Appendix E.
Summary of PdV Wind Energy Project EIR

1.0 PdV Wind Energy Project

1.1 Project Description

The PdV project (proposed project) would be located along the southeastern foothills of the Tehachapi Mountains in the Willow Springs area of eastern Kern County. The proposed project is located about 15 miles west of State Highway 14 (Antelope Valley Freeway) and 12.5 miles south of Highway 58. Figure A-1 shows the location of the proposed project. The proposed project site is generally bounded to the north and west by the Tehachapi Mountains; to the south by the Los Angeles Aqueduct and beyond that, Rosamond Boulevard; and to the east by Tehachapi Willow Springs Road. The Pacific Crest Trail temporary alignment bisects the proposed project site. Tejon Ranch is situated directly west of the proposed project site, while Willow Springs International Motorsports Park, a recreational racetrack, is located approximately 10 miles to the east. Northrop Grumman Corporation maintains its Tejon Test Site approximately 3 miles to the west. The unincorporated community of Rosamond and Edwards Air Force Base are located about 15 miles to the southeast.

The PdV project would include construction and operation of the following:

- Up to 300 wind turbines, not to exceed 400 feet in height from ground elevation, with associated generators, towers, foundations, and pad-mounted transformers. Each turbine could range from 1 to 3 MW;
- On-site roads and off-site project access roads, control cables, subsurface electrical feederline corridors, and power collection cables (transmission lines) necessary to serve the project;
- A new PdV substation to step up the voltage generated by the turbines to meet the electrical transmission system's 220-kV voltage (both 220-kV and 500-kV lines cross the site);
- A 20-acre interconnection yard/switching station near the existing SCE 220-kV Antelope-Magunden power line to interconnect the facility with that line or the adjacent 500-kV transmission line;
- An O&M building of about 4,800 square feet; and
- Temporary construction yards and concrete batch plants.

As discussed in the PdV Environmental Impact Report (EIR), published in September 2007 (Lead Agency: Kern County Planning Department), Power Partners Southwest, LLC (applicant) is considering a range of turbine models for this wind project to address market and manufacturer constraints that may ultimately dictate the type of turbine available once the proposed project has been permitted. To provide flexibility in selecting a turbine model for the proposed project, based on availability and other market constraints, the EIR evaluated a range of turbines from 1 to 3 MW.

The smallest turbine that may be used would be the Mitsubishi MWT-1000A at 1 MW, and the largest turbine would be the Vestas V90, at 3 MW. Therefore, the proposed project could consist of as many as 300 turbines or as few as 100 turbines. The EIR evaluates the impacts associated with implementation of the range of turbines that could be used. Each EIR section discusses the range of impacts that could occur, with an emphasis on the maximum impact that would be expected. For example, with respect to land impacts, the greatest area of impact would occur if 300 1-MW turbines were installed. Therefore, the assessment of land impacts in this EIR is based on the worst-case scenario of the installation of 300 1-MW wind turbines. Under this worst-case scenario, the proposed project would disturb up to 394 acres of land (or 7 percent of the total site); 276.8 acres would be permanently disturbed and 117.2 acres would be disturbed temporarily during construction. The main access road would require 15.5 acres of off-site disturbance.

Construction and operation of the proposed project could affect up to 643.5 acres within the overall 5,820-acre proposed project site. All areas of temporary disturbance would be restored in accordance with the Kern County General Plan and Zoning Ordinance. Each of these components is discussed in detail in Chapter 3, "Project Description" (PdV Draft EIR, Chapter 3, September 2007).

