COL Information Item Classification

Purpose

COL information items listed in the US-APWR DCD are to be categorized into "COL Holder Item" and "COL Applicant Item."

Definition:

(1) COL Holder Item

a. Detailed design information depending on as-procured/as-built information:

Information that will be addressed during procurement, fabrication, construction, testing and operation stages is classified as a "COL Holder Item". Information that allows the NRC to conclude its safety evaluation should be contained in the application.

b. Operational Programs / Other Procedures:

Those programs described in the FSAR to the extent that the NRC can conclude with reasonable assurance that the program is "fully described" and which are not required to be submitted as part of the application by the regulations or RG 1.206,

or

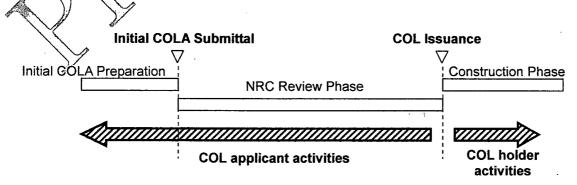
Those procedures and programs which should be submitted in accordance with the requirements of the regulations or RG 1.206, but scheduled to be provided to the NRC after the COL issuance (e.g. prior to fuel loading).

c. Development of detailed schedule

Detailed schedule cannot be fixed during the COLA review phase and is subject to change in accordance with the progress of design or construction. Such a schedule is defined as a COL Holder Item.

(2) COL applicant item

The contents to be included in the application by the regulations



COL Information Item Classification

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		Category of COL Information Items COL Information or Action Items Defined in the DCD	s for Lumina	Catego Informatio	ry of COL on Items for int COLA	
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
	COL 1.1(1)	The COL Applicant is to provide scheduled completion date and estimated commercial operation date of nuclear power plants referencing the US-APWR design certification.	1.1	. X		
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	COL 1.2(1)	The COL Applicant is to develop a complete and detailed site plan in the site specific licensing process.	1.2	X		
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	COL 1.8(1)	The COL Applicant is to demonstrate that the interface requirements established for the design have been met.	1.8	X		
	COL 2.1(1)	The COL Applicant is to describe the site geography and demography including the specified site parameters.	2.1	X	, .	
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		The COL Applicant is to describe nearby industrial, transportation, and military facilities in the vicinity of the site of the US-APWR standard plant design. The COL Applicant is to establish the presence of potential hazards and effects of potential accidents in the vicinity of the site and determine whether these accidents are to be considered as DBEs.	2.2	Х		
		Which is these accounts are to be considered as BBEs.	,			

	COL Information or Action Items Defined in the DCD		Categoi Informatio Lumina		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 2.3(1)	The COL Applicant is to verify their selected site meteorology is bounded by the site-related parameters, or is to demonstrate the site specific parameters are qualified by the design, analysis and acceptance criteria established for the US-APWR standard plant design.		Х		
COL 2.3(2)	The COL Applicant is to provide conservative factors as described in SRP2.3.4 (Reference 2.3-3). If a selected site will cause excess to the bounding χ /Q values, then the COL Applicant is to demonstrate how the does reference values in 10 CFR 50.34 (Reference 2.3-3) and the control room dose limits in 10 CFR 50, Appendix A, General Design criteria 19 (Reference 2.3-4) are met using site-specific χ /Q values.	2.3			
COL 2.3(3)	The COL Applicant is to characterize the atmospheric transport and diffusion conditions necessary for estimating radiological consequences of the routine release of radioactive materials to the atmosphere, and provide realistic estimates of annual average χ /Q values and D/Q values as described in SRP 2.3.5 (Reference 2.3-5).	2.3	X		
COL 2.4(1)	The COL Applicant is to provide sufficient information as outlined in SRPs 2.4.1 through 2.4.6 (Reference 2.4-1 through 2.4-6) and as outlined below to verify that hydrologic related events will not affect the safety-basis for the US-APWR.	2.4	X		
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COL 2.5(1)	The COL Applicant is to provide sufficient information regarding seismic and geologic characteristics of the site and the region surrounding the site to permit an adequate evaluation of the proposed site, to support evaluations performed to estimate the site-specific ground motion response spectrum, and to permit adequate engineering solutions to actual or potential geologic and seismic effects at the proposed site. A summary is to be provided that includes a synopsis of Subsections 2.5.1 through 2.5.2, including a brief description of the site, investigations performed, results of investigations performed, conclusions, and identification of who did the work.	2.5	X		

	Category of COL Information Items	s for Lumina		y of COL	
	COL Information or Action Items Defined in the DCD		Informatio	n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.1(1)	The COL Applicant is to provide a design that allows for the appropriate inspections and layout features of the ESWS in accordance with GDC 45.	3.1	X		
COL 3.2(1)	The COL Applicant is to assure that SSCs that are classified seismic category I are included in the scope of the COL Applicant's QA Program and be in compliance with the pertinent QA requirements of 10 CFR 50, Appendix B (Reference 3.2-8).	3.2	Х		
COL 3.2(2)	The COL Applicant is to assure procedures exist for the design, fabrication, erection, construction, testing, and inspection, including requirements and restrictions (e.g., interface requirements and site parameters) in the final safety analysis report meeting the acceptance criteria of SRP 3.2.1(Reference 3.2-26).	3.2	X		
COL 3.2(3)	The unique non-standard building structures are separately addressed by the COL Applicant.	3.2	Х		
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COL 3.3(1)	The COL Applicant is to verify the basic wind speed requirements of Subsection 3.3.1.1 envelope the site-specific basic wind speed.	3.3	X		

	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale	
COL 3.3(2)	The requirements of Subsection 3.3.2.2 also apply to seismic category I structures provided by the COL Applicant. Similarly, it is the responsibility of the COL Applicant to establish the methods for qualification of tornado effects to preclude damage to safety-related SSCs.	3.3	X			
COL 3.3(3)	Seismic category I structures provided by the COL Applicant are designed to preclude failure effects on safety-related SSCs. In addition, where the trajectory of a tornado missile could impact safety-related SSCs, seismic category I structures and components are designed according to procedures described in Subsection 3.5.3 for a spectrum of tornado missiles described in Subsection 3.5.1.4, in order to preclude effects caused by missiles on safety-related SSCs.		х	-		
COL 3.4(1)	The COL Applicant is to address site-specific design of plant grading and drainage.	3.4	X			
COL 3.4(2)	The COL Applicant is to demonstrate the DBFL is applicable to their specific site. The COL Applicant is to identify and address applicable site conditions where static flood level exceed the DBFL and/or generate dynamic flooding forces.	3.4	X			
COL 3.4(3)	The COL Applicant is to address site specific engineered features. Site - specific engineered features includes plant buildings and systems such as the RWSAT, the primary makeup water tank, the demineralized water storage tank, the fire water storage tanks, the yard piping, etc.	3.4	X			

	Category of COL Information Items COL Information or Action Items Defined in the DCD		Categor Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.4(4)	The COL Applicant is to address waterproofing as a site-specific engineered feature. Waterproofing encompasses concrete mix design, water stops, and waterproofing membrane/barrier.	3.4	X		
COL 3.4(5)	The COL Applicant is to determine if the interface requirements given in Chapter 2, Section 2.4, envelopes the site-specific flooding hazards. Specific COL information is to be verified as follows:	3.4	Х		
	The site-specific maximum water level caused by the PMF and all other external sources of flooding is to be determined and/or verified by the COL Applicant in accordance with the guidelines of RG 1.59 (Reference 3.4-5). The COL Applicant may need to employ 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.				·.
COL 3.5(1)	Plant procedures are to specify that equipment required for	3.5	X		
	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.	·			
COL 3.5(2)	The COL Applicant is to commit to actions to maintain P_1 within this acceptable limit as provided by turbine and rotor design features, material specifications and recommended inspections during preservice and inservice periods.	3.5	X		
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COL 3.5(3)	Establish the presence of potential hazards and the effects of potential accidents in the vicinity of the site, as described in DCD, Section 2.2.	3.5	X	:	
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	COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
COL 3.5(4)	Verify the site interface parameters with respect to aircraft crashes and air transportation accidents as described in DCD, Section 2.2 and RG 1.206, Section C.I.3.5.1.6.	3.5	Х	-	
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COL 3.5(5)	Additional analyses may be required to evaluate other potential site-specific missiles.	3.5	х		
*	The Combined License (COL) Applicant is to identify the systems or components important to plant safety or shutdown that are located near to high- or moderate-energy piping systems and are susceptible to the consequences of these piping failures (Subsection 3.6.1).	3.6	X		
1	The COL Applicant is to provide a list of high- and moderate- energy lines, which includes a description of the layout of all piping systems where physical arrangement of the piping systems provides the required protection, the design basis of structures and compartments used to protect nearby essential systems or components, or the arrangements to ensure the operability of safety features where neither separation nor protective enclosures are practical (Subsection 3.6.1).	3.6	X		
	The COL Applicant is to provide the failure mode and effect analysis to verify that the consequences of failures in high- and moderate-energy lines do not affect ability to safely shutdown the plant (Subsection 3.6.1).	3.6	X		

	 COL Information or Action Items Defined in the DCD		Informatio	y of COL on Items for nt COLA	· -
COL	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.	The COL Applicant is to implement the criteria for defining pipe break and crack location and configuration and location of design basis breaks and cracks (Subsection 3.6.2.1).	3.6	. X		
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COL 3.	The COL Applicant is to identify the postulated rupture orientation of each postulated break location (Subsection 3.6.2.1).	3.6	X		
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COL 3.	The COL Applicant is to implement the criteria associated with special features, if any (Subsection 3.6.2.5).	3.6	Χ.		
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COL 3.	The COL Applicant is to implement the appropriate methods to assure that as built plant is consistent with the design and as built drawings showing component locations and support locations and types.	3.6	X. X		
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COL 3.	 The COL Applicant is to identify the types of as-built materials and material specification used for base metal welds, weldments, and safe ends for piping evaluated for LBB.	3.6	X ,		
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COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 3.6(9)	The COL Applicant is to provide information related to as-built material and material specifications for piping including toughness (J-R curves) and tensile strength (stress-strain curves), yield and ultimate strength, welding process/methods used.	3.6	Х		· · · · · · · · · · · · · · · · · · ·
COL3.7(1)	The COL Applicant is to assure that the site-specific PGA at the basemat level control point of the CSDRS as defined in Subsection 3.7.1.1 is less than or equal to 0.30 g.	3.7	Х	·	
COL3.7(2)	The COL Applicant is to assure that the site-specific FIRS at the basemat level control point of the CSDRS are enveloped by the CSDRS given in Figures 3.7.1-1 and 3.7.1-2 for the R/B, PCCV, and containment internal structure on a common basemat, and for the east and west PS/Bs.	3.7	X		
	·				
COL3.7(3)	The COL Applicant is to assure that seismic design and analysis of the ESWPT, UHSRS, and all other site-specific SSCs, are performed utilizing seismic analysis methods and modeling procedures that are consistent with the commitments made and descriptions included in Section 3.7 of this DCD. The COL Applicant also performs site-specific SASSI analyses for the R/B-PCCV-containment internal structure as described in Subsection 3.7.2.4. The COL Applicant is to verify that the results of the site-specific SSI analysis for the broadened ISRS and basement walls lateral soil pressures are enveloped by the US-APWR standard design.	3.7	X		
COL3.7(4)	The COL Applicant is to use appropriate damping values when performing site-specific SASSI analysis and other site-specific seismic analyses to generate ISRS. Where the structural response is too low to be compatible with the level of damping, the lower damping values listed in Table 3.7.3-1(b) is to be used in the site-specific SSI analysis for calculation of ISRS, in accordance with Section 1.2 of RG 1.61 (Reference 3.7-15). In accordance with RG 1.61 (Reference 3.7-15), the damping values in Table 3.7.3-1(b) are also intended for use in site-specific OBE analysis, if the site-specific OBE is higher than 1/3 of the site-specific SSE.	3.7	. X		

