Environmental Topic	Impact(s)	Mitigation	Conclusion
Aesthetics (Visual Resources) - Construction	**PROJECT SPECIFIC:** During the construction period, construction, construction materials, construction equipment, trucks, and parked vehicles have the potential to be visible on the project site and the adjacent laydown area. Construction activities would be conducted in a manner that would reduce dust from leaving the project site. The construction activities on the project site and the activities in the laydown areas would not contrast in a significant way with the existing industrial character of the area. During the construction period, in any areas along public streets not bordered by the existing concrete wall, the views into the site from these areas will be screened using chain-link fencing covered with a screening fabric or slats. Construction of the transmission line would also introduce construction vehicles, materials, and equipment into the view for a short duration. Any visual changes associated with construction period activities would be minor and temporary, and thus not significant. Any lighting that might be installed to facilitate nighttime construction activities will, to the extent feasible and consistent with worker safety codes, be directed toward the center of the construction site and shielded to prevent light from straying offsite. Task-specific construction lighting would be used to the extent practical while complying with worker safety regulations. With these measures, lighting associated with the project construction would not pose a hazard or adversely affect day or nighttime views toward the site. **CUMULATIVE:** The area in the vicinity of the project is essentially built out, and according to the City of Vernon, no other projects have been planned in this area. As documented in Section 8.11.6, the proposed power plant conforms to the City of Vernon's major goals and objectives for industrial development, would be sited in an area reserved for industrial uses, and would conform to the City of Vernon's policies and standards related to the appearance of new industrial development. The transmission line options proposed are located in corridors where transmission lines already exist, and because for the most part, they entail replacement of existing transmission structures, the level of visual change will be minor, minimizing the potential for the creation of cumulative effects. Because the project would not create impacts on visual resources that are significant, and because the visual changes associated with other development taking place in the surrounding area are relatively minor, the proposed project would not result in cumulative impacts on visual resources in the project vicinity.	This analysis has documented the fact that no significant visual impacts would result from implementation of the proposed project. Therefore, no mitigation measures are proposed. Project implementation would be subject to City of Vernon planning regulations, however. Specifically, a Site Plan would be repared and submitted to the City of Vernon for review and comment and CEC Compliance Project Manager for review and approval before construction begins. The site plan would comply with all applicable provisions of the City of Vernon General Plan and Zoning Ordinance, including provisions related to screening and project appearance.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
Aesthetics (Visual Resources) - Operation	**PROJECT SPECIFIC:** There are no designated scenic roads or vista points in the project viewshed. In addition, the project would not affect any landscapes of more than moderately low visual quality, and any effects to the existing visual quality of landscapes in the area would not be substantial. The site itself is flat and, when transferred to the City, will be a vacant parcel located in an industrial city in which visual resources such as scenic corridors, areas of natural beauty, and scenic recreational areas are not designated. The project site is surrounded by industrial/ light industrial/ warehouse facilities. Project water vapor plumes would not substantially degrade the existing visual character of the site and its surroundings because the frequency with which water vapor plumes would appear would be limited and because the general landscape setting has a well-established industrial character in which visual water vapor plumes of various origins are already present. The presence of the proposed power plant would not create a substantial change in the character or visual quality of nearby views toward the site. The level of visual change brought about by the transmission lines would be low and would not create changes in the character and quality of the view that would be so substantial as to constitute a significant impact. The project's light fixtures would be restricted to areas required for safety, security, and operations. Lighting would be directed onsite; it would be shielded from public view, and nonglare fixtures and use of switches, sensors, and timers to minimize the time that lights not needed for safety and security are on would be specified. These measures should substantially reduce the offsite visibility of project lighting. Therefore, lighting associated with the project operation would not pose a hazard or adversely affect day or nighttime views toward the site. **CUMULATIVE:** The area in the vicinity of the project is essentially built out, and according to the City of Vernon, no other projects have been planned in this area. As documented in Section 8.11.6, the proposed power plant conforms to the City of Vernon's major goals and objectives for industrial development, would be sited in an area reserved for industrial uses, and would conform to the City of Vernon's policies and standards related to the appearance of new industrial development. The transmission line options proposed are located in corridors where transmission lines already exist, and because for the most part, they entail replacement of existing transmission structures, the level of visual change will be minor, minimizing the potential for the creation of cumulative effects. Because the	This analysis has documented the fact that no significant visual impacts would result from implementation of the proposed project. Therefore, no mitigation measures are proposed. Project implementation would be subject to City of Vernon planning regulations, however. Specifically, a Site Plan would be repared and submitted to the City of Vernon for review and comment and CEC Compliance Project Manager for review and approval before construction begins. The site plan would comply with all applicable provisions of the City of Vernon General Plan and Zoning Ordinance, including provisions related to screening and project appearance.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	project would not create impacts on visual resources that are significant, and because the visual changes associated with other development taking place in the surrounding area are relatively minor, the proposed project would not result in cumulative impacts on visual resources in the project vicinity.		
Agricultural (and Soil) Resources - Construction	**PROJECT SPECIFIC:** Construction activities can potentially impact soil resources by increasing soil erosion and soil compaction. The effect of soil erosion would be that soil lost during or after construction could increase the sediment load in surface receiving waters downstream of the construction site. The magnitude, extent, and duration of this construction-related impact depend on the erodibility of the soil (discussed above), the proximity of the construction activity to receiving waters, and the construction methods, duration, and season. Construction of the proposed project would result in soil compaction during the construction of foundations, pump station, pipelines, and paved roadway and parking areas. Soil compaction would also result from vehicle traffic along temporary access roads. Soil compaction increases soil density by reducing soil pore space. This, in turn, reduces the ability of the soil to absorb precipitation and transmit gases for respiration of soil microfauna. Soil compaction can result in increased runoff, erosion, and sedimentation. The incorporation of BMPs during project construction will result in less than significant impacts from soil compaction during construction. **CUMULATIVE:** The effects on soil erosion, sedimentation, and compaction associated with the VPP are not considered to be significant. Concurrent projects within the drainage basin have not been identified; however, if they exist, they would also be subject to the same requirements to limit impacts on soil erosion and sedimentation. In addition, the existing urban nature of the project area means that any soil compaction that might have taken place with development has already occurred. Therefore, the cumulative impacts of the proposed VPP would be negligible.	Erosion control measures would be required during construction to help maintain water quality, protect property from erosion damage, and prevent accelerated soil erosion or dust generation that destroys soil productivity and soil capacity. Temporary erosion and sediment control measures will be implemented before construction begins, would be maintained and evaluated during construction, and would be removed from the site after the completion of construction. These measures would be described in detail in a stormwater pollution prevention plan (SWPPP) that would be prepared and approved prior to initiation of site activities. The SWPPP will include a menu of BMPs to be selected and implemented based upon site conditions, phase of construction, and weather conditions. Revegetation, mulching, physical stabilization, dust suppression, berms, ditches, and sediment barriers would be included among the BMPs listed: • During construction of the project and the related linear facilities, dust erosion control measures would be implemented to minimize the wind-blown erosion of soil from the site. • Water would be sprayed on the soil in active construction areas to control dust during revegetation.	Mitigated to less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
		• Soil stockpiles will be covered or controlled with soil binder materials as necessary to guard against wind or water erosion. • Sediment barriers, such as straw bales, sand bags, or silt fences, slow runoff and trap sediment. They will be placed at the downgradient perimeter of disturbed areas, at the base of exposed slopes, and along streets and property lines downgradient of the disturbed area. • Perimeter barriers will be used during rainy season and during other parts of the year, some barriers would be placed in locations where offsite drainage could occur to reduce or prevent sediment from leaving the site.	