1.2 Alternatives

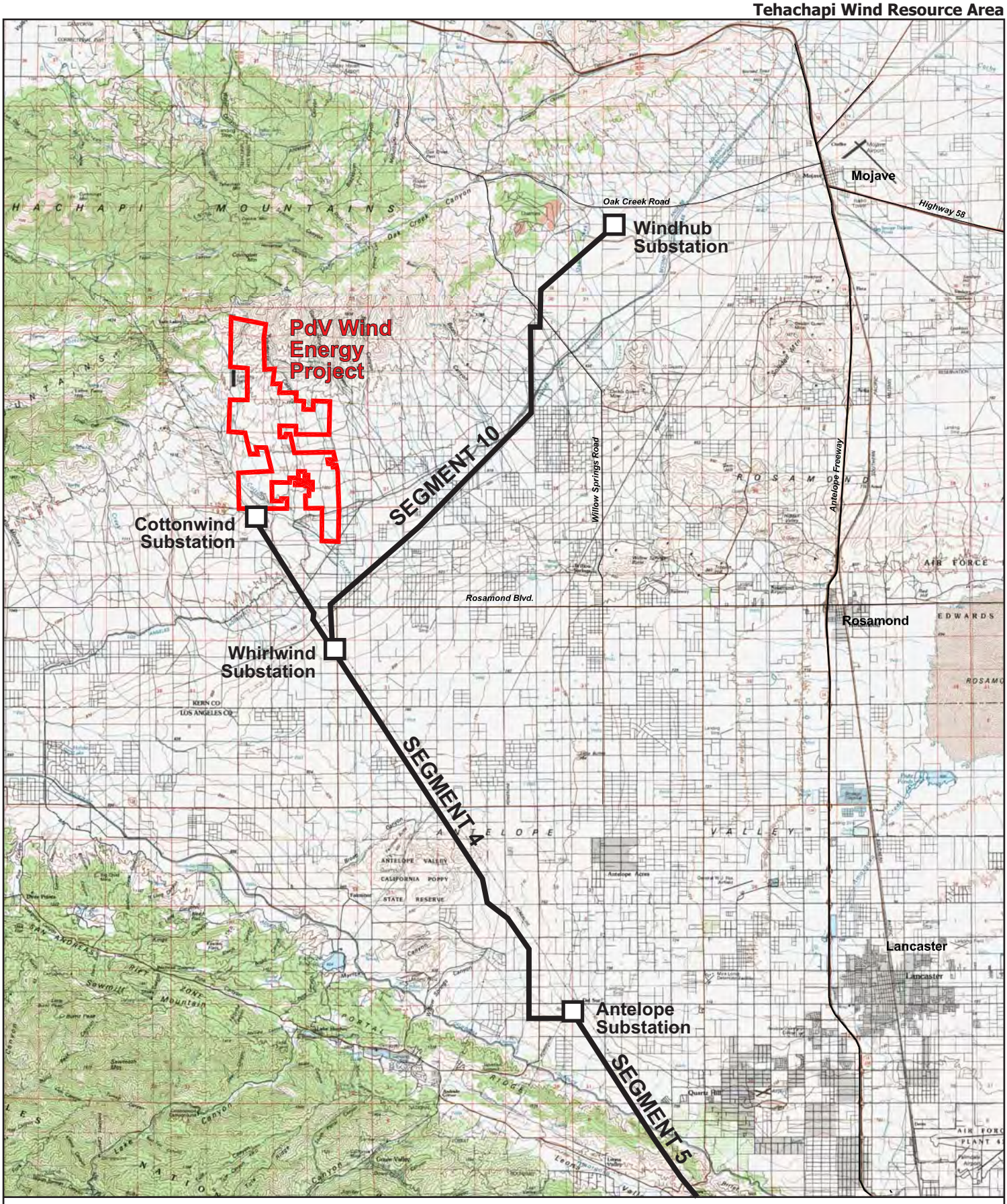
Information in this section was derived from *Chapter 6 Alternatives* of the PdV EIR. The PdV EIR discussed and analyzed 4 alternatives to the proposed project and provided a comparison of the impacts of these alternatives and of the proposed project. The alternatives analyzed in the PdV EIR are:

- Alternative A: No Project Alternative;
- Alternative B: Build Out of General Plan;
- Alternative C: Relocate to Tehachapi Wind Resource Area; and
- Alternative D: Reduce Project Size.

Alternative A: No Project Alternative

According to the PdV EIR, under Alternative A, the proposed project would not be constructed and existing conditions at the proposed project site would remain unchanged. Land uses on the proposed project site would remain as rural residential, recreational, and agricultural use as well as electrical power transmission use. Under Alternative A, the significant visual, air quality, biological resources, and public services impacts of the proposed project would be avoided, as discussed below. With respect to energy demand and energy sources, this alternative would undercut California's aggressive goal of meeting 20 percent of the state's electricity from renewable sources by 2010. Specifically, this alternative would not produce the 300 MW of wind energy for the consumer market in southern California. The 300 MW per day of wind energy capacity that the PdV Wind Project would provide would not be available to help investor-owned utilities, such as Southern California Edison (SCE), meet the renewable portfolio standard required under state law. Further, available wind energy in the Tehachapi Mountain area, which has been identified as one of California's largest areas for wind energy development and is currently responsible for about 40 percent of the state's total wind-generated power, would not be accessible to customers. This would force utilities to make alternate arrangements in order to supply the market with competitively priced fuel. In addition, the need for energy in the project region is likely to increase because of projected population and economic growth in Kern County and other southern California counties.

