Appendix D12: CPV Sentinel ("CPVS") 850 MW Project Riverside County, CA

Environmental Topic	Impact(s)	Mitigation	Conclusion
Aesthetics (Visual Resources) – Construction	 PROJECT SPECIFIC: During construction, the visual intrusion of construction equipment, materials, and personnel would constitute an adverse but not significant impact, because it would occur only for a relatively short time and would not result in a long-term landscape change following site restoration. CUMULATIVE: The project is not anticipated to have cumulative impacts on visual resources. 	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted. However, design features were incorporated into the proposed project to reduce potential impacts.	Less than significant.
Aesthetics (Visual Resources) - Operation	 PROJECT SPECIFIC: In the context of the surrounding industrial landscape, the proposed project would not represent a significant impact on landscape character or scenic quality. Modeling of the water vapor plumes from the two cooling towers indicates that plumes would occur. But given the limited operational hours of the proposed project (less that 3,406 hours per year), and that the bulk of those operational hours would occur in the summer months when conditions are least favorable for plume formation, visible water vapor plumes from the proposed project would result in a less than significant impact on visual resources. CUMULATIVE: The proposed project will add a new industrial facility to the overall landscape setting. However, the existing SCE Devers substation, wind turbine facilities, and associated transmission lines have compromised the existing landscape setting. Therefore, when considered with the existing visual setting, the proposed project would not significantly alter existing scenic quality or viewsheds and would not substantially add cumulative effects. 	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted. However, design features were incorporated into the proposed project to reduce potential impacts.	Less than significant.
Air Quality - Construction	PROJECT SPECIFIC: The primary emission sources during construction will include exhaust from heavy construction equipment and vehicles and fugitive dust generated in areas disturbed by grading, excavating, and erection of facility structures. Other emissions sources will be on-road delivery trucks and worker commute trips. The AERMOD dispersion model with OLM predicted maximum 1-hour and annual NO2 concentration due to project construction emissions which, when added to conservative background values from the nearest SCAQMD monitoring stations, are below the 1-hour California standard. Predicted maximum impacts for CO and SO ₂ are also less than the most stringent ambient standards. The predicted contribution of the proposed construction activities would have the potential to temporarily contribute to existing violations of the state and federal PM ₁₀ standards if construction occurs	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted. The project will comply with applicable requirements for control of fugitive dust during construction.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	during a period of high background concentrations. However, such contributions would be minor and temporary, and would not constitute a significant impact.		
	CUMULATIVE: Impacts to air quality during construction will be concentrated in the immediate area of the site. No other new sources have been identified in the local area that would contribute significantly with the project's emissions to produce a significant impact to air quality.		
Air Quality - Operation	PROJECT SPECIFIC: . Modeled impacts due to the project emissions, in combination with conservative background concentrations, would not cause a violation of any NAAQS and would not significantly contribute to the existing violations of the federal and state PM_{10} and $PM_{2.5}$ standards. In addition all of the proposed project's operational emissions of nonattainment pollutants and their precursors will be offset to ensure a net air quality benefit.	Based on expected project emission levels, the proposed project will be required to supply offsets for NOx, PM10, SO2, and VOCs. CO offsets will not be required because of the current attainment designation of the Salton Sea Air Basin for this pollutant.	Mitigated to less than significant.
	CUMULATIVE: A cumulative modeling analysis to evaluate the combined effects of pollutant emissions from the proposed project and other new or imminent emission sources within a 6-mile radius (if any) will be performed when sufficient information on these sources becomes available.		
Biological Resources – Construction and Operation	 PROJECT SPECIFIC: The proposed project site will be located in an already disturbed area that is primarily used for energy generation and just east of the Devers substation. The proposed project would not impact special-status plant species, special-status wildlife species, or water bodies. No indications of special-status plants or wildlife were observed during field surveys. No wetlands were identified within the surveyed area. CUMULATIVE: The proposed project is an "in-fill" project that does not require extensive linears to connect to the power grid, water system, or natural gas pipelines. The proposed project would potentially affect waters of the United States and individuals and/or the habitats of Coachella Valley milk-vetch, Coachella Valley fringe-toed lizard, burrowing owl and desert tortoise. Because mitigation measures would mitigate these impacts to less than significant levels, the proposed project's contribution to this impact would not be cumulatively considerable. Therefore, the proposed project's cumulative impacts would be less than significant. 	Mitigation measures have been incorporated to ensure that any potential impacts during project construction and operation would be less than significant, including the following: • Conducting preconstruction surveys for rare plants species or sensitive wildlife species (including Coachella Valley fringe-toed lizards, desert tortoise, and burrowing owl); • Instituting worker education programs; • Restoring temporary work areas that are disturbed during construction, and avoiding exotic plant species introduction; • Ensuring construction schedule avoids or minimizes disturbance of sensitive species;	Mitigated to less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
		 Reducing nighttime lighting and including other measures to reduce potential for avian collision with the stacks and other tall structures; and Developing a biological resources mitigation implementation and monitoring program. 	