COL Information or Action Items Defined in the DCD COL Information or Action Items Defined in the DCD COL INFORMATION ITEM COL INFORMATION ITEM COL INFORMATION ITEM COL Applicant is to assure that the FIRS that are derived for asiamic category I and ill structures and buildings, and that are used to characterize the site-specific SSE must envelope the minimum required earthquast in accordance with 10 CPR 50. Apparatiol S (Reference 3.7-7). For a COL Applicant requirement is to be met by considering minimum responses spectra that are tied to the shapes of the US-APWR CSDRS and and anchored at 0.1 g. This assures that the response spectra shapes are comparable to RG 1.60 (Reference 3.7-6) and sasures sufficient energy content in the low-frequency range. COL3.7(6) The COL Applicant is to develop site-specific GMRS and FIRS by an analysis methodology, which accounts for the upward propagation of the GMRS. The FIRS must then be compared to the CSDRS to assure that the US-APWR standard plant seismic design is valid for a particular site. If the FIRS are not enveloped by the CSDRS, then the US-APWR standard plant seismic design is valid for a particular site. If the FIRS are not enveloped by the CSDRS is assure that the US-APWR standard plant seismic design is modified as part of the COLA in order to validate the US-APWR standard plant design must also assure that the see specific SSE envelopes but the FIRS (are the form the CDL Applicant is to verify that the site-specific ratios V/A and ADV2 (A, V, O, are FGA, ground velocity, and ground dissiplements; respectively are considered in them CDL Applicant to assure that the quancy events described in Appendix D of RG 1.208 (Reference 3.7-3). The COL Applicant is to verify that the site-specific returned and the country of the bound and information of the proper plant of the proper plant bearing analysis and bearing load compared to capacity. If necessary, a more detailed assuria canninade by the CDL Applicant to evaluate the bearing load compared to capacity, if						
COL Information or Action Items Defined in the DCD Luminant COLA COL LUMINOR COL INFORMATION ITEM COL SUBSECTION COL Applicant is to assure that the FIRS that are derived for seismic category! and il structures and buildings, and that are used to characterize the site-specific SSE must envelope the minimum required earthquake in accordance with 10 CFR 30, Appendix S (Reference 3.7-1). For a COL Applicant requirement is to be met by considering minimum response spectra shapes are comparable to RG 160 (Reference 3.7-5) and anothored at 0.1 g. This assures that the response spectra shapes are comparable to RG 160 (Reference 3.7-6) and anothored at 0.1 g. This assures that the response spectra shapes are comparable to RG 160 (Reference 3.7-6) and anothored at 0.1 g. This assures that the response spectra shapes are comparable to RG 160 (Reference 3.7-6) and assures sufficient energy content in the low-frequency range. COL3.7(6) The COL Applicant is to develop site-specific GMRS and FIRS by an analysis methodology, which accounts for the upward propagation of the GMRS. The FIRS (Internet Personal Perso		Category of COL Information Items	for Lumina			
COL ITEM NO. COL INFORMATION ITEM COL Applicant is to assure that the FIRS that are derived for selsmic category I and II structures and buildings, and that are used to characterize the site-specific SES must envelope the minimum required earthquake in accordance with 10 CFR SQ, Appendix S (Reference 3.7.7). For a COL Applicant referencing the US-APWR standard plant design, this requirement is to be met by considering minimum response spectra that are tied to the shapes of the US-APWR CSDRS and anchored at 0.1 g. This assures that the response spectra shapes are comparable to RG 1.60 (Reference 3.7.6) and assures sufficient energy content in the low-frequency range. COL3.7(6) The COL Applicant is to develop site-specific GMRS and FIRS by an analysis methodology, which accounts for the upward propagation of the GMRS. The FIRS must then be compared to the CSDRS, then the US-APWR standard plant seismic design is valid for a particular six II the FIRS are not enveloped by the CSDRS, then the US-APWR standard plant seismic design is modified as part of the COLA in order to validate the US-APWR for installation at that site. A COL Applicant using the US-APWR standard plant design must also assure that the site-specific SSE envelopes both the FIRS (derived from the GMRS) and the minimum response spectra described in item COL3.7(5) above. The COL Applicant is to verify that the site-specific ratos VIA and ADV2 (A V. D. are PCA, ground velocity, and ground displacement, respectively) are consistent with characteristic values for the magnitude and ciliarne of the appropriate controlling events defining the site-specific relation values for the magnitude and ciliarne of the appropriate controlling events defining the site-specific relation values for the magnitude and ciliarne of the appropriate controlling events defining the site-specific relation values of the magnitude and ciliarne site of the cold Applicant to evaluate the bearing load compared to capacity. If necessary, a more detailed seismic analysis may be pe		COL Information or Action Items Defined in the DCD		Informatio	n items for	*
for seismic category I and II structures and buildings, and that are used to characterize the site-specific SSE must envelope the minimum required earthquake in accordance with 10 CFR 50, Appendix (Sfeference 3.7-7). For a COL Applicant referencing the U.S-APWR standard plant design, this requirement is to be met by considering minimum response spectra that are tied to the shapes of the U.S-APWR CSDRS and anchored at 0.1 g. This assures that the response spectra shapes are comparable to RG 150 (Reference 3.7-6) and assures sufficient energy content in the low-frequency range. COL3.7(6) The COL Applicant is to develop site-specific CBMRS and FIRS 3.7 X by an analysis methodology, which accounts for the upward propagation of the GMRS. The FIRS must then be compared to the CSDRS in the MEDS. PWR standard plant seismic design is valid for a particular stell. If the FIRS are not enveloped by the CSDRS, then the U.S-APWR standard plant seismic design is modified as part of the COLA in order to validate the U.S-APWR or installation at that site. A COL Applicant using the U.S-APWR standard plant seismic design is modified as part of the COLA in order to validate the U.S-APWR standard plant seismic design is modified as part of the COLA in order to validate the U.S-APWR standard plant design must also assure that the site-specific SEE envelopes both the FIRS Glered from the GMRS) and the minimum response spectra described in item COL3.7(b) above. The COL Applicant is to verify that the site-specific ratios V/A and ADN2 (A, V, D, are PGA, ground velocity, and ground displacement, respectively) are consistent with characteristic values for the magnitude and distance of the appropriate controlling events defining the site-specific uniform hazard response spectra. These parameters must be examined by the COL Applicant to assure that they are consistent with the values determined for the low and high frequency events described in Appendix D of RG 1.208 (Reference 3.7-3). The COL Applicant is to determine the site-specific		COL INFORMATION ITEM		Applicant	1	Rational
assures sufficient energy content in the low-frequency range. COL3.7(6) The COL Applicant is to develop site-specific GMRS and FIRS by an analysis methodology, which accounts for the upward propagation of the GMRS. The FIRS must then be compared to the CSDRS to assure that the US-APWR standard plant seismic design is valid for a particular site. If the FIRS are not enveloped by the CSDRS, then the US-APWR standard plant seismic design is modified as part of the COLA in order to validate the US-APWR for installation at that site. A COL Applicant using the US-APWR standard plant design must also assure that the site-specific SSE envelopes both the FIRS (derived from the GMRS) and the minimum response spectra described in item CCL3.7(6) above. The COL Applicant is to verify that the site-specific ratios V/A and ADV2 (A, V, D, are PGA, ground velocity; and ground displacement, respectively) are consistent with characteristic values for the magnitude and distance of the appropriate controlling events defining the site-specific uniform hazard response spectra. These parameters must be examined by the COL Applicant to assure that they are consistent with the values determined for the low and high frequency events described in Appendix D of RG 1.208 (Reference 3.7-3). COL3.7(7) The COL Applicant is to determine the site-specific required allowable dynamic bearing capacity for seismic category I and II structures and buildings based upon the site-specific seismic spectra and subgrade conditions. It is also the responsibility of the COL Applicant to evaluate the bearing load compared to capacity. If necessary, a more defailed seismic analysis may be performed that accounts for upilit in determining the bearing load at the basemat soil contact surface. COL3.7(8) The COL Applicant is to assure that if the average site-specific shear wave velocities of the subgrade are determined to be below 3,500 fts, the COL Applicant is to institute dynamic	COL3.7(5)	for seismic category I and II structures and buildings, and that are used to characterize the site-specific SSE must envelope the minimum required earthquake in accordance with 10 CFR 50, Appendix S (Reference 3.7-7). For a COL Applicant referencing the US-APWR standard plant design, this requirement is to be met by considering minimum response spectra that are tied to the shapes of the US-APWR CSDRS and anchored at 0.1 g. This assures that the response spectra	3.7	×		
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shear wave velocities of the subgrade are determined to be below 3,500 ft/s, the COL Applicant is to institute dynamic testing of the subgrade materials in order to verify the dynamic	L3.7(7)	allowable dynamic bearing capacity for seismic category I and II structures and buildings based upon the site-specific seismic spectra and subgrade conditions. It is also the responsibility of the COL Applicant to evaluate the bearing load compared to capacity. If necessary, a more detailed seismic analysis may be performed that accounts for uplift in determining the bearing		X		
	OL3.7(8)	shear wave velocities of the subgrade are determined to be below 3,500 ft/s, the COL Applicant is to institute dynamic testing of the subgrade materials in order to verify the dynamic	3.7	×		

•	Category of COL Information Items COL Information or Action Items Defined in the DCD	for Lumina	Catego	ry of COL	
				nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
	The COL Applicant is to assure that the design or location of any site-specific seismic category I SSCs, for example buried yard piping or duct banks, will not expose those SSCs to possible impact due to the failure or collapse of the NS AC/B as discussed in Subsection 3.7.2.8, or with any other NS SSCs that could potentially impact, such as heavy haul route loads, transmission towers, non-safety-related storage tanks, etc. Alternately, site-specific seismic category I SSCs is to be designed for impact loads due to failure of the AC/B and other NS SSCs.	3.7	X		
	The COL Applicant is to assure that the design or location of the T/B, A/B, AC/B and other non-seismic category I structures will preclude contact of those structures with US-APWR seismic category I buildings due to seismic (and other design basis loading) and will not create unacceptable structure-structure interaction effects including soil surcharge loads.	3.7	X		
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, ,	The COL Applicant is to perform any site-specific seismic analyses for the polar crane and fuel handling area cranes (once the cranes are selected for the site), as required by NOG-1 (Reference 3.7-22), such as crane design analysis performed by coupling the crane model with the overall building model.	3.7	X		
	It is the responsibility of the COL Applicant to design seismic category I below- or above-ground liquid-retaining metal tanks such that they are enclosed by a tornado missile protecting concrete vault or wall, in order to confine the emergency gas turbine fuel supply.	3.7	X		
		,			
	The COL Applicant is to set the value of the OBE that serves as the basis for defining the criteria for shutdown of the plant, according to the site specific conditions.	3.7	Х		

COL. INFORMATION ITEM COL INFORMATION ITEM COL. Applicant to Col. Applicant is to determine from the site-specific geological and seismological conditions if multiple US-APVIR' units at each will have essentially the same seismic response, and based on that determination, it is the responsibility of the COL. Applicant to choose if more than one unit is provided with seismic instrumentation at a multiple-unit site. COL.3.7(15) The COL Applicant is to assure that seismic instrumentation is provided in accordance with the requirements discussed in Subsection 3.7.4.2. COL.3.7(16) The COL Applicant is to determine if free-field seismic instrumentation and a CAV check is utilized in addition to the US-APWR standard plant seismic instrumentation program. COL.3.7(17) The COL Applicant is to assure that a site-specific seismic instrumentation program is established that complements the US-APWR seismic instrumentation program discussed in Subsection 3.7.4.5. COL.3.7(17) The COL Applicant is to assure that a site-specific seismic instrument subsection 3.7.4.5. COL.3.7(18) The COL Applicant is to develop site-specific instrument surveillance programs including calibration and lesting, and develop site-specific minimuments in service during plant operation and shutdown.		COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
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instrumentation and a CAV check is utilized in addition to the US-APWR standard plant seismic instrumentation program. COL3.7(17) The COL Applicant is to assure that a site-specific seismic instrumentation program is established that complements the US-APWR seismic instrumentation program discussed in Subsection 3.7.4.5. COL3.7(18) The COL Applicant is to develop site-specific instrument surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant	COL3.7(15)	provided in accordance with the requirements discussed in	3.7	X		
instrumentation and a CAV check is utilized in addition to the US-APWR standard plant seismic instrumentation program. COL3.7(17) The COL Applicant is to assure that a site-specific seismic instrumentation program is established that complements the US-APWR seismic instrumentation program discussed in Subsection 3.7.4.5. COL3.7(18) The COL Applicant is to develop site-specific instrument surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant		·	1			
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instrumentation program is established that complements the US-APWR seismic instrumentation program discussed in Subsection 3.7.4.5. COL3.7(18) The COL Applicant is to develop site-specific instrument surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant						
surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant	COL3.7(17)	instrumentation program is established that complements the US-APWR seismic instrumentation program discussed in	3.7	X	X	(1).b
surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant						
	COL3.7(18)	surveillance programs including calibration and testing, and develop site-specific maintenance and repair procedures that maximize the number of instruments in service during plant	3.7		X	(1).b

	Category of COL Information Items	s for Lumina	nt COLA		-
	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL3.7(19)	The COL Applicant is to provide the details of the seismic instrumentation implementation plan based on the discussion in Subsections 3.7.4.1 through 3.7.4.5.	3.7		X	(1).b
COL 3.8(1)	The design analysis takes into account the minimum/maximum values permitted by the codes and standards as appropriate to capture worst case analysis scenarios. It is the responsibility of the COL Applicant to perform reconciliation evaluations when the as -built properties become available.	3.8	X		
COL 3.8(2)	It is the responsibility of the COL Applicant to assure that wobble and curvature coefficients used in computing prestressing losses due to friction is consistent with the tendon system corrosion protection coatings present at the time of prestressing.	3.8	. X		
COL 3.8(3)	It is the responsibility of the COL Applicant to assure that any material changes based on site-specific material selection for construction of the PCCV meet the requirements specified in Article CC-2000 of the code and supplementary requirements of RG 1.136 as well as SRP 3.8.1 as discussed herein.	3.8	X		
COL 3.8(4)	It is the responsibility of the COL Applicant to select the site- specific concrete ingredients and to develop a concrete mix design that produces the concrete design strengths specified for the US-APWR PCCV and conform to all applicable material and quality control requirements.	3.8	Х		

		Category of COL Information Items	s for Lumina		2.190	
		COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
	L ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL	3.8(5)	It is the responsibility of the COL Applicant to verify these concrete creep and shrinkage parameters by testing of the site-specific concrete mix. The PCCV design analysis is revised if the final test results affect the conclusions of the containment calculation.	3.8	X		
COL	3.8(6)	It is the responsibility of the COL Applicant to develop a site- specific specification that covers the concrete production and batch plant requirements.	3.8	X		
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COL	3.8(7)	It is the responsibility of the COL Applicant to determine the site- specific aggressivity of the ground water/soil and accommodate this parameter into the concrete mix design as well as the site- specific structural surveillance program.	3.8	X		
COL	3.8(8)	It is the responsibility of the COL Applicant to produce a site- specific specification to define the material and welding requirements, testing, and quality requirements.	3.8	X		
	•		:	, · .		
COL	3.8(9)	Another site-specific specification is produced for the PCCV locks and equipment hatch.	3.8	X		
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Category of COL Information Items for Luminant COLA									
	COL Information or Action Items Defined in the DCD			Category of COL Information Items for Luminant COLA					
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational				
COL 3.8(10)	The prestressing system is designed as a strand system as discussed below, however the system material may be switched to a strand system at the choice of the COL Applicant. In this case, it is the responsibility of the COL Applicant to adjust the US-APWR standard plant tendon system design and details on a site-specific basis.	3.8	х						
COL 3.8(11)	A wire system may be chosen by the COL Applicant in which case the design needs to be reviewed and pre-stressing system details adjusted to accommodate the wire system material requirements.	3.8	Х						
COL 3.8(12)		3.8	X		· · · · · · · · · · · · · · · · · · ·				
	specific specification that covers the material requirements for the Pre-stressing System.								
COL 3.8(13)	It is the responsibility of the COL Applicant to produce a site- specific specification to define the material and special material testing requirements for the Reinforcing Steel System including bars and splices.	3.8	X .	,					
COL 3.8(14)	It is the responsibility of the COL Applicant to establish a site-specific program for testing and ISI of the containment. The COL Applicant program is to include inservice surveillance, such as the periodic surveillance and inspection of the containment liner and pre-stressing tendons in accordance with ASME Code, Section XI, Subsection IWL.	3.8	X	Х	(1).b				
			. ,						
COL 3.8(15)	COL Applicants is responsible for the seismic design of those seismic category I and II SSCs not part of the US-APWR standard plant. The COL Applicant is responsible for the design of the following seismic category I structures to the site-specific SSE:	3.8							

