 of NEI 07-03A. In addition, NEI Template 08-08 Revision 3, "Generic FSAR Template Guidance for Life-Cycle Minimization of Contamination" is fully adopted. And also, the guidance provided in NEI 08-08 will be used at CPNPP Units 3 and 4 to minimize contamination during construction,	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				operation and decommissioning. This will include the use of photographs and video records during construction to facilitate updating the conceptual site model for groundwater movement and aid in revising the groundwater monitoring plan post-construction. Final layout drawings, photographs, global positioning survey information and video records will be used in assessing the proper location for groundwater monitoring wells, foundations, pipes, conduits and other below grade structures.”	
RCOL2_12.03-12.04-2	12.5	12.5-2	Response to RAI No.119. Luminant Letter No.TXNB-09068 Date 11/16/2009	Add Table 12.5-201 “Summary of Comanche Peak Units 3 and 4 Very High Radiation Areas (VHRAs)”	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_14.02.01-1	12.5	12.5-1	Response to RAI No.129 Luminant Letter No.TXNB- 10010 Date 2/22/2010	Changed describes the relevant industry standards, ANSI N42.17A-1989 and ANSI N323A-1997, as the bases for selection and calibration of instrumentation and equipment and calibration and maintenance of portable radiation survey instruments.	-
RCOL2_14.02.01-1	Table 12.5-202	12.5-5	Response to RAI No.129 Luminant Letter No.TXNB- 10010 Date 2/22/2010	Added new Table 12.5-202 to identify the consensus standards used to define the calibration methods for personnel monitors, radiation survey instruments, and laboratory equipment.	-
RCOL2_12.03-12.04-9	12.2.1.1.10	12.2-1	Response to RAI No. 133 Luminant letter No. TXNB- 10012 Date 2/24/2010	Added reference to Regulatory Issue Summary (RIS) 2007-03.	-
RCOL2_12.03-12.04-10	12.4.1.9.2.1	12.4-1	Response to RAI No. 133 Luminant letter No. TXNB- 10012 Date 2/24/2010	Added applicability of the CPNPP Unit 1 and 2 Radiation Protection Program to the construction workers in the fourth paragraph.	-
RCOL2_12.05-6	12.5	12.5-1	Response to RAI No. 136 Luminant letter No. TXNB- 10020 Date 3/9/2010	Added a new paragraph after the third paragraph of Section 12.5, titled "Source Term Reduction Strategy".	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_12.05-5	12.5.4.2	12.5-2	Response to RAI No. 136 Luminant letter No. TXNB-10020 Date 3/9/2010	Added a new paragraph after the fifth paragraph of Section 12.5, describing compliance of respiratory protection procedure.	-
CTS-01106	12.1.1.3.1 12.1.1.3.2 12.1.1.3.3 12.5	12.1-1 12.5-1	Update due to issuance of NEI 07-08A Rev0	NEI 07-08 Rev.3 was updated to NEI 07-08A Rev.0.	2
CTS-01128	12.4.1.9.4	12.4-4 [12.4-5]	Technical correction	Changed "A peak loading of 4300 construction workers per year" to "A peak loading of 4300 construction workers"	2
CTS-01107	12.5	12.5-3	Update due to issuance of NEI 08-08A Rev0	NEI 08-08 Rev.3 was updated to NEI 08-08A Rev.0.	2
RCOL2-12.03-12.04-11	12.1.3	12.1-2	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Revised the fourth paragraph to indicate that guidance of RG 4.21 is followed.	-
RCOL2-12.03-12.04-11	12.1.4	12.1-3	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added "and Subsection 12.3.1.3.2" to COL Action Items 12.1(6) and 12.1(7).	-
RCOL2-12.03-12.04-11	12.1.4	12.1-3	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added COL Action Item 12.1(8).	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2-12.03-12.04-11	12.3.1.2.2	12.3-1	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added Subsection 12.3.1.3.1 Design Considerations, Subsection 12.3.1.3.1.1 Design Considerations for Site Specific Design, and Subsection 12.3.1.3.2 Operational/Programmatic Considerations.	-
RCOL2-12.03-12.04-11	12.3.6	12.3-2	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added COL Action Item 12.1(10).	-
RCOL2-12.03-12.04-11	12.3	12.3-2	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added Table 12.3-201 Regulatory Guide 4.21 Design Objectives and Applicable FSAR Subsection Information for Minimizing Contamination and Generation of Radioactive Waste.	-
RCOL2-12.03-12.04-11	12.3	12.3-3	Response to RAI No. 135 Luminant Letter no.TXNB-10065 Date 9/22/2010	Added Figure 12.3-201 Yard Piping Routing and Building Penetration Schematic (Not to scale).	-
CTS-01140	12.1.3 12.1.4 12.2.1.1.10 12.2.3 12.3.1.2.1.1 12.3.2.2.8 12.3.4 12.3.6	12.1-2  12.2-1 12.2-3 12.3-1 12.3-2 [12.3-3] [12.3-4]	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4
DCD_12.02-29	12.2.3	12.2-3	Response to DCD RAI No.532	COL Action Items (CP COL12.2 (3) and 12.2 (4)) were added.	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
DCD_12.02-30	12.3.6	12.3-2 [12.3-4]	Response to DCD RAI No.532	COL Action Item (CP COL 12.3(9)) was added.	4
DCD_12.02-29 DCD_12.02-30	12.5	12.5-2	Response to DCD RAI No.532	Resolution to COL Action Items (CP COL12.2 (3) 12.2 (4) and 12.3 (9)) was added.	4
DCD_12.02-29 DCD_12.02-30	12.5	12.5-2 [12.5-3]	Response to DCD RAI No.532	Resolution to COL Action Items (CP COL12.2 (3) 12.2 (4) and 12.3 (9)) was added.	4
DCD_12.03-12.04-33	Table 12.5-201	12.5-6 [12.5-7]	Amended Response (9/15/2010) to DCD RAI No.524	Added a new row, "Spent Resin Storage Tank Valve Area," in Table 12.5-201.	5
DCD_12.03-12.04-33	Table 12.5-201	12.5-6 [12.5-7]	Amended Response (9/15/2010) to DCD RAI No.524	Added a new row, "Valve Area next to the Mixed-Bed Demineralizer Room, the Cation-Bed Demineralizer Room and the Deborating Demineralizer Room," in Table 12.5-201.	5
CTS-01172	Table 12.5-201	12.5-6 [12.5-7]	Consistency with DCD ch 12, Table 12.3-1	Changed "A & B Waste Demineralizers Room" to "A, B-Waste Demineralizer Room" in Table 12.5-201.	5
CTS-01195	Table 12.5-201	12.5-6 [12.5-7]	Erratum	Replaced "VRHAs" to "VHRAs."	5