Cultural Resources Construction and Operation	PROJECT SPECIFIC: Though two archaeological resources were identified within the proposed project's archaeological area of potential effects (APE), the two archaeological sites do not appear to be "significant" resources, i.e., they do not qualify as historic properties or historic resources. The archaeological resources are located in an environment that has been heavily disturbed by construction activities associated with the wind farms, off-road vehicular traffic, and especially illegal dumping. No further information can be obtained from these resources. Therefore, there would be no effect to significant archaeological resources with project implementation. It is possible that with proposed project implementation, previously undiscovered archaeological resources. It should also be noted, however, that most of the site has been subjected to extensive grading and development, thereby reducing the likelihood that intact cultural deposits exist within the study area. None of the buildings or structures in the architectural APE of the proposed project appear to meet the criteria for listing in the National Register of Historic Places (NRHP) or the California Register of Historic Places (CRHR). All buildings or structures in the APE around the project location more than 50 years old received evaluation. None of the buildings appear to meet the exacting standards of exceptional significance. Therefore, none of the buildings in the architectural APE appear to be significant historic properties. CUMULATIVE: Given that project implementation would not result in effects to known important cultural resources, it is unlikely that the proposed project could have significant cumulative effects to cultural resources. As noted above, however, it is possible that previously undiscovered archaeological resources may be exposed during construction activities. Unless properly evaluated and managed, this could result in a significant cumulative effect to such naaged, this could result in a significant cumulative ef	The following measures would be implemented to ensure that potential impacts to newly identified archaeological resources (i.e., found during construction) would be less than significant: • Avoid locating project facilities near any newly identified cultural resources found to be CRHR or NRHP eligible. If avoidance is not possible, physically demarcate and protect the cultural resource. • A qualified archaeologist will monitor all initial grading or excavation within 100 feet of any newly identified potentially significant resource that may have a subsurface component. • Construction crews will be informed of the value and procedures relating to designated culturally sensitive areas. • A Native American monitor should be present if a newly identified archaeological cultural resource appears to have a prehistoric or ethnographic component. • If a newly identified potentially significant resource cannot be avoided during the placement of any project component, further archaeological work will be undertaken as appropriate to assess the importance/significance of the resource prior to the project	Mitigated to less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
Geology - Construction	PROJECT SPECIFIC: Grading of the proposed project site will include a balanced cut and fill to terrace the site to accommodate the eight combustion turbines generators. Over excavation and recompaction will be required in the temporary construction laydown area. Site grading is not expected to result in significant adverse impacts to the geologic environment.	implementation. Measures are proposed to mitigate potentially significant geologic hazards to less than significant levels. These mitigation measures are more accurately described as project design features.	Mitigated to less than significant.
Geology - Operation	 CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts to geologic resources. PROJECT SPECIFIC: Seismically induced ground shaking presents a moderate hazard to the proposed project. This impact is potentially 	Measures are proposed to mitigate potentially significant geologic hazards to	Mitigated to less than significant.
	significant. Liquefaction and slope failure are not hazards at the site. No other geologic hazards with the potential to significantly affect the proposed project were identified. With implementation of the mitigation measures, all geologic hazards will be reduced to a less than significant level. No significant impacts on the geologic environment are expected from the operation of the proposed plant.	less than significant. These mitigation measures are more accurately described as project design features.	Significant.
	CUMULATIVE: No impacts of a geologic hazard or geologic resources nature are anticipated at the project site due to the cumulative effects of the future projects or other possible projects to be constructed in the vicinity of the site.		
Hazards and Hazardous Materials - Construction	 PROJECT SPECIFIC: Hazardous materials that will be used during the construction phase include unleaded gasoline, diesel fuel, oil, lubricants (i.e., motor oil, transmission fluid, and hydraulic fluid), solvents, adhesives, and paint materials. Small volumes of hazardous materials will be on site during construction, and there is minimal potential for significant environmental impacts from hazardous material incidents during construction. However, mitigation measure will ensure that proper procedures are followed in the event of a hazardous materials spill. CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts as a result of hazardous materials handling. 	The three main hazards presented by these materials are toxicity, corrosion, and flammability/explosion. Several materials listed have toxic qualities, but no flammable or explosive traits. Other materials are highly flammable or explosive due to either their own chemical composition or the form in which the material is stored (i.e., under pressure), but show little to no signs of being toxic. Mitigation measures will be	Mitigated to less than significant.
	to result in cumulative impacts as a result of nazardous materials handling.	established at the proposed project site to properly control each of the aforementioned hazardous materials' hazardous properties during construction.	

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		Construction Fueling and Maintenance Activities. Measures will be implemented related to fueling and maintenance of construction vehicles and equipment:	
		Hazardous Materials Spill Containment and Cleanup. Spills that occur during vehicle maintenance will be cleaned up immediately, and contaminated soil will be containerized and sent for subsequent evaluation and offsite disposal. A log will be maintained of all spills and cleanup actions.	
		Hazardous Materials Emergency Contacts. Emergency telephone numbers will be available on site for the fire department, police, local hospitals, ambulance service(s), and environmental regulatory agencies.	
		Hazardous Materials Container Labeling. Containers used to store hazardous materials will be properly labeled and kept in good condition.	