Agricultural (and Soil) Resources - Operation	**PROJECT SPECIFIC:** Operation of the VPP would not result in impacts to the soil from erosion or compaction. Routine vehicle traffic during plant operation will be limited to existing roads, all of which will be paved, and standard operational activities should not involve the disruption of soil. Therefore, impacts to soil from project operations would be less than significant. **CUMULATIVE:** The effects on soil erosion and compaction associated with the VPP are not considered to be significant. Concurrent projects within the drainage basin have not been identified; however, if they exist, they would also be subject to the same requirements to limit impacts on soil erosion and sedimentation. In addition, the existing urban nature of the project area means that any soil compaction that might have taken place with development has already occurred. Therefore, the cumulative impacts of the proposed VPP would be negligible.	Permanent erosion control measures on the site will include graveling, paving, drainage systems, building construction, and landscaping. A Construction Drainage, Erosion and Sedimentation Control Plan (CDESCP) will be developed in conjunction with California Energy Commission (CEC) staff to set performance standards and monitor the effectiveness of soil loss mitigation measures. This plan will address the timing and methods for monitoring plant establishment, as well as reporting and response requirements.	Less than significant.
Air Quality -	**PROJECT SPECIFIC:** The results of the analysis indicate that the maximum construction impacts will be below the AAQSs for each of the	The Applicant proposes to implement the standard construction mitigation measures	Mitigated to less than

Environmental Topic	Impact(s)	Mitigation	Conclusion
Construction	criteria pollutants and averaging periods, with the exception of the 24-hour PM10 and PM2.5 concentrations and the annual PM10 and PM2.5 concentrations. For PM10, the annual and 24-hour background concentrations exceed the state AAQSs without adding the modeled concentrations. Because the entire SCAQMD is nonattainment for the state PM10 standard, the incremental 24-hour and annual PM10 impacts from construction were compared to the SCAQMD allowable change in 24-hour concentration threshold of 10.4 µg/m3 (SCAQMD Rule 403 and SCAQMD LST, 2003) and annual concentration threshold of 1 µg/m3 (SCAQMD Rule 1303). The predicted 24-hour and annual PM10 concentrations exceed the SCAQMD allowable change in concentration thresholds. However, based on the results of the analysis, approximately 85 percent of the particulate concentrations would be due to fugitive dust emissions. The assumptions used to estimate the project's fugitive emissions are conservative in nature and the actual fugitive dust control efficiencies are expected to be higher than those used in the emissions estimate. Additionally, the average annual rainfall during the construction period was not factored into the calculations, which would also further reduce the fugitive dust emissions from construction. Because the construction activity is finite and best available emission control techniques will be used throughout the 24-month construction activity period, impacts from construction would be less than significant. **CUMULATIVE:** An analysis of potential cumulative air quality impacts that may result from the project and other reasonably foreseeable projects is generally required only when project impacts are significant. The City received a listing of potential cumulative impact sources from the SCAQMD that have submitted permit applications to the SCAQMD or those that have received permits but are not yet in operation. The City transmitted this listing to the CEC for review. The CEC identified those sources it believed were appropriate to include in the cumulative impact analysis. The City reviewed these sources with the SCAQMD permit engineer identified and provided additional information to the CEC staff. Furthermore, the California Energy Commission staff reviewed the CEQA projects identified by the SCAQMD staff and discounted these projects because of the distance from the VPP project and the emission sources are not appropriate for modeling (volatile organic compound sources).	developed by the CEC over the past few years, including compliance with SCAQMD rules Rule 402 – Nuisance and Rule 403 to mitigate air quality impacts expected during construction.	significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
Air Quality - Operation	**PROJECT SPECIFIC:** The highest modeled concentrations were used to demonstrate compliance with the AAQS. A comparison of the maximum VPP Project operational impacts to the ambient air quality standards. For those pollutants and averaging periods where the background concentrations do not exceed the AAQS, the project will not cause or contribute to the violation of a standard. For those pollutants where the background data are already in excess of the standards, the project's impact plus background is above the standard, and would further contribute to an existing violation of the standard absent mitigation. To demonstrate compliance with SCAQMD modeling requirements of Rule 1303, the maximum ambient air quality impacts for the VPP facility were compared to the SCAQMD's significance thresholds for PM10. The maximum facility modeled impacts for PM10 will not exceed the SCAQMD significance thresholds. It should be noted that the PM10 impacts modeled included PM10 emissions from the three combustion turbines, cooling tower, and the diesel fire pump engine. Based on the analysis the cooling tower makes up a majority of the 24-hour impact. The maximum individual turbine 24-hour PM10 impact is 0.66 µg/m3. Therefore, as defined by the SCAQMD, the project's PM10 impacts are not considered significant. **CUMULATIVE:** A review of the City of Vernon, Los Angeles, and the County of Los Angeles planning departments did not identify any Notices of Preparation for projects that would be expected to emit significant operational emissions (refineries, power plants, engine generators, etc.).	Mitigation will be provided for all emission increases from the project in the form of offsets and the installation of BACT, as required under SCAQMD regulations. Through the use of BACT/LAER to control air pollutant emissions, the acquisition of ERCs/RTCs, combined with the results of the air quality impact analysis, the project is not expected to result in significant air quality impacts, and the Applicant believes that no additional operational mitigation is necessary beyond the offsets that will be provided in accordance with SCAQMD requirements.	Mitigated to less than significant.
Biological Resources – Construction	**PROJECT SPECIFIC:** The VPP will require the installation of new equipment. No vegetation, other than landscape plant species, is currently located within the fenceline of the power plant site, laydown, or parking areas. Thus, no sensitive biological resources are expected to be disturbed. Potential impacts from pipeline installation will be minimal due to placement of the pipelines in existing city streets within the industrial area. Potential impacts from transmission line installation will be minimal due to the placement of the lines within a developed industrial area. **CUMULATIVE:** Due to the highly developed nature of the area and lack of biological resources, cumulative impacts from the proposed project would not occur. The VPP project would not cause any new habitat disturbance. Because the proposed site was previously developed and is located in an industrial zoned area, no significant individual or cumulative	As there are no biological resources within the property boundary, mitigation measures are not proposed. Measures such as off-site mitigation, educational programs, and compliance or monitoring programs are not required.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	impacts would occur.		
Biological Resources - Operation	**PROJECT SPECIFIC:** Cooling tower drift is the fine mist of water droplets that escape the cooling tower's mist eliminators and emitted into the atmosphere. Cooling towers concentrate the particulates (total dissolved solids) during the cooling process and produce a salt mist. Salts can physically damage a leaf cell, which affects the photosynthetic ability of plants. Other effects include blocking the stomata (leaf pores) so that normal gas exchange is impaired, as well as affecting leaf adsorption and solar radiation reflectance. These effects can reduce productivity in crops, trees, and sensitive special-status plant species in a deposition area. Recycled water for industrial purposes will be provided by CBMWD, thus, there will be no mechanism to affect fish or other biota from securing water for operations. **CUMULATIVE:** Due to the highly developed nature of the area and lack of biological resources, cumulative impacts from the proposed project would not occur. The VPP project would not cause any new habitat disturbance. Because the proposed site was previously developed and is located in an industrial zoned area, no significant individual or cumulative impacts would occur.	As there are no biological resources within the property boundary, mitigation measures are not proposed. Measures such as off-site mitigation, educational programs, and compliance or monitoring programs are not required.	Less than significant.