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.

**Comanche Peak Nuclear Power Plant, Units 3 & 4**  
**COL Application**  
**Part 2, FSAR**

**Table 12.5-201 (Sheet 1 of 2)**  
**Summary of Comanche Peak Units 3 and 4**  
**Very High Radiation Areas (VHRAs)**

RCOL2\_12.  
03-12.04-2

<u>Plant Area</u>	<u>Description of Area and Methods Employed to Ensure Personnel Safety</u>
<u>Refueling Canal</u>	<u>These areas have the potential to become VHRAs during underwater spent fuel transfer and inspection operations. These areas are submerged during this period and it becomes inaccessible for personnel. Per DCD Subsection 12.3.2.2.4, all spent fuel removal, transfer, and inspection operations are performed under borated water to provide radiation protection and to maintain sub-criticality conditions. Administrative and access controls, such as temporary fences or ropes, are in place to assure that personnel doses are maintained ALARA during fuel handling and inspection operations. With the exception of the spent fuel pit, the dose rates in these areas of the plant are significantly less under all other operating conditions</u>
<u>Refueling Cavity (including Core Internals Laydown Area)</u>	
<u>Cask Pit</u>	
<u>Fuel Inspection Pit</u>	
<u>Spent Fuel Pit</u>	
<u>Fuel Transfer Tube</u>	<u>This area only has the potential to reach Zone X radiation conditions while there is spent fuel passing through the tube. As indicated in Section 12.5 of the COL FSAR, locked gates provide positive access control of the fuel transfer tube. Entry to these areas is allowed only through the issuance of a specific Radiation Work Permit. However, the issuance of a specific Radiation Work Permit for access to these areas is not regularly permitted while spent fuel is passing through the tube.</u>
<u>Reactor Cavity</u>	<u>This area is designed to contain the molten core from the reactor vessel in the event of a severe accident. This area is inaccessible to personnel.</u>
<u>Reactor Vessel</u>	<u>This area is inaccessible to personnel.</u>

CTS-01195

**Comanche Peak Nuclear Power Plant, Units 3 & 4**  
**COL Application**  
**Part 2, FSAR**

**Table 12.5-201 (Sheet 2 of 2)**  
**Summary of Comanche Peak Units 3 and 4**  
**Very High Radiation Areas (VHRAs)**

<u>Plant Area</u>	<u>Description of Area and Methods Employed to Ensure Personnel Safety</u>
<u>Waste Gas Surge Tanks Rooms</u>	<p>As indicated in DCD Figure 12.3-1, these areas are isolated in individual shielded compartments with elevated access by ladder/stairs or completely enclosed shielded compartments with hatch openings or removable concrete block walls. Locked gates positively control entry into these areas, which is allowed only with the issuance of a Specific Radiation Work Permit. However, there is no projected reason for entry into these areas for equipment maintenance, repair or replacement. The issuance of a Specific Radiation Work Permit for access to these areas is not regularly permitted. However, if entry is required, the applicable ALARA principles, such as remote operations, limiting stay time, using temporary shielding, backwashing filters, draining tanks, etc., will be employed to reduce doses as much as practical.</p>
<u>Spent Resin Storage Tank Rooms</u>	
<u>Spent Resin Storage Tank Valve Area</u>	
<u>Charcoal Beds Rooms (including the passage near the rooms)</u>	
<u>Mixed-Bed Demineralizer Room</u>	
<u>Cation-Bed Demineralizer Room</u>	
<u>Valve Area next to the Mixed-Bed Demineralizer Room, the Cation-Bed Demineralizer Room and the Deborating Demineralizer Room</u>	
<u>A, B-Waste Demineralizer Room</u>	
<u>Volume Control Tank Room</u>	