		COL Information or Action Items Defined in the DCD		Informatio	y of COL in Items for int COLA	
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
-		- ESWPTs				
Ì						
		- Ultimate Heat Sink (UHS) Basins				
		Granda vida dinik (divid) Badina				
•	•		,			!
İ		PSFSVs				
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C	COL 3.8(16)	Seismic category II structures and subsystems are, therefore, analyzed and designed by the COL Applicant for the site-	3.8	Х		
	•	specific SSE using the same methods and stress limits specified for seismic category I structures and subsystems, except structural steel in-plane stress limits are permitted to reach 1.0				
		Fy				
1	201 2 9/47)	It is the responsibility of the COL Applicant to perform site-	3.8	- X .		· · · · · · · · · · · · · · · · · · ·
1	COL 3.8(17)	specific analyses of buildings and structures that are classified as seismic systems and designed on a site-specific basis. The	3.0	F 🔨 .		,
		seismic system buildings and structures that can be subject to site-specific seismic analyses include, but are not limited to, the				;
		following:				
}		A/P (points) autogon III (if an desimand as an different desimand				
		A/B (seismic category II) (if re-designed or modified for site specific condition)		•		
	•			• •		
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	COL Information or Action Items Defined in the DCD		Catego Informatio Lumina		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
	· T/B (seismic category II) (if re-designed or modified for site specific condition)				
COL 3.8(18)	The COL Applicant is to assure the minimum gaps adjacent to seismic category I building superstructures are two times the absolute sum of the maximum displacement of each building under the most unfavorable load combination, or a minimum of 2 in.	3.8	Х		
COL 3.8(19)	The design and analysis of the ESWPT and UHS basin is to be provided by the COL Applicant based on site-specific seismic criteria.	3.8	Х		
COL 3.8(20)	Externally generated loads may be applicable as identified in site COLs. Such site-specific loads include those induced by	3.8	×		
	floods, potential non-terrorism related aircraft crashes, explosive hazards in proximity to site, and projectiles and missiles generated from activities of nearby military installations.				
COL 3.8(21)	In design reconciliation analysis by COL Applicant, if actual loads are established to be lower than the above loads, the actual loads may be used for reconciliation	3.8	Х		·
COL 3.8(22)	The COL Applicant must address the issues of monitoring seismic category I structures in accordance with the requirements of NUMARC 93-01 and 10 CFR 50.65.	3.8		X	(1).b
COL 3.8(23)	Where the zone of maximum frost penetration as identified on a site specific COL extends below the depth of the foundations for the standard plant, lean concrete is poured under any foundation bases above the frost line so that the bottom of lean concrete is below the maximum frost penetration level.		X		
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		Category of COL Information Items	for Lumina	nt COLA		
		COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	1
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
	COL 3.8(24)	Other buildings and structures of the US-APWR are designed based on site-specific soil conditions by the COL Applicant.	3.8	X		· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·		·				•
	COL 3.8(25)	Design soil conditions are as provided in Chapter 2, Section 2.5, and the site-specific COL are to assure the design criteria listed	3.8	. X		
		in Chapter 2, Table 2.0-1, is met or exceeded.				
	COL 3.8(26)	Subsidence and differential displacement may therefore be reduced to less than 2 in. if justified by the COL Applicant based on site specific soil properties.	3.8	X	·	
	COL 3.9(1)	The COL Applicant is responsible for assuring that specific environmental design considerations and snubber functionality is assured under harsh service conditions.	3.9		Х	(1).b
						·
	COL 3.9(2)	The first operational US-APWR internals are classified as Prototype in RG 1.20 (Reference 3.9-23). The first COL Applicant, at the time of application, is to provide the results of the vibration assessment program results consistent with guidance of RG 1.20.	3.9	Х		
	·	Subsequent COL Applicant need only provide information on the schedule in accordance the applicable portion of position C.3 of RG 1.20 for Non-Prototype internals.		·		

•	Category of COL Information Item	S 101 Edillina		y of COL	
	COL Information or Action Items Defined in the DCD		Informatio	n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.9(3)	The COL Applicant is responsible for assuring the required ASME snubber test and examination program is performed at required Technical Specification intervals.	3.9		X	(1).b
COL 3.9(4)	It is the responsibility of the COL Applicant to assure any materials used for a snubber, including lubricants, hydraulic fluids, and seals, are required to survive in a radioactive environment without any adverse effect on their structural and mechanical properties, and functionality.	3.9		X	(1).b
COL 3.9(5)	The COL Applicant is to review the Program Plan for IST of Pumps and Valves in Tables 3.9-12 and 3.9-13, respectively, and revise as necessary with the actual vendor information obtained during detail design phase.	3.9		Х	(1).b
COL 3.9(6)	The COL Applicant is to provide the Program Plan for IST of dynamic restraints in accordance with ASME OM Code (Reference 3.9-14).	3.9		X	(1).b
COL 3.9(7)	The COL Applicant is to provide alternate method and justification (if any) for valves in IST Program Plan.	3.9		X	(1).b
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		Category of COI Information Home	for Lumina	nt COL A	 _	
•	,	Category of COL Information Items COL Information or Action Items Defined in the DCD	TOF Lumina	Category of COL Information Items for		
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
	COL 3.10(1)	The COL Applicant is to document and implement an equipment qualification program for seismic category I equipment and provide milestones and completion dates. The program is to describe in detail the practices followed in qualification, including criteria, methods, and procedures used in conducting testing and analysis. The program is to include a description of the environmental parameters applicable to the specific plant and verify that seismic category I equipment is qualified to the	3.10		X	(1).b
	COL 3.10(2)	administrative control of component qualification, including a	3.10		X	(1).b
		description of the equipment qualification file (including EQSDS), the handling of documentation, internal acceptance reviews, identification of the scope of suppliers of equipment, and the interchange of information between equipment suppliers and the testing laboratories.				
	COL 3.10(3)	The COL Applicant is responsible for maintaining the equipment qualification files, including the EQSDSs, during the equipment selection, procurement phase, and the life of the plant. These auditable records are to be kept current as equipment is replaced, further tested, or otherwise further qualified.	3.10		X	(1).b
				•		
		If equipment qualification uses earthquake experience data and/or test experience data, the COL Applicant is to have a detailed description of the experience database, including applicable implementation methods and procedures to assure structural integrity and functionality of the equipment subjected to the defined loading conditions. The supporting documentation confirming that the equipment will remain functional during and after the postulated earthquakes in combination with the other relevant static and dynamic loads is included in the equipment qualification files and EQSDSs.	3.10		X	(1).b
	COL 3.10(5)	Components that have been previously tested to IEEE 344-1971 prior to submittal of the DCD are reevaluated to justify the appropriateness of the input motion and requalify the equipment, if necessary. The COL Applicant is to requalify the component using biaxial test input motion unless the applicant provides justification for using a single-axis test input motion.	3.10		X	(1).b
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	Category of COL Information Items COL Information or Action Items Defined in the DCD		Categor Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.10(6)	The COL Applicant is to maintain a list of systems required to perform the functions defined in SRP Section 3.10, general introductory text, and note the milestones and results of any planned in-plant tests, such as in situ impedance tests, and operational tests, which are used to confirm the qualification of any item of equipment. This includes in-situ application of vibratory devices to simulate the seismic and dynamic vibratory motions on complex active devices and its acceptability to confirm functionality of the device when shown that a meaningful test can be performed in this manner.	3.10		X	(1).b
COL 3.10(7)	The COL Applicant is to prepare a seismic qualification report (SQR) that contains the following: a list of systems required to perform the functions defined in the second paragraph of subsection I of SRP 3.10; a list of equipment, and its supports, associated with each system and any other equipment required in accordance with the above; the EQSDSs for each piece of equipment (i.e., each component) listed; and a detailed description of the experience database.	3.10		Х	(1).b
COL 3.11(1)	The plant licensee (COL Applicant) describes how the environmental qualification document summarizing the qualification results for all equipment identified in Appendix 3D is to be assembled. This is a condition of licensure.	3.11		Х	(1).b
	The test environmental parameters and the methodology used to qualify the equipment located in harsh environments are identified.				
	2. A summary of environmental conditions and qualified conditions for the equipment located in a harsh environment zone are presented in the system component evaluation work sheets or packages. The system component evaluation work sheets/packages are compiled in the environmental qualification document.				
	The procedures and results of qualification by tests, analyses, or other methods for the safety related equipment are				
·	documented and maintained by COL Applicant.				
	·	·			

	COL Information or Action Items Defined in the DCD		Informatio	Category of COL Iformation Items for Luminant COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Ratio
COL 3.11(2)	The plant licensee (COL Applicant) describes how the results of the qualification tests in an auditable file in accordance with requirements of 10 CFR 50.49 (j) (Reference 3.11-2) are to be recorded. Such a record is maintained for the entire period during which the related equipment remains installed in the plant, stored for future use, or is held for permit verification.	3.11		X	(1
COL 3.11(3)	The plant licensee (COL Applicant) is to prepare a schedule showing the EQ program proposed implementation milestones.	3.11		X	(1
i i				·	
COL 3.11(4)	The plant licensee (COL Applicant) is to describe periodic tests, calibrations, and inspections to be performed during the life of the plant to verify that electrical and mechanical equipment remains capable of fulfilling its intended safety function.	3.11		X	(1
COL 3.12(1)	If catalog items for the pipe support design were as- built/manufactured per the rules of ASME Code, Section III, Subsection NF published at a later date than that identified in Subsection 3.12.6.1 are used, the COL Applicant is to reconcile the use of the later edition.	3.12	X		
COL 3.12(2)	If any piping is laid out in the yard, the COL Applicant is to generate site-specific seismic response spectra, which is used for the design of these piping systems or portions of piping system.	3.12	X		

	COL Information or Action Items Defined in the DCD	,	Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 3.12(3)	If the COL Applicant finds it necessary to lay ASME Code, Sec III, class 2 or 3 piping exposed to wind or tornado loads, then such piping must be designed to the plant design basis loads.	3.12	X		
COL 3.12(4)	The COL Applicant, if necessary, is to screen piping systems that are sensitive to high frequency modes for further evaluation.	3.12	X		f
COL 3.13(1)	The COL Applicant is to provide information on procedures for effective corrosion protection for the stud bolting following head removal and allow the ISI to be performed on the removed RV stud bolting.	3.13	X		
COL 3.13(2)	The COL Applicant is to provide information on the final selection of lubricants, sealants, and cleaning fluids.	3.13	X		
COL 3.13(3)	The COL Applicant is to retain quality records including certified material test reports for all property test and analytical work performed on nuclear threaded fasteners in accordance with the requirements of 10 CFR 50.71.		X		

COLITEM	COL Information or Action Items Defined in the DCD		Information Items for Luminant COLA		
NO.	INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
	address compliance with ISI arized in Subsection 3.13.2.	3.13	X		
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	,				
requirements of ASME (3.13-14), and the requir (Reference 3.13-11), Pr	o commit to complying with the Code, Section XI, IWA-5000 (Reference Tements of 10 CFR 50.55a(b)(2)(xxvi) Tessure Testing Class 1, 2, and 3 Paragraph (xxvii) Removal of Insulation		X		
design limit DNBR desc based on the relevant p the safety analysis limit limit DNBR and other Di	Applicants is to confirm whether the cribed in Section 4.4 can be available lant-specific instrumentation specs, or DNBR value can cover the new design NBR penalties such as rod bow penalty, y and/or reserving more core operational			х	(1).a
	·				
	resses the addition of ASME Code d in Regulatory Guide 1.84.	5.2.1.2	X		-
	resses Code Cases invoked in ervice inspection program that are in tory Guide 1,147.	5.2.1.2	X		

	Category of COL Information Items COL Information or Action Items Defined in the DCD	Category of COL Information Items for Luminant COLA			
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 5.2(3)	The COL applicant addresses Code cases invoked in connection with the operation and maintenance that are in compliance with Regulatory Guide 1.192.	5.2.1.2	X		
COL 5.2(4)	The COL applicant addresses and develops the inservice inspection and testing program for the RCPB, in accordance with Section XI of the ASME Code and 10 CFR 50.55a.	5.2.4.1	Х	Х	(1).b
COL 5.2(5)	The COL applicant addresses and develops the preservice inspection and testing program for the RCPB in accordance with Article NB-5280 of Section III, Division I of the ASME Code.	5.2.4.2	X .	X	(1).b
COL 5.2(6)	The COL applicant provides a complete list of code exemptions for the inservice inspection program as permitted by Subarticle IWB-1220 of ASME Section XI	5.2.4.1 5.2.4.2		X	(1).b
OL 5.2(7)	The COL applicant provides specific information to identify the applicable ASME Code requirements where relief is requested, justification for the relief requested, and the inspection method to be used as an alternative.	5.2.4.1 5.2.4.2		X	(1).b

	COL Information or Action Items Defined in the DCD		Informatio	y of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 5.2(8)	The COL applicant addresses the actual, as procured material data of the RCPB to the NRC staff at an agreed upon predetermined time agreed by an appropriate method (e.g., ITAAC).	5.2.3.1	X		
	,				
COL 5.2(9)	The COL applicant addresses data, test results, or other information about the program for nondestructive examination of the ferritic steel tubular products for components of the RCPB to the NRC staff at an agreed upon predetermined time agreed by an appropriate method (e.g., ITAAC).		X		
COL 5.2(10)	The COL applicant addresses detailed information that can be determined after discussion with procurement venders, such as design of the valves and insulations.	5.2.2.4 5.2.3.2		. X	(1).a
			<u>'</u>		
COL 5.3(1)	Pressure-Temperature Limit Curves	5.3			
	The COL applicant addresses the use of plant-specific reactor vessel P-T limit curves. Generic P-T limit curves for the US-APWR reactor vessel are shown in Figures 5.3-2 and 5.3-3, which are based on the conditions described in Subsection 5.3.2. However, for a specific US-APWR plant, these limit curves are plotted based on actual material composition requirements and the COL applicant addresses the use of these	5.3.2 5.3.2.1 5.3.2.2 5.3.3.6 5.3.3.7	×	,	
	plant-specific curves.				