Hazards and Hazardous Materials – Operation	PROJECT SPECIFIC: During project operations, aqueous ammonia (29 percent) will be stored in two 12,000-gallon tanks. The ammonia aboveground storage tanks will also be equipped with a secondary underground containment sump, which will contain any spills from the ammonia tank. The results of the Offsite Consequence Analysis demonstrate the neither the worst-case release scenario nor the alternative release scenario would cause an impact that exceeds the toxic endpoint concentration of 200 ppm (CalARP toxic endpoint) or 75 ppm (CEC) at a public receptor.	The three main hazards presented by these materials are toxicity, corrosion, and flammability/explosion. Several materials listed have toxic qualities, but no flammable or explosive traits. Other materials are highly flammable or explosive due to either their own chemical composition or the form in which the material is stored (i.e., under pressure), but show little to no signs of being toxic. Mitigation measures will be	Mitigated to less than significant.

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	CUMULATIVE: Other projects in the area do not store or use hazardous materials that can impact the operations of the proposed project or contribute to the cumulative impacts. Results from the offsite consequence analysis demonstrate the distance to the toxic endpoint from both the worst-case and the alternative release scenarios to be 0.08-mile. Both of these release scenarios would pose no significant impact on the surrounding receptors. Currently, no hazardous substances are being stored at the Devers substation that may interact with a release from the project site. The vulnerability zone developed from a worst-case scenario would not have an adverse effect on residential developments. In addition, it is not anticipated that these residential developments would store or use any hazardous materials that may present cumulative impacts when combined with an ammonia release.	established at the proposed project site to properly control each of the aforementioned hazardous materials' hazardous properties during operation of the project. Containerized Materials Storage and Handling. Containerized materials will typically consist of returnable tanks (approximately 100-gallon capacity), 55-gallon drums, or 5-gallon pails of lubricants and oils, and smaller containers of paints and solvents. These materials will be managed to mitigate potential releases. Bulk Hazardous Materials Hazardous materials will also be managed to mitigate the potential for releases to the	
		environment. Personnel Training and Equipment Personnel working with chemicals will be trained in proper handling and emergency response to chemical spills or accidental releases. Additionally, designated personnel will be trained as a plant hazardous materials response team. Safety equipment will be provided for use as required during chemical containment and cleanup activities, and will include safety showers and eyewash stations. Service water hose connections will be provided near chemical usage and storage areas to allow flushing of chemical spills, if needed. Hazardous Materials Management –	
		Plans and Procedures Several programs will address hazardous materials storage locations: emergency	

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		response procedures, employee training requirements, hazard recognition fire safety, first-aid/emergency medical procedures, hazardous materials release containment/control procedures, hazard communication training, personnel protective equipment, training, and release reporting requirements. These programs will include the HMBP, workers safety program, fire response program, plant safety program, and facility standard operating procedures. The HMBP will include procedures on hazardous materials handling, use, and storage; emergency response, spill prevention, and control; and training, record keeping, and reporting. An RMP for NH4 (OH) will also be prepared.	
		Spill Response Procedures. Personnel will be trained in spill response reporting and cleanup procedures. The facility will maintain on site one or more spill response kits. These kits will contain absorbents appropriate for the hazardous materials kept on site and each kit will be clearly designated for the type of spilled material it should be used for. Typically these kits contain a barrel, shovel, and absorbents. In addition, the facility will maintain a supply of gloves and protective clothing for use during spill response events. Personnel discovering a spill will report to the on-shift control room operator. The control room operator will notify the operations superintendent or the plant manager. The superintendent or manager will function as the onsite coordinator and will be in charge of	

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		activities related to spill containment, control, and cleanup, and regulatory agency reporting, if needed. The onsite coordinator will assess the situation; contain the leak or spill; begin cleanup operations with onsite staff or offsite contractors, as needed; and collect information for reporting, if needed.	
		Facility Closure During Unexpected Cessation of Operations In addition to implementing mitigation measures to control the use and storage of hazardous materials on site, the proposed project will also be prepared for an unexpected cessation of operations. Facility closure can be either temporary or permanent. Facility closure can result from two circumstances: (1) the facility is closed suddenly and/or unexpectedly due to unplanned circumstances, such as a natural disaster or other unexpected event (e.g., a temporary shortage of facility fuel); or (2) the facility is closed in a planned, orderly manner, such as at the end of its useful economic or mechanical	
Hydrology and Water	PROJECT SPECIFIC:	life or due to gradual obsolescence. The following mitigation measures will be implemented to ensure that project	Mitigated to less than
Quality - Construction and Operation	Groundwater: Due to the depth to groundwater (in excess of 300 to 400 feet), degradation of groundwater is not anticipated. Since the total amount of inflow to the Basin due to the proposed project would be more than twice the amount extracted, potential impacts to groundwater supplies are considered less than significant, and would actually be beneficial to the Basin. On average, the amount of water to be percolated at the Horton WWTP on an annual average basis would be approximately 1,500 afy. Consequently, the amount of water percolated into the Basin would be more than twice the volume to be extracted from the onsite wells. Because the Upper Valley Basin consists predominantly of sandy soils with relatively thin clay layers, the potential for the proposed project to induce land subsidence would not be expected. Subsidence typically occurs in	 be implemented to ensure that project-related impacts to water resources are less than significant: Implement BMPS during construction Well testing Report of Monthly Water Extraction Report of Groundwater Level Monitoring Report of Groundwater Quality 	significant.