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03-12.04-2

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12.04-33

DCD\_12.03-  
12.04-33

CTS-01172

## **Chapter 13**

## Chapter 13 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL_13.05.02.01-1	13.5.2	13.5-3	Response to RAI No.37 Luminant Letter no.TXNB-09055 Date 10/19/2009	Change the subsection number to "DCD subsection 13.5.2"	-
RCOL_13.05.02.01-3, 4, 5, 6	13.5.2.1	13.5-4	Response to RAI No.37 Luminant Letter no.TXNB-09055 Date 10/19/2009	The descriptions have been revised to refer to plant-specific technical guidelines (P-STGs)	-
RCOL_13.05.02.01-6	13.5.2.1	13.5-4 13.5-5	Response to RAI No.37 Luminant Letter no.TXNB-09055 Date 10/19/2009	The descriptions regarding EOP V&V process have been added.	-
RCOL2_13.01.01-2	Appendix 13AA, Subsection 13AA.2	13AA-3	Response to RAI No. 68 Luminant Letter no.TXNB-09061 Date 11/5/2009	Deleted the reference to Appendix 14B which was incorrect.	-
RCOL2_13.01.01-3	13.1.3	13.1-12	Response to RAI No. 68 Luminant Letter no.TXNB-09061 Date 11/5/2009	Change indicates that RO and SRO candidates meet the requirements of ACAD 09-001 Section 6, "RO and SRO Candidate Education, Experience, and Training Requirements for Initial Startup and Operation of New Construction Plants (Cold Licensing)"	-
RCOL2_13.01.01-3	13.2	13.2-1	Response to RAI No. 68 Luminant Letter no.TXNB-09061 Date 11/5/2009	Change describes the establishment of CPNPP partnerships in addition to the	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				Industrial Technology Program.	
RCOL2_13.01.01-3	13.2.1.1	13.2-1 13.2-2	Response to RAI No. 68 Luminant Letter no.TXNB-09061 Date 11/5/2009	Change describes the Training Program accreditation time frame using the guidance provided by ACAD 08-001.	-
RCOL2_13.01.01-3	Figure 13.1-205	13.1-31	Response to RAI No. 68 Luminant Letter no.TXNB-09061 Date 11/5/2009	Change adds Figure to show relative timeline of hiring and training milestones for various types of personnel.	-
RCOL_13.01.02- 13.01.03-2	13.1.1.1.1	13.1-2	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added responsibilities of Technical Supervisors.	-
RCOL_13.01.02- 13.01.03-2	13.1.1.2.2	13.1-5	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added reporting line and duties of the System Engineering Supervisors.	-
RCOL_13.01.02- 13.01.03-5	13.1.2.1	13.1-8	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added statement that Shift Operations Manager position requires meeting ANSI/ANS 3.1-1993 qualification requirements.	-
RCOL_13.01.02- 13.01.03-2	13.1.2.2	13.1-10	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added reporting line and duties of the Maintenance Team Supervisors.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL_13.01.02- 13.01.03-2	13.1.2.3	13.1-11	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added reporting line and duties of the Radiation Protection Supervisors.	-
RCOL_13.01.02- 13.01.03-2	Table 13.1-201 (Sheet 4 of 7)	13.1-18	Response to RAI No. 69 Luminant Letter no.TXNB-09061 Date 11/5/2009	Added the position of technical supervisor as System Engineering Supervisor to the table.	-
RCOL_13.04-2	Table 13.4-201 (Sheet 1 of 7)	13.4-2	Response to RAI No. 71 Luminant Letter no.TXNB-09061 Date 11/5/2009	Items 1 and 2 have been revised to reference the FSAR, Program Source, and milestones for the Primary- to- Secondary Leakage Monitoring Program.	-
RCOL_13.04-3	Table 13.4-201 (Sheets 1 of 7) (Sheet 2 of 7)	13.4-2 and 13.4-3	Response to RAI No. 71 Luminant Letter no.TXNB-09061 Date 11/5/2009	Items 1, 2, and 6 have been revised to reference 10CFR50.34.f (2) (xxvi) and FSAR Subsections that describe the Highly Radioactive Fluid Systems Outside Containment monitoring program requirements.	-
RCOL_13.04-1	Table 13.4-201 (Sheet 4 of 7)	13.4-5	Response to RAI No. 71 Luminant Letter no.TXNB-09061 Date 11/5/2009	Revised Item 9 to include Ground Water Monitoring Program implementation milestone.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_NONE-1	13.7	13.7-1 13.7-2	Response to RAI No. 130 Luminant Letter no. TXNB-10010 Date 2/22/10	Revised Section 13.7 to provide more clarification for Fitness for Duty Program.	-
RCOL2_NONE-1	13.7.2	13.7-2	Response to RAI No. 130 Luminant Letter no. TXNB-10010 Date 2/22/10	Revised Reference 13.7-201 to correct the date and to add ML number. Added Reference 13.7-202	-
RCOL2_NONE-2	Table 13.4-201 (Sheet 7 of 8) (Sheet 8 of 8)	13.4-8 13.4-9	Response to RAI No. 131 Luminant Letter no. TXNB-10010 Date 2/22/10	Revised Table 13.4- 201 to provide additional detail per NRC letter to NEI dated 12/2/09.	-
RCOL2_13.04-4	Table 13.4-201 (Sheet 1 of 9)	13.4-2	Response to RAI No. 151 Luminant Letter no. TXNB-10030 Date 04/12/2010	Revised Table 13.4- 201 to include the inservice inspection element applicable to the steam generators.	-
RCOL2_13.04-4	Table 13.4-201 (Sheet 2 of 9)	13.4-3	Response to RAI No. 151 Luminant Letter no. TXNB-10030 Date 04/12/2010	Revised Table 13.4- 201 to include the preservice inspection element applicable to the steam generators.	-
DCD_09.03.02-13	13.4	13.4-1	Reflect response to DCD RAI No. 526	Added COL Item 13.4 (2)	2