Alternative A would limit the contribution of the renewable wind energy to fulfill projected energy demands and could result in the construction of wind plants at other locations or the substitution of fossil fuels, each of which could create additional environmental impacts. With respect to the preservation of agricultural land in Kern County, which is a high priority in the Kern County General Plan, this alternative may indirectly lead to the future conversion of agricultural lands in the proposed project site to non-agricultural use. Specifically, the proposed project would preserve the base zoning district of agricultural use for the lifetime of the proposed project and would provide additional income to the landowners. Unlike other forms of development, such as residential development, agricultural operations in the proposed project site could continue throughout operation of the proposed project. With the exception of the limited amount of land that would be converted to non-agricultural use for the installation of aboveground facilities, landowners are expected to continue current agricultural operations (primarily grazing) on the remaining areas of the project site. Therefore, the proposed project would prevent other potential development with uses not compatible with agricultural operations.



Aspen Environmental Group

Figure E-1
PdV Wind Energy Project Location

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Alternative B: Build Out of General Plan

Under Alternative B, it has been assumed that the population of Kern County will continue to grow at its current rate of less than 2 percent annually over the next 20 years, with increments generated both by a continuing influx of new residents from outside the County and by the natural increase of the population in the area (Kern County, 2004a). This alternative explores the potential impacts if the current General Plan were carried through full implementation without any changes and if potential development were maximized. The introduction of homes and processing and mining facilities would introduce structures where none presently exist.

Aesthetics. Visual impacts would be significant, as development would replace untouched land. As a result, this alternative would not lessen aesthetic impacts to a less-than-significant level. The Build Out alternative would not reduce the significance of the impacts on the visual character of the proposed project site.

Air Quality. The development of homes and mining and processing facilities would significantly impact air quality, as emissions of NOx and PM_{10} would increase during construction. Emissions of Greenhouse gases (GHGs) would also increase due to the increased need for additional electricity generated from fossil fuels associated with the growing development and vehicle traffic. The long-term impacts on air quality would also not be reduced by this alternative. Not only would the reductions in emissions as a result of the proposed project be lost, but an increase in emissions would result from the development. As a result, this alternative would not lessen the significant impacts on air quality.

Biological Resources. Under this alternative, impacts on existing natural conditions, including plant communities and habitat used by common wildlife and sensitive species, would be significant. One single-family dwelling unit per 20 acres or 80 Williamson Act acres is low density, yet could result in habitat loss. Natural resource extraction could result in habitat loss and disruption of plant communities. Although the absence of wind turbines would eliminate the threat of migratory avian loss, the loss of habitat as a result of development would remain a significant impact on biological resources.

Recreation. Under this alternative, visual impacts on the Pacific Crest Trail would be lessened compared to the proposed project but not to a less-than-significant level. This alternative, like the No Project alternative, assumes no construction of the three hundred 1-MW turbines. This Build Out alternative does include the possible construction of one dwelling per 20 acres (or one dwelling per 80 Williamson Act acres) and the accompanying agricultural structures for grazing and dry-land farming. Visual impacts would be significant as development would replace untouched land. This alternative substitutes wind turbines for agricultural structures and homes, which, despite their inherent inequalities, is still development on untouched land. In conjunction with the high viewshed expectations of hikers and equestrians on the Pacific Crest Trail, this alternative would still result in a significant and unavoidable impact on public parks.

This alternative would not reduce any significant and unavoidable impacts associated with the proposed project to less-than-significant levels. Moreover, this alternative would not meet the proposed project objectives, including: Provide up to 300 MW of installed electrical capacity; Result in an economically feasible wind energy project that would be developed through commercially available financing; Realize the full potential of the wind resource on the lands under lease; and Offset the need for additional electricity generated from fossil fuels and assist the state in meeting its air quality goals and reduce GHGs.