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	groundwater basins with thick clay layers that can compress when dewatered. Because of the general absence of thick clay layers in the vicinity of the project site, the potential to cause land subsidence is considered to be less than significant. The proposed project would use a ZLD system. No wastewater would be discharged from the proposed project; therefore, there would be no impact on the quality of water underlying the site. Because the proposed project would not discharge any wastewater to the environment, it would not affect the quality of the underlying groundwater in any way and would not affect the beneficial use of the groundwater as designated by the RWQCB in the Water Quality Control Plan for the area. The construction of the linear facilities is anticipated to have no impacts on water quality due to the short duration of construction and implementation of methods to reduce potential impacts and the relatively shallow depths of excavation (less than 4 feet) compared to the depth to groundwater (300 to 400 feet). A project-specific Environmental Safety and Health Plan will be developed. Furthermore, a SWPPP and an Erosion Control Plan will be developed and implemented. Surface Water: The proposed project would not use surface water resources. Surface water is not a significant source of water supply in this area because surface water sources provide less than 5 percent of the regional water supply. These surface water sources are located in the upper portions of the drainages far from the proposed project site. Therefore, there would be no adverse impact on water supply or other users of this source. There will be no discharge of process water to surface water bodies due to the ZLD system. Therefore, there would be no significant impacts to	 Monitoring Report of Groundwater Percolation Erosion Control Measures During Construction Permanent Erosion Control Measures 	
	surface water quality. Project features designed to be protective of water quality include the ZLD system, which will offsite disposal of process wastewater; a retention basin to collect and manage storm water the project site; and secondary spill containment around chemical delivery and storage areas, tanks, and transformers. Impacts to surface water resources would be less than significant.		
	Flooding: The proposed project site is not within a 100-year floodplain. The proposed project would not increase the risk of flooding, erosion, or siltation. There would be only minimal changes in absorption rates, drainage patterns, or the rate or amount of surface runoff due to the additional surface paving and the placement of equipment associated with the proposed project. Storm water runoff from off site will be collected at the northern edge of the site and conveyed in ditches along the eastern and		

Environmental Topic	Impact(s)	Mitigation	Conclusion
	western edges of the site, such that overall drainage patterns will be maintained. The gas line would be buried underground and the surface topography along the pipeline would be the same as prior to construction, such that there would be no fill placed within the floodplain that would result in adverse impacts to water surface elevations. Therefore, impacts to floodplains would be less than significant. Development of roads, buildings, and other paved and impermeable surfaces would reduce the amount of storm water that infiltrates into the ground and increase the amount of water that runs off the proposed project site. Runoff from most of the site would be routed to a retention basin that would allow water to percolate to the subsurface. The net effect is expected to result in an insignificant decrease in overall runoff volume from the site (due to percolation and evaporation instead of direct discharge off site). Therefore, the proposed project's impact on runoff volume and peak flows would be less than significant		
	would be less than significant. CUMULATIVE: Past, current, and potential future projects, including the proposed project, would require a water supply. The proposed project will access its banked reclaimed water in the Basin via onsite wells. This water plan would have a negligible effect on water availability in the region and would not adversely affect water levels in the Basin. On a long-term basis, the proposed project will purchase 1,500 afy of reclaimed water from MSWD that will be percolated to the Basin, and then extract only 550 afy from the project's onsite wells; therefore, there would be a positive impact to the basin. In addition, the well metering fees paid to DWA would result in even more importation of water to be percolated into the Basin. Therefore, the proposed project would not contribute to a cumulatively significant impact, and cumulative impacts of the proposed project would be less than significant.		
Land Use – Construction and Operation	PROJECT SPECIFIC: The proposed project would not disrupt or divide an established community, nor would it conflict with the established uses of the area. The project involves the development of an industrial use in an area designated for industrial and energy-related uses. The project is compatible with the existing uses in the project area (e.g. wind energy generation and Devers substation). The proposed project is consistent with current land use and zoning designations of Riverside County and Palm Springs. No conflicts with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project would occur with implementation of the proposed project. No Prime Farmland and/or soils of Statewide Importance or Unique Farmlands are within a 1-mile radius	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	of the project site or within ¹ / ₄ -mile radius of the pipeline route, therefore impacts associated with prime farmland are less than significant.		
	CUMULATIVE: While land uses in the area are changing and mixed use development will be moving closer to the project site including residential and commercial properties, the area surrounding the project site will still be dominated by the Devers substation and wind farms, with the Dillon Wind Farm project further dedicating additional land to wind energy generation. The City of Desert Hot Springs is planning mixed use (including residential), as indicated in the projects identified above, in the vicinity of the proposed project. However, the proposed project is consistent with the current General Plan land use and zoning designations in the project area. Based on this consistency with future projected land uses, even in consideration of other projects in the area, the project would not have significant cumulative impacts on land uses in the area.		
Noise - Construction	 PROJECT SPECIFIC: Construction of CPVS would temporarily elevate the noise levels in the surrounding area. Most often the sound levels would be moderate, with a few processes causing short-term, substantially elevated noise levels to occur. Because construction would be of a limited duration, would be conducted during daylight hours, and would implement best practices for construction noise control, no adverse construction noise effects are expected to occur in the surrounding community. CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative noise impacts. 	 The following best practices for noise control will be implemented: All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arcwelders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. All mobile or fixed noise-producing 	Mitigated to less than significant.
		equipment used on the project, which is regulated for noise output by a local, state, or federal agency, shall comply with such regulation while in the course of project activity.	