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
DCD_09.03.02-13	Table 13.4-201 (Sheet 1,2 and 3 of 9)	13.4-2 13.4-3 13.4-4	Reflect response to DCD RAI No.526	Added LMA to Items 1, 2 and 6.	2
RCOL2_13.06.01-1	13.6	13.6-1	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added first sentence to first paragraph.	-
RCOL2_13.06.01-1	13.6.2	13.6-1	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added new Section 13.6.2.	-
RCOL2_13.06.01-1	13.6.2.2	13.6-3	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Replaced the last sentence.	-
RCOL2_13.06.01-3	13.1.1.2.1	13.1-3	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added “and safety/security interface” to the first sentence of the third bullet.	-
RCOL2_13.06.01-4	Table 13.4-201 (sheet 6 of 9 ) (Sheet 7 of 9)	13.4-7 13.4-8	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Revised the milestone statement for Item #15 to read as follows: Prior to receipt of fuel on-site for Units 3 and 4.	-
RCOL2_13.06.01-6	13.6.1	13.6-1	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added Reference 13.06-7 to the last paragraph.	-
RCOL2_13.06.01-7	13.6	13.6-1	Response to RAI No. 161 Luminant Letter	Added statement that the Security Plan for Units 3 and	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no.TXNB-10047 Date 6/24/2010	4 is part of the Combined License Application.	
RCOL2_13.06.01-7	13.6.1	13.6-1	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Deleted the words “as separate licensing documents” from the section.	-
RCOL2_13.06.01-8	13.6.2.1	13.6-2	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added Reference 13.06-7 to the first paragraph.	-
RCOL2_13.06.01-8	13.6.2.5	13.6-4	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added Reference 13.06-7.	-
RCOL2_13.06.01-10	13.6.2.3	13.6-3	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added last sentence which includes References 13.06-7 and 13.06-201.	-
RCOL2_13.06.01-11	13.6.2.4	13.6-4	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added Reference 13.06-7 to last sentence.	-
RCOL2_13.06.01-12	13.6.4	13.6-4	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added Table 13.4- 201 and Section 3 of Part 10 to COL Information Item 13.6(1).	-
RCOL2_13.06.01-12	13.6.4	13.6-4	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Deleted “and the physical security plan” from COL Information Item 13.6(2)	-
RCOL2_13.06.01-12	13.6.4	13.6-5	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Deleted “and the physical security plan” from COL Information Item 13.6(5)	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_13.06.01-18	13.1.1.2.1	13.1-3	Response to RAI No. 161 Luminant Letter no.TXNB-10047 Date 6/24/2010	Added fourth bullet, “Programmatic Controls,” to address the programmatic controls including safety/security interface.	-
RCOL2_13.04-1 S01	Table 13.4-201 (Sheets 4 and 5 of 9)	13.4-5 13.4-6	Supplemental Response to RAI No. 71 Luminant Letter no.TXNB-10066 Date 9/29/2010	Deleted Groundwater Monitoring Program from Chapter 11 and added to Chapter 12 group.	-
CTS-01140	13.3 13.3.1 13.3.4 13.4.1 Table 13.4-201  13.6	13.3-1  13.3-2 13.4-1 13.4-2 Through 13.4-10  13.6-1	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4
RCOL2_06.04-8	13.2.1.1.3 13.5.2.2	13.2-2 13.5-7	Response to RAI No.172 Luminant Letter no.TXNB-10069 Date 10/6/2010	Added requirements for operator training and procedure development to satisfy RG 1.196.	-
RCOL2_14.02-4 S01	Table 13.1-201 (Sheet 7 of 7)	13.1-18	Supplemental Response to RAI No.75 Luminant Letter no.TXNB-11003 Date 1/27/2011	Added qualification requirements for non-supervisory engineers following ASME NQA-1 1994	-

\*Page numbers for the attached marked-up pages may differ from the revision 1 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 14**

## Chapter 14 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_14.02-9	14.2.12.1.112	14.2-6	Response to RAI No. 86 Luminant Letter no. TXNB-09062 Date 11/5/2009	COLA FSAR Subsection 14.2.12.1.112, "Personnel Monitors and Radiation Survey Instruments Preoperational Test", has been revised to specify that calibration be performed in accordance with the radiation protection program	-
RCOL2_14.02-12	14.2	14.2-6	Response to RAI No. 86 Luminant Letter no. TXNB-09062 Date 11/5/2009	FSAR Subsection 14.2.12.1.112 has been revised to include laboratory equipment consistent with RG 1.68 Appendix A, item 1.k(3).	-
RCOL2_14.02-13	14.2	14.2-6	Response to RAI No. 86 Luminant Letter no. TXNB-09062 Date 11/5/2009	FSAR Subsection 14.2.12.1.112 has been revised to specify that calibration be performed in accordance with the radiation protection program.	-
RCOL2_14.02-14	14.2.12.1.112	14.2-6	Response to RAI No. 86 Luminant Letter no. TXNB-09062 Date 11/5/2009	Subsection 14.2.12.1.112 has been revised to include reference to the radiation protection program for calibration requirements.	-
RCOL2_14.02-4	14.2	14.2-2	Response to RAI No. 75 Luminant Letter	Incorporated ANS-3.1 Requirements for test personnel qualifications in	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
			no. TXNB-09063 Date 11/11/2009	14.2.2.	
RCOL2_14.02-4	14.2	14.2-18	Response to RAI No. 75 Luminant Letter no. TXNB-09063 Date 11/11/2009	Added Table 14.2-203 "Comparison with the Qualification Requirements of the Staffing in ANS-3.1"	-
RCOL2_14.02-6	14.2.11	14.2-5	Response to RAI No. 75 Luminant Letter no. TXNB-09063 Date 11/11/2009	Added statement the periodic reviews will be done to ensure test program schedules do not affect one another	-
RCOL2_14.02-15	14.2.12.1.113	14.2-7 14.2- 8	Response to RAI No. 98 Luminant Letter no. TXNB-09064 Date 11/11/2009	FSAR Subsection 14.2.12.1.113 has been revised to include testing of the ESWS valves to the FSS at the required flow rates to the hose stations located in the RB and ESWS pump house.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_14.02-16	14.2.12.1.113	14.2-7 14.2- 8	Response to RAI No. 98 Luminant Letter no. TXNB-09064 Date 11/11/2009	Performance testing of basin water level logic has been specified in item A.4. The phrase mentioning the UHS transfer pump interlocks in C.1 and D.2 has been deleted. Performance testing of the UHS transfer pumps has been added as specified in item C.2 and in the acceptance criteria described in D.1. "Interlocks" in Objective 3 has been deleted.	-
RCOL2_14.02.01-1	14.2.12.1.112	14.2-5	Response to RAI No.129 Luminant Letter no.TXNB-10010 Date 2/22/10	Deleted Subsection 14.2.12.1.112 as testing of personnel monitors, survey instruments, and laboratory equipment is performed as part of the Radiation Protection Program.	-
RCOL2_14.02.01-1	Appendix 14A Table 14A-201	14A-2	Response to RAI No.129 Luminant Letter no.TXNB-10010 Date 2/22/10	Deleted Subsection 14.2.12.1.112 from table for consistency and stated that personnel monitors and radiation survey instruments are tested as part of the Radiation Protection Program.	-
DCD_14.02-120	14.2.8.2	14.2-3	Reflect response to DCD RAI No. 521	Revised "First –plant-only test" to "First-plant-only tests" on the Subsection	2