Alternative C: Relocate to Tehachapi Wind Resource Area

Alternative C would place the proposed project in an area closer to existing wind developments. In the Tehachapi/Mojave area, most of the existing 3,444 wind turbines that produce about 710 MW of power are located in the TWRA (California Energy Commission, 2005). While this alternative would reduce visual impacts there is not enough acreage to construct the proposed wind plant, which as currently designed requires a contiguous 5,638 acres. The owners of the other wind projects in the TWRA may be considering improving their own projects under existing power contracts, and such improvements or expansion of existing wind facilities could preclude the use of space in the TWRA for new projects. In addition, there are other wind energy projects being planned in Kern County. Although applications have not yet been submitted to permitting agencies, presumably some of these projects will be in the TWRA. Given that wind plants already exist or are planned in the TWRA, siting the proposed project in the TWRA would only replace other proposed wind plants. By locating the proposed project, which is a large development, out of the TWRA, other projects could also be implemented in the TWRA. In the long-term, therefore, siting the proposed project outside of the TWRA may lead to approval of more wind energy projects.

As a result of housing growth, large areas of land that are required for the proposed project are increasingly difficult to find and are expensive. Increased costs could result in wind development projects being economically unfeasible. With a growing population in the Tehachapi area and in California as a whole, wind resources in areas of Kern County other than the TWRA would be necessary in order to facilitate achievement of the state's renewable energy goals.

Aesthetics. Under this alternative, visual impacts would be reduced from those of the proposed project. However, most of the projects in the TWRA are located on ridgetops and use shorter, older turbines (around the 200-foot-tall level). The introduction of the proposed 400-foot-tall towers on ridgetops may in fact be more visually prominent than the existing turbines, creating a visual impact in the TWRA.

Air Quality. The TWRA is located in the part of the Mojave Desert Air Basin under the jurisdiction of the Kern County Air Pollution Control District (KCAPCD). Air emissions associated with the construction and operation of a 300-MW wind plant at this location would theoretically be the same as for the proposed project. Emissions of NOx and PM_{10} would also be significant and impact air quality in the basin. Therefore, this alternative would not reduce impacts on air quality.

Biological Resources. Impacts on biological resources within the TWRA would vary based on the specific location. If the development occurs within a previously disturbed area, then impacts would be less significant. If impacts occur in a more undeveloped area, depending on the quality of habitat available, impacts may be equal or greater. Because there are other wind plants and development in the immediate area, wildlife may already use this area less than the proposed, more remote proposed project site. This alternative would also be expected to result in the loss of suitable habitat for sensitive species. However, it is expected that, similar to the proposed project, impacts on habitat and associated biological resources could be reduced to less than significant through avoidance of sensitive habitat and mitigation. As with the proposed project, impacts on certain sensitive avian species during operation of wind turbines are uncertain. Therefore, regardless of whether the turbines are installed at the proposed project site or in the TWRA, impacts are considered to be potentially significant and unavoidable. As a result, relocating the project to the TWRA would not result in fewer impacts on biological resources.

Recreation. Under this alternative, impacts on public parks would be avoided when compared to the proposed project. Relocating the project to the TWRA would avoid construction of the proposed project

along the Pacific Crest Trail, which would be significantly impacted by the proposed project. This alternative would not reduce all significant and unavoidable impacts associated with the proposed project to less-than-significant levels. However, Alternative C: Relocate Project to the TWRA, would meet all of the proposed project's objectives.

Alternative D: Reduce Project Size

Alternative D would reduce the proposed project site and components dramatically to a size level where the construction would not cause an exceedance of the PM_{10} threshold. In order to prevent an exceedance of the PM_{10} threshold during construction, the project site would have to be reduced from 3,573 acres to approximately 37 acres. Energy generated from the proposed project would be reduced 88.6 percent from 300 MW to 34 MW. Only thirty-four 1-MW turbines would be constructed on 37 acres of land. The primary benefit of this alternative would be the short-term reduction of air quality impacts. Alternative D would meet the daily emission threshold of NOx and PM_{10} during construction. This alternative would not, however, meet Kern County's goal to maximize wind energy production as stated in the Kern County General Plan (Energy Element, Section 5.4.2, Wind Energy Development). Specifically, Policy 4 states: The County will work with the wind energy industry to maximize electricity potential while assuring that military flight operations, communications facilities, and visual conflicts for neighboring property owners are addressed. Furthermore, reducing the proposed project would significantly affect the economic terms of the proposed project, driving up the cost of renewable energy. Reducing the proposed project size could impact the economics to a level that the applicant would choose to withdraw the proposed project and it would not be built.