Environmental Topic	Impact(s)	Mitigation	Conclusion
^		• Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.	
		• Construction site and haul-road speed limits shall be established and enforced during the construction period.	
		• The hours of construction including noisy maintenance activities and all spoils and material transport shall be restricted to the periods and days permitted by the local noise or other applicable ordinance. Noise-producing project activity shall comply with local noise control regulations affecting construction activity or obtain exemptions from the regulations.	
		• The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address or music system shall be audible at any adjacent noise-sensitive receptor.	
		• The onsite construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to CPV Sentinel shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.	
Noise - Operation	PROJECT SPECIFIC: The proposed project has been designed with noise control features. There are currently two noise sensitive residential	The proposed project as designed would not cause significant adverse noise	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	 receptor locations within the area that could potentially experience a +5 dBA increase in noise—residences 330 feet easterly and 340 feet southerly of the project site. These properties will be vacated prior to commencement of project construction. All remaining residences are located far enough away from the proposed project site, such that proposed project would have no appreciable effect on existing ambient noise levels. No significant noise impacts would occur as a result of the proposed project. CUMULATIVE: None of the projects identified as being within the vicinity of the proposed project would move residential or other sensitive land uses to areas which would be significantly impacted by noise from the proposed project. Further, none of these project's noise to create cumulative significant noise impacts on existing nearby sensitive receptors. Thus, any cumulative noise impacts would be less than significant. 	 impacts; therefore, no additional mitigation of operational noise would be required. However, to ensure that acoustical design goals are met by the facility while in operation, the following mitigation measures are proposed: The proposed project design and implementation shall include appropriate noise attenuation measures adequate to ensure that the noise level produced by operation of the project will not exceed an hourly average exterior noise level of 56 dBA Leq at any residence. No new pure tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints, as determined by the compliance project manager (CPM). Pressure relief valves shall be adequately muffled to preclude noise that draws legitimate complaints, as 	
Paleontological Resources - Construction	PROJECT SPECIFIC: Construction-related impacts to paleontological resources primarily involve terrain modification (excavations and drainage diversion measures). Paleontologic resources, including an undetermined number of fossil remains and unrecorded fossil sites; associated specimen data and corresponding geologic and geographic site data; and the fossilbearing strata, could be adversely impacted by ground disturbance and earth moving associated with construction of the project. Direct impacts would result from vegetation clearing, grading of the generating facility site and associated roads, trenching for pipelines, augering for foundations, and any other earth-moving activity that disturbs or buries previously undisturbed fossiliferous sediments, making those sediments and their paleontologic resources unavailable for future scientific investigation. Construction of supporting facilities, such as temporary construction offices, laydown areas, and parking areas are unlikely to result in adverse impacts on significant paleontological resources, as they will involve only	determined by the CPM. Potential impacts on paleontological resources as a result of project construction could represent significant adverse impacts and consequently will need to be mitigated. Mitigation measures will be implemented to reduce potential adverse impacts to significant paleontological resources resulting from project construction. These proposed paleontological resource impact mitigation measures would reduce direct, indirect, and cumulative adverse environmental impacts on paleontological resources to a less than significant level. The mitigation measures include the	Mitigated to less than significant.

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	surface ground disturbance. The proposed project will impact both Pleistocene and Holocene-age alluvial deposits. In addition, there is a slight possibility that sediments of the Pliocene Imperial Formation may be impacted by deep excavations. Site clearing, grading, leveling and deeper excavation at the proposed project site and trenching for the proposed natural gas pipeline could result in significant adverse impacts to paleontological resources in either the Pleistocene alluvial fan deposits or Imperial Formation marine deposits. Impacts on significant fossils in Holocene-age alluvial deposits are highly unlikely. CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts to paleontological resources.	 following: Prior to construction, a qualified paleontologist will be retained to both design and implement a monitoring and mitigation program. During construction, earth-moving construction activities will be monitored where these activities will potentially disturb previously undisturbed sediment. The paleontological resource monitoring and mitigation program will include preconstruction coordination; construction monitoring; emergency discovery procedures; sampling and data recovery, if needed; preparation, identification, analysis, and museum curation of any fossil specimens and data recovered; and reporting. Prior to start of construction, all personnel who will be involved with earth-moving activities will be informed that fossils could be encountered. They will also be informed on the appearance of common fossils and on proper notification procedures. This worker training will be prepared and presented by a qualified paleontologist. The implementation of these mitigation measures would reduce the potentially significant adverse environmental impact of project related ground disturbance and earth moving on paleontological resources to a less than significant level by allowing for the recovery of fossil remains and associated specimen data and corresponding geologic and geographic 	

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		site data that otherwise would be lost to earth moving and to unauthorized fossil collecting.	
Paleontological Resources - Operation	PROJECT SPECIFIC: No impacts on paleontological resources are expected to occur from the continuing operation of the project or any of its related facilities.	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted.	Less than significant.