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				14.2.8.2	
DCD_14.02-120	14.2.13	14.2-8	Reflect response to DCD RAI No. 521	Revised COL item 14.2(11) from "First-plant only test" to "First-plant only tests"	2
CTS-01140	14.2.11 14.2.12 14.2.12.1.112 14.2.12.1.113 14.2.12.1.114  14.2.13  Table 14.2-201 14.3.4.7 APPENDIX 14A	14.2-4  14.2-5  14.2-6 [14.2-7] 14.2-7 [14.2-8] 14.2-9  14.3-1 14A-1	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4
RCOL2_14.02-4 S01	14.2	14.2-2	Supplemental Response to RAI No.75 Luminant Letter no.TXNB-11003 Date 1/27/2011	Added qualification requirements for non-supervisory engineers following ASME NQA-1 1994.	-
RCOL2_14.02-4 S01	14.2	14.2-15	Supplemental Response to RAI No.75 Luminant Letter no.TXNB-11003 Date 1/27/2011	Added new Table 14.2-203 for qualification requirements for non-supervisory engineers following ASME NQA-1 1994.	-
DCD_14.02-122	Table 14.2-202 (Sheet 2 of 6)	14.2-11	Updated COLA to reflect DCD	Changed Preoperational Test name for 14.2.12.1.27 to "Turbine-Generator (T/G)"	5

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.

**Comanche Peak Nuclear Power Plant, Units 3 & 4**  
**COL Application**  
**Part 2, FSAR**

**Table 14.2-202 (Sheet 2 of 6)**

**Comparison of Tier 2 Preoperational Tests with Tier 1 Test Requirements**

<b>Test Description</b>	<b>Tier 2 Section</b>	<b>Tier 1 Section</b>
Main Steam Isolation Valve (MSIV), Main Feedwater Isolation Valve (MFIV), and Main Steam Check Valve	14.2.12.1.23	2.7.1.2, 2.7.1.9
Motor-Driven Emergency Feedwater System	14.2.12.1.24	2.7.1.11
Turbine-Driven Emergency Feedwater System	14.2.12.1.25	2.7.1.11
Extraction Steam	14.2.12.1.26	(2.7.1.1)
<del>Main</del> Turbine <del>System Valves</del> - <u>Generator (T/G)</u>	14.2.12.1.27	2.7.1.1
Condensate System	14.2.12.1.28	(2.7.1.9)
Feedwater System	14.2.12.1.29	2.7.1.9
Feedwater Heater and Drain Systems	14.2.12.1.30	(2.7.1.9)
Condensate Polishing System	14.2.12.1.31	(2.7.1.8)
Main Condenser Evacuation System	14.2.12.1.32	(2.7.1.4)
Circulating Water System	14.2.12.1.33	(2.7.1.7)
Essential Service Water System (ESWS)	14.2.12.1.34	2.7.3.1
Main and Unit Auxiliary Transformers	14.2.12.1.35	2.6.1
Reserve Auxiliary Transformers	14.2.12.1.36	(2.6.1)
Non-Class 1E Alternating Current (ac) Distribution	14.2.12.1.37	(2.6.1)
6.9 kV Class 1E System	14.2.12.1.38	2.6.1
480 V Class 1E Switchgear	14.2.12.1.39	2.6.1
480 V Class 1E Motor Control Center	14.2.12.1.40	2.6.1
120 V ac Class 1E	14.2.12.1.41	2.5.1, 2.6.3
Emergency Lighting System	14.2.12.1.42	2.6.6
Normal Lighting System	14.2.12.1.43	(2.6.6)
Class 1E Gas Turbine Generator	14.2.12.1.44	2.6.4

DCD\_14.02-122

## **Chapter 15**

## Chapter 15 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01127	15.0.3.3	15.0-1	Consistency with DCD Rev2	Changed "15A-18 through 15A-23" to "15A-18 through 15A-24"	2
RCOL2_02.0 3.04-11	15.0.3.3 15.0.4	15.0-1	Response to RAI No 158 Luminant letter TXNB-10048 Date 6/25/2010	Added x/Q information for TSC	-

\*Page numbers for the attached marked-up pages may differ from the revision 1 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. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01130	16.2	16.2-1	Editorial Correction	Replaced instructions.	2