Aesthetics. Under this alternative, the visual character of the proposed project site would still be significantly affected. Even the introduction of a fraction of the number of turbines and associated facilities would still introduce structures into a relatively undeveloped area that would be visually noticeable. As described above, views of the turbines and associated facilities would be most prominent from nearby residences and for individuals recreating in the area, including using the Pacific Crest Trail and off-road vehicle trails. Reduction of the proposed project size would not significantly decrease remote views because they would already be fairly limited, even with the proposed project, because of the distance of nearby communities and major highways and roads in the proposed project vicinity. While the reduced project could relocate turbines away from the Pacific Crest Trail, visual impacts would still likely occur, as discussed above under "Alternatives Eliminated." Therefore, aesthetic impacts of the reduced project would be significant and unavoidable.

Air Quality. Reducing the number of turbines to 34 (88.6 percent decrease) would bring the impacts on air quality during construction to less-than-significant levels. Levels of NOx and PM_{10} would meet the Kern County and KCAPCD significance thresholds of 25 and 15 tons per year, respectively. Therefore, this alternative would have less-than-significant impacts on air quality during construction, unlike the proposed project. While the reduction of the proposed project size would reduce temporary short-term air quality impacts, the long-term offsets to overall reduction of GHGs and other particulates associated with the burning of fossil fuels gained by operation of the 300-MW proposed project would be negligible. Hence, the decrease in short-term emissions could indirectly result in greater long-term emissions in the Mojave Desert Air Basin. Therefore, impacts associated with this alternative could be greater than the proposed project in the long-term.

Biological Resources. Alternative D would reduce the loss of suitable habitat for sensitive species, as it would impact less area. It could also be designed to avoid impacts on the state-designated species in the

site. Nevertheless, even with a reduced area of impact, habitat and associated biological resources would be disturbed by construction. Similar to the proposed project, however, it is anticipated that these impacts would be reduced to less than significant.

Alternative D would also reduce impacts on raptors because there would be fewer turbines that might be encountered. It would, however, not reduce the impacts to a less-than-significant level. Because there is potential for protected species, including mammals, birds, and bats, to use the area, there is still the potential for a significant impact if the proposed project were to result in a substantial reduction in the numbers of an endangered or threatened species. As such, even with the installation of fewer turbines and associated equipment, construction and operation of a reduced project would have a potentially significant impact on raptors and other sensitive species, similar to the proposed project. In addition, impacts on certain sensitive avian species during operation are uncertain and, therefore, are considered to be potentially significant and unavoidable.

Recreation. Under this alternative, impacts on public parks would be lessened compared to the proposed project but not to a less-than-significant level. The reduction in the number of turbines to 34 would still provide an aesthetic impact on the Pacific Crest Trail, given the high viewshed expectations of hikers and equestrians on this National Scenic Trail. Visual impacts would remain significant despite the reduction in turbines, because the introduction of 400-foot-tall turbines where no development currently exists would be a significant impact. The Reduce Project Size alternative would not reduce all significant and unavoidable impacts associated with the proposed project to less-than-significant levels. Despite a much smaller number of turbines, thirty-four 1-MW turbines would still have a significant aesthetic impact on undeveloped land. Although the levels of emissions during construction would meet the acceptable Kern County threshold, the long-term impacts of eliminating 266 MW of wind energy on air quality could be more harmful than the short-term benefit of reduced construction emissions. Moreover, this alternative would not work toward the 20 percent renewable energy production for California by 2010. Under this alternative, biological impacts would be reduced, yet not to less-than-significant levels. Finally, reducing the size of the proposed project site and energy produced could have economic impacts that render the alternative unfeasible. The construction of a commercial wind farm operates within an economy of scale, which would be reduced to an infeasible level with only 34 wind turbines.

1.3 Impacts and Mitigation Measures

Information in this section was derived from the PdV EIR document prepared by the Kern County Planning Department. For a more detailed discussion on impacts for each issue area, refer to Chapter 4 of the PdV EIR. Additionally, references cited in the mitigation measures correspond to the PdV EIR. All figures listed below can be found in the PdV EIR.

Less than Significant with Mitigation. The PdV EIR addressed all potentially significant environmental impacts identified during the Initial Study/Notice of Preparation and public scoping. The EIR found that environmental impacts on the following issue areas would be reduced to less-than-significant levels with the incorporation of mitigation measures:

- Agricultural resources;
- Cultural resources;
- Geology and soils;
- Hazards and hazardous materials;
- Hydrology and water quality;
- Land use and planning;
- Mineral resources;
- Noise;
- Public services;
- Transportation; and
- Utilities and services.

