August 1, 2013

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

# Part 10

# ITAAC and Proposed License Conditions Revision 3

**Update Tracking Report** 

**Revision 3** 

### **Revision History**

Revision	Date	Update Description
-	6/28/2012	COLA Revision 3 Transmittal
		See Luminant Letter no. TXNB-12023 Date 6/28/2012
-	05/31/2012	Updated Section: Appendix A.1
		See Luminant Letter no. TXNB-12016 Date 05/31/2012
		Incorporated responses to following RAIs No. 251
-	06/21/2012	Updated Section: Appendix A.1
		See Luminant Letter no. TXNB-12022 Date 06/21/2012
		Incorporated responses to following RAIs No. 254
-	07/16/2012	Updated Section: Appendix A.1
		See Luminant Letter no. TXNB-12025 Date 07/16/2012
		Incorporated responses to following RAIs No. 56 Supplemental 01
-	07/24/2012	Updated Sections: 2.6, 3
		See Luminant Letter no. TXNB-12027 Date 07/24/2012
		Incorporated responses to following RAIs No. 261
-	09/14/2012	Updated Sections: Appendix A.1, Appendix A.3
		See Luminant Letter no. TXNB-12032 Date 09/14/2012
		Incorporated responses to following RAIs No. 250

Revision History - 1 of 2

-	09/24/2012	Updated Sections:
		Appendix A.1, Appendix A.2
		See Luminant Letter no. TXNB-12034 Date 09/24/2012
		Incorporated responses to following RAIs
		No. 254 S01
-	09/26/2012	Updated Sections:
		3, Appendix A.7
		See Luminant Letter no. TXNB-12035 Date 09/26/2012
		Incorporated responses to following RAIs
		No. 262
0	08/27/2012	Updated Section:
		Appendix A.2
	00/00/00/0	
1	02/26/2013	Updated Section:
		Appendix A.3
	00/07/0040	
2	03/27/2013	Updated Section:
		2.6, 3
	04/16/2013	Lindatad Saatiana:
-	04/10/2013	Updated Sections:
		Appendix A.2
		See Luminant Letter no. TXNB-13012 Date 04/16/2013
		See Luminani Leller no. 1710-13012 Dale 04/10/2013
		Incorporated responses to following RAIs
		No. 273
3	8/1/2013	Updated Section:
Ŭ	0/1/2010	2, 2.6, 2.7, 3
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## Tracking Report Revision List

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
RCOL2_09.02.01- 10	Appendix A.1 Table A.1-1 (Sheet 6 of 7)	9 16	Response to RAI No. 251 Luminant Letter no.TXNB-12016 Date 05/31/2012	Clarified that water hammer is prevented in the ESWS as well as the UHS, including testing of the as-built.	-
RCOL2_14.03.07- 38	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7)	11 [10] 18 [17]	Response to RAI No. 254 Luminant Letter no.TXNB-12022 Date 6/21/2012	Added ITAAC to address UHS fan qualification against tornado effects. Added ITAAC to address cooling tower spray nozzle size.	-
RCOL2_14.03.03- 1 S01	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7)	11	Supplemental 01 Response to RAI No. 56 Luminant Letter no.TXNB-12025 Date 7/16/2012	An additional ITAAC (#21) was added to Table A.1-1 to verify the "design" of ASME Section III Piping and Components.	-
RCOL2_01.05-3	2.6 3	3 7	Response to RAI No. 261 Luminant Letter no.TXNB-12027 Date 7/24/2012	Added description regarding a potential condition to the license. Added a proposed licensing condition.	-

Change ID No.	Section	ITAAC Rev.3	Reason for change	Change Summary	Rev. of
RCOL2_03.03.02- 9	Appendix A.1 A.1.1 Table A.1-1 (Sheet 7 of 7)	Page * 11 18	Response to RAI No. 250 Luminant Letter no.TXNB-12032 Date 9/14/2012	Revised to incorporate RG 1.221.	T/R -
	Appendix A.3 A.3.1 A.3.1.1	32 32, 33			
RCOL2_14.0 3.07-38 S01	Figure A.1-1	22	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to show the newly introduced drain lines for freeze protection.	-
RCOL2_14.0 3.07-38 S01	Table A.2-2 (Sheet 1 of 2)	28	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Following SSCs for freeze protection are added to the table. - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_14.0 3.07-38 S01	Table A.2-3	30	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	Alarms, displays and control functions of the following SSCs are added to the table. - ESW piping room unit heaters - UHS transfer piping room unit heaters	-
RCOL2_14.0 3.07-38 S01	Figure A.2-1	31	Supplemental Response to RAI No. 254 Luminant Letter no.TXNB-12034 Date 09/24/2012	The figure is revised to add newly introduced dampers.	-
RCOL2_03.06.01- 1	3	7 [8]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised the Proposed Licensing condition reflecting changes in COL 3.6(1) and 3.6(4).	-

