Project Name: Horizon West Transmission's Ironwood Transmission Line
Reviewer(s): Seth Myers
Initial Review Date: 11/5/2025

PEA Checklist Section: 5.3 Air Quality
ECORP Project Number: 2020-196.03

Section #	Item Description	Does the PEA include this item? Yes	No	N/A	Notes	Applicant Response Date:	CPUC 2nd Review Item Resolved? Yes	No	Notes	Applicant 2nd Response Date:	CPUC 3rd Review Item Resolved? Yes	No
5.3.1 Environmental Setting												
5.3.1.1	**Air Quality Plans.** Identify and describe all applicable air quality plans and attainment areas. Identify the air basin(s) for the Project Area. If the Project is located in more than one attainment area and/or air basin, provide the extent in each attainment area and air basin.	☑	☐	☐	Chapter 5.3 adequately identifies and describes all applicable air quality plans and attainment status for both applicable air basins on page 5.3-4.		☐	☐			☐	☐
5.3.1.2	**Air Quality.** Describe existing air quality in the Project Area.											
	a) Identify existing air quality exceedance of National Ambient Air Quality Standards and California Ambient Air Quality Standards in the air basin.	☑	☐	☐	This data is adequately provided on page 5.3-4.		☐	☐			☐	☐
	b) Provide the number of days that air quality in the area exceeds state and federal air standards for each criteria pollutant that where air quality standards are exceeded.	☑	☐	☐	This data is adequately provided in Table 5.3-2 and Table 5.3-3 on page 5.3-5.		☐	☐			☐	☐
	c) Provide air quality data from the nearest representative air monitoring station(s).	☑	☐	☐	This data is adequately provided in Table 5.3-2 and Table 5.3-3 on page 5.3-5.		☐	☐			☐	☐
5.3.1.3	**Sensitive Receptor Locations.** Identify the location and types of each sensitive receptor locations within 1,000 feet of the Project Area. Provide GIS data for sensitive receptor locations. Sensitive Receptor locations may include hospitals, schools, and day care centers, and such other locations as the air district board or California Air Resources Board may determine (California Health and Safety Code § 42705.5(a)(5)).	☐	☑	☐	No GIS data was received. Revise Table 5.3-4 to (1) include the street name for each identified sensitive receptor location and (2) assign a unique receptor identification number. Update Figure 5.3-1 accordingly to display the corresponding receptor numbers.		☐	☐			☐	☐
5.3.2 Regulatory Setting												
5.3.2.1	**Regulatory Setting.** Identify applicable federal, state, and local laws, policies, and standards regarding air quality.	☑	☐	☐	This information is adequately provided on pages 5.3-8 through 5.3-12.		☐	☐			☐	☐
5.3.2.2	**Air Permits.** Identify and list all necessary air permits.	☑	☐	☐	This information is adequately provided on page 5.3-12.		☐	☐			☐	☐
5.3.3 Impact Questions												
5.3.3.1	**Impact Questions.** The impact questions include all air quality impact questions in the current version of CEQA Guidelines, Appendix G.	☑	☐	☐	The appropriate impact questions are included.		☐	☐			☐	☐
5.3.3.2	Additional CEQA Impact Questions: None.	☑	☐	☐			☐	☐			☐	☐
5.3.4 Impact Analysis												
5.3.4.1	**Impact Analysis.** Provide an impact analysis for each checklist item identified in CEQA Guidelines Appendix G for this resource area and any additional impact questions listed above.	☑	☐	☐	An impact analysis for each checklist item has been prepared.		☐	☐			☐	☐
The following information will be presented in the PEA or a technical Appendix to support the air quality impact analysis:												
5.3.4.2	**Air Quality Emissions Modeling.** Model project emissions using the most recent version of CalEEMod and/or a current version of other applicable modeling program.	☑	☐	☐	The most recent version of CalEEMod was employed.		☐	☐			☐	☐
	Provide all model input and output data sheets in Microsoft Excel format to allow CPUC to evaluate whether Project data was entered into the modeling program accurately. The assumptions used in the air quality modeling must be consistent with all PEA information about the Project's schedule, workforce, and equipment.	☐	☑	☐	The third paragraph on Page 5.3-15 states that the Swiss Federal Office of Civil Aviation Guidance on the Determination of Helicopter Emissions is sourced for both "emission factors and methodology" to quantify Project helicopter emissions. Since this is a unique emission source, provide such information in this paragraph. Specifically, identify (1) the type of helicopters used for modeling, (2) number of hours in flight assumed daily, and (3) number of take off/landing events assumed daily. Appendix B, Emissions Calculations, does not disclose the helicopter emission factors for the varying activities. Clearly identify the emission factors used for take off and landing events in addition to cruising in Appendix B. A review of Appendix B, Emissions Calculations, shows that EMFAC2021 was used to calculate on-road mobile emissions. Disclose this in the "Air Quality Methodology" discussion.		☐	☐			☐	☐