The mitigation measures identified to reduce significant impacts to less-than-significant levels are summarized in Table 1 below.

Unavoidable Significant Adverse Impacts. The PdV EIR found that the proposed project would result in significant and unavoidable impacts for the following resources, even with the incorporation of feasible mitigation measures:

- Aesthetics;
- Air quality;
- Biological resources; and
- Recreation.

The proposed project has the potential to have significant adverse effects on aesthetics, air quality, biological resources, and recreation at the project site and/or in the regional project area, even with mitigation, as identified in Table 1.

1.3.1 Aesthetics

Setting

The proposed project site is in an undeveloped, rural area located in the Tehachapi Mountains and is part of the Cottonwood Creek watershed, draining generally west and south toward the creek. Landforms in the project area consist of valleys and mountains. Two single-circuit 220-kV and one large, single-circuit 500-kV transmission lines occur in a corridor that trends NW from SE at the bottom of the proposed project site near Cottonwood Creek. Views of the proposed project would vary from significantly noticeable for individuals using the proposed project site or nearby area for recreation to less noticeable for those driving on the roads surrounding the proposed project. Views for individuals recreating in the area, such as hiking on the Pacific Crest Trail (which bisects the proposed project site) or using off-road vehicles, would be substantially affected. Surrounding areas to the north, south, and west do not currently generate light. Since no glare-producing structures currently exist on the proposed project site, glare is not generated.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

- **Adversely Affect a Scenic Vista**

  The proposed project would transform the relatively natural condition of the proposed project site (although it is currently used for grazing) to a commercial-scale wind farm consisting of wind turbines approximately 400 feet tall. Therefore, the existing visual character of the proposed project site would be altered.

  No feasible mitigation measures can be implemented to preserve the natural condition of the proposed project site. With implementation of the proposed project, impacts would be significant and unavoidable.

- **Alter or Degrade the Existing Visual Character or Quality of the Proposed Project Site and Its Surroundings**

  No wind projects currently exist in the area and the surroundings are primarily agricultural with scattered rural residences. The surroundings of the proposed project site would be changed from open space view to a view of 300 wind turbines.

No feasible mitigation measures can be implemented to preserve the existing visual character of the proposed project site. With implementation of the proposed project, impacts would be significant and unavoidable.

- **Result in Light or Glare that Adversely Affects Day or Nighttime Views in the Area**

  Lighting at night in the area includes visible light from nearby houses and headlights from motorists traveling along Tehachapi Willow Springs Road. Due to the height of wind turbines, flashing white or red lights would be required by the Federal Aviation Administration (FAA) for safety. Continuous lighting atop the wind turbines and security lighting for the Office and Maintenance Building would change the night sky view. Impacted viewers include nearby residences and Pacific Crest Trail users.

  Impacts would be significant and unavoidable after implementation of the following mitigation measures:

  Mitigation Measure (MM) 4.1-1: The applicant shall file a Notice of Construction with the FAA for the project. The applicant shall install lighting on turbines for aviation warning in accordance with FAA requirements only. The turbines shall not be lighted for other reasons.

  MM 4.1-2: All exterior lighting on the O&M building and on site fencing shall be shielded to minimize the impacts on the night sky.

Other Impacts

- **Alter or Damage a Major Landform or Scenic Resource**

  No impacts on state scenic highways would occur. Impacts would be less than significant.

- **Result in Aesthetics Impacts as a Result of SCE Facility Improvements**

  Aesthetic impacts to SCE Facility improvements would be less than significant due to shorter transmission pole lengths, similar pole design and material, low viewer expectation, and very low average daily traffic levels. A new source of substantial light or glare would not be created. Impacts would be less than significant.

1.3.2 Agricultural Resources

Setting

The proposed project site does not have a developed water source, therefore agricultural activity is limited. The proposed project site has always been used for agriculture, including grazing, pasture use, and minimal dry-land farming. Williamson Act Land Use contracts apply to approximately 2,367 acres within the proposed project site's 5,820 acres.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Covert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-agricultural Use**

  No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance exists at the proposed project site. Therefore, Important Farmland would not be converted to nonagricultural uses by the proposed project. The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan and the Wind Energy (WE) Combining District. Impacts would be less than significant.