	CUMULATIVE: If paleontological resources were encountered during construction of future projects in the area, impacts to paleontological resources could be significant if measures are not implemented to adequately address these resources. However, the contribution to these cumulative impacts from the proposed project would be less than significant, since mitigation measures would be implemented as part of the proposed project to recover the resources. The mitigation measures would effectively recover the value to science of significant fossils discovered and ensure that the project's contribution to cumulative impacts to		
	paleontological resources was less than significant.		
Public Health – Construction	PROJECT SPECIFIC: Due to the relatively short duration of the proposed project construction (i.e., 18 months), significant long-term public health effects are not expected to occur as a result of project construction emissions. Diesel particulate exhaust is the air pollutant with the largest potential for human health risk emitted during the construction period. Diesel particulate has been classified as a toxic air contaminant and a carcinogen. However, the exposure assessment conducted for carcinogens is typically 70 years; due to the short duration of the construction effort, carcinogenic health risks are not predicted.	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted.	Less than significant.
	CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts to public health.		
Public Health – Operational	PROJECT SPECIFIC: Facility operations were evaluated to determine whether particular substances would be used or generated at the proposed project site that could cause adverse health effects upon their release to the air. The primary sources of potential emissions from facility operations would be the eight natural gas-fired combustion turbine generators (CTGs), as well as the aqueous ammonia slip stream from the selective catalytic reduction (SCR) control system on each turbine. Secondary sources of potential emissions come from the evaporative cooling tower and diesel fuel combustion in the black start and fire water engines. The black start	The criteria pollutant emissions from the proposed project will be mitigated by the use of Best Available Control Technology (BACT) and through emissions offsets. The toxic pollutant emissions from the proposed project will also be mitigated by the exclusive use of natural gas fuel. In addition, pollution control technologies employed to control criteria pollutants	Mitigated to less than significant.
	fuel combustion in the black start and fire water engines. The black start and fire water engines will normally be operated only for short periods in	employed to control criteria pollutants (specifically, the oxidation catalyst on the	

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	testing mode to ensure operability if needed. The cooling tower will employ a high-efficiency drift elimination system to minimize the release of drift droplets containing trace amounts of hazardous substances. The proposed project will be fueled with clean burning natural gas, thereby minimizing potential toxic air emissions. The maximum incremental cancer risk from project emissions was estimated to be 0.856 in 1 million. For sensitive receptors, the maximum chronic total hazard index (THI) and the maximum acute THI were both estimated to be less than 1. Based on this evaluation using conservative assumptions, the proposed project emissions are expected to pose a less than significant increase in carcinogenic health risk. As demonstrated by the air quality analysis, criteria pollutant emissions from the proposed project would not cause or contribute to violations of federal or state ambient air quality standards, which have been set at levels designed to protect public health. No significant adverse health effects from criteria pollutant emissions are anticipated. CUMULATIVE: CEC requirements specify that an analysis must be conducted to determine the cumulative impacts of a proposed project and other projects within a 6-mile radius that have received construction permits but are not yet operational or that are in the permitting process or can be expected to do so in the near future. Information requests have been	turbines) will also significantly reduce organic TACs. These measures satisfy the SCAQMD requirements for toxics (T-BACT) for natural gas-fired generation units.	
	made to SCAQMD to obtain data on new projects planned within 6 miles from the proposed CPVS site. When this information is received, it will be forwarded to CEC for approval as the basis for the full cumulative analysis.		
Socioeconomics – Construction and Operational	PROJECT SPECIFIC: The proposed project would have a positive impact on fiscal resources in Riverside County and in the region. The construction payroll would be \$40.5 million, generating considerable indirect and induced economic benefits, as well as direct project employment. Construction will occur over an 18-month period and is estimated to cost \$440 million. Project construction would result in payment of an estimated \$25 million in sales and use taxes. Most of this income would accrue to the State of California, but about \$4.8 million in sales tax revenues would go to Riverside County and the County Transportation Commission. After construction, as a utility asset, the new power plant would pay an estimated \$5.1 million in annual property tax revenues, which would benefit local schools and the Riverside County General Fund, as well as local service districts. There is more than an adequate supply of construction workers within Riverside County, and it is anticipated that all of the construction personnel would be drawn from the communities located within the study area. Similarly, the 10 full-time and 4	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	part-time operation workers would be drawn from the local labor force. The construction and operation of the proposed project would not have a significant adverse impact on law enforcement, fire, emergency, medical, utility, or educational services. No significant socioeconomic issues were identified.		