	The following information will be addressed in the emissions modeling, Air Quality Appendix, and PEA:											
	a) Quantify the expected emissions of criteria pollutants from all project-related sources. Quantify emissions for both construction and operation (e.g., compressor equipment).				The third paragraph on Page 5.3-15 states that "It is anticipated that construction would involve the use of two light duty helicopters during the Conductor and Wires Installation construction phase, as well as the use of one heavy duty helicopter during the Structure Installation construction phases. While it is unlikely that the use of all three helicopters (two light duty and one heavy duty) would occur at the same time in the same region, it was assumed that the two light duty helicopter would operate simultaneously on any given day and be within proximity of each other (although likely spread out over a great distance across the transmission line pathway)." Amend this sentence to disclose the most conservative scenario of Project helicopter use in a single day, regardless of proximity. Update Table 5.3-8, Maximum Daily Local Construction Emissions for California Project Components, and Table 5.3-9, Annual Local Construction Emissions for Arizona Project Components accordingly. While challenging for an 84-mile linear Project, expand the fourth paragraph on page 5.3-15 to provide a comprehensive description of the anticipated construction sequence, schedule, and equipment usage. The narrative should clearly describe the construction parameters and assumptions applied in the emissions modeling analysis. □						

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					Strike the second to last sentence in the fourth paragraph on page 5.3-15 as follows: "The crews were analyzed individually because they are spaced far enough apart along the transmission line (approximately 0.25 miles or greater) such that any emissions from the varying crews occurring on any given day would not combine to cause a potential exceedance of the NAAQS at any given location." While it is agreed that due to the linear nature of the Project, localized health risk impacts would not occur, the maximum daily emissions generated by the Project within the Salton Sea Air Basin must be compared against the Imperial County Air Pollution Control District daily significance thresholds in order to evaluate regional air quality impacts. The National Ambient Air Quality Standards (NAAQS) are concentration standards and whether two or more crews "combine" to exceed a standard depends on how emissions disperse, not just on linear distance between crews. CEQA analyses should be conservative or demonstrate why a less conservative approach is justified with quantitative analysis. An arbitrary separation of 0.25 mile without justification is not sufficient. Update Table 5.3-8, Maximum Daily Local Construction Emissions for California Project Components, accordingly. Update the first paragraph under Table 5.3-8 accordingly.							
		☐	☑	☐	See the previous two comments and revise or omit the first and second paragraphs on page 5.3-16.		☐	☐			☐	☐
					Appendix B, Emissions Calculations, does not appear to adequately account for worker or hauling trips over unpaved roads, though the fifth paragraph on page 5.3-16 states that it was assumed that only 60 percent of total trips would be on paved roads, and thus 40 percent on unpaved roads. The fugitive dust emission rates (PM10) from travel on unpaved roads should be substantially greater than emissions rates from travel on paved roads. A review of Appendix B actually shows slightly higher emission rates from travel on paved roads. First, update this paragraph to provide an explanation of why it is assumed 60 percent of total trips would be on paved roads and 40 percent on unpaved roads. Next, either use CalEEMod to calculate emissions from unpaved roads, instead of EMFAC, or calculate fugitive dust emissions for travel on unpaved roads using the methodology described in Section 13.2.2 of USEPA's AP-42, as shown in the cell below: Where: EFunpaved = unpaved road dust emission factor (g/mile). k = particle size multiplier for particle size range. The AP-42 default values are 816.47 g/VMT for PM2.5 and 81.65 g/VMT for PM10. s = surface material silt content (%). M = surface material moisture content (%). 						