- **Conflict with Existing Agricultural Zoning or Williamson Act Contracts**

  Under the Williamson Act (Gov. Code Section 51238(a)(1)), "electrical facilities" are designated as compatible uses on agricultural land. The exact number and location of the turbines has not been made, therefore *MM 4.2*-1, stated below, requires that a determination of compatibility be made on a site-specific basis in conjunction with the required turbine plot plan. Implementation of this mitigation measure would ensure that the requirements of compatible use with the Williamson Act are conformed with and that commercial agriculture operations can continue as required.

  MM 4.2-1: Prior to construction of any wind turbine on a parcel of land subject to a Williamson Act Land Use contract, the applicant shall submit a written site description, along with a plot plan, for review and approval to the Kern County Planning Department. This submittal is in addition to the required WE plot plan review. The site-specific description shall include the qualifying agricultural use and quantification of the amount of land that would no longer be available for that use.

- **Involve Other Changes in the Existing Environment which, Because of their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use**

  Approximately 4 percent of agricultural land would be permanently disturbed and converted to nonagricultural use. Therefore, approximately 96 percent of the proposed project site could continue agricultural and grazing activities. Since only a limited area of the proposed project site would be converted to nonagricultural use and the fact that the land being converted is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, this impact is considered less than significant. The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan.

- **Result in the Cancellation of an Open-Space Contract, Williamson Act Contract, or Farmland Security Zone**

  The proposed project is in conformance with the California Land Conservation Act of 1965 and is not covered by any open space contract or Farmland Security Zone. This impact would be less than significant.

  MM 4.2-1 should be implemented.

- **Result in Agricultural Impacts as a Result of SCE Facility Improvements**

  The proposed SCE facilities and adjacent lands consist entirely of lands classified as "other land" and "grazing land". The proposed project would not convert Important Farmland to nonagricultural uses. No impacts would occur.

1.3.3 Air Quality

Setting

The proposed project site is located within the Mojave Desert Air Basin (MDAB) in Kern County and is regulated by the Kern County Air Pollution Control District (KCAPCD). The primary pollutants of concern in the proposed project area are particulate matter (PM) less than 10 microns (PM_{10}) and ozone.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

- **Violate any Air Quality Standards or Contribute Substantially to an Existing or Projected Air Quality Violation**

The Kern County Planning Department and KCAPCD thresholds of significance were used. Emissions of Nitrogen Oxide (NOx) and PM10 during construction would exceed the KCAPCD thresholds. Project emissions during operation would not exceed the same thresholds. The mitigation measures listed below have been identified to reduce emissions of PM10, PM2.5, and NOx during construction. However, even with mitigation, emissions would continue to exceed KCAPCD thresholds. Thus, the proposed project would have a temporary but significant and unavoidable impact on air quality during construction.

MM 4.3-1: The applicant shall develop a Fugitive Dust Control Plan in compliance with KCAPCD Rule 402 to reduce PM10 and PM2.5 emissions during construction. The Fugitive Dust Control Plan shall include:

a. Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan;

b. Description and location of operation(s);

c. Listing of all fugitive dust emissions sources included in the operation; and

d. Implementation of the following dust control measures shall be implemented:

i. All material excavated or graded will be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. Watering will occur a minimum of twice daily on unpaved/untreated roads and on disturbed areas with active operations.

ii. All clearing, grading, earth moving, and excavation activities will cease during periods when dust plumes of 20 percent or greater opacity affect public roads or occupied structures.

iii. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive dust.

iv. If more than 5,000 cubic yards of fill material will be imported or exported from the site, then all haul trucks will be required to exit the site via an access point where a gravel pad or grizzly has been installed.

v. Areas disturbed by clearing, earth moving, or excavation activities will be minimized at all times.

vi. Stockpiles of dirt or other fine loose material will be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.

vii. Where acceptable to the fire department, weed control will be accomplished by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.

viii. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

ix. Traffic speeds on unpaved roads shall be limited to 25 mph.