\*Page numbers for the attached marked-up pages may differ from the revision 1 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. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_17.0 5-3 RCOL2_17.0 5-8	17.3.1	17.3-2	Response to RAI No. 79 Luminant Letter no.TXNB-09065 Date 11/13/2009	17.3-202 NuBuild Quality Assurance Project Plan, Revision 1, Luminant, October 2008. 17.3-203 Comanche Peak Steam Electric Station Final Safety Analysis Report, Chapter 17, Amendment 101, Luminant, 2007. 17.3-204 US-APWR Quality Assurance Program Description, SQ-QD-070001, Revision 3, MNES, October 2008. 17.3-205 Quality Assurance Program Requirements for Nuclear Facilities, N45.2-1971, ANSI/ASME, 1971. 17.3-206 Quality Assurance Requirements for Nuclear Facility Applications, NQA-1-1994, ANSI/ASME, 1994.	-
RCOL2_17.0 5-8	17.5.3	17.5-1	Response to RAI No. 79 Luminant Letter no.TXNB-09065 Date 11/13/2009	Deleted "of this Final Safety Analysis Report (FSAR), for design, construction and operation phases" and "utilize" Added "initially use" and "for the engineering, procurement, and construction (EPC) phase."	-
RCOL2_17.0 4-4	17.4.3	17.4-1	Response to RAI No. 92 Luminant Letter no.TXNB-09077 Date 12/9/2009	Clarifying text to state the O-RAP objectives	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_17.0 4-2	17.4.5	17.4-3	Response to RAI No. 92 Luminant Letter no.TXNB-09077 Date 12/9/2009	Added text to list other operational programs	-
RCOL2-17.0 4-3	Table 17.4-201	17.4-5	Response to RAI No. 92 Luminant Letter no.TXNB-09077 Date 12/9/2009	Revised table to list all cooling tower fans.	-
RCOL2-17.0 4-4	17.4.3	17.4-1	Response to RAI No. 92 Luminant Letter no.TXNB-09077 Date 12/9/2009	Revised text to emphasize the continuity of the basic RAP established during the design phase of the project.	-
CTS-01140	17.0 17.1 17.2 17.4.8 17.4.9 17.5.1 17.6	17.1-1  17.2-1 17.4-4  17.5-1 17.6-1	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