Cultural Resources - Construction	**PROJECT SPECIFIC:** CH2M HILL conducted archival research; reviewed all cultural resource investigation reports within the VPP project area; contacted all other interested agencies, Native American groups, and historic societies; and conducted a complete field investigation. As a result of all these efforts, CH2M HILL did not detect within the project area any significant prehistoric or historic archaeological remains. There are no historic architectural resources anticipated within, or immediately adjacent to, the plant site. No impacts on cultural resources are expected to occur at the plant site. The gas line, sanitary sewer line, and transmission line will be constructed entirely within previously disturbed areas, and entirely within the existing disturbed city streets. Further, both the CHRIS literature search and CH2M HILL's survey failed to identify significant archaeological sites. No significant impacts on any of these architectural resources are expected to occur because the proposed construction of the VPP is not expected to have any impact these resources or alter the historical context of these resources. **CUMULATIVE:** Because the VPP project would not affect known	Although significant archaeological and historic archeological sites were not found during the project field survey, it is possible that subsurface construction could encounter buried archaeological remains. For this reason, the City of Vernon proposes to implement measures to mitigate any potential adverse impacts that could occur if there were an inadvertent discovery of buried cultural or historically significant resources. These measures include: (1) designation of a cultural resources specialist (CRS) to be on-call to investigate any cultural or historically significant resource finds made during construction; (2) implementation of a construction worker training program;	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	significant cultural resources, it would not likely cause significant cumulative impacts. If construction were to encounter a large, stratified, buried prehistoric archaeological site or discrete filled-in historic period features, the possibility of cumulative impacts would arise because such sites might be highly significant, and in the past many have been destroyed or damaged by agricultural activity and/or commercial/industrial/residential development in the project vicinity. However, given the relative low level of impact to such a site that the VPP project would cause, it is also possible that proposed project activities would not lead to significant cumulative impacts, depending on the extent of project impact to any such discovered archaeological deposits. Any potential impact to an unknown site would be minimized by a stop-work procedure if a site were uncovered allowing time for proper survey and mitigation of the site to occur. No impacts on architectural resources are expected to occur.	(3) monitoring of excavations that extend to depths of previously undisturbed soils; (4) procedures for halting construction in the event that there is an inadvertent discovery of archaeological deposits or human remains; (5) procedures for evaluating an inadvertent archaeological or historically significant discovery; and (6) procedures to mitigate adverse impacts on any inadvertent archaeological or historic discovery determined significant.	
Cultural Resources - Operation	**PROJECT SPECIFIC:** As noted above in the Cultural Resources impact from construction, CH2M HILL did not detect within the project area any significant prehistoric or historic archaeological remains. There are no historic architectural resources anticipated within, or immediately adjacent to, the plant site. No impacts on cultural resources are expected to occur at the plant site. Thus, no significant impacts on any of these architectural resources are expected to occur because the proposed operation of the VPP is not expected to have any impact these resources or alter the historical context of these resources. **CUMULATIVE:** None identified.	Impacts were determined to be less than significant and no operation mitigation measures were identified.	Less than significant
Energy	Not evaluated in document	None identified in document	Not identified in document
Geology - Construction	**PROJECT SPECIFIC:** Ground shaking presents the most significant geologic hazard to the proposed VPP facility and linear facilities. Linear facilities associated with the VPP site include electricity transmission, natural gas, water, and reclaimed water lines. Liquefaction may also impact linear facilities as a result of ground shaking. The project site will be delivered to the City with all existing structures removed and the site remediated and leveled. Construction may require minor grading of the site for proper drainage. Impacts to the geologic environment involve dust generation and possible change in drainage. Since the site is generally level, site grading is not expected to adversely impact the geologic environment.	An initial geotechnical investigation has been completed at the VPP site and indicates that liquefaction potential is low at the site. Additional analyses to evaluate liquefaction potential will be conducted as part of the final geotechnical investigation that will be completed prior to construction. Subsidence potential at the project site is considered low. A final geotechnical engineering report required	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	No active faults were noted to cross the VPP site. Therefore, no mitigation measure is required to reduce the hazard from surface faulting rupture. Expansive soils were not encountered in the initial geotechnical investigation of the site and are not expected under both the linear facilities and the VPP site. **CUMULATIVE:** None identified.	by the County will specify the actual degree of subsidence and any mitigation that may be required.	
Geology - Operation	**PROJECT SPECIFIC:** Ground shaking presents the most significant geologic hazard to the proposed VPP facility and linear facilities. Linear facilities associated with the VPP site include electricity transmission, natural gas, water, and reclaimed water lines. Liquefaction may also impact linear facilities as a result of ground shaking. Seismically induced ground shaking and possible liquefaction potential could affect the stability of the transmission lines and stability of the natural gas, water and sewer lines. No active faults were noted to cross the VPP site. Therefore, no mitigation measure is required to reduce the hazard from surface faulting rupture. Expansive soils were not encountered in the initial geotechnical investigation of the site and are not expected under both the linear facilities and the VPP site. **CUMULATIVE:** None identified.	An initial geotechnical investigation has been completed at the VPP site and indicates that liquefaction potential is low at the site. Additional analyses to evaluate liquefaction potential will be conducted as part of the final geotechnical investigation that will be completed prior to construction. Subsidence potential at the project site is considered low. A final geotechnical engineering report required by the County will specify the actual degree of subsidence and any mitigation that may be required.	Less than significant
Hazards and Hazardous Materials - Construction	**PROJECT SPECIFIC:** Hazardous materials to be used at VPP during construction were evaluated for hazardous characteristics. During construction of the project and linear facilities, regulated substances, as defined in California's Health and Safety Code, Section 25531, will not be used. Hazardous materials to be used during construction of the project and its associated linear facilities will include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. There are no feasible alternatives to motor fuels and oils for operating construction equipment. The types of paint required are dictated by the types of equipment and structures that must be coated and by the manufacturers' requirements for coating. The quantities of hazardous materials that will be onsite during construction are small, relative to the quantities used during operation. Construction personnel will be trained to handle the materials properly. The most likely possible incidents will involve the potential for fuels, oil, and grease dripping from construction equipment. The small quantities of fuel, oil, and grease that might drip from construction equipment will have	During facility construction, hazardous materials stored onsite will include small quantities of paints, thinners, solvents, cleaners, sealants, lubricants, and 5-gallon emergency fuel containers. *The following measures that will be taken to mitigate potential risks from hazardous material usage:* • Paints, thinners, solvents, cleaners, sealants, and lubricants will be stored in a locked utility building. These materials will be handled per the manufacturers' directions and will be replenished as needed. The emergency fuel containers will be Department of Transportation (DOT)-approved, 5-gallon safety containers, secured to the	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	relatively low toxicity and will be biodegradable. Therefore, the expected environmental impact is minimal. Small oil spills may also occur during onsite refueling. Equipment refueling will be performed away from water bodies to prevent contamination of water in the event of a fuel spill. Therefore, the potential environmental effects from fueling operations are expected to be limited to small areas of contaminated soil. If a fuel spill occurs on soil, the contaminated soil will be placed into barrels or trucks for offsite disposal as a hazardous waste. The worst-case scenario for a chemical release from fueling operations would be a vehicle accident involving a service or refueling truck. Handling procedures for the hazardous materials to be used onsite during construction. The quantities of hazardous materials that will be handled during construction are relatively small and Best Management Practices (BMPs) will be implemented by contractor personnel. Therefore, the potential for environmental effects is expected to be small. **CUMULATIVE:** None identified	construction equipment. The emergency fuel will be used only when regular vehicle fueling is unavailable. • Fuel, oil, and hydraulic fluids will be transferred directly from a service truck to construction equipment tanks and will not otherwise be stored onsite. Fueling will be performed by designated, trained service personnel either before or at the end of the workday. Service personnel will follow standard operating procedures (SOPs) for filling and servicing construction equipment and vehicles. *The SOPs, which are designed to reduce the potential for incidents involving the hazardous materials, include the following:* • Refueling and maintenance of vehicles and equipment will occur in designated areas that are equipped with spill control features (e.g., berms, paved surfaces, spill response kits, etc.). • Vehicle and equipment service and maintenance will be conducted by authorized personnel only. • Refueling will be conducted only with approved pumps, hoses, and nozzles. • Catch-pans will be placed under equipment to catch potential spills during servicing. • All disconnected hoses will be placed in containers to collect residual fuel from the hose. • Vehicle engines will be shut down during refueling. • No smoking, open flames, or welding	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		will be allowed in refueling or service areas. • Refueling will be performed away from bodies of water to prevent contamination of water in the event of a leak or spill. • When refueling is completed, the service truck will leave the project site. • Service trucks will be provided with fire extinguishers and spill containment equipment, such as absorbents. • Should a spill contaminate soil, the soil will be put in containers for offsite disposal as a hazardous waste. • All maintenance and refueling areas will be inspected monthly. Results of inspections will be recorded in a logbook that will be maintained onsite. Small spills will be contained and cleaned up immediately by trained, onsite personnel. Larger spills will be reported via emergency phone numbers to obtain help from offsite containment and cleanup crews. Personnel working on the project during the construction phase will be trained in handling of and the dangers associated with hazardous materials. An onsite health and safety person will be designated to implement health and safety guidelines and contact emergency response personnel and the local hospital, if necessary. If a spill involves hazardous materials equal to or greater than the specific reportable quantity, all federal, state, and local reporting requirements will be followed. The California Water Code, Section 13272(f), establishes a	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		reportable quantity of 42 gallons for spills of petroleum products in water bodies. In the event of a fire or injury, the local fire department will be called (City of Vernon Fire Station at 3375 Fruitland Avenue in Vernon).	