	Category of COL Information Item COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 5.3(2)	Reactor Vessel Material Surveillance Program	5.3			
	The COL applicant provides a reactor vessel material surveillance program based on information in Subsection 5.3.1.6.	5.3.1.6 5.3.3.7	x		· :
COL 5.3(3)	Surveillance Capsule Lead Factor and Azimuthal Location Confirmation	5.3			
		,			
	The COL applicant confirms the azimuthal location and lead factors for the surveillance capsule of a particular US-APWR plant.	5.3.1.6	X		
COL 5.3(4)	Reactor Vessel Material Properties Verification	5.3			

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		Category of COL Information Items	for Lumina	nt COLA		
		COL Information or Action Items Defined in the DCD		Catego: Informatio	y of COL on Items for nt COLA	
C	OL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL	COL Holder	Rationale
		The COL applicant verifies plant-specific beltline region material property requirements in accordance with the requirements in Subsections 5.3.1.5, 5.3.2.1 and Table 5.3.1. The verification includes evaluating the USE and RTNDT at EOL, and a PTS evaluation based on actual material property requirements of the reactor vessel material and the projected neutron fluence for the design-life objective of 60 years.	5.3.2.3 5.3.2.4	X		
COL	L 5.3(5)	Preservice and Inservice Inspection	5.3	· .		
		The COL applicant provides the information for preservice and inservice inspection described in Subsection 5.2.4.	5.3.3.7	X		
COL	L 5.4(1)	The COL applicant addresses the information for preservice and inservice inspection of the RCP flywheel.	5.4.1.1		Х	(1).b
				·		
COL		The COL applicant addresses the elements of steam generator program such as an assessment of degradation, inspection requirements for the tubes and any repairs to the tubes	5.4.2.1, 5.4.2.2	X		
		(including plugging), integrity assessment procedures, tube plugging and repairs, primary to secondary leak monitoring, foreign material exclusion (including management of loose parts), maintenance of steam generator secondary side integrity, contractor oversight, self assessment, and reporting.				
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	Category of COL Information Items	for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 5.4(3)	The COL applicant addresses the extent of consistency with the steam generator program requirements in standard technical specification.	5.4.2.2	Х		
COL 5.4(4)	The COL applicant addresses the method for determining tube plugging or repair criteria.	5.4.2.2	Х		
COL 5.4(5)	The COL applicant addresses the scope and extent of the	5.4.2.2	×		
OOL 3.4(3)	preservice inspection of the steam generator tubes.	5.4.2.2	^		
COL 5.4(6)	The COL applicant addresses the steam generator tube inspection and reporting requirements to be adopted in technical specification (including the limiting condition for operation (LCO), surveillance requirements, and primary-to-secondary leakage limits)	5.4.2.2	X		
COL 5.4(7)	The COL applicant addresses the any potential differences between the technical specification and Article IWB-2000 of ASME code Section XI.	5:4.2.2	X		

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	Category of COL Information Items	s for Lumina			
	COL Information or Action Items Defined in the DCD		Informatio	y of COL in Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rational
COL 6.1(1)	The COL Applicant complies with the provisions and recommendations provided by ASME NQA-1-1994, Part II when developing programs that support the cleaning of materials and components, cleanness control, and preoperational flushing for systems that contain austenitic stainless steel components as recommended by RG 1.37. This program includes documentation to verify the compatibility of materials used in manufacturing ESF components with ESF fluids.	6.1.1		X	(1).b
COL 6.1(2)	The COL Applicant is responsible to develop an augmented ISI program to ensure the structural integrity of pressure-retaining cold-worked austenitic stainless steel components.	6.1.1		X	(1).b
COL 6.1(3)	The COL Applicant is responsible to a develop a program to maintain an inventory of all acids and bases within the	6.1.1		X	(1).b
	containment to aid in control of pH within a post-LOCA environment.				
COL 6.1(4)	The COL Applicant is responsible to identify materials within the containment that would yield hydrogen gas by corrosion from the emergency cooling or containment spray solutions, and their use should be limited as much as practicable.]	X	,	
			: :		
COL 6.1(5)	The COL Applicant is responsible to identify and quantify all organic materials that exist in significant amounts in the containment (e.g., wood, plastics, lubricants, paint or coatings, electrical cable insulation, and asphalt). Coatings not intended for 60 -year service without overcoating should include total overcoating thicknesses expected to be accumulated over the	6.1.2		X	(1).b

	Category of COL Information Items	for Lumina	nt COLA		
,	COL Information or Action Items Defined in the DCD		Categor Informatio Lumina		
COLITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 6.1(6)	The COL Applicant is responsible to prepare and implement an erosion/corrosion monitoring program.	6.1.1	X		
					·
COL 6.2(1)	The COL applicant is responsible to provide best estimates of these heatsinks in the COL application, update the FSAR based on as-built information and confirm the values are bounded by the values in containment analyses.	6.2.1	X		
001 6 0(0)	The COLAR Standard St	624	· · ·		(1) h
COL 6.2(2)	The COL Applicant is responsible to prepare and implement and an initial test program consistent with DCD Chapter 14 in accordance with RG 1.68 to ensure Operational readiness.	6.2.1		X	(1).b
COL 6.2(3)	An NPSH evaluation of the CSS head loss is prepared by the COL applicant and the FSAR updated based on as-built information.	6.2.2	X		•
COL 6.2(4)	Performance characteristics and effectiveness of the ECCS/CS strainer is evaluated by the COL applicant. The evaluation includes the effects of debris, hydraulic resistance, debris transport and vendor test data.	6.2.2	X		

	Category of COL Information Items COL Information or Action Items Defined in the DCD	Categor Informatio			
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 6.2(5)	Preparation of a cleanliness, housekeeping and foreign materials exclusion program is the responsibility of the COL applicant. This program addresses other debris sources such as latent debris inside containment. This program minimizes foreign materials in the containment.	6.2.2		X	(1).b
				·	
COL 6.2(6)	As built pipe run distances from outer containment isolation valve to the containment penetration are provided by the COL applicant.	6.2.4		Х	· (1).a
	44				
COL 6.2(7)	The operating principle and accuracy of the combustible gas analyzers are provided by the COL applicant.	6.2.5		X	(1).a
COL 6.2(8)	The COL applicant is responsible for the containment leakage rate testing program including, but not limited to, its preparation, exemptions, equipment, methods, procedures, conduct, limits, acceptance criteria, schedule, and reports.	6.2.6	·	×	(1).b
COL 6.2(9)	Selection, purchase, and installation of specific insulation products are controlled by administrative programs developed by any applicant referencing the certified US-APWR design for construction and operation.	6.2.2		X	(1).b

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Category of COL Information Items for Luminant COLA								
	COL Information or Action Items Defined in the DCD	Category of COL Information Items for Luminant COLA						
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale			
COL 6.2(10)	Inservice inspection of strainers, RWSP, vortex suppression devices and evidence of corrosion is the responsibility of any licensee who references the US-APWR certified design for construction and operation.	6.2.2		Х	(1).b			
COL 6.3(1)	The COL Applicant provides the bases for ECCS surveillance requirements for ECCS performance such as motor operated valve and pump capability testing.	6.3.4		Х	(1).b			
					· ·			
		42						
COL 6.3(2)	The COL Applicant prepares a suitable initial test program consistent with DCD Chapter 14 in accordance with RG 1.68 to ensure Operational readiness.	6.3.4		Х	(1).b			
COL 6.3(3)	The COL Applicant prepares normal, abnormal and emergency operating procedures for the ECCS, to include Safety Injection Pumps, Accumulators, and Emergency Letdown, including emergency operating instruction for feed-and-bleed operation.	6.3.2		X	(1).b			
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COL 6.3(4)	The COL Applicant is responsible for developing a program to maintain RWSP water chemistry including surveillance test procedures.	6.3.2		Х	(1).b			

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	Category of COL Information Items	s for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD	5 IOI LUIIIIIA	Catego: Informatio	y of COL in Items for int COLA	
COL ITEM	COL INFORMATION ITEM	DCD	COL Applicant Item	COL Holder Item	Ratio
COL 6.3(5)	The COL Applicant is responsible for developing an inservice pump and valve test program for system and components.	6.3.2	· <u>·</u>	X	(1
COL 6.3(6)	The COL Applicant is responsible to prepare an as-built list of material used in or on the ECCS by their commercial names, quantities (estimate where necessary), and chemical composition and show that the radiolytic or pyrolytic decomposition products, if any, of each material will not interferently the composition products, if any, of each material will not interferently the composition products.	6.3.2		X	(1)
,	with the safe operation of this or any other ESF.				
COL 6.4(1)	The COL Applicant is responsible to provide details of specific chemicals, their amounts, on site storage description, type of supply container (e.g., bottle, tank), and the type of connection (e.g., pipe, armored hose) to the system serviced; and the location of toxic gas releases and distance from the MCR and the MCR HVAC system intakes.	6.4.2	X		
	·				
COL 6.4(2)	The COL Applicant is responsible to prepare and implement normal, surveillance, abnormal, and emergency operating procedures for the MCR HVAC system, to include the main control room emergency filtration system.	6.4.3		X	(1
COL 6.4(3)	Inservice test program requirements, including inleakage testing, are the responsibility of any COL Applicant selecting the US-APWR for construction and licensed operation, and are addressed in plant Technical Specifications (Chapter 16).	6.4.5	x		

	Category of COL Information Items for Luminant COLA								
		COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA					
2 *	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale			
	COL 6.4(4)	The COL Applicant is responsible to determine the charcoal adsorber weight, type and distribution.	6.4	Х	X	(1).a			
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	COL 6.4(5)	A hazards analysis based on the recommendations of RG 1.78 (Ref. 6.4-4) is the responsibility of the COL Applicant.	6.4.4	Х					
	,			· •					
	COL 6.5(1)	Preserving access and inspectability for ASME Code Section III for Class 1 and Class 2 components is the responsibility of the COL Applicant.	6.5.2 ·		х	(1).a			
		•							
	COL 6.5(2)	The COL Applicant is responsible for preparation and implementation of an Initial Test Program and an Inservice Test program in accordance with ASME Code Section III for Class 2 and Class 3 systems and components.	6.5.2	•	X	(1).b			
				,					
	COL 6.5(3)	The COL Applicant is responsible to provide surveillance test procedures (Chapter 16) for the containment pH adjustment.	6.5.2		х	(1).b			

	COL Information or Action Items Defined in the DCD	Informatio	y of COL n Items for nt COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 6.5(4)	The COL Applicant is responsible to provide an as-built list of material used in or on the ESF filter systems by their commercial names, quantities (estimate where necessary), and chemical composition and show that the radiolytic or pyrolytic decomposition products, if any, of each material will not interfere with the safe operation of this or any other ESF.	6.5.1		X	(1).a
COL 6.6(1)	The COL Applicant is responsible for the preparation of a preservice inspection program (non-destructive baseline examination) and an Inservice inspection program for ASME Code Section III Class 2 and 3 systems, components (pumps and valves), piping, and supports in accordance with 10 CFR5055a(g), including selection of specific examination	6.6.1		X	(1).b
COL 6.6(2)	techniques and preparing appropriate inspection procedures The COL Applicant is responsible for preparing an augmented inservice inspection program for high-energy fluid system piping.	6.6.8		×	(1).b
COL 7.3(1)	COL applicant provides description of number and configuration of controllers in each SLS train, and SLS I/O configuration.	7.3	X		
	,	,	,		
OL 7.4(1)	COL applicant provides description of I&C required for ultimate heat sink (UHS).	7.4	Х		
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	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
COL 7.5(1)	COL applicant provides description of I&C required for UHS.	7.5	X		
COL 7.9(1)	COL applicant provides descriptions on the site cyber security plan.	7.9	X		
	·				
COL 8.2(1)	The COL Applicant is to provide a description of the utility power grid and its interconnection to other grids, and address the stability of the offsite power system in accordance with Branch Technical Position BTP 8-3 (Reference 8.2-17).	8.2.2	X		
					1
	Transmission system description, to include the plant switchyard, interconnection with other switching stations, within the independent system operator's system. The transmission lines, including their sizing, corridors and right-of-ways are described in detail. Subsection 8.2.1.1 will be supplemented to include this site-specific information.	8.2.1	X		
	Switchyard description, to include a detailed design and characteristics such as circuit breaker and bus duty and short circuit ratings, ac and dc auxiliary power service. Subsection 8.2.1.1 is supplemented to include this site-specific information.	8.2.1	X		