	CUMULATIVE: Cumulative impacts were assessed by researching other large-scale construction projects proposed in the project area, where overlapping construction schedules would create a demand for workers may not be met by labor in the Riverside County area. These projects could temporarily deplete certain types of trade labor and equipment. However, these impacts are not considered significant because of the specialized nature of power plant construction and because there is a large supply of construction workers/laborers within Riverside County. If a shortage in certain craft workers is encountered for these projects, workers could be contracted from the Los Angeles Metropolitan area, which is approximately 2 hours west of the project site, to make up for any workforce deficits. Thus, less than significant cumulative impacts are anticipated. Similarly, cumulative impacts would not result from the operation phase of the power plant, because the number of new permanent personnel is small, and these workers would likely be from Riverside County and would not need to relocate to the project area. Thus, less than significant impacts are anticipated. Disruption or division of established communities or large numbers of displacements would not occur, as most of these projects are energy-related projects and by nature are located in undeveloped areas, zoned for such uses. As a result, no cumulative socioeconomic impacts are anticipated due to construction and operation of		
Soils – Construction	the proposed project. PROJECT SPECIFIC: The cut-and-fill operations at the project site will result in alteration of the existing soil profiles. Alteration of the existing soil profiles, including mixing of soils and rock, will alter the physical, chemical, and biological characteristics of the native soils and underlying geology. Clearing of the protective vegetative cover and the subsequent soil disturbance will likely result in short-term increases in water and wind erosion rates. The proposed project design includes measures to stabilize fill areas and cut slopes and to control drainage. An erosion and sedimentation control plan will be implemented during construction to control sediment and runoff. These design measures are expected to preclude geotechnical problems associated with the cut-and-fill operations, and to limit erosion/sedimentation to acceptable levels. The proposed	Because no significant impacts to soils are expected with the construction and operation of the proposed project, no mitigation measures are proposed. However, project design measures will be incorporated into the construction and operation of the proposed project to reduce project-related impacts to soils. Standard BMPs will be incorporated into project design for construction and operation, and will minimize onsite soil erosion and offsite sedimentation.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	drainage control berms are expected to control potential flooding events at the site. Construction vehicle and equipment use on disturbed soils at the plant site will also likely increase wind erosion rates temporarily at the plant site. Because of the measures that will be taken during construction to stabilize cut and fill areas and control drainage, impacts during construction are expected to be less than significant. Following construction, wind and water erosion on the plant site will be reduced, because the plant site will be terraced, seeded and covered, concrete, asphalt, or crushed aggregate, and drainage will be controlled. Implementation of the mitigation measures are expected to limit impacts to the soil resource at the power plant site to less than significant levels.		
	CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts to soils.		
Soils – Operational	 PROJECT SPECIFIC: Power plant operation would not result in impacts to soil from erosion or compaction. Routine maintenance activities during the operational phase, including vehicular travel on access roads will be limited to paved and gravel covered areas. Regular operations activities are not expected to involve soil disruption. The stormwater retention basin will be constructed with engineered earth dikes and will be protected by erosion control fabric, riprap, paving or soil cement to minimize erosion. Power plant emissions are not expected to have any impacts on surrounding soil-vegetation systems. Therefore, no significant impacts to soils associated with operation of the proposed project are expected. CUMULATIVE: Soil erosion and sedimentation impacts associated with the proposed project are construction related; these would be short-term impacts and would be minimized by implementation of mitigation measures. The proposed project would therefore not cause or contribute to a significant cumulative impact to soils. 	Because no significant impacts to soils are expected with the construction and operation of the proposed project, no mitigation measures are proposed. However, project design measures will be incorporated into the construction and operation of the proposed project to reduce project-related impacts to soils. Standard BMPs will be incorporated into project design for construction and operation, and will minimize onsite soil erosion and offsite sedimentation.	Less than significant.
Solid/Hazardous Waste – Construction	PROJECT SPECIFIC: During construction of the proposed project, the primary waste generated would be solid nonhazardous waste and may include excess concrete, metal and glass scrap, and empty nonhazardous containers. Management of these wastes is the responsibility of the construction contractor(s). Typical management practices required for contractor waste management include recycling when possible, proper storage of waste and debris to prevent wind dispersion, and weekly pickup and disposal of wastes to local Class III landfills. The total amount of solid waste to be generated by construction activities has been estimated to be similar to that generated for normal commercial construction and is not	The nonhazardous solid wastes produced during construction would be collected in onsite dumpsters and periodically picked up for disposal. The waste will be taken to a local transfer station or materials recycling facility where recyclable materials will be removed and residual materials disposed of at an appropriate landfill. The disposal of wastewater will be coordinated by the construction	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	 expected to result in a significant impact on public health or cause adverse effects on local landfill capacity. It is anticipated that some hazardous solid and liquid waste(s) would also be generated during plant construction. Additionally, solid nonhazardous and some hazardous waste would also be generated during offsite project improvements, including the installation of the transmission lines and natural gas line. The amount of hazardous waste generated during construction of the water and natural gas supply lines and the electrical transmission lines is anticipated to be minimal. CUMULATIVE: Construction of the proposed project is not anticipated to result in cumulative impacts as a result of waste generation. 	contractor. Stormwater will be discharged in accordance with the requirements of the construction stormwater management permit obtained prior to construction. The generation of nonhazardous wastewater will be minimized through water conservation and re-use measures. The majority of the hazardous waste generated during construction will be liquid wastes (waste oil, cleaning fluids, passivating fluids, and solvents). The construction contractor will manifest these wastes for disposal at a permitted Class I facility or recycling facility. Some solid waste (e.g., dried paint, welding materials or spent filters) may be generated, but the quantity of this material is expected to be minimal. The construction contractor would be the generator and will dispose of this waste in accordance with all federal, state, and local laws and regulations.	