Hazards and Hazardous Materials – Operation	**PROJECT SPECIFIC:** Hazardous materials to be used at VPP during operation were evaluated for hazardous characteristics. Some of these materials will be stored at the generating site continuously. Others will be brought onsite for the initial startup and periodic maintenance (every 3 to 5 years). Some materials will be used only during startup. Hazardous materials will not be stored or used in the gas supply line, water supply line, or electric transmission line corridors during operations. Several hazardous materials, including two regulated substances (aqueous ammonia and hydrogen), will be stored at the generating site during VPP operation. However, only aqueous ammonia will be stored in amounts above the threshold quantity. An RMP will be prepared consistent with the CalARP program requirements. Many of the hazardous materials that will be stored onsite are corrosive and are a threat to humans (particularly workers at the site) if inhaled, ingested, or contacted with the skin. Mixing incompatible chemicals can generate toxic gases. Measures to keep incompatible chemicals separated include separate storage and containment areas and/or berming. Potential environmental and/or human health effects could be caused by accidental releases, accidental mixing of incompatible chemicals, fires, and injury to facility personnel from contact with a hazardous material. The accidental release of aqueous ammonia might present serious potential for effects on the environment and/or human health. The VPP facility will store the 19-percent aqueous ammonia solution in two stationary aboveground storage tanks. Aqueous ammonia will be delivered to the plant by truck transport. Therefore, the potential for environmental or health effects will exist only during those rare occasions when the materials are onsite. Many of the hazardous materials are non-flammable. Aqueous ammonia, which constitutes the largest quantity of hazardous materials onsite (except for the mineral oil in the transformers), is incombustible in its liquid state. Ammonia evaporating as a gas from a leak or spill of the aqueous solution is combustible within a narrow range of concentrations in air. However, the	During VPP operation, some hazardous materials will be stored onsite. *Listed below are management and mitigation measures for minimizing the risks of hazardous material handling during facility operation.* • The aqueous ammonia storage and handling facilities will be equipped with a tank level monitor, temperature and pressure monitors and alarms, and excess flow and emergency block valves. Secondary containment will be provided. If there is an inadvertent release from the storage tank, the liquid will be contained within the secondary containment structure. • Sulfuric acid will be fed into the circulating water system in proportion to makeup water flow for alkalinity reduction; this will be done to control the scaling tendency of the circulating water within an acceptable range. The acid feed equipment will consist of an acid storage tank and chemical metering pumps. A 12,000-gallon storage tank will be located near the cooling tower circulating water pumps in a concrete containment area; the area will have sufficient capacity to contain the full tank contents plus accumulated rainfall for 24 hours during a 25-year storm. • Hydrogen gas will be stored outdoors	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	evaporation rate is sufficiently low that the lower explosive limit (LEL) will not be reached. The lubrication oil, diesel fuel, and hydrogen are flammable and will be handled in accordance with a HMBP to be approved by EHD. Hydraulic oil, which is classified as combustible, will also be handled in compliance with the HMBP. With proper storage and handling of flammable materials in accordance with the HMBP, the risk of fire and explosion at the generating facility should be minimal. The natural gas that will provide VPP with fuel for the combustion turbines is flammable and could leak from the supply line that brings gas from Southern California Gas pipeline. The risk of leakage is the normal type of risk encountered with transmitting natural gas via pipeline. Proper design, construction, and maintenance of the line will minimize leaks and the risk of fire or explosion. The line will be buried primarily in or adjacent to roadways. Oxidizers will be stored onsite that could contribute to a fire or explosion hazard. This includes oxygen in compressed gas cylinders. This material will be segregated from flammables and combustibles during storage. **CUMULATIVE:** The primary potential cumulative impact from the use and storage of hazardous materials will be a simultaneous release from two or more sites of a chemical that will migrate offsite. Potentially, the two or more migrating releases could combine; thereby posing a greater threat to the offsite population than a single release by any single site. Hazardous materials that do not migrate, such as sulfuric acid, will not present a potential cumulative impact. The hazardous material with the potential to migrate offsite from VPP is aqueous ammonia. To determine the potential for cumulative impacts, other sites in the vicinity that store and use ammonia must be identified and analyzed. In addition, other chemicals in the vicinity with the ability to migrate offsite that could combine or interact with released ammonia must be identified and analyzed. Numerous other facilities in the City of Vernon handle and store ammonia. Ammonia is sometimes used for refrigeration, making it a fairly common chemical in an industrial area such as Vernon. The closest facility of record handling ammonia is California By-Products Company, a pet food processor, located at 5100 Boyle Avenue in Vernon. This facility is across the street from the VPP and uses anhydrous ammonia for refrigeration. Simultaneous releases from this facility and the proposed VPP facility could cause cumulative	in compressed gas cylinders. It will be used for cooling the steam turbine generator. Because it is highly flammable and potentially explosive, it will be stored in a separate area away from sources of ignition and heat and from oxidizing materials. • Of the other hazardous materials that are continuously used onsite, one merits additional discussion because of the quantity of material stored. Sodium hypochlorite will be added to the circulating water as a biocide. The system will consist of an 8,000-gallon storage tank, chemical metering pumps, and a leak detection system and alarm system. The tank will be located above concrete containment areas with sufficient capacity to contain the full tank contents plus accumulated rainfall for 24 hours during a 25-year storm. • All hazardous materials will be handled and stored in accordance with applicable codes and regulations. All containers used to store hazardous materials will be inspected regularly for signs of leaking or failure. Incompatible materials will be stored in separate storage and containment areas. Areas susceptible to potential leaks and/or spills will be paved and bermed. Containment areas may drain to a collection area, such as an oil/water separator or a waste collection tank. Piping and tanks will be protected from potential traffic hazards by concrete or pipe-type traffic bollards and barriers.	