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		Category of COL Information Items COL Information or Action Items Defined in the DCD	s for Lumina	Catego: Information	y of COL on Items for nt COLA	
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rational
	COL 8.2(4)	Normal preferred power includes a detail description of this power supply circuit, including characteristics, ratings and relay protection. This Combined License Application (COLA) item is addressed in Subsection 8.2.1.2.	8.2.1	. X		
	COL 8.2(5)	Alternate preferred power includes a detail description of this power supply circuit, including characteristics, ratings and relay protection. This COLA item is addressed in Subsection 8.2.1.2.	8.2.1	X		
ч	COL 8.2(6)	Unit synchronization describes the synchronization scheme of the main generator, including the synchronizing breaker. This COLA item is addressed in Subsection 8.2.1.2.	8.2.1	X	,	
•						
	COL 8.2(7)	Protective relaying is described in detail for each circuit such as lines, buses and transformers. This COLA item is addressed in Subsection 8.2.1.2.1.		Х		
	COL 8.2(8)	Switchyard dc power is addressed as part of the switchyard design description and includes batteries, chargers and distribution panels. This COLA item is addressed in Subsection	8.2.1	X		

	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 8.2(9)	Switchyard ac power is addressed as part of the switchyard design description and includes transformers and distribution panels. This COLA item is addressed in Subsection 8.2.1.2.1.	8.2.1	X		·
COL 8.2(10)	Transformer protection is addressed as part of the switchyard design description and includes protective relaying schemes. This COLA item is addressed in Subsection 8.2.1.2.	8.2.1	X		
		*			
COL 8.2(11)	Stability and Reliability of the Offsite Transmission Power Systems: The Reliability and Stability Study is provided in the COLA as a supporting document to the COLA. A failure modes and effects analysis (FMEA) is provided.	8.2.3	х		·
COL 8.2(12)	Interface requirements: Conformance to the design basis requirements (Subsection 8.2.3) is addressed in the COLA.	8.2.3	Х		
	·				
COL 8.3.1(1)	Transmission voltages are site specific and are provided by the COL applicant. This includes also MT and RAT voltage ratings.	8.3.1	X		

	Category of COL Information Items	s for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
COL 8.3.1(2)	Lightning Protection and grounding is site specific and is provided by the COL applicant.	8.3.1		×	(1).a
			·		
COL 8.3.1(3)	Short Circuit analysis is provided by the COL applicant, since the system contribution is site specific.	8.3.1	х		
					· · · · · · · · · · · · · · · · · · ·
				ĺ	
COL 8.3.1(4)	In general schematics are not needed to depict the functional operation of equipment. However, the interface drawings between the digital and electromechanical equipment are provided by the COL applicant. In addition schematics are provided for any functions that are decided not to be implemented with the digital system, if any. This is an implementation decision that is made by the COL applicant.	8.3.1	X		
COL 8.3.1(5)	Details of the cable and raceway design are incorporated into the as-built plant design by the COL applicant.	8.3.1	X ,		
COL 8.3.1(6)	Analyses and any underlying assumptions used to demonstrate the acceptance criteria for the digital control and protection systems, including protective devices for motors and generators are included within the plant digital system and are addressed by COL applicant similar with 8.3.1(4) above.		X		
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	Category of COL Information Items	o ioi Luminai		y of COL	
	COL Information or Action Items Defined in the DCD		Informatio	n Items for nt COLA	
COŁ ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 8.3.2(1)	The individual DC motor characteristics are the responsibility of the COL applicant. However, the panel loads are conservatively calculated to account for all the loads.	8.3.2	Х		
COL 8.3.2(2)	Short circuit analysis is provided by the COL applicant.	8.3.2	х		
COL 8.3.2(3)	In general schematics are not needed to depict the functional operation of equipment. However, the interface drawings between the digital and electromechanical equipment are provided by the COL applicant. In addition schematics are provided for any functions that are decided not to be implemented with the digital system, if any. This is an implementation decision that is made by the COL applicant.	8.3.2	· X		
COL 9.1(1)	The COL Applicant is to provide a program for monitoring the effectiveness of neutron poison present in the neutron absorbing panel.	9.1.2		Х	(1).a
COL 9.1(2)	The COL Applicant is to provide skimmers, if desired, to provide additional purification to the SFP water.	9.1.3	X		

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	Category of COL Information Items COL Information or Action Items Defined in the DCD	s for Lumina	Catego: Informatio	egory of COL nation Items for ninant COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 9.1(3)	The COL Applicant is to develop administrative procedures to preclude the suspension hoist from being utilized other than for new fuel assembly handling.	9.1.4		X	(1).b
					. ,
COL 9.1(4)	The COL Applicant is to develop operations procedures to control refueling activities within the parameters of DCD section 9.1.4.	9.1.4		×	(1).b
COL 9.1(5)	The COL Applicant is to provide communication devices to provide communication between operators at the fuel handling	9.1.4		X.	(1).b
i i	machine, the new fuel elevator, the FTS including upenders, and the refueling machine as described in Section 9.1.4.				
COL 9.1(6)	The COL Applicant is to establish a program for the OHLHL that meets the guidance of ANSI/ASME B30.2., ANSI/ASME B30.9, ANSI N14.6, ASME NOG-1, CMAA Specification 70-2000, NUREG-0554, NUREG-0612, and NUREG-0800, Section 9.1.5.			X	(1).b
COL 9.1(7)	The COL Applicant is to establish a program for the OHLHL that meets the guidance of ANSI/ASME B30.2., ANSI/ASME B30.9, ANSI N14.6, ASME NOG-1, CMAA Specification 70-2000, NUREG-0554, NUREG-0612, and NUREG- 0800, Section 9.1.5.	9.1.5		x	(1).b
,	9.7.5.				

COL 9.2(1) The COL Applicant is to develop administrative control procedures to govern the operation, testing, maintenance, and inspection of the OHLHL. Amongst other things, this will control the use of the polar crane when handling heavy loads to minimize crane usage over the refueling cavity and to preclude heavy loads over the refueling cavity during refueling activities. COL 9.2(1) The COL Applicant is to confirm the function of ESWS at the lowest probable water level of the UHS. COL 9.2(2) The COL Applicant is to provide the protection against adverse environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and waterhammer. COL 9.2(3) The COL Applicant is to determine source and location of the UHS.	!	COL Information or Action Items Defined in the DCD	Category of COL L Information or Action Items Defined in the DCD Information Items for Luminant COLA			
procedures to govern the operation, testing, maintenance, and inspection of the OHLML. Amongst other things, this will control the use of the polar crane when handling heavy loads to minimize crane usage over the refueling cavity and to preclude heavy loads over the refueling cavity during refueling activities. COL 9.2(1) The COL Applicant is to confirm the function of ESWS at the lowest probable water level of the UHS. COL 9.2(2) The COL Applicant is to provide the protection against adverse environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and waterhammer. COL 9.2(3) The COL Applicant is to determine source and location of the UHS.		COL INFORMATION ITEM		Applicant	1	Rational
COL 9.2(2) The COL Applicant is to provide the protection against adverse environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and waterhammer. COL 9.2(3) The COL Applicant is to determine source and location of the UHS.	COL	procedures to govern the operation, testing, maintenance, and inspection of the OHLHL. Amongst other things, this will control the use of the polar crane when handling heavy loads to minimize crane usage over the refueling cavity and to preclude			X	(1).b
environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and waterhammer. COL 9.2(3) The COL Applicant is to determine source and location of the UHS. COL 9.2(4) The COL Applicant is to determine location and design of the 9.2.1 X	COL		9.2.1 :-	X		
environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and waterhammer. COL 9.2(3) The COL Applicant is to determine source and location of the UHS. COL 9.2(4) The COL Applicant is to determine location and design of the 9.2.1 X						
COL 9.2(4) The COL Applicant is to determine location and design of the 9.2.1 X	COL	environmental, operating, and accident conditions that can occur, such as freezing, thermal overpressurization, and	9.2.1	X		
COL 9.2(4) The COL Applicant is to determine location and design of the 9.2.1 X		·				
	COL		9.2.1	X		
			·			
	COL		9.2.1	X		

COL 9.2(5) The COL Applicant is to determine location and design of ESW discharge structure COL 9.2(6) The COL Applicant is to provide ESWP design details — required total dynamic head, NPSH available, required etc. COL 9.2(7) The COL Applicant is to confirm the piping, valves, sizes a other design details	the	9.2.1 9.2.1	COL Applicant Item	COL Holder Item	Rationale
COL 9.2(5) The COL Applicant is to determine location and design of ESW discharge structure COL 9.2(6) The COL Applicant is to provide ESWP design details—required total dynamic head, NPSH available, required etc.	the	9.2.1	Applicant Item X	1 ' 1	Rationale
COL 9.2(6) The COL Applicant is to provide ESWP design details – required total dynamic head, NPSH available, required etc.					
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required total dynamic head, NPSH available, required etc COL 9.2(7) The COL Applicant is to confirm the piping, valves, sizes a	c .	9.2.1			
COL 9.2(7) The COL Applicant is to confirm the piping, valves, sizes a			X		
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	and	9.2.1	. X		
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COL 9.2(8) The COL Applicant is to specify ESW chemistry requireme	ents.	9.2.1	×		
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The entire 9.2.4 is a COL item. The storage capacity and of the potable water is a conservative COL item and should confirmed. Based on this the components is also to be confirmed.	usage Id be	9.2.4	X		
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	Category of COL Information Item COL Information or Action Items Defined in the DCD		Categoi Informatio	y of COL n Items for nt COLA	
CÖL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 9.2(10)	The COL Applicant is to confirm that all State and Local Department of Health of Natural Resources Environmental Protection Standards are applied and followed.	9.2.4	X		
COL 9.2(11)	The COL Applicant is to confirm the source of potable water to the site and the necessary required treatment.	9.2.4	Х		
		10.4			
COL 9.2(12)	The COL Applicant is to confirm that the sanitary waste is sent to the onsite plant treatment area or is will they use the city sewage system.	9.2.4	Х	-	
COL 9.2(13)	The COL Applicant is to confirm the supply of water (city or onsite wellsof another) and confirm the system operation.	9.2.4	Х		
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COL 9.2(14)	The COL Applicant is to confirm Table 9.2.4-1 for required components and their values.	9.2.4	Х		

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	Category of COL Information Items	s for Lumina	ent COLA		
	COL Information or Action Items Defined in the DCD		Catego Informatio	ory of COL on Items for ant COLA	,
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL	COL Holder	Rational
COL 9.2(15)	The COL Applicant is to determine the total number of people at the site and identify the usage capacity. Based on these numbers the COL Applicant is to size the potable water tank and associated pumps.	9.2.4	X		
			·		
COL 9.2(16)	The COL Applicant is to provide values to the component Table 9.4.2-1 based on the calculations performed for COL 9:2.4.2.1.	9.2.4	X .		
COL 9.2(17)	The COL Applicant is to determine the total number of sanitary lift stations and is to size the appropriate interfaces.	9.2.4	. x		
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COL 9.2(18)	The COL Applicant is to determine the type of the UHS based on specific site conditions and meteorological data.	9.2.5	X		
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COL 9.2(19)	The COL Applicant is to design the UHS to receive its electrical power supply, if required by the UHS design, from safety busses so that the safety functions are maintained during LOOP. The UHS also receives its standby electrical power from the onsite emergency power supplies during a LOOP.		X		
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	Category of COL Information Items COL Information or Action Items Defined in the DCD		Categor Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 9.2(20)	The COL Applicant is to provide a detailed description and drawings of the UHS, including water inventory, temperature limits, heat rejection capabilities, instrumentation, and alarms.	9.2.5	. X	·	
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COL 9.2(21)	The COL Applicant is to determine the source of make-up water to the UHS inventory and the blowdown discharge location based on specific site conditions.	9.2.5	X		
		·			
COL 9.2(22)	The COL Applicant is to provide results of UHS capability and safety evaluation of the UHS based on specific site conditions and meteorological data. The COL Applicant is to use at least 30 years site specific meteorological data and heat loads data for UHS performance analysis.	9.2.5	X		
		.4	۳		
COL 9.2(23)	The COL Applicant is to provide test and inspection requirements of the UHS. These is to include inspection and testing requirements necessary to demonstrate that fouling and degradation mechanisms are adequately managed to maintain acceptable UHS performance and integrity.	9.2.5	X		
COL 9.2(24)	The COL Applicant is to provide the required alarms, instrumentation and controls details based on the type of UHS	9.2.5	X		
	to be provided.		·		
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	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 9.3(1)	The COL Applicant is to provide the high pressure nitrogen gas, low pressure nitrogen gas, the hydrogen gas, carbon dioxide, and oxygen supply systems.	9.3.1	X		
COL 9.3(2)	The COL Applicant is to provide the Testing and Inspection requirements for the high pressure nitrogen gas, low pressure nitrogen gas, hydrogen gas, carbon dioxide, and oxygen supply systems.	. 9.3.1	. X		
COL 9.3(3)	The COL Applicant is to determine that no decrease in the effectiveness of emergency plans results from not having post accident sampling system capability.	9.3.2	X		
COL 9.3(4)	The COL Applicant is to maintain an offsite capability to monitor radioactivity, including radioactive iodines.	9.3.2	×		
COL 9.3(5)	The COL Applicant is to define the storm drainage system collection points and their discharge to either the basin or the municipal storm or a natural body of water.	9.3.3	· X		