					$EFunpaved = \left(k\left(\frac{s}{12}\right)1\left(\frac{S}{30}\right)0.5 \div \left(\frac{M}{0.5}\right)0.2 - C\right) \times (1 - P \div 365)$						
					The first paragraph on page 5.3-25 describes the fact that the use of helicopters may be used periodically during Project operations. In order to provide greater disclosure to the analysis and to identify that operational emissions would not exceed regional significance thresholds, develop and describe a reasonable scenario for a day of operational helicopter use and calculate and disclose the emissions from take off/landing events as well as cruising.						
	b) Identify manufacturer's specifications for all proposed new emission sources. For proposed new, additional, or modified compressor units, include the horsepower, type, and energy source.	☑	☐	☐	This information is included, as applicable.		☐	☐			☐	☐
	c) Describe any emission control systems that are included in the air quality analysis (e.g., installation of filters, use of EPA Tier II, III, or IV equipment, use of electric engines, etc.).	☑	☐	☐	This information is included, as applicable.		☐	☐			☐	☐
	d) When multiple air basins may be affected by the Project, model air emissions within each air basin and provide a narrative (supported by calculations) that clearly describes the assumptions around the Project activities considered for each air basin. Provide modeled emissions by attainment area or air basin (supported by calculations).	☐	☑	☐	See Comment for 5.3.4.2 Air Quality Emissions Modeling above, starting with text "The third paragraph on Page 5.3-15 states..." While challenging for an 84-mile linear Project, expand the fourth paragraph on page 5.3-15 to provide a comprehensive description of the anticipated construction sequence, schedule, and equipment usage. The narrative should clearly describe the construction parameters and assumptions applied in the emissions modeling analysis.		☐	☐			☐	☐
5.2.4.3	**Air Quality Emissions Summary.** Provide a table summarizing the air quality emissions for the project and applicable thresholds for each applicable attainment area. Include a summary of uncontrolled emissions (prior to application of any APMs) and controlled emissions (after application of APMs). Clearly identify the assumptions that were applied in the controlled emissions estimates.	☐	☑	☐	See Comment above. Currently the assumptions that were applied in the controlled emissions estimates are not clearly identified.		☐	☐			☐	☐
5.2.4.4	Health Risk Assessment. Complete a Health Risk Assessment when air quality emissions have the potential to lead to human health impacts. If health impacts are not anticipated from project emissions, the analysis should clearly describe why emissions would not lead to health impacts.	☐	☑	☐	Due to the linear nature of Project construction, where pollutant-generated activities would not occur at any single location for long periods, a Health Risk Assessment is not necessary.		☐	☐			☐	☐
					The last sentence of page 5.3-25 states that, "The nearest sensitive receptor to the Proposed Project is a single-family residence located south of the intersection of Tubbs Road and Vencii Road." However, Table 5.3-4 on page 5.3-6 of the chapter identifies several other residential receptors within 0 feet of Project construction. Revise this sentence to include the locations of all residential receptors identified as within 0 feet in Table 5.3-4.		☐	☐			☐	☐
					The fourth paragraph on page 5.3-26 states, "Approximately six miles of the Proposed Project is located in Arizona; however, no sensitive receptors are situated within 1,000 feet of project construction." However, Figure 5.3-1 of the chapter identifies at least two residential receptors with 1,000 feet, contradicting this statement. I review of aerial imagery does show residential receptors southeast of the North Gila Station. Revise this statement to reflect this.		☐	☐			☐	☐
5.3.5 CPUC Draft Environmental Measures *(from Attachment 4)*												

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	Dust Control During Construction. The Applicant shall implement measures to control fugitive dust in compliance with all local air district(s) standards. Dust control measures shall include the following at a minimum: - All exposed surfaces with the potential of dust-generating shall be watered or covered with coarse rock to reduce the potential for airborne dust from leaving the site. - The simultaneous occurrence of more than two ground disturbing construction phases on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. - Cover all haul trucks entering/leaving the site and trim their loads as necessary - Use wet power vacuum street sweepers to sweep all paved access road, parking areas, staging areas, and public roads adjacent to project sites on a daily basis (at minimum) during construction. The use of dry power sweeping is prohibited. - All trucks and equipment, including their tires, shall be washed off prior to leaving project sites. - Apply gravel or non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at project sites. - Water and/or cover soil stockpiles daily. - Vegetative ground cover shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. - All vehicle speeds shall be limited to fifteen (15) miles per hour or less on unpaved areas. - Implement dust monitoring in compliance with the standards of the local air district. - Halt construction during any periods when wind speeds are in excess of 50 mph.	☑	☐	☐	It is noted on page 5.3-30 that any construction dust control measures required under local air district regulations will be implemented.		☐	☐			☐	☐