Environmental Topic	Impact(s)	Mitigation	Conclusion
	impacts, if the migrating clouds merged. However, based on the results of the Offsite Consequences Analysis, an ammonia plume generated during worst-case and unloading release scenarios at the VPP would not migrate offsite. This greatly reduces the chance that a cumulative impact involving the merging of migrating ammonia plumes could occur.	A worker safety plan, in compliance with applicable regulations, will be implemented. It will include training for contractors and operations personnel. Training programs will include safe operating procedures, the operation and maintenance of hazardous materials systems, proper use of personal protective equipment (PPE), fire safety, and emergency communication and response procedures. All plant personnel will be trained in emergency procedures, including plant evacuation and fire prevention. In addition, designated personnel will be trained as members of a plant hazardous material response team; team members will receive the first responder and hazardous material technical training. Hazardous materials will be delivered periodically to VPP. Transportation will comply with the applicable regulations for transporting hazardous materials, including DOT, U.S. Environmental Protection Agency (USEPA), California Department of Toxic Substances Control (DTSC), CHP, and California State Fire Marshal. The Risk Management Plan will include a hazard assessment to evaluate the potential effects of accidental releases; a program for preventing accidental releases; and a program for responding to accidental releases to protect human health and the environment. *The basic elements of an RMP are:* • Management System • Hazard Assessment	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		• Prevention Program • Emergency Response	
Hydrology and Water Quality - Construction	**PROJECT SPECIFIC:** During construction, approximately 13.7 acres of land associated with the plant site and additional areas along the linear corridors (e.g., sewer and gas lines) would be disturbed. The 13.3-acre property that will be used for construction laydown and parking would have previously been disturbed by the property owner in the process of removing the existing buildings and structures prior to its transfer to the City. Surface water impacts are anticipated to be related primarily to short-term construction activity and consist primarily of increased potential for turbidity due to erosion of newly excavated or placed soils. Activities such as grading can potentially increase rates of erosion during construction. In addition, construction materials could contaminate runoff or groundwater if not properly stored and used. Compliance with engineering and construction specifications, following approved grading and drainage plans, and adhering to proper material handling procedures will ensure effective mitigation of these short-term impacts. Best management practices for erosion control will be implemented. Additionally, erosion and sediment controls, surface water pollution prevention measures, and other BMPs will be developed and implemented for construction in accordance with the NPDES Construction Permit issued statewide by the State Water Quality Control Board and local agency requirements. To qualify for the NPDES General Construction permit, the construction contractor will be required to develop a SWPPP (prior to beginning construction), to reduce or prevent the offsite migration of sediment and other pollutants and to reduce the effects of runoff from the construction site to offsite areas. BMPs implemented during construction will be required to meet the technology-based standards of the permit and must assure that violations of receiving water standards do not occur. Successful implementation of the SWPPP will ensure that construction impacts to water resources are mitigated to a less-than-significant level. Compliance with mitigation measures should ensure that all residual impacts associated with the proposed project are mitigated to a level of less than significant. **CUMULATIVE:** The VPP project will not cause or contribute to	Implement BMPs designed to minimize soil erosion and sediment transport during construction of the plant site and project linear features. BMPs will be site-specific and will be modified during construction depending on the phase of construction and weather conditions. BMPs will be selected from a menu of options to most appropriately reflect site conditions and meet regulatory requirements; BMPs to be contained in the SWPPP will include erosion controls (such as soil binders), sediment controls (such as gravel barriers and silt fencing), masonry and paint waste management controls, hazardous material protected programs, material storage and waste management controls, tracking controls (such as protected construction site entrances), wind erosion controls, dry weather flow management, and training components.	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	cumulative impacts on water resources. Good engineering practices and BMPs will be used in the project design and operation. Stormwater discharge will adhere to a SWPPP and to state and local agency water quality standards. The SUSMP program is a regional program addressing water quality for all new development and redevelopment in the region and was designed specifically to mitigate the cumulative impacts of such development on the Pacific Ocean and on local waterways such as the Los Angeles River. The VPP's compliance with the SUSMP constitutes compliance with a regional water quality program further ensuring that cumulative impacts to local waterways are avoided. Drainage volumes and peak flow rates from the site will be lower with the VPP than under existing conditions. No significant impacts to surface water or groundwater quality are expected during construction of the project. The project will contribute to water conservation by making use of recycled water for power plant cooling.		
Hydrology and Water Quality - Operation	**PROJECT SPECIFIC:** Stormwater from the site will be discharged to the LACDPW storm drain system. Because this site is considered "redevelopment," a Standard Urban Stormwater Management Plan (SUSMP) will be submitted to the City of Vernon and LACDPW that includes details of facilities and measures that mitigate impacts to water quality. Consultation with LACDPW on specific facilities and measures will occur during the process of applying for a Flood Permit (see above). The planned onsite detention basin is an example of a structural BMP that will improve stormwater quality; other structural BMPs could be required by LACDPW during review of the Flood Permit Application. Compliance with the SUSMP requirements as implemented by LACDPW will reduce any impact from stormwater runoff to a level of less than significant. In addition to review and approval of the SUSMP, LORS compliance also requires preparation of a SWPPP for industrial operations. The industrial SWPPP will require a suite of good housekeeping requirements including steps to identify and mitigate pollutants and conditions of concern. BMPs to be implemented during operations will be selected to address the potential pollutants generated onsite and will address industrial areas exposed to the elements, material loading and storage areas, dust generating activities, spill and leak prevention, potential non-stormwater flows and prohibitions on discharge of certain nonstormwater flows (such as boiler blowdown), waste handling, and employee training. Inspections and monitoring (including sampling) will also be conducted per the permit requirements. Compliance with the SUSMP would compliment the	• Implement and maintain appropriate erosion and sediment controls for slopes, catch basins, culverts, stream channels, and other areas prone to erosion in accordance with the draft [construction phase] Stormwater Pollution Prevention Plan. Implement and maintain BMPs for material management in accordance with the draft SWPPP. • Implement the requirements of the Standard Urban Stormwater Mitigation Plan by designing and installing structural BMPs (such as the planned stormwater detention basin) as directed by the City of Vernon and LACDPW during the Flood Permit application process. • Conduct operations at the plant site in accordance with the statewide General Permit for Industrial Activities, as recommended by the City of Vernon and LACDPW during review of the Standard Urban Stormwater	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	requirement to prepare and implement a SWPPP for industrial activities. Through the SUSMP and statewide industrial stormwater permit program, all potential pollutants generated during the industrial phase will be sufficiently mitigated such that the beneficial uses of downstream receiving waters will be protected and water quality standards (established in the Basin Plan or any adopted programs addressing impairments in the Los Angeles River) will not be violated. Therefore, impacts from water quality during the operations phase will be less than significant. Compliance with mitigation measures should ensure that all residual impacts associated with the proposed project are mitigated to a level of less than significant. **CUMULATIVE:** The VPP project will not cause or contribute to cumulative impacts on water resources. Good engineering practices and BMPs will be used in the project design and operation. Stormwater discharge will adhere to a SWPPP and to state and local agency water quality standards. The SUSMP program is a regional program addressing water quality for all new development and redevelopment in the region and was designed specifically to mitigate the cumulative impacts of such development on the Pacific Ocean and on local waterways such as the Los Angeles River. The VPP's compliance with the SUSMP constitutes compliance with a regional water quality program further ensuring that cumulative impacts to local waterways are avoided. Drainage volumes and peak flow rates from the site will be lower with the VPP than under existing conditions. No significant impacts to surface water or groundwater quality are expected during operation of the project. The project will contribute to water conservation by making use of recycled water for power plant cooling.	Mitigation Plan. Implement a suite of good housekeeping requirements including steps to identify and mitigate pollutants and conditions of concern. Select BMPs to be implemented during operations to address thepotential pollutants generated on site and will address industrial areas exposed to the elements, material loading and storage areas, dust generating activities, spill and leak prevention, potential non-stormwater flows and prohibitions on discharge of certain nonstormwater flows (such as boiler blowdown), waste handling, and employee training. • Conduct inspections and monitoring (including sampling) per the requirements of the statewide General Permit. Design and implement the BMPs to prevent or control pollutants potentially associated with the operation of the plant from entering storm drains in accordance with the final Stormwater Pollution Prevention Plan.	