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
RCOL2_03.06.01- 1	Appendix A.7 A.7.1 A.7.2 Table A.7-1	47 [49]	Response to RAI No. 262 Luminant Letter no.TXNB-12035 Date 9/26/2012	Revised the Design Description and ITAAC reflecting changes in COL 3.6(1) and 3.6(4).	-
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 1.b	25	NRC reviewer comment from a view point of consistency with S-COLA	Added ", considering postulated dynamic effects (i.e., missile and pipe break hazard), internal flooding and fire" to the last sentence of the Acceptance Criteria.	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 3.b	26	NRC reviewer comment from a view point of consistency with S-COLA	The last word in the Design Commitment, "cable", changed to "cables"	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 3.b	26	NRC reviewer comment from a view point of consistency with S-COLA	Wording in the Acceptance Criteria after "RG 1.75" changed to: ", between the as-built cables of redundant UHS ESW pump house ventilation systems Class 1E divisions"	0

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 5.a	26	NRC reviewer comment from a view point of consistency with S-COLA	Deleted "exist" and "to" from the Acceptance Criteria.	0
CTS-01504	Appendix A.2 Table A.2-1 ITAAC 6	26 [27]	NRC reviewer comment from a view point of consistency with S-COLA	Deleted "of the parameters" from the Design Commitment.	0
CTS-01504	Appendix A.2 Figure A.2-1	31	NRC reviewer comment from a view point of consistency with S-COLA	Revised the figure to add a backdraft damper at each room inlet/outlet duct.	0
CTS-01511	Appendix A.3, A.3.1	32, 33, 34, 37 [35,38]	To reflect updates on the Technical Report MUAP- 10006(Rev3)	The term"R/B complex" is used to collectively PCCV, PS/Bs, and A/Bs.	1

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
CTS-01511	Appendix A.3 Table A.3-1	35, 36, 37 [38]	To reflect updates on the Technical Report MUAP- 10006(Rev3)	The wording in the title of the ITAAC Table A.3- 1 is changed replacing "USHRS, ESPWT and PSFSV" with "Plant specific structures".	1
CTS-01512	Appendix A3 Table A3-2 (sheet 1, 2, 3 [4])	38, 39 and 40 [41, 42]	To reflect changes in Plot Plan and AIA.	Floor elevations and wall thicknesses revised.	1
CTS-01512	Appendix A.3 Figure A.3-1 [Sheet 1 and 2 of 2]	41 [43, 44]	To reflect changes in Plot plan	Overall General Arrangement plan replaced with the updated version; and minor editorial correction.	1
CTS-01526	2.6	3	Reflection of EP rule change	Added discussion of new License Condition for a detailed shift staffing analysis.	2

Change ID No.	Section	ITAAC Rev.3 Page *	Reason for change	Change Summary	Rev. of T/R
CTS-01526	3	7	Reflection of EP rule change	Revised License Condition (v) to address the detailed on-shift staffing assessment performed pursuant to 10 CFR Part 50, Appendix E, Section IV.A.9.	2
RCOL2_14.03.07- 39	Appendix A.2 A.2.1 Table A.2-1 (Sheets 2 [3], 3 [4] of 3 [4])	24 [25] 26 [28], 27 [29]	Response to RAI No. 273 Luminant Letter no.TXNB-13012 Date 4/16/2013	Add the description of UHS ESW pump house air intakes and outlets are protected from tornado and hurricane missiles. Table A.2-1, item 5.c was revised.	-
				Table A.2-1, item 8 was added.	
CTS-01533	2	2	Reflection of updated status of proposed license condition development	The 1 <sup>st</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> sentences of the section were deleted.	3
CTS-01533	2.6 2.7 3	3 6 [8]	Reflection of Fukushima- related RCOLA Part 2 Revision 3 UTR revision 2	Section 2.7 was added. Intent of the paragraph 3 in Section 2.6 was absorbed in the new Section 2.7. Item 2.D(15) was added to Section 3.	3
CTS-01533	3	5, 6	Consistency in description of RCOLA RAI number	Description of RAI numbers in Sources for item 2.D(11), 2.D(12) and 2.D(14) were revised.	3

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

#### 1. ITAAC

The ITAAC for the COLA consist of the following:

- 1) Design Certification ITAAC are contained in DCD Tier 1 and are incorporated by reference.
- 2) Plant-Specific ITAAC are provided in Appendices A.1, A.2, A.3, and A.4. The design description information contained in the Appendices is a compilation of information from various sources in the FSAR and is included to assist the reader in reviewing information pertinent to the Plant-Specific ITAAC.
- 3) Emergency Planning ITAAC are provided in Appendix B.
- 4) Physical Security ITAAC for the DCD are contained in DCD Tier 1 and are incorporated by reference. Plant Specific Security ITAAC are provided in Appendix C.