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## **Chapter 18**

## Chapter 18 Tracking Report Revision List

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
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\*Page numbers for the attached marked-up pages may differ from the revision 1 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. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
CTS-01116	APPENDIX 19A	- 19A-i 19A-1	Consistency with DCD Rev.2	Added Appendix 19A	2
RCOL2_19-9	19.1.5	19.1-8	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added second paragraph to identify LOOP events and what they are applied to.	-
RCOL2_19-9	19.1.5	19.1-8	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced “tornado-induced” with “tornado—induced.”	-
RCOL2_19-9	19.1.5	19.1-8	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added fifth paragraph to clarify F-scale intensity F1 and F2 scenarios for CDF calculations. Added sixth paragraph to clarify the assumption of plant switchyard damage for enhanced F-scale intensity F1 and F2 LOOP scenarios that lead to the RCP seal LOCA CDF. Replaced “Tornado strike-induced” with “Enhanced F-scale intensity of F3, F4, and F5 tornado strike-induced.”	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-9	19.1.5	19.1-8	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Revised eighth paragraph to clarify the wind speed range for plant switchyard damage by the tornado strike.	-
RCOL2_19-9	19.1.5	19.1-8	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced "Reactor coolant pump (RCP) seal loss of coolant accident (LOCA)" with "RCP seal LOCA."	-
RCOL2_19-9	Table 19.1-201	19.1-12 [19.1-13]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added the following to Table 19.1-201 for tornado strike and exceedance frequency: Beyond design base enhanced F-scale tornado intensity, wind speed, strike frequency, and strike exceedance frequency.	-
RCOL2_19-11	Table 19.1-206	19.1-39 [19.1-51]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added statement to clarify operational procedures will be prepared for main control room water level basin monitoring.	-
RCOL2_19-11	Table 19.1-206	19.1-39 [19.1-51]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added statement to clarify operational procedures will be prepared for main control room water level basin monitoring.	-
RCOL2_19-11	Table 19.1-206	19.1-39 [19.1-51]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added Subsection FSAR 19.1.5.1 and Subsection DCD Tier 1 ITAAC #24	-
RCOL2_19-10	Table 19.1-206	19.1-39 [19.1-51]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added Subsection FSAR 9.5 and description identifying Owner Controlled Area procedural maintenance and vegetation clearance with the NFPA 1144	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				minimum setback distance.	
RCOL2_19-11	19.1.5.1.1	19.1- 9 [19.1-10]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added Subsection 19.1.5.1.1 to describe the replacement of DCD Subsection 19.1.5.1.1 page 19.1-63 referring to the seismic margin analysis.	-
RCOL2_19-11	19.1.5.1.2	19.1- 9 [19.1-10]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added Subsection 19.1.5.1.2 to describe the addition of a paragraph to DCD Subsection 19.1.5.1.2 page 19.1-73 referring to the confirmation of plant-specific HCLPFs using the design specific in-structure response.	-
RCOL2_19-12	19.1.4.1.2	19.1-3	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced “the basins can be effective in removing decay heat more than 24 hours” with “two basins are effective in removing decay heat for more than 24 hours without replenishment or transferring water from another basin.”	-
RCOL2_19-13	19.1.9	19.1-11 [19.1-12]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added new Subsection 19.1-202 with the reference “ <i>Climatology Models for Extreme Hurricane Winds Near the United States</i> . Thomas H. Jagger and James B. Elsner, January 19.2006.” Added new Subsection 19.1-203 with the reference “ <i>A Simple Empirical Model for Predicting the Decay of Tropical</i>	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				<i>Cyclone Winds after Landfall.</i> John Kaplan and Mark Demaria. JOURNAL OF APPLIED METEOROLOGY, Volume 34. November, 1995.”	
RCOL2_19-13	Table 19.1-205 (Sheet 2 of 34)	19.1-17 [19.1-18]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph to clarify which explosions will not affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 4 of 34)	19.1-19 [19.1-20]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph to clarify which flammable vapor clouds cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 6 of 34)	19.1-21 [19.1-22]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added fifth paragraph to clarify why the main control room is habitable for toxic chemicals from mobile or stationary sources.	-
RCOL2_19-10	Table 19.1-205 (Sheet 7 of 34)	19.1-22 [19.1-23]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added to second paragraph description identifying Owner Controlled Area procedural maintenance and vegetation clearance with the NFPA 1144 minimum setback distance. Also, added to second paragraph the established distances of the Protected Area and security isolation zone to ensure no wildfire temperature that would affect the PRA’s CDF.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-13	Table 19.1-205 (Sheet 8 of 34)	19.1-22 [19.1-24]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph describing what fire hazards and on-site fuel storage facilities cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 sheet 7 of 22 (9 of 34)	19.1-22 [19.1-25]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Revised first paragraph to clarify the role of the ESWS and CWS and explain that the intake structure is not safety related. Replaced Criteria value "3" with "1." Added second paragraph to clarify intake structure collision is of equal or lesser potential for which the plant has been designed. Replaced third paragraph to clarify the effects of the accidental release of petroleum and why they would not affect the operation of the plant. Added fourth paragraph to clarify why liquid spills cannot affect the plant.	-
RCOL2_19-10	Table 19.1-205 (Sheet 10 of 34)	19.1-23 [19.1-26]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Deleted description as follows: "The probability of aircraft related accidents for CPNPP Units 3 and 4 is less than an order of magnitude of $10^{-7}$ per year for aircraft, airway, and airport information reflected in Subsection 2.2.2.7."	-
RCOL2_19-13	Table 19.1-205 (Sheet 10 of 34)	19.1-23 [19.1-26]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced first paragraph defining the probability of aircraft-related hazards for CPNPP Units 3 and 4.	-
RCOL2_19-10	Table 19.1-205 (Sheet	19.1-23	Response to RAI No. 165	Added the explanation and formula/conclusion	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	10 of 34)	[19.1-26]	Luminant Letter no.TXNB-10046 Date 6/24/2010	for nearby airports to the CPNPP site and the probability of an aircraft crashing into the plant, respectively.	
RCOL2_19-10	Table 19.1-205 (Sheet 11 of 34)	19.1-23 [19.1-27]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added first paragraph clarifying the annual number of aircraft operations near CPNPP to explain the probability of aircraft-related hazards.	-
RCOL2_19-13	Table 19.1-205 (Sheet 11 of 34)	19.1-23 [19.1-27]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Deleted description as follows: "No potential site proximity missile hazards." Replaced second paragraph clarifying potential site-proximity missile hazards and where they are identified. Added third paragraph explaining that no site proximity missile hazard is identified.	-
RCOL2_19-10	Table 19.1-205 (Sheet 12 of 34)	19.1-23 [19.1-28]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Deleted description as follows: "The probability of turbine failure resulting in the ejection of turbine rotor (or internal structure) fragments through the turbine casing, P1, as less than $10^{-5}$ per year. The acceptable risk rate $P4 = P1 \times P2 \times P3$ is therefore maintained as less than $10^{-7}$ per year." Replaced first paragraph clarifying that no postulated low trajectory turbine missiles from CPNPP Units 1 and 2 can affect CPNPP Units 3 and 4.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				Added second paragraph explaining, mathematically, the acceptable risk rate for the probability of turbine missile accidents.	
RCOL2_19-13	Table 19.1-205 (Sheet 14 through 16 of 34)	19.1-24 [19.1-30 through 19.1-32]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	<p>Added paragraph explaining the determination of the possible hurricane frequency for the CPNPP site.</p> <p>Added paragraph describing background information of the tropical storm and hurricane history for the Texas coast in the past century. Added the formula provided by Kaplan and Demaria on calculating the tropical cyclone wind speed after landfall with a correction factor accounting for inland distance and a prediction for the upper bound of possible hurricane wind speed at the CPNPP site.</p> <p>Added paragraph describing the parameters for predicting the maximum possible wind speed (upper bound) at the CPNPP site.</p> <p>Added paragraph describing the history of hurricanes that came nearby the CPNPP site in the past 150 years, and paired with the upper bound wind speed to explain why hurricane</p>	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
				winds can be screened out as not risk significant.	
RCOL2_19-13	Table 19.1-205 (Sheet 19 of 34)	19.1-26 [19.1-35]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced fourth paragraph clarifying that thunder storms cannot affect the plant and why	-
RCOL2_19-13	Table 19.1-205 (Sheet 19 of 34)	19.1-26 [19.1-35]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced sixth paragraph clarifying that lightning cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 20 of 34)	19.1-27 [19.1-36]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced second paragraph clarifying that hail cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 21 of 34)	19.1-29 [19.1-37]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced second paragraph clarifying that air pollution is not a significant site hazard and is less severe than the impact from toxic chemicals and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 23 of 34)	19.1-30 [19.1-39]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added second paragraph clarifying that precipitation cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 23 of 34)	19.1-30 [19.1-39]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced fourth paragraph clarifying that dust storms cannot affect the plant and why.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-13	Table 19.1-205 (Sheet 24 of 34)	19.1-32 [19.1-40]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added Subsection 3.3.1.1	-
RCOL2_19-13	Table 19.1-205 (Sheet 25 of 34)	19.1-32 [19.1-41]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Removed first paragraph. Replaced second paragraph describing the extreme winds' maximum wind speed and what potential hazards might exist from them. Added third paragraph clarifying that extreme winds are insignificant potential hazards.	-
RCOL2_19-13	Table 19.1-205 (Sheet 26 of 34)	19.1-33 [19.1-42]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced third paragraph clarifying that surface winds cannot severely affect the plant and why.	-
RCOL2_19-10	Table 19.1-205 (Sheet 27 of 34)	19.1-34 [19.1-43]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced "788.9" with "793.66," Criteria number "3" with "2," and Frequency number "None" with "< 10 <sup>-7</sup> ."	-
RCOL2_19-10	Table 19.1-205	19.1-34 [19.1-	Response to RAI No. 165	Replaced "4.56" with "4.59," "793.46" with	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	(Sheet 27 of 34)	43]	Luminant Letter no.TXNB-10046 Date 6/24/2010	"810.64," and "28" with "11."	
RCOL2_19-10	Table 19.1-205 (Sheet 27 of 34)	19.1-34 [19.1-43]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added second paragraph describing the Probable Maximum Precipitation (PMP) distribution to determine the Probable Maximum Flood (PMF).	-
RCOL2_19-10	Table 19.1-205 (Sheet 27 of 34)	19.1-34 [19.1-43]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph outlining the scenarios for the PMP distributions.	-
RCOL2_19-10	Table 19.1-205 sheet 19 of 22 (Sheet 28 of 34 Sheet 29 of 34)	19.1-34 [19.1-44 19.1-45]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added paragraph describing the critical storm center within the Paluxy River watershed used to determine the resulting peak runoff and the water surface elevation. Added paragraph describing the calculation for the overall and areal frequency of a U.S. PMP event for 6 hours and 25 inches over 10 square miles. Added paragraph clarifying the frequency of a PMP of 25 inches over 10 square miles is projected to be well below $10^{-7}$ per year.	-
RCOL2_19-10	Table 19.1-205 (Sheet 29 of 34)	19.1-34 [19.1-45]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced Criteria number "3" with "2" and Frequency number "None" with "< $10^{-7}$ ."	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-10	Table 19.1-205 (Sheet 29 of 34)	19.1-34 [19.1-45]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced "788.9" with "793.66."	-
RCOL2_19-10	Table 19.1-205 (Sheet 29 of 34)	19.1-34 [19.1-45]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced "809.28" with "810.64" and "805" with "795."	-
RCOL2_19-13	Table 19.1-205 (Sheet 29 of 34)	19.1-34 [19.1-45]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added fourth paragraph clarifying that probable maximum flood cannot affect the plant and why.	-
RCOL2_19-10	Table 19.1-205 (Sheet 30 of 34)	19.1-34 [19.1-46]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added first paragraph describing the coincident wind wave activity and its effects on Squaw Creek Reservoir. Added second paragraph describing the estimated frequency of a PMF capable of reaching plant grade elevation.	-
RCOL2_19-10	Table 19.1-205 (Sheet 31 of 34)	19.1-35 [19.1-47]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced first paragraph clarifying the elevation of CPNPP safety-related facilities and that they could not be affected by flooding.	-
RCOL2_19-13	Table 19.1-205 (Sheet 31 of 34)	19.1-35 [19.1-47]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added second paragraph clarifying that no safety related structures could be affected by flooding due to dam failures and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 32 of 34)	19.1-35 [19.1-48]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph clarifying that surge and seiche flooding cannot affect the plant and why.	-