Land Use and Planning - Construction	**PROJECT SPECIFIC:** Small-scale agriculture uses are only present within the LADWP right-of-way. The construction impact to this area would be minimal. The only potential effect would be from the installation of a new transmission line pole. Therefore, the proposed project would not convert farmland to nonagricultural use and would not result in the conversion of farmland to nonagricultural use. **CUMULATIVE** No farmland is present in the study area and existing agricultural uses are minimal, so construction of the proposed project	No significant impacts were identified; no mitigation measures were identified.	No impact

Environmental Topic	Impact(s)	Mitigation	Conclusion
	would not significantly affect farmland. Therefore, the proposed project would not result in a cumulative farmland impact.		
Land Use and Planning - Operation	**PROJECT SPECIFIC:** The proposed power plant project would not physically divide an established community because the power plant project site is located on a portion of a block that is surrounded by roads and other industrial development. Therefore, the plant site would not affect access to the city or the project area and would not introduce incompatible land uses. The utilities would not physically divide established communities because the utility lines would be installed underground. The proposed aboveground transmission line routes would be along existing roads and railroad tracks and within an existing transmission line corridor and, therefore, would not physically divide a community. The Randolph Route also would not physically divide an established community because the alignment would be along existing roads and railroad tracks adjacent to Randolph Street. In addition, neither alignment would impede traffic flow beneath the transmission line and would not restrict commerce, or cause a change of traffic patterns. The proposed power plant site is located on land that is designated General Industrial by the City of Vernon General Plan. Allowable uses for the General Industrial land use designation include varied manufacturing, assembling, holesaling, hazardous waste processors, trash to energy facilities, solid and liquid waste disposal facilities and commercial uses which serve industry. Other permitted uses include transportation-related uses, steels mills, paper mills, rendering plants, junk yards, warehouses, slaughtering, and pressing and stamping operations. Although a power plant is not specifically cited as an allowable use for General Industrial-designated land, this designation allows for heavy industry such as trash to energy facilities and refineries, so the proposed power plant, which is also considered to be a heavy industrial use, is also considered to be consistent with the General Industrial designation. Although the City of Vernon General Industrial zoning land use designation does not specifically cite power plants as an allowable use, it allows public facilities. The City of Vernon zoning ordinance defines a public facility as any facility, structure, or land owned or operated by a local, state, or federal agency or by a public utility. The proposed power plant and transmission lines are considered to be a public facility because it would be owned and operated by the City of Vernon. A public facility is an allowable use. Therefore, the proposed power plant and transmission lines would be consistent with the City Zoning Ordinance land use designation. The proposed project is consistent with the General Plan policies for the	No significant impacts were identified; no mitigation measures were identified.	No impact

Environmental Topic	Impact(s)	Mitigation	Conclusion
	cities of Vernon and Commerce. The General Plans for the cities of Huntington Park, Bell, and Maywood do not include any policies applicable to the alternative transmission line. No habitat conservation plan or natural community conservation plan applies to the project site. Therefore, the proposed project would not conflict with such plans. **CUMULATIVE:** The proposed project is consistent with the City of Vernon's goals and objectives for industrial development and would be sited in an area zoned for public facilities. The proposed project is consistent with the General Plan land use designations and zoning designations for the site, and is also consistent with the applicable General Plan land use policies. The proposed power plant would be installed in an existing industrial area so it would be compatible with adjacent land uses. The River Route transmission line would be installed within an industrial area in the City of Vernon and the Randolph Route would be along Randolph Street in the same corridor as existing power lines so the new transmission line would be compatible with adjacent land uses. The proposed project would not conflict with ongoing and future project planned within the City of Maywood. Therefore, the proposed project would not contribute to a significant impact on land use in the project vicinity. Therefore, the proposed project would not result in a significant cumulative land use impact. No habitat conservation plan or natural community conservation plan applies to the project area. Therefore, the proposed project would not result in a cumulative conflict with such plans. The proposed project, including both the River Route and Randolph Route transmission lines, would result in no significant impact to land use; therefore, no significant cumulative impacts to land use would occur.		
Mineral Resources	Not evaluated in document	None identified in document	Not identified in document
Noise - Construction	**PROJECT SPECIFIC:** Worker exposure levels during construction of the VPP will vary depending on the phase of the project and the proximity of the workers to the noise-generating activities. Hearing protection will be available for workers and visitors to use as needed throughout the duration of the construction period. Construction of the VPP is expected to be typical of other power plants in terms of schedule, equipment used, and other types of activities. The noise level will vary during the construction period, depending upon the construction phase. Construction of power plants can generally be divided into five phases that use different types of	• A Hearing Protection Plan, which complies with Cal-OSHA requirements, will be incorporated into the Health and Safety Plan. • The project owner shall establish a telephone number for use by the public to report any significant undesirable noise conditions associated with the construction of the	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	construction equipment. The five phases are: (1) demolition, site preparation, and excavation; (2) concrete pouring; (3) steel erection; (4) mechanical; and (5) clean-up. Average or equivalent construction noise levels projected at various distances from the site. The construction noise may be audible at the nearest residences the closest of which is about 1,000 feet away but is not anticipated to exceed current exposure levels (with the exception of pile driving) and the noisiest construction activities will be confined to the daytime hours. Noise generated during the testing and commissioning phase of the project is not expected to be substantially different from that produced during normal full-load operation. Starts and abrupt stops are more frequent during this period, but on the whole they are usually short-lived. Because of the industrial nature of the area, e steam blows may not be limited to daytime work hours. **CUMULATIVE:** Not identified.	project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year. • Throughout the construction of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all legitimate project related noise complaints. • *The project owner or authorized agent shall:* • Use the Noise Complaint Resolution Form typically suggested by CEC or functionally equivalent procedure to document and respond to each noise complaint; • Attempt to contact the person(s) making the noise complaint within 24 hours; • Conduct an investigation to attempt to determine the source of noise related to the complaint; • If the noise complaint is legitimate, take all feasible measures to reduce the noise at its source • Noisy construction work (that causes offsite annoyance as evidenced by the filing of a legitimate noise complaint) shall be restricted to the 6:00 a.m. to 7:00 p.m. time period. • Haul trucks shall be operated in	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.	