	Category of COL Information Items	s for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 9.3(6)	The COL Applicant is to provide a description and design bases for the Transformer area sump collection and drainage system.	9.3.3	Х		***
COL 9.3(7)	The COL Applicant is to provide a description and analysis of the Lube oil and fuel oil storage area sump collection and drainage system.	9.3.3	X	·	
COL 9.4(1)	The COL Applicant is to provide proper MCR personnel protection against toxic gases if warranted by a site specific chemical survey.	9.4.1 (6.4)	X		
COL 9.4(2)	The COL Applicant is to require Initial tracer gas testing to be performed for the MCR envelope and periodically repeated per the plant specific Technical Specifications.	9.4.1 (16)	×		
COL 9.4(3)	The COL Applicant is to determine the charcoal adsorber type and efficiency based on the adorber type selected.	9.4.1, 9.4.3, 9.4.6	X		1
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5		Category of COL Information Items	s for Lumina	nt COLA		
	·	COL Information or Action Items Defined in the DCD		Catego Informatio	ry of COL on Items for ont COLA	
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rational
	COL 9.4(4)	The COL Applicant is to determine the capacity of cooling and heating coils that are affected by site specific condition.	9.4.3, 9.4.5, 9.4.6	Х		
	COL 9.4(5)	The COL Applicant is to determine heating coil type of air handling units that are not installed in Reactor Building and Power Source Building.	9.4.3	X		
				1111		
	COL 9.5(1)	The COL applicant establishes a fire protection program, including organization, training and qualification of personnel, administrative controls of combustibles and ignition sources, firefighting procedures, and quality assurance.	·9.5.1		X	(1).b
4.	COL 9.5(2)	The COL Applicant addresses the design and fire protection aspects of the facilities, buildings and equipments, such as cooling towers and a fire protection water supply system, which are site specific and/or are not a standard feature of the US-APWR.	9.5.1	Х		
,	COL 9.5(3)	The COL Applicant provides apparatus for plant personnel and fire brigades such as portable fire extinguishers and self contained breathing apparatus.	9.5.1		Х	(1).b
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	Category of COL Information Items	for Lumina			
	Category of COL COL Information or Action Items Defined in the DCD Information Items for Luminant COLA				
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 9.5(4)	The COL Applicant addresses all communication system interfaces external to the plant (offsite locations). These include interfaces to utility private networks, commercial carriers and the federal telephone system. The configuration of these connections will include consideration of the concerns raised in IE Bulletin 80-15.		х		·
COL 9.5(5)	The COL Applicant addresses the emergency offsite communications including the crisis management radio system.	9.5.2	X		
	·				,
COL 9.5(6)	The COL applicant addresses connections to the Technical Support Center from where communications networks are provided to transmit information pursuant to the requirements delineated in 10 CFR 50.34(f)(2)(xxv).	9.5.2	×		
COL 9.5(7)	The COL Applicant addresses a continuously manned alarm station required by 10 CFR 73.46(e)(5) and the communications requirements delineated in 10 CFR 73.45(g)(4)(i)(ii). The COL Applicant addresses notification of an attempted unauthorized or unconfirmed removal of strategic special nuclear material in accordance with 10 CFR 73.45(e)(2)(iii).	9.5.2	Х		
COL 9.5(8)	The COL Applicant addresses offsite communications for the onsite operations support center.	9.5.2	X		

	COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 9.5(9)	The COL Applicant addresses the fire response communication system requirements delineate in 10 CFR 73.55(e) such that a single act cannot remove onsite capability of calling for assistance and also as redundant system during onsite emergency crisis.	9.5.2	x		
COL 9.5(10)	The COL Applicant addresses the requirements for oil supply	9.5.4	×		
	and emergency fuel delivery.				
COL 10.2(1)	The Combined License holder Is to submit to the NRC staff for review prior to fuel load, and then implement a turbine maintenance and inspection program. The program is be consistent with the maintenance and inspection program plan activities and inspection intervals identified in subsection 10.2.3.5. The Combined License holder will have available plant specific turbine rotor test data and calculated toughness curves that support the material property assumptions in the turbine rotor analysis. Plant start-up procedure including warm-up time is to be verified based on the specific material property.	10.2.3.5		X	(1).b
COL 10.3(1)	The Combined License holder is to address preparation of an FAC monitoring program for carbon steel portions of the steam and power conversion systems that contain water or wet steam. This monitoring program is to address industry guidelines and the requirements included in Generic Letter 89-08.	10.3.6	X		
COL 10.4(1)	Circulating Water System	10.4			

	COL Information or Action Items Defined in the DCD	or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA		
COLITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational	
	The Combined License Applicant is to determine the site specific final system configuration and system design parameters for the CWS including makeup water and blowdown.	10.4.5	X .			
COL 10.4(2)	Steam Generator Blowdown System	10.4				
	Following items are to be addressed in support of the Combined License Application:	10.4.8	X			
	Waste Water System design details including site specific requirements.	10.4.8	Х			
			·			
	Nitrogen or equivalent system design for Steam Generator Drain Mode. (This is dependent on Waste water system design)	10.4.8	. X			

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		Category of COL Information Items COL Information or Action Items Defined in the DCD	s for Lumina	Categor Informatio	y of COL n Items for nt COLA		
. ",	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale	
	COL 10.4(3)	Secondary Side Chemical Injection System	·10.4		,		-
		The Combined License applicant is to address the bulk chemical storage tanks and associated transfer pumps selection for the secondary side chemical injection system.	10.4.10	X			
				·		·	
	COL 10.4(4)	Auxiliary Steam System	10.4				
					·		
		The design of the AS is site specific and is to be addressed by the Combined License Applicant.	10.4.11	х			-
		the Combined License Applicant.	·				
		· .					
	COL 11.2(1)	The COL applicant is responsible for ensuring that mobile and temporary liquid radwaste processing equipment and its interconnection to plant systems conforms to regulatory requirements and guidance such as 10 CFR 50.34a (Ref. 11.2-5), 10 CFR 20.1406 (Ref.11.2-7) and RG 1.143 (Ref. 11.2-3), respectively.	11.2.4	X .			

	Category of COL COL Information or Action Items Defined in the DCD Information Items for Luminant COLA		l l		Information Items for		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale		
1	Site-specific information of the LWMS, e.g., radioactive release points, effluent temperature, shape of flow orifices, etc., is provided in the COLA.	11.2	Х				
		:		7.7			
	The COL applicant is responsible for radioactive release due to liquid containing tank failure using site-specific parameters.	11.2	Х				
F G G	The COL applicant is to calculate doses to members of the public following the guidance of RG 1.109 (Ref 11.2-15) and RG 1.113 using site-specific parameters, and compares the doses due to the effluents with the numerical design objectives of Appendix I to 10 CFR 50 (Ref 11.2-10) and compliance requirements of 10 CFR 20.1302, 40 CFR 190.	11.2	X				
a , r	The COL applicant is to perform a site-specific cost benefit analysis to demonstrate compliance with the regulatory requirements and criteria presented in the NEI 07-11 (Ref 11.2-2)).	11.2 *	X				
t/	The COL applicant is responsible for the site-specific aspects of the process and effluent monitoring and sampling system in accordance with RG 1.21 and 4.15 (Ref. 11.3-13, 11.3-14).	11.3	Х				

, ,	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	Dette - 1	
COL IT NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale	
COL 11.3	(2) The COL applicant is responsible for assuring the fulfillment of the guidelines issued in 10 CFR 50, Appendix I regarding the offsite doses released through gaseous and liquid effluent streams.	11.3	X			
COL 11.3	(3) The COL applicant is to provide a discussion of the onsite vent stack design parameters and release point specific characteristics shall be provided.	11.3	Х			
·						
COL 11.3	(4) The COL applicant is to provide a commitment to establish and implement sampling program, for overall plant operation and the GWMS operation.			X	(1).b	
COL 11.3	(5) The COL applicant is to prepare a plan for offsite dose calculation manual in accordance with the guidance of NUREG 1301, NUREG-0133, and Regulatory Guides 1.109, 1.111, or 1.113, containing site-specific requirements.	11.3		X	(1).b	
COL 11.3	(6) The COL applicant is to calculate doses to members of the public following the guidance of RG 1.109 and RG 1.111, and compare the doses due to the effluents with the numerical design objectives of Appendix I to 10 CFR 50 and compliance requirements of 10 CFR 20.1302, 40 CFR 190.	11.3	X		· <u></u> -	

	Category of COL Information Items	s for Lumina	nt COLA		1
	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 11.3 (7)	The COL applicant is to provide further information about GWMS (e.g. location of release points, effulent temperature).	11.3.6	X		
COL 11.3 (8)	The COL applicant is to perform a site-specific cost benefit analysis to demonstrate compliance with the regulatory requirements and criteria presented in the NEI technical report.	11.3	Х	:	
COL 11.4(1)	The current design meets the waste storage requirements in accordance with ANSI/ANS-55.1. When the COL applicant desires additional storage capability beyond that which is discussed in this Tier 2 document, the COL applicant will	11.4	X		
	identify plant-specific needs for on-site waste storage and provide a discussion of on-site storage of low-level waste.				
COL 11.4(2)	The commitment to establish and implement a process control program for the use of suitable chemicals for overall plant operation and the SWMS operation, including the de-watering processing of the spent resins and filter sludge.	11.4		Х	(1).b
COL 11.4(3)	The COL applicant is to prepare a plan for the process control program describing the process and effluent monitoring and sampling program. The plan should include the proposed implementation milestones.	11.4		X	(1).b

	COL Information or Action Items Defined in the DCD		Informatio	y of COL in Items for int COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Ratio
COL 11.4(4)	The COL applicant is responsible for the identification of mobile/portable SWMS connections that are considered non-radioactive but later may become radioactive through contact or contamination with radioactive systems (i.e., a non-radioactive system becomes contaminated due to leakage, valving errors, or other operating conditions in the radioactive systems). The COL applicant is to prepare a plan to develop and use operating procedures so that the guidance and information in Inspection and Enforcement (IE) Bulletin 80-10 (Ref. 11.4-29) is followed.	11.4	X		
COL 11.4(5)	The current design provides collection and packaging of dry active wastes for offsite shipment and/or disposal. Depending on site-specific requirements, the COL applicant can send the wastes for offsite laundry facility processing and/or bring in a mobile compaction unit for volume reduction. The temporary mobile compaction subsystem is a COL item.	11.4	X		
COL 11.4(6)	The COL applicant is required to perform a site-specific cost benefit analysis to demonstrate compliance with the regulatory requirements.	.11.4	X		• -
COL 11.4(7)	The COL applicant can adopt solid waste processing facility (e.g. de-watering system, compactor for reducing waste volume) depending on site-specific requirements. These facilities are COL item.	11.4	X		
		·	,		
COL 11.5 (1)	The COL applicant is responsible for the site-specific aspects of the process and effluent monitoring and sampling system in accordance with RGs 1.21, 1.33 and 4.15 (Ref. 11.5-12, 11.5-17, 11.5-14). Furthermore, the COL applicant is responsible for assuring the fulfillment of the guidelines issued in 10 CFR 50, Appendix I (Ref. 11.5-3) regarding the offsite doses released through gaseous and liquid effluent streams.	11.5.5	X		

	Category of COL Information Items COL Information or Action Items Defined in the DCD		Categor Informatio Lumina		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 11.5(2)	The COL applicant is to prepare an offsite dose calculation manual to provide specific administrative controls and liquid and gaseous effluent source terms to limit the releases to sitespecific requirements containing a description of the methods and parameters that drive to arrive radiation instrumentation alarm setpoint. The COL applicant is to commit to follow the NEI generic template 07-09 (Ref. 11.5-30) as an alternative to providing the offsite dose calculation manual at the time of application.	11.5.5	÷	X	(1).b
COL 11.5(3)	The COL applicant is to develop a radiological and environmental monitoring program) taking into consideration local land use and census data in identifying all potential radiation exposure pathways. The program shall take into account associated radioactive materials present in liquid and gaseous effluents and direct external radiation from SSCs. The COL applicant is to follow the guidance outlined in NUREG-1301(Ref. 11.5-21), and NUREG-0133 (Ref. 11.5-18) when developing the radiological effluent monitoring program. The COL applicant is to commit to follow the NEI generic template 07-09 (Ref. 11.5-30) as an alternative to providing the radiological effluent monitoring program at the time of application.	11.5.5		X	(1).b
COL 11.5(4)	The COL applicant is to provide monitoring instruments information which are of inspection, decontamination, and replacement for site-specific matter.	11.5.5	X .		
COL 11.5(5)	The COL applicant is to provide analytical procedures and sensitivity for selected radioanalytical methods and type of sampling media for site-specific matter.	11.5.5		X	(1).a
COL 11.5(6)	The COL applicant is to perform a site-specific cost benefit analysis to demonstrate compliance with the regulatory requirements.	11.5.5	X		