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
RCOL2_19-13	Table 19.1-205 (Sheet 32 of 34)	19.1-35 [19.1-48]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added fifth paragraph clarifying that tsunamis cannot affect the plant and why.	-
RCOL2_19-10	Table 19.1-205 (Sheet 33 of 34)	19.1-36 [19.1-49]	Response to RAI No. 165 Luminant Letter no.TXNB-10046 Date 6/24/2010	Replaced "788.9" with "793.66" and "30" with "28."	-
RCOL2_19-13	Table 19.1-205 (Sheet 33 of 34)	19.1-36 [19.1-49]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added third paragraph clarifying that ice effects cannot affect the plant and why.	-
RCOL2_19-13	Table 19.1-205 (Sheet 33 of 34)	19.1-36 [19.1-49]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added "(criterion 3)" clarifying why the UHS does not rely on or depend on certain water formations.	-
RCOL2_19-13	Table 19.1-205 (Sheet 34 of 34)	19.1-37 [19.1-50]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added "(criterion 3)" clarifying why channel diversion cannot adversely affect CPNPP Units 3 and 4 safety-related structures or systems.	-
RCOL2_19-13	Table 19.1-205 (Sheet 34 of 34)	19.1-37 [19.1-50]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added "(criterion 3)" clarifying why no safety-related facilities could be affected by low-flow or drought conditions.	-
RCOL2_19-13	Table 19.1-205 (Sheet 34 of 34)	19.1-37 [19.1-50]	Response to RAI No. 166 Luminant Letter no.TXNB-10046 Date 6/24/2010	Added paragraph 4 clarifying that ground water cannot affect the plant and why.	-
CTS-01140	19.1.1.4.1 19.1.4.2.2 19.1.5.2.2 19.1.5.3.2 19.1.6.2	19.1-1 19.1-4 19.1-9 [19.1-10] 19.1-10	Standardization	Changed LMN to STD and where needed, removed or replaced reference to CPNPP Units 3 and 4	4

Change ID No.	Section	FSAR Rev. 1 Page*	Reason for change	Change Summary	Rev. of FSAR T/R
	19.1.7.1  19.2.5 19.2.6.1 19.2.6.1.1  19.2.6.2 19.2.6.5 19.3.3	[19.1- 11]  19.2-1 19.2-2  19.2-3  19.3-1			
DCD_19-426	19.1.7.6	19.1-11	Reflect Response to DCD RAI No. 564	Replaced “RTMS and SFCP” with “RTMS, SFCP and peer review”	4
DCD_19-426	19.3.3	19.3-1	Reflect Response to DCD RAI No. 564	Replaced “RTMS” with “RTMS and peer review”	4

\*Page numbers for the attached marked-up pages may differ from the revision 1 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.