Noise - Operation	**PROJECT SPECIFIC:** Nearly all components will be specified not to exceed near-field maximum noise levels of 90 dBA at 3 feet (or 85 dBA at 3 feet where available as a vendor standard). Since there are no permanent or semi-permanent workstations located near any piece of noisy plant equipment, no worker's time-weighted average exposure to noise should approach the level allowable under OSHA guidelines. Outdoor levels throughout the plant will typically range from 90 dBA near certain equipment to roughly 65 dBA in areas more distant from any major noise source. The noise levels generated by the plant have been calculated for the monitoring locations. R5 is the only monitoring location representing a residential area near the VPP and is located approximately 1,000 feet away. The noise levels presented represent the anticipated steadystate level from the plant with essentially all equipment operating. Operational noise from the VPP is predicted not to exceed 59 dBA at R5, the residential noise monitoring location closest to the site. During the nighttime hours, a project level of 59 dBA is 7 dBA greater than the average nighttime L90 and 6 dBA greater than the average nighttime L50. While these levels exceed the CEC's 5 dBA threshold for a potential noise impact suggesting further analysis is warranted, they result in less than a 10 dBA increase. Such an increase should be considered acceptable given compliance with the City LORS, the industrial nature of the city, the limited number of affected residences, and the fact that the residences are owned by the City.
	
	As a general rule, combined-cycle plants, even those without significant noise controls, do not produce discrete tones that are prominent or noticeable at typical receptor distances. Similar combined-cycle facilities have not resulted in ground or airborne vibration impacts. The proposed project is primarily driven by gas turbines exhausting into heat recovery steam generators (HRSGs). These very large HRSGs reduce low frequency noise, which is mainly the source of airborne induced vibration of structures.
	
	CUMULATIVE: Not identified.
		• Signs requiring the use of hearing protection devices will be posted in all areas where noise levels commonly exceed 85 dBA, such as inside acoustical enclosures.
		• The project owner shall establish a telephone number for use by the public to report any significant undesirable noise conditions associated with the operation of the project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be maintained until the project has been operational for at least one year.
		• Throughout the operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all legitimate project related noise complaints.
		• *The project owner or authorized agent shall:*
		  • Use the Noise Complaint Resolution Form typically suggested by CEC or functionally equivalent procedure to document and respond to each noise complaint;
		  • Attempt to contact the person(s) making the noise complaint within 24 hours;
		  • Conduct an investigation to attempt to determine the source of noise
			Mitigated to less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
		related to the complaint; • If the noise complaint is legitimate, take all feasible measures to reduce the noise at its source	
Population/Housing	Not evaluated in document	None identified in document	Not identified in document
Public Services	Not evaluated in document	None identified in document	Not identified in document
Recreation	Not evaluated in document	None identified in document	Not identified in document
Solid/Hazardous Waste – Construction	**PROJECT SPECIFIC:** During construction, the primary waste generated will be solid nonhazardous waste. However, some nonhazardous liquid waste and hazardous waste (solid and liquid) will also be generated. Most of the hazardous wastes will be generated at the plant site, but a minimal quantity of hazardous waste will be generated during construction of the electric transmission line, natural gas supply line, and wastewater discharge (sewer) line. Paper, wood, glass, and plastics will be generated from packing materials, waste lumber, insulation, and empty nonhazardous chemical containers. Approximately 2 tons of these wastes will be generated on a monthly basis during project construction. These wastes will be recycled where practical. Waste that cannot be recycled will be disposed of weekly in a Class III landfill. Onsite, the waste will be placed in dumpsters. Metal will include steel from welding/cutting operations, packing materials, and empty nonhazardous chemical containers. Aluminum waste will be generated from packing materials and electrical wiring. Approximately 12 tons of waste metal (based on 1,000 lbs per month over 24 months) will be generated during construction. Waste will be recycled where practical and nonrecyclable waste will be deposited in a Class III landfill. Nonhazardous wastewater will be generated, including sanitary wastewater, equipment washwater, stormwater runoff, and wastewater from pressure testing the gas supply line. Sanitary waste will be collected in portable, self-contained toilets. Equipment washwater will be contained at specifically designated wash areas and disposed of offsite at a licensed facility accepting such wastes. Stormwater runoff will be managed in accordance with the contractor-developed stormwater pollution prevention	Because the environmental impacts caused by wastes generated during construction of the facility are expected to be insignificant, extensive monitoring programs will not be required. Generated waste, both nonhazardous and hazardous, will be monitored during project construction in accordance with the monitoring and reporting requirements mandated by the regulatory permits to be obtained for construction.	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	plan (SWPPP) that will be approved by the appropriate agencies prior to the start of construction. The gas supply pipeline hydrostatic test water will be filtered to collect any sediment and welding fragments. The water will be collected, tested, and disposed of by the pipeline contractor. Most of the hazardous waste generated during construction will consist of liquid waste, such as flushing and cleaning fluids, passivating fluid (to prepare pipes for use), and solvents. Some hazardous solid waste, such as welding materials and dried paint, may also be generated. Flushing and cleaning waste liquid will be generated when pipes and boilers are cleaned and flushed. Passivating fluid waste is generated when high temperature pipes are treated with either a phosphate or nitrate solution. The volume of flushing and cleaning and passivating liquid waste generated is estimated to be one to two times the internal volume of the pipes cleaned. The quantity of welding, solvent, and paint waste is expected to be minimal. The City or the construction contractor will be considered the generator of hazardous construction waste and will be responsible for proper handling of hazardous waste in compliance with all applicable federal, state, and local laws and regulations, including licensing, personnel training, accumulation limits and times, and reporting and recordkeeping. The hazardous waste will be collected in satellite accumulation containers near the points of generation. It will be moved daily to the contractor's 90-day hazardous waste storage area, located at the site construction laydown area. The waste will be removed from the site by a certified hazardous waste collection company and delivered to an authorized hazardous waste management facility, prior to expiration of the 90-day storage limit. **CUMULATIVE:** The VPP facility will generate nonhazardous solid waste that will add to the total waste generated in Los Angeles County and in California. Almost all the nonhazardous waste will be wastewater that will be disposed of through the LACSD. However, it is estimated that VPP will generate approximately 600 tons of solid waste during construction. However, there is adequate recycling and landfill capacity in California to recycle and dispose of the waste generated by VPP. Therefore, the impact of the project on solid waste recycling and disposal capacity is not		

Environmental Topic	Impact(s)	Mitigation	Conclusion
	significant. The VPP will be included in the City of Vernon Solid Waste Recycling Program. The City's contract with a solid waste hauler includes specifications for the provision of recycling containers, collection of recyclables on a routine basis, and delivery of recyclables to recycling facilities. The City of Vernon currently complies with the 50% solid waste diversion/recycling goal established by AB 939.		