Solid/Hazardous Waste - Operation	PROJECT SPECIFIC: The majority of the wastes that will be generated at the proposed project facility during operation will be liquid hazardous waste that will be recycled. Both solid and liquid hazardous wastes will be disposed of at a treatment, storage and disposal facility (TSDF) or placed into a permitted Class I landfill. The hazardous wastes that would be generated annually by the proposed project are expected to be well below 0.01 percent of the combined capacity of the three hazardous waste landfills identified as available for use by the project. This amount is considered to be a less than significant impact. If nonhazardous solid waste is not recyclable, it will be disposed of at a Class III landfill. Nonhazardous liquid wastes (storm water) will be discharged to a collection system, which discharges to a retention basin located at the south portion of the site. Appropriate procedures and personnel training will provide assurance that nonhazardous and hazardous wastes are properly handled and do not significantly affect the environment or health and safety. Best management practices will be used by the facility to manage and minimize the amount of waste generated. No significant impacts from	No significant impacts relative to waste management are expected from the proposed project. However, several best management practices will be used by the facility to manage and minimize the amount of waste generated. The following priorities would be established for waste management during the construction and operation phases for the facility: • Source reduction (preferred option); • Recycling; • Treatment; and • Disposal (least desirable option). Disposal will only be used for wastes that cannot be eliminated through source reduction or addressed by recycling or	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	waste management would occur as a result of the proposed project. CUMULATIVE: Future projects in the area could generate nonhazardous and hazardous waste in the area. Nonhazardous waste generated at the CPVS would also add to the total waste generated in Riverside County and in California. There are, however, adequate recycling facilities and landfill capacities to dispose of the waste from Riverside County over the next 40 to 50 years. Therefore, the impact of the nonhazardous solid waste generated by the proposed project is not considered significant. The hazardous waste generated at the CPVS will be recycled and treated to the extent possible. California has more than adequate treatment and disposal capacity for the hazardous waste generated by the proposed project is considered less than significant.	treatment.	
Traffic Impacts - Construction	 PROJECT SPECIFIC: Access to the project site is from Dillon Road via State Route (SR) 62. During project construction, no study roadway segments would be significantly affected by the proposed project. The following three intersections would experience short-term impacts during the peak construction period : • SR 62/Dillon Road – 2009 No Project level of service (LOS) F (a.m., p.m.) condition would increase by 14 seconds (a.m.) and 3 seconds (p.m.) during 2009 Peak Project Construction. • Indian Avenue/Dillon Road – 2009 No Project LOS E (p.m.) condition would worsen to LOS F (p.m.) during 2009 Peak Project Construction. • Indian Avenue/20th Street – 2009 No Project LOS D (p.m.) condition would worsen to LOS F (p.m.) during 2009 Peak Project Construction. • Indian Avenue/20th Street – 2009 No Project LOS D (p.m.) condition would worsen to LOS E (p.m.) during 2009 Peak Project Construction. • Indian Avenue/20th Street – 2009 No Project LOS D (p.m.) condition measures will deploy trained traffic control personnel at the intersections of Indian Avenue/Dillon Road and Indian Avenue/20th Street during the a.m. and p.m. peak hour. In addition, the majority of project-added traffic routed via SR 62 and Dillon Road will be re-routed through Indian Avenue and Dillon Road, thereby fully mitigating the a.m. and p.m. peak hour. In addition, the majority of project construction. CUMULATIVE: The proposed project's peak construction activities would occur in 2009, and the plant is expected to be operational by 2010. Taking into consideration the combination of distance from the project site, 	Trained Traffic Control personnel will be deployed at the intersections of Indian Avenue/Dillon Road and Indian Avenue/20th Street during the a.m. and p.m. peak hour. The implementation of this measure will be coordinated with Riverside County, local jurisdictions and law enforcement agencies. This measure will minimize delay at the affected intersection movements experiencing poor LOS through more efficient assignments of vehicle right-of-way. A standard traffic and monitoring control plan designed to minimize impacts to traffic flow will be developed and implemented consistent with the size and scope of the project construction activity.	Mitigated to less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	scheduling, and actual implementation of the above proposed projects, short-term cumulative impacts associated with the project are anticipated to be less than significant. Due to the relatively small number of operational trips (commuting of 8 full time, 4 part time employees) and nonrecurring service/delivery trips to and from the project site (one or two trips a month), it is anticipated that the proposed project will not contribute to long-term cumulative impacts in conjunction to the proposed projects that have been identified as being within the immediate vicinity of the proposed project.		
Traffic Impacts - Operation	PROJECT SPECIFIC: Power plant operations will require approximately 10 full-time and 4 part time personnel. Based on the minimal operational added trips, the proposed plant operations would not substantially change the LOS of the roads and intersections in the study area. Therefore, no significant traffic impacts during project operations are anticipated.	Because no significant impacts are expected with the implementation of the proposed project, no mitigation measures are warranted.	Less than significant.
	CUMULATIVE: The proposed project's peak construction activities would occur in 2009, and the plant is expected to be operational by 2010. Taking into consideration the combination of distance from the project site, scheduling, and actual implementation of the above proposed projects, short-term cumulative impacts associated with the project are anticipated to be less than significant. Due to the relatively small number of operational trips (commuting of 8 full time, 4 part time employees) and nonrecurring service/delivery trips to and from the project site (one or two trips a month), it is anticipated that the proposed project will not contribute to long-term cumulative impacts in conjunction to the proposed projects that have been identified as being within the immediate vicinity of the proposed project.		