COL Information or Action Items Defined in the DCD		COL Information or Action Items Defined in the DCD		Informatio Lumina	Devis	
COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale		
The COL Applicant is to demonstrate compliance with RG 1.8 (Reference 12.1-3), 8.8 (Reference 12.1-4), and 8.10 (Subsection 12.1.1.3) (Reference 12.1-5).	12.1	Х		- ,		
The COL Applicant is to provide, to the level of detail provided in RG 1.70 (Reference 12.1-7), the criteria and/or conditions under which various operating procedures and techniques is to be provided to ensure that occupational radiation exposures ALARA are implemented (Subsection 12.1.3).	12.1	Х				
The COL Applicant is to describe how the plant follows the guidance of RG 8.2 (Reference 12.1-8), 8.4 (Reference 12.1-9), 8.6 (Reference 12.1-10), 8.7 (Reference 12.1-11), 8.9 (Reference 12.1-12), 8.13 (Reference 8.13), 8.15 (Reference 12.1-14), 8.20 (Reference 12.1-15), 8.25 (Reference 12.1-16), 8.26 (Reference 12.1-17), 8.27 (Reference 12.1-18), 8.28 (Reference 12.1-19), 8.29 (Reference 12.1-20), 8.32 (Reference 12.1-21), 8.34 (Reference 12.1-22), 8.35 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-25).	12.1	X .				
The COL Applicant is to describe the implementation of specific exposure control techniques.	12.1	Х		<u> </u>		
		,				
The COL Applicant is responsible for the use of any additional contained radiation sources and airborne radioactive materials that are not identified in subsection 12.2.1 and 12.2.2, including radiation sources used for instrument calibration or radiography.	12.2		X	(1).a		
	The COL Applicant is to demonstrate compliance with RG 1.8 (Reference 12.1-3), 8.8 (Reference 12.1-4), and 8.10 (Subsection 12.1.1.3) (Reference 12.1-5). The COL Applicant is to provide, to the level of detail provided in RG 1.70 (Reference 12.1-7), the criteria and/or conditions under which various operating procedures and techniques is to be provided to ensure that occupational radiation exposures ALARA are implemented (Subsection 12.1.3). The COL Applicant is to describe how the plant follows the guidance of RG 8.2 (Reference 12.1-8), 8.4 (Reference 12.1-19), 8.6 (Reference 12.1-10), 8.7 (Reference 8.13), 8.15 (Reference 12.1-11), 8.20 (Reference 12.1-17), 8.27 (Reference 12.1-18), 8.28 (Reference 12.1-19), 8.29 (Reference 12.1-20), 8.32 (Reference 12.1-21), 8.34 (Reference 12.1-22), 8.35 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-25). The COL Applicant is to describe the implementation of specific exposure control techniques.	The COL Applicant is to demonstrate compliance with RG 1.8 (Reference 12.1-3), 8.8 (Reference 12.1-4), and 8.10 (Subsection 12.1.1.3) (Reference 12.1-5). The COL Applicant is to provide, to the level of detail provided in RG 1.70 (Reference 12.1-7), the criteria and/or conditions under which various operating procedures and techniques is to be provided to ensure that occupational radiation exposures ALARA are implemented (Subsection 12.1.3). The COL Applicant is to describe how the plant follows the guidance of RG 8.2 (Reference 12.1-8), 8.4 (Reference 12.1-19), 8.6 (Reference 12.1-10), 8.7 (Reference 12.1-11), 8.9 (Reference 12.1-11), 8.20 (Reference 12.1-13), 8.25 (Reference 12.1-16), 8.26 (Reference 12.1-17), 8.27 (Reference 12.1-18), 8.28 (Reference 12.1-19), 8.29 (Reference 12.1-20), 8.32 (Reference 12.1-21), 8.34 (Reference 12.1-22), 8.35 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-25). The COL Applicant is to describe the implementation of specific exposure control techniques.	COL INFORMATION ITEM COL Applicant is to demonstrate compliance with RG 1.8 (Reference 12.1-3), 8.8 (Reference 12.1-4), and 8.10 (Subsection 12.1.1.3) (Reference 12.1-5). The COL Applicant is to provide, to the level of detail provided in RG 1.70 (Reference 12.1-7), the criteria and/or conditions under which various operating procedures and techniques is to be provided to ensure that occupational radiation exposures ALARA are implemented (Subsection 12.1.3). The COL Applicant is to describe how the plant follows the guidance of RG 8.2 (Reference 12.1-19, 8.6 (Reference 12.1-12), 8.13 (Reference 12.1-11), 8.9 (Reference 12.1-12), 8.13 (Reference 12.1-11), 8.26 (Reference 12.1-12), 8.27 (Reference 12.1-13), 8.28 (Reference 12.1-12), 8.29 (Reference 12.1-12), 8.34 (Reference 12.1-12), 8.35 (Reference 12.1-12), 8.36 (Reference 12.1-12), 8.36 (Reference 12.1-12), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-25). The COL Applicant is to describe the implementation of specific exposure control techniques.	COL INFORMATION ITEM COL Applicant is to demonstrate compliance with RG 1.8 (Reference 12.1-3), 8.8 (Reference 12.1-4), and 8.10 (Subsection 12.1.1.3) (Reference 12.1-5). The COL Applicant is to provide, to the level of detail provided in RG 1.70 (Reference 12.1-7), the criteria and/or conditions under which various operating procedures and techniques is to be provided to ensure that occupational radiation exposures ALARA are implemented (Subsection 12.1.3). The COL Applicant is to describe how the plant follows the guidance of RG 8.2 (Reference 12.1-13), 8.4 (Reference 12.1-19), 8.7 (Reference 12.1-11), 8.7 (Reference 12.1-16), 8.26 (Reference 12.1-17), 8.27 (Reference 12.1-16), 8.26 (Reference 12.1-17), 8.27 (Reference 12.1-18), 8.28 (Reference 12.1-19), 8.36 (Reference 12.1-20), 8.35 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-23), 8.36 (Reference 12.1-24), and 8.38 (Reference 12.1-25). The COL Applicant is to describe the implementation of specific exposure control techniques.		

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Category of COL Information Items for Luminant COLA								
COL Information or Action Items Defined in the DCD			n Items for					
COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale				
The COL Applicant is responsible for the use of portable instruments, and the associated training and procedures, to accurately determine the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident, in accordance with the requirements of 10 CFR 50.34(f)(2)(xxvii) and the criteria in Item III.D.3.3 of NUREG-0737.	12.3	X						
The COL Applicant is to provide more detailed air controlling process and airborne radioactivity monitor in Figure 12.3-11.	12.3	X						
For multiunit plants, the COL Applicant is to provide estimated annual doses to construction workers in a new unit construction area, as a result of radiation from onsite radiation sources from the existing operating plant(s).	12.3	X						
The COL Applicant is to provide a description of the corporate or home office organization, its functions and responsibilities, and the number and qualifications of personnel. The COL Applicant directs attention to activities that include facility design, design review, design approval, construction management, testing, and operation of the plant.	13.1	Х						
The COL Applicant is to develop a description of past experience in the design, construction, and operation of nuclear power plants and past experience in activities of similar scope and complexity.	13.1	X						
	The COL Applicant is responsible for the use of portable instruments, and the associated training and procedures, to accurately determine the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident, in accordance with the requirements of 10 CFR 50.34(f)(2)(xxvii) and the criteria in Item III.D.3.3 of NUREG-0737. The COL Applicant is to provide more detailed air controlling process and airborne radioactivity monitor in Figure 12.3-11. For multiunit plants, the COL Applicant is to provide estimated annual doses to construction workers in a new unit construction area, as a result of radiation from onsite radiation sources from the existing operating plant(s). The COL Applicant is to provide a description of the corporate or home office organization, its functions and responsibilities, and the number and qualifications of personnel. The COL Applicant directs attention to activities that include facility design, design review, design approval, construction management, testing, and operation of the plant. The COL Applicant is to develop a description of past experience in the design, construction, and operation of nuclear power plants and past experience in activities of similar scope	COL INFORMATION ITEM The COL Applicant is responsible for the use of portable instruments, and the associated training and procedures, to accurately determine the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident, in accordance with the requirements of 10 CFR 50.34(f)(2)(xxvii) and the criteria in Item III.D.3.3 of NUREG-0737. The COL Applicant is to provide more detailed air controlling process and airborne radioactivity monitor in Figure 12.3-11. 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The COL Applicant is to develop a description of past experience in the design, construction, and operation of nuclear power plants and past experience in activities of similar scope	COL Information or Action Items Defined in the DCD COL INFORMATION ITEM COL Applicant is responsible for the use of portable instruments, and the associated training and procedures, to accurately determine the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident, in accordance with the requirements of 10 CFR 50.34(f)(2)(xxvii) and the criteria in Item III.D.3.3 of NUREG-0737. The COL Applicant is to provide more detailed air controlling process and airborne radioactivity monitor in Figure 12.3-11. For multiunit plants, the COL Applicant is to provide estimated annual doses to construction workers in a new unit construction area, as a result of radiation from onsite radiation sources from the existing operating plant(s). The COL Applicant is to provide a description of the corporate or home office organization, its functions and responsibilities, and the number and qualifications of personnel. The COL Applicant is to activities that include facility design, design review, design approval, construction management, testing, and operation of the plant. The COL Applicant is to develop a description of past experience in the design, construction, and operation of nuclear power plants and past experience in activities of similar scope	COL INFORMATION ITEM COL Applicant is responsible for the use of portable instruments, and the associated training and procedures, to accurately determine the airborne iodine concentration in areas within the facility where plant personnel may be present during an accident, in accordance with the requirements of 10 CFR 50.34(f)(2)(xxvii) and the criteria in Item III.D.3.3 of NUREG-0737. The COL Applicant is to provide more detailed air controlling process and airborne radioactivity monitor in Figure 12.3-11. For multitunit plants, the COL Applicant is to provide estimated annual doses to construction workers in a new unit construction area, as a result of radiation from onsite radiation sources from the existing operating plant(s). The COL Applicant is to provide a description of the corporate or home office organization, its functions and responsibilities, and the number and qualifications of personnel. The COL Applicant directs attention to activities that include facility design, design review, design approval, construction management, testing, and operation of the plant. The COL Applicant is to develop a description of past experience in the design, construction, and operation of nuclear power plants and past experience in activities of similar scope				

	Category of COL Information Items for Luminant COLA								
		COL Information or Action Items Defined in the DCD	Catego Informatio Lumina						
.*	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale			
	COL 13.1(3)	The COL Applicant is to describe its management, engineering, and technical support organizations. The description includes organizational charts for the current headquarters and engineering structure and any planned modifications and additions to those organizations that reflect the added functional responsibilities with the nuclear plant.	13.1	X					
				•					
	COL 13.1(4)	The COL Applicant is to develop a description of the organizational arrangement is designated as the responsibility of a COL Applicant. This description shows how the added functional responsibilities associated with the addition of the nuclear plant to the Applicant's power generation capacity are delegated and assigned (or expected to be assigned to each of the working or performance-level organizational units to implement these responsibilities). The description includes organizational charts reflecting the current corporate structure and the specific working- or performance-level organizational units that provide technical support for the operation.	13.1.1.2	X					
	COL 13.1(5)	The COL Applicant is to develop the description of the general qualification requirements in terms of educational background and experience COL requirements for positions or classes of positions depicted in the organizational arrangement.	13.1.1.3	Х					
·									
	COL 13.1(6)	The COL Applicant is to develop the organizational structure for the plant organization, its personnel responsibilities and authorities, and operating shift crews.	13.1.2	X					
	COL 13.1(7)	The COL Applicant is to develop the description of education, training, and experience requirements established for management, operating, technical, and maintenance positions for the operating organization.	13.1.3	X					

	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 13.2(1)	The COL Applicant is to develop the training program description.	13.2.1	X		
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COL 13.2(2)	The COL Applicant is to in accordance with NUREG-0800, Section 13.2.1.I.3 (Ref. 13.2-4), develop training programs for reactor operators.	13.2.1.1	X		
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COL 13.2(3)	The COL Applicant is to In accordance with NUREG-0800, Section 13.2.2.1.3 (Ref. 13.2-4), develop training programs for non-licensed plant staff.	13.2.1.1	Х		
COL 13.2(4)	The COL Applicant is to develop training programs. These programs include a chart, which shows the schedule of each part of the training program for each functional group of employees in the organization in relation to the schedule for preoperational testing, expected fuel loading, and expected time for examinations prior to plant criticality for licensed operators.	13.2.1.2	X		
COL 13.2(5)	The COL Applicant is to determine the extent to which portions of applicable NRC guidance is used in the facility training program or the justification of exceptions.	13.2.2	X		

COL Information or Action Items Defined in the DCD			Category of COL Information Items for Luminant COLA		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 13.3(1)	The COL Applicant referencing the US-APWR certified design is to develop interfaces of design features with site specific designs and site parameters.	13.3	X		
COL 13.3(2)	The COL Applicant referencing the US-APWR certified design is to develop a comprehensive emergency plan as a physically separate document.	13.3.1	Х		• .
COL 13.3(3)	The COL Applicant referencing the US-APWR certified design is to develop an emergency classification and action level scheme.	13.3.1	Х		
OL 13.3(4)	The COL Applicant referencing the US-APWR certified design is to develop the security-related aspects of emergency planning.	13.3.1	X		
		·			
COL 13.3(5)	The COL Applicant referencing the US-APWR certified design is to develop a multi-unit site interface plan depending on the location of the new reactor on, or near, an operating reactor site with an existing emergency plan.	13.3.2	X		

	Category of COL Information Items	for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 13.3(6)	The COL Applicant referencing the US-APWR certified design is to develop an emergency planning inspections, tests, analyses, and acceptance criteria.	13.3.3	X	-	
COL 13.3(7)	The COL Applicant referencing the US-APWR certified design is to develop the description of the operation support center.	13.3	X		
COL 13.4(1)	The COL Applicant referencing the US-APWR certified design is to develop a description and schedule for the implementation of operational programs. The COL Applicant is to "fully describe" the operational programs as defined in SECY-05-0197 (Ref. 13.4-1) and provide commitments for the implementation of operational programs required by regulation. In some instances, programs may be implemented in phases. The COL Applicant is to include the phased implementation milestones in their submittal.	13.4	X		
COL 13.5(1)	The COL Applicant is to develop administrative procedures describing administrative controls over activities that are important to safety for the operation of a facility.	13.5.1.1		х	(1).b
COL 13.5(2)	The COL Applicant is to develop operating and maintenance procedures.	13.5.2		X	(1).b
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<u> </u>	Category of COL Information Items	for Lumina		-v of CO1	
	COL Information or Action Items Defined in the DCD	Category of COL Information Items for Luminant COLA		 	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 13.5(3)	The COL Applicant is to develop procedures performed by licensed operators in the control room. Operating procedures that are used by the operating organization to ensure routine operating, off-normal, and emergency activities are conducted in a safe manner are described. The plan includes the implementation of these procedures (Ref. 13.5-3).	13.5.2.1		X	(1).b
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COL 13.5(4)	The COL Applicant is to describe the different classifications of procedures the operators will use in the control room and locally in the plant for operations, the operating organization responsible for maintaining the procedures, and the general format and content of the different classifications.	13.5.2.1	Х		
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COL 13.5(5)	The COL Applicant is to describe the program for developing operating procedures.	13.5.2.1	X	<u>'</u>	
COL 13.5(6)	The COL Applicant is to describe the program for developing and implementing emergency operating procedures.	13.5.2.1	X		
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COL 13.5(7)	The COL Applicant is to describe the classifications of maintenance and other operating procedures, the operating organization group or groups responsible for following each class of procedure, and the general objectives and character of each class and subclass.	13.5.2.2	X.		