#### 2. Proposed License Conditions

The NRC and industry are currently evaluating the appropriate license conditions for a Combined Operating License (COL). Identified below are several possible topics for license conditions that serve as a starting point for consideration. The listing is not final nor are all items necessarily appropriate. As a result, this section will not be updated during the COL review until further NRC and industry guidance is available. As specific license conditions are identified they will be added to section 3 below.

#### 2.1 Completion of ITAAC

Completion of the ITAAC listed in the previous section may be a proposed license condition to be satisfied prior to fuel load. However, this license condition may not be necessary as the ITAAC may be adequately controlled by the regulations.

#### 2.2 Not Used

#### 2.3 Operational Programs

Operational Programs are identified in FSAR Table 13.4-201 and Subsection 10.2.3.5. Their implementation by the milestones indicated in the table below represents a potential condition to the license. Some of these programs may be adequately controlled by other methods such as regulations, technical specifications or a commitment and will not be addressed as a license condition. Proposed license conditions are provided in Section 3 below based upon the current information in the FSAR.

#### 2.4 Environmental Protection Plan

The Environmental Protection Plan (EPP) and its implementation may also be a

potential condition to the license. The EPP has typically been an appendix to the operating license and that precedent may be followed for COLs as well. No plant specific environmental items have been identified which are not adequately controlled by regulations, the appropriate permits, etc. and thus an EPP has not been proposed and is not needed.

#### 2.5 Technical Specifications

Implementation of Technical Specifications prior to fuel load could also constitute a potential condition to the license. The Technical Specifications have typically been an appendix to the operating license and that precedent may be followed for COLs as well.

#### 2.6 Emergency Planning Actions

Execution of Letters of Agreement with State and local entities identifying the specific nature of arrangements in support of emergency preparedness and certifying the agency's concurrence with the emergency action levels prior to the full-participation exercise is a potential condition to the license. A proposed license condition is provided in section 3 below.

Submittal of a fully developed set of site-specific Emergency Action Levels (EALs) to the NRC in accordance with NEI 99-01, Revision 5 at least 180 days prior to initial fuel load is a potential condition to the license. A proposed license condition is provided in section 3 below.

Implementation of the results of an emergency planning staffing assessment of the onsite and augmented staffing capability to satisfy the staffing- recommendations in Recommendation 9.3 of the Fukushima Near Term Task- Force as described in SECY 12 0025 prior to the first full participation exercise is a potential condition to the license. A proposed license condition is provided in- section 3 below.	RCOL2_01.0 5-3 CTS-01533
Performance and implementation of the results of a detailed shift staffing analysis performed pursuant to 10 CFR Part 50, Appendix E, Section IV.A.9 in accordance with the methodology described in NEI 10-05. "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities." Rev. 0, prior to the first full participation exercise is a potential condition to the license. A proposed license condition is provided in section 3 below.	CTS-01526
2.7 Fukushima Response Actions A summary of the post-COL commitments and programs related to the NRC. Fukushima Near-Term Task Force (NTTF) recommendations are tabulated in FSAR Table 1B-202. Some of these items will be controlled by a license condition as proposed in Section 3 below.	CTS-01533

#### 2.8 Others

The current operating licenses have some typical license conditions in areas such

Propose	ed License Condition	Source
to Se sp so fol gla otl	Pursuant to the Act and 10 CFR Parts 30, 40, and 70, receive, possess, and use prior to the finding in ection 2.D.(3), in amounts not exceeding those pecified in Section 2.B.(3)(i) above, any byproduct, purce, or special nuclear material that is (1) in unsealed rm; (2) on foils or plated surfaces, or (3) sealed in ass, for sample analysis or instrument calibration or her activity associated with radioactive apparatus or imponents;	
to 2.1 or ch	Pursuant to the Act and 10 CFR Parts 30, 40, and 70, receive, possess and use, after the finding in Section D.(3), in amounts as required, any byproduct, source, special nuclear material without restriction as to the mical or physical form, for sample analysis or strument calibration or other activity associated with dioactive apparatus or components; and	
pc nu	ursuant to the Act and 10 CFR Parts 30 and 70, to ossess, but not separate, such byproduct and special oclear materials as may be produced by the operation the facility.	
<u>2D.(3) N</u>	uclear Fuel Loading	
(i)	The licensee shall notify the Director of the Office of New Reactors, or the Director's designee, that all ITAAC included in Appendix A to this license are complete.	
(ii)	) The licensee is authorized to load fuel into the reactor vessel after the Commission has found, in accordance with 10 CFR 52.103(g), that all the acceptance criteria in the ITAAC contained in Appendix A to this license are met.	
2.D(11)	Operational Program Implementation	COLA FSAR Table 13.4-201
program "Impleme	nsee shall implement the programs or portions of s identified in FSAR Table 13.4-201 with the entation" of "License Condition" on or before the ed milestones in FSAR Table 13.4-201.	COLA FSAR Subsection 10.2.3.5 Based on Model COL discussed with NRC and DCWGs on 2/26/2011.
		Response to CP RAI # 198 response issued 4/28/11.