Solid/Hazardous Waste - Operation	**PROJECT SPECIFIC:** During VPP facility operation, the primary waste generated will be nonhazardous solid waste. However, varying quantities of both solid and liquid hazardous waste will also be generated periodically. The majority of nonhazardous waste will be wastewater discharged to the sewer. The VPP facility will also produce maintenance and generating facility wastes, typical of power generation operations. These will include rags, turbine air filters, broken and rusted metal and machine parts, defective or broken electrical materials, empty containers, the typical refuse generated by workers and small office operations, and other miscellaneous solid wastes. The quantity generated is estimated to be about 50 tons per year. Large metal parts will be recycled. The wastewater collection system will collect sanitary wastewater from sinks, toilets, and other sanitary facilities and discharge the wastewater to the City's sanitary sewer, which will convey the wastewater to LACSD's wastewater treatment facilities. New sewer line connections will be installed to connect the VPP site to the existing LACSD sewer line. General facility drainage will consist of area washdown, sample drains, equipment leakage, and drainage from facility equipment areas. Water from these areas will be collected in a system of floor drains, hub drains, sumps, and piping and routed to the facility wastewater collection system. Drains that could contain oil or grease will first be routed through two oil/water separators. Water from the plant wastewater collection system will be recycled to the cooling tower basin. Wastewater from combustion turbine water washes will be collected in a holding tank. If cleaning chemicals were not used during the water wash procedure, the wastewater will be discharged to the oil/water separators. Wastewater containing cleaning chemicals will be trucked offsite for disposal at an approved wastewater disposal facility.	Because the environmental impacts caused by wastes generated during operation of the facility are expected to be insignificant, extensive monitoring programs will not be required. Generated waste, both nonhazardous and hazardous, will be monitored during project operation in accordance with the monitoring and reporting requirements mandated by the regulatory permits to be obtained for operation.	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	Hazardous waste generated will include waste lubricating oil, used oil filters, spent SCR and oxidation catalysts, and chemical cleaning wastes. The catalyst units will contain heavy metals that are considered hazardous. Chemical cleaning wastes will be generated from the periodic cleaning of the HRSGs and associated piping. They will consist of alkaline and acidic cleaning solutions used during chemical cleaning of the HRSG boiler system turbine wash and HRSG fireside washwaters. These wastes generally contain high concentrations of heavy metals and will be collected for offsite disposal. The chemical feed area drains will collect spillage, tank overflows, effluent from maintenance operations, and liquid from area washdowns. After testing, water collected from the chemical storage areas will be directed to the cooling tower basin if clean or, if not, it will be containerized and shipped offsite for disposal. The quantity of this effluent is expected to be minimal. **CUMULATIVE:** The VPP facility will generate nonhazardous solid waste that will add to the total waste generated in Los Angeles County and in California. Almost all the nonhazardous waste will be wastewater that will be disposed of through the LACSD. However, it is estimated that VPP will generate approximately 80 tons a year from operations (including approximately 30 tons of hazardous waste). However, there is adequate recycling and landfill capacity in California to recycle and dispose of the waste generated by VPP. Therefore, the impact of the project on solid waste recycling and disposal capacity is not significant. The VPP will be included in the City of Vernon Solid Waste Recycling Program. The City's contract with a solid waste hauler includes specifications for the provision of recycling containers, collection of recyclables on a routine basis, and delivery of recyclables to recycling facilities. The City of Vernon currently complies with the 50% solid waste diversion/recycling goal established by AB 939. Hazardous waste generated during operation of VPP will consist of waste oil, filters, SCR and oxidation catalysts, and fluids used to clean the HRSGs and piping. The waste oil and catalysts will be recycled or disposed of off site. Cleaning and flushing fluids will be removed and disposed of offsite. Cleaning and flushing will occur only periodically. Hazardous waste treatment and disposal capacity in California is more than adequate. Therefore, the effect of VPP on hazardous waste recycling, treatment, and		

Environmental Topic	Impact(s)	Mitigation	Conclusion
	disposal capability is not significant.		
Traffic Impacts - Construction	**PROJECT SPECIFIC:** During the peak construction, the project is expected to generate approximately 434 construction worker vehicle trips during the peak periods. These 434 peak daily construction worker vehicles will arrive and depart during a single shift beginning at 7:00 a.m. and ending at 5:30 p.m., resulting in 868 daily vehicle trips. Traffic attributable to the project construction will arrive to the site before the typical adjacent street system morning peak periods begins, but will depart the site during the afternoon peak period; however, the construction of the VPP will not affect the typical adjacent street system morning and afternoon peak ICU values. In general, the findings are that the construction of the VPP will not result in intersections ICUs that are significantly greater than those for the existing typical morning and afternoon peak hours for the street system. Therefore, the construction of the VPP is not expected to have significant impacts on roadway intersections in most cases. The average and maximum daily truck traffic at the site during construction are estimated to be approximately 7 and 10 trucks per day, respectively. Truck traffic will consist of material deliveries, shuttles to three laydown areas, and work vehicles spread throughout the workday with few deliveries during the peak hour. Therefore, their contribution to overall traffic impacts will be negligible. **CUMULATIVE:** There should not be significant cumulative impacts resulting from the proposed VPP in combination with other proposed projects in the area, because traffic impacts resulting from the power project are temporary and less than significant (construction). There are no other large planned industrial developments in the general project area (i.e., within the City of Vernon) being considered.	The City will encourage construction contractor's employees to organize carpools. Construction of the proposed project will add a moderate amount of traffic to local roadways during the construction period. In most cases, the increase in delay is minimal because traffic will be added to major movements. Because, with certain exceptions discussed below, there are no significant impacts to local roads, no mitigation measures are required. However, if significant impacts occur during construction (i.e., if the construction worker schedule is greatly expanded), trip reduction strategies will be implemented to stagger shift start and end times so that impacts during peak hours are not worsened. An exception is Atlantic Boulevard/Bandini Boulevard intersection, where significant impacts may occur and for potential lane or intersection closures related to transmission line construction. To mitigate impacts at Atlantic and Bandini, a TMP will be prepared to address potential mitigation measures. The TMP will be used to address potential traffic issues during construction, timing of heavy equipment and building material deliveries, potential street or lane closures, signing, lighting, and traffic control device placement. Damage to a roadway opened during construction will be restored to or near its preexisting condition. The construction contractor will work with the local agency's	Mitigated to less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
		engineer to prepare a schedule and mitigation plan for the roadways along the construction routes. Traffic impacts that require mitigation measures are the impacts resulting from partial roadway closures during the natural gas, sewer pipeline and transmission line construction. *The following mitigation measures are anticipated to reduce those impacts to an insignificant level:* • Develop a TMP for the entire roadway network where the natural gas, sewer pipeline and transmission line are to be constructed. • Incorporate detour signs in the TMP for construction. • In the TMP, address the need to minimize the total length of roadway under construction at any one time to avoid having long stretches of roadway out of service but with no construction in progress. • Conduct construction along affected roadways at night or between morning and afternoon peak hours where permitted. • Maintain a minimum of 20 feet wide clear travel way (10 feet for each direction) to allow traffic movements.	
Traffic Impacts - Operation	**PROJECT SPECIFIC:** The operational phase of the proposed project would generate approximately 11 additional employee commutes or 22 daily trips. A quantitative traffic analysis was not conducted for the long-term operations phase since it would generate a low volume of peak hour trips (11 morning and 11 evening peak hour employee trips). This would not have a measurable impact on the study area intersections. During operations of the VPP, it is estimated that 20 employees will work onsite. Eleven employees will work during the regular operation hours (8 a.m.-5	The operations-related and maintenance-related traffic associated with the project is considered to be minimal; freeways and local roadways have adequate capacity to accommodate operations-related traffic. Consequently, no operations-related mitigation measures are required.	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
	p.m.). An additional 9 employees will work 12-hour rotating shifts, with three employees per shift, and 3 as relief. Based on this schedule, it is estimated that there will be 11 inbound vehicular trips during the morning peak commuter hour and 11 outbound vehicular trips during the afternoon commuter hour The addition of traffic associated with project operations during the peak commuter morning and afternoon hours will not result in an ICU value significantly higher than without the project. Therefore, the operation of the VPP will not have significant impacts on roadway intersections. Transport of large quantities of hazardous materials to the project site is not anticipated until the end of project construction. Table 8.10-8 summarizes expected truck trips during operations, including delivery of hazardous materials and removal of wastes. There will be a maximum of three truck trips per day, with an average of two or fewer truck trips per day to the project site. During full operation, aqueous ammonia (19 percent) will be delivered to the project site by tanker truck about every 2 to 3 days (for a single truck) or once a week (for a double truck). **CUMULATIVE:** There should not be significant cumulative impacts resulting from the proposed VPP in combination with other proposed projects in the area, because traffic impacts resulting from the power project are negligible (operation). There are no other large planned industrial developments in the general project area (i.e., within the City of Vernon) being considered. Traffic volumes generated by the VPP during the operations phase will be low so that there should be no cumulative significant environmental impacts.		