	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Ration
COL 13.6(1)	The COL Applicant referencing the US-APWR certified design is to develop the security assessment, plant overall security plan, an implementation schedule for the security programs, and proposed inspection, test, analysis, and acceptance criteria for physical security hardware.	13.6.1	х .		
COL 13.7(1)	The COL Applicant referencing the US-APWR certified design is to develop the description of the operating and construction (upon approval of revised 10 CFR 26) plant fitness-for-duty programs.	13.7	X .		
COL 14.2(1)	The ITP described in this chapter only addresses those systems and components within the US-APWR. The COL applicant is responsible for describing the program for the testing of other components and systems that are site-specific. Testing of these items demonstrates that they meet requirements as defined in the Final Safety Analysis Report (FSAR). [14.2.1]		X		
COL 14.2(2)	The COL applicant provides a description of the organization(s) responsible for all phases of the ITP, and provide a description of the administrative controls that assure that experienced and qualified supervisory personnel and other principal participants are responsible for managing, developing, and conducting the ITP. [14.2.2]	14.2.2	X		
COL 14.2(3)	The COL applicant provides the process used to develop test specifications and test procedures. [14.2.3]	14.2.3	X .	X	(1).b

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	Category of COL Information Items	for Lumina	nt COLA					
	Category of COL COL Information or Action Items Defined in the DCD Information Items for Luminant COLA		Information Items for		fined in the DCD Information Items for		Information Items for	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale			
COL 14.2(4)	The COL applicant develops a description of the administrative controls that govern the conduct of test program. These controls include requirements that govern the activities of the startup organization and their interface with other organizations. [14.2.4]	14.2.4	X					
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COL 14.2(5)	The COL applicant develops a description of the specific	14.2.5	X					
	controls for the review, evaluation, and approval of test results of the program by appropriate personnel and/or organizations, including the methods and schedules for approval of test data for each major phase. [14.2.5]				·			
COL 14.2(6)	The COL applicant develops a description of the specific controls for the preparation and retention of test records. [14.2.6]	14:2.6	X					
COL 14.2(7)	The COL applicant provides a schedule for the development of plant procedures that assures required procedures are available for use during preoperational and startup testing. [14.2.9]	14.2.9		Х	(1).c			
				. ,				
COL 14.2(8)	The COL applicant provides an event-based schedule, relative to fuel loading, for conducting each major phase of the test program. For multiunit sites, the COL applicant discusses the effects of overlapping initial test program schedules on	14.2.11	-	Х	(1).c			
	organizations and personnel participating in each ITP. [14.2.11]							

	COL Information or Action Items Defined in the DCD		Categor Informatio	y of COL n Items for nt COLA	·
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 14.2(9)	The COL applicant identifies and cross-references each test or portion of a test required to be completed prior to fuel load which satisfies ITAAC requirements. [14.2.11]	14.2.11	X		
COL 14.2(10)	The COL applicant is responsible for the testing outside scope of this DCD in accordance with the test criteria described in subsection 14.2.1. And testing of the following is required. [14.2.12]	14.2.12	X		
	Personnel monitors and radiation survey instruments				
COL 14.3(1)	The COL applicant provides the ITAAC for the site specific portion of the plant systems specified in Subsection 14.3.5, Interface Requirements. [14.3.4.7]	14.3.4.7	Х		
COL 14.3(2)	The COL applicant provides proposed ITAAC for the facility's emergency planning not addressed in the DCD in accordance with RG 1.206 (Reference 14.3-1) as appropriate. [14.3.4.10]	14.3.4.10	X		

Γ	Category of COL Information Items for Luminant COLA						
		COL Information or Action Items Defined in the DCD		Category of COL Information Items for Luminant COLA			
	COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale	
ļ	COL 14.3(3)	The COL applicant provides proposed ITAAC for the facility's physical security hardware not addressed in the DCD in accordance with RG 1.206 (Reference 14.3-1) as appropriate. [14.3.4.12]	14.3.4.12	X			
	COL 16.3.0.8(1)	LCO 3.0.8 and associated Bases for snubber evaluation are to be confirmed.	16.3.0.8	Х			
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	COL 16.3.7.9(1	LCO 3.7.9 and associated Bases for the Ultimate Heat Sink based on plant specific design are to be developed.	16.3.7.9	X			
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	COL 16.4.1(1)	The site specific information for site location is to be.	16.4.1	х			
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	COL 16.4.3.1(1)	The site specific boron concentration is to be provided.	16.4.3.1	Χ .			
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	Category of COL Information Iter COL Information or Action Items Defined in the DCD	· ·	Catego: Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Ration
COL 16.5.1.1(1)	The titles for members of the unit staff are to be specified .	16.5.1.1	Х		
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COL 16.5.2.1(1)	The titles for members of the unit staff are to be specified.	16.5.2.1	Х		
COL	The titles for members of the unit staff are to be specified.	16.5.2.2	X		
16.5.2.2(2)					
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COL 16.5.3.1(1)	Minimum qualification for unit staff is to be specified.	16.5.3.1	Х		
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COL 16.5.5.1(1)	The titles for members of the unit staff that approve the Offsite Dose Calculation Manual are to be specified.	16.5.5.1	X		
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	Category of COL Information Items COL Information or Action Items Defined in the DCD		Categor Informatio Lumina		
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 16.5.5.18(1)	All of the requirements for CRMP specified in NEI 06-09 are to be satisfied.	16.5.5.18	Х		
COL (6.5.6.1(1)	The format of the Annual Radiological Environmental Operating Report is to be specified based on "the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979" or another format.	16.5.6.1	X		
COL 33.7.10(1)	The types of uncontrolled release materials from that the MCREFS provides a protected environment are to be specified.	16.B3.7.10	x , ,		
COL 17.4(1)	The COL Applicant shall be responsible for the development	17.4.9	<u> </u>		
	and implementation of the Phases II and III of the D-RAP. In the Phase II, the plant's site-specific information should be introduced to the D-RAP process and the site-specific SSCs should be combined with the US-APWR design SSCs into a list for the specific plant. In the Phase III, procurement, fabrication, construction, and test specifications for the SSCs within the scope of the RAP should ensure that significant assumptions, such as equipment reliability, are realistic and achievable. The QA requirements should be implemented during the procurement, fabrication, construction, and pre-operation testing of the SSCs within the scope of the RAP.				
COL 17.4(2)	The COL Applicant shall be responsible for the development and implementation of the O-RAP, in which the RAP activities should be integrated into the existing operational program (i.e., Maintenance Rule, surveillance testing, in-service inspection, inservice testing, and QA). The O-RAP should also include the process for providing corrective actions for design and operational errors that degrade non-safety-related SSCs within the scope of the RAP.	17.4.9	X		

	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 17.5(1)	The COL applicant shall develop and implement the Construction and Operational QAP that also covers the activities described in Section 17.5.	17.5.4		×	(1).b
COL 18.1(1)	The COL Applicant is responsible for establishing an NRC-approved US-APWR HFE program that maintains the certified US-APWR HFE design in the site-specific as-built plant.	18.1	X		
COL 18.1(2)	The COL Applicant referencing the US-APWR certified design is responsible for designing the EOF, including specification of the location, in accordance with the US-APWR HFE program.	18.1	x		
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COL 18.3(1)	The COL Applicant referencing the US-APWR certified design is to update the functional requirements analysis and function allocation to reflect the site-specific functions that are outside the scope of the certified design.	18.3	X		·
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COL 18.3(2)	The COL Applicant, referencing the US-APWR certified design, is to maintain the functional allocation report by identifying changes that impact the FA in the COL Applicant's HFE issues tracking system.	18.3	X		

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	Category of COL Information Items COL Information or Action Items Defined in the DCD	s for Luminai	Categor	y of COL n Items for	
COLITEM	COL INFORMATION ITEM	DCD	Luminar COL Applicant	COL Holder	Rationale
NO.	No.	SUBSECTION	Item	Item	
COL 18.4(1)	The COL Applicant referencing the US-APWR design is to update the task analysis to reflect the site-specific tasks that are outside the scope of the US-APWR design.	18.4	X		
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COL 18.4(2)	The COL Applicant referencing the US-APWR design is to document the scope and responsibility of each facility function, considering the assumptions and results of the site-specific asbuilt task analysis.	18.4	Х		
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COL 18.4(3)	The COL Applicant, referencing the US-APWR design, is to maintain the task analysis report by identifying changes that impact the task analysis in COL Applicant's HFE Issues Tracking system.	18.4	X		,
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COL 18.5(1)	The COL Applicant developed plant staffing and personnel qualifications is to address applicable requirements of NUREG-0800, Section 13.1 as associated with the site-specific as-built plant.	18.5	X		
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COL 18.5(2)	The COL Applicant is to address non-licensed operator staffing requirements for the site-specific plant design.	18.5	X		
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COL Information or Action Items Defined in the DCD			Informatio	COLA Category of COL Information Items for Luminant COLA	
COL ITEM	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rationale
COL 18.6(1)	The COL Applicant referencing the US-APWR design is to update the final HRA/PRA influence on HFE design to reflect the site-specific as-built design and document the resulting changes to the HFE design.	18.6	X .		
COL 18.6(2)	The COL Applicant is to maintain the PRA/HRA report by identifying changes that impact the PRA/HRA in the COL Applicant's HFE issues tracking system.	18.6	Х		
COL 18.7(1)	The COL Applicant is to control the site-specific as-built plant HSI design to address applicable requirements and demonstrate that the site-specific as-built plant HSI design meets the applicable acceptance criteria.	18.7	X		·
COL 18.8(1)	The COL Applicant is responsible for developing all plant procedures, as defined in Section 13.5.3.	18.8		X	. 1(b)
COL 18.9(1)	The COL Applicant is responsible for the training program, as described in Section 13.2.3.	18.9	X		

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COL ITEM NO. COL INFORMATION ITEM COL SUBSECTION The COL Applicant is to be responsible for documenting the 18.10		COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
18.10(1) V&V program and final V&V results for the site-specific as-built plant.	4	COL INFORMATION ITEM		Applicant	1 1	Rational
the impact of plant modifications on Human Factors issues. The COL Applicant is to be responsible for establishing an HFE design control program that maintains the US-APWR HFE design in the site-specific as-built plant. COL The COL Applicant is to be responsible for comparing the final (as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. COL The COL Applicant is to be responsible for establishing a human performance monitoring program that identifies and		V&V program and final V&V results for the site-specific as-built	18.10	X .		
the impact of plant modifications on Human Factors issues. The COL Applicant is to be responsible for establishing an HFE design control program that maintains the US-APWR HFE design in the site-specific as-built plant. The COL Applicant is to be responsible for comparing the final (as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. COL The COL Applicant is to be responsible for establishing a human performance monitoring program that identifies and						
design control program that maintains the US-APWR HFE design in the site-specific as-built plant. The COL Applicant is to be responsible for comparing the final (as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. The COL Applicant is to be responsible for establishing a 18.12 X (1).b human performance monitoring program that identifies and		The COL Applicant is to expand the V&V program to address the impact of plant modifications on Human Factors issues.	18.10	X		
18.11(1) design control program that maintains the US-APWR HFE design in the site-specific as-built plant. COL The COL Applicant is to be responsible for comparing the final (as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. COL The COL Applicant is to be responsible for establishing a human performance monitoring program that identifies and						
18.11(1) design control program that maintains the US-APWR HFE design in the site-specific as-built plant. COL The COL Applicant is to be responsible for comparing the final (as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. COL The COL Applicant is to be responsible for establishing a human performance monitoring program that identifies and] ,			
(as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or justified. COL The COL Applicant is to be responsible for establishing a human performance monitoring program that identifies and		design control program that maintains the US-APWR HFE	18.11		×	(1).b
18.12(1) human performance monitoring program that identifies and		(as-built in the plant) HSIs, procedures, and training with the detailed design description to verify that they conform to the design that resulted from the HFE design process and V&V activities. Any identified discrepancies are to be corrected or	18.11		X	(1).b
18.12(1) human performance monitoring program that identifies and		•				
		human performance monitoring program that identifies and	18.12		×	(1).b

	COL Information or Action Items Defined in the DCD		Informatio	ry of COL on Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder Item	Rational
COL 19.3(1)	The COL Applicant will continue to provide for risk-managed technical specifications, RAP, etc.	19.3	Х		
COL 19.3(2)	A program to implement 10 CFR 50.65, the Maintenance Rule, is the responsibility of the COLA.	19.3	Х		
COL 19.3(3)	A reactor oversight process is the responsibility of the COL Applicant.	19.3	X		
COL 19.3(4)	The PRA will be updated as necessary to assess specific site information and associated site-specific external events (high winds and tornadoes, external floods, transportation, and nearby facility accidents).	19.3	X		
COL 19.3(5)	When the design activity progresses and specific design data becomes available, SSC fragilities shall be updated during the COLA phase to reflect specific design data.	19.3	X		

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	Category of COL Information Item	ns for Lumina	nt COLA		
	COL Information or Action Items Defined in the DCD		Informatio	y of COL n Items for nt COLA	
COL ITEM NO.	COL INFORMATION ITEM	DCD SUBSECTION	COL Applicant Item	COL Holder	Rationale
COL 19.3(6)	The COL applicant will develop an accident management program based on the U.S. industry initiated and coordinated program in this area and related information from efforts on an international front.	19.3		X	(1).b
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