CTS-01533

Proposed License Condition	Source	
2.D(12) Operational Program Implementation Schedules	COLA FSAR Table 13.4-201	
The Licensee shall submit to the Director of NRO, a schedule, no later than 12 months after issuance of the COL or at the start of construction as defined in 10 CFR 50.10(a), whichever is later, that supports planning for and conduct of NRC inspections of operational programs listed in FSAR Table 13.4-201 with the exception of the Fitness for Duty program. The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter for each applicable operational program until either the operational program has been fully implemented or the plant has been placed in commercial service, whichever comes first.	Based on Model COL discussed with NRC and DCWGs on 2/26/2011 and RG 1.206. <u>Response to RAI</u> <u>6123 (CP RAI #238)</u> response issued 12/13/11.	CTS-01533
The Licensee shall submit to the Director of NRO, a schedule, no later than 12 months after issuance of the COL, that supports planning for and conduct of NRC inspections of the Fitness for Duty program listed in FSAR Table 13.4-201. The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter until either the Fitness for Duty program has been fully implemented or the plant has been placed in commercial service, whichever comes first.	FFD program separated out because of partial implementation of the program prior to construction activities commencing.	
<ul> <li>2.D(14) Site-specific or License-specific Conditions</li> <li>(i) The plant-specific PTS evaluation of the as-procured reactor vessel material properties will be submitted to the NRC within 12 months following acceptance of the reactor vessel.</li> </ul>	Answer to RAI 2353 (CP RAI #8) question 05.03.02-3-as- provided in TXNB-09028- dated August 7, 2009.	CTS-01533
(ii) Prior to the full-participation exercise to be conducted in accordance with the requirements of Appendix E to 10 CFR Part 50, Luminant shall establish Letters of Agreement with the following entities:	Answer to RAI 3295 (CP RAI #70) question 13.03-1 and RAI 3327 (CP RAI #78) questions 13.03-2 and 13.03-8.	
a. Governors Division of Emergency Management (GDEM), Texas Department of Public Safety	10.00-0.	
b. Texas Department of State Health Services		
c. Hood County Judge		
d. Somervell County Judge		
These Letters of Agreement will identify the specific nature of arrangements in support of emergency preparedness for operation of the proposed new nuclear units and certify the agency's concurrence with the emergency action levels described in Comanche Peak Units 3 & 4 Combined License Application Emergency Plan Procedure, "Assessment of Emergency Action Levels, Emergency Classification and Plan Activation."		

Proposed License Condition	Source	
(vi) Before commencing installation of individual piping segments and connected components in their final locations, Luminant shall complete the asdesigned pipe break hazards analysis for compartments (rooms) containing those segments in accordance with the criteria outlined in the US-APWR DCD, Subsections 3.6.1.2.2, 3.6.1.2.3, and 3.6.2, and shall inform the Director of NRO, or the Director's designee, in writing, upon the completion of this analysis and the availability of the as-designed pipe break hazards analysis reports.	Answer to RAI 6628 (CP RAI #262) question 03.06.01-1	RCOL2_03.0 6.01-1
2.D(15) Fukushima-Related Actions Implementation The licensee shall implement the commitments, programs or portions of programs identified in FSAR Table 1B-202 with the "Implementation" of "License Condition" (except for the staffing assessment commitment which is controlled by 2.D(14)(v) above) on or before the associated milestones in FSAR Table 1B-202.	COLA FSAR Table 1B-202 COLA FSAR Appendix 1B Based on Model COL discussed with NRC and DCWGs on 2/26/2011. Supplemental answer to RAI 6527 (CP RAI #261) Question 01.05-1, Supplemental answer to RAI 6527 (CP RAI #261) Question 01.05-2 and Response to RAI 6929 (CP RAI #269).	CTS-01533