MM 4.3-2: The applicant shall reduce exhaust emissions during construction and, in particular, emissions of NOX, when using construction equipment and vehicles by implementing the following measures:

a. Prohibit the use of heavy-equipment during first- or second-stage smog alerts and suspend all construction activities during second-stage smog alerts;

b. Maintain equipment engines in proper working order;

c. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use to the extent feasible;

d. During all grading and construction activities at least 10 percent of diesel engine–driven construction equipment on site shall be equipped with Tier 1 or Tier 2 as certified by the CARB or with engines certified by the KCAPCD to provide equivalent benefits. At least 40 percent of the remaining diesel engine–driven construction equipment shall have diesel particulate filters and lean-NOX catalysts (or equivalent control devices);

e. The owner/operator will require that all diesel engines be shut off when not in use to reduce emissions from idling;

f. Require that trucks and vehicles in loading or unloading queues have their engines turned-off when not in use; and

g. Equip any generators, compressors, or other stationary sources of emissions located within 100 feet of a residence or other sensitive receptor with a control system to reduce normal exhaust emissions.

- **Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Region is Nonattainment for Federal or State Standards**

  Since proposed project construction results in significant emissions of NOx and PM10, construction emissions would also result in a cumulatively considerable net increase. However, since proposed project operation would not result in significant emissions, a long-term cumulative increase in criteria pollutants would not be attributed to the proposed project.

  See *MM 4.3-1* and *4.3-3*; Conform with the goals, policies, and implementation measures of the Kern County General Plan and the WE Combining District.

- **Result in Impacts on Air Quality Resources as a result of SCE Facility Improvements**

  Exceedance of the thresholds by the proposed project alone is the same as the construction of the proposed project and the transmission lines together. NOx and PM10 are exceeded in both cases. Impacts from the construction of the transmission lines alone are less than significant. When air impacts from proposed project construction and transmission line construction are grouped together, they are considered significant and unavoidable with respect to NOx and PM10.

  Impacts to climate change from the transmission line construction alone are considered less than significant. When these impacts are grouped together with construction impacts from the proposed project, impacts are still considered less than significant with respect to Greenhouse Gas (GHG) emissions.

Other Impacts

- **Conflict with or Obstruct Implementation of the Applicable Air Quality Plan**

  Operation of the proposed project would not result in significant emissions and conflict with applicable air quality plans. The proposed project would exceed the KCAPCD significance thresholds during construction. Thus, proposed project construction would conflict with applicable air quality plans. The proposed project would conform to the goals, policies, and implementation measures of the Kern County General Plan WE Combining District and future KCAPCD air quality plans, including the revised SIP that will be submitted to the EPA in 2007. Implementation of the following mitigation measures would reduce construction impacts to less than significant.

See *MM 4.3-1* through *MM 4.3-5*; Conform to the goals, policies, and implementation measures of the Kern County General Plan WE Combining District and future KCAPCD air quality plans, including the revised SIP that will be submitted to the EPA in 2007.

- **Expose Sensitive Receptors to Substantial Pollutant Concentration**

  Non-project related sensitive receptors would not be exposed to substantial pollutant concentrations from the proposed project. However, construction workers would be exposed to criteria pollutants. Implementation of the mitigation measures below would reduce the exposure to workers from concentrations of pollutants and spores.

  MM 4.3-4: The applicant shall educate construction personnel on the health effects of exposure to criteria pollutant emissions.

  MM 4.3-5: The applicant shall provide construction workers with personal protective equipment such as respiratory equipment (masks), if requested by the worker to reduce exposure to pollutants and Valley Fever.

  MM 4.3-6: The applicant shall provide all construction personnel and visitors to the project site with information regarding Valley Fever. This would facilitate recognition of symptoms of Valley Fever and earlier treatment.

- **Create Objectionable Odors Affecting a Substantial Number of People**

  Odor emissions associated with vehicle and engine exhaust and fueling are the only types that would be produced from the proposed project. Due to the large area of the proposed project and strong prevailing winds at the proposed project site, the odors would most likely disperse and not create significant objectionable odors. Therefore, the proposed project is not expected to create significant impacts to air quality related to objectionable odors.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan and WE Combining District.

1.3.4 Biological Resources

Setting

The proposed project site supports 12 habitat types containing native and non-native species typical of the Mojave Desert and Tehachapi Mountains. Of these habitats, the Joshua Tree Woodland, the Desert Native Grassland, and the Southern Willow Scrub are designated by the California Department of Fish and Game (CDFG) as sensitive plant communities. Visual observations of the site show historical uses have resulted in moderate to substantial habitat disturbance.

Along the western area of the proposed project site, 5.6 acres of National Wetland Inventory (NWI)-mapped wetlands were identified. Approximately 24.5 miles of blue-line drainages are located within the proposed project site. Wildlife species on the proposed project site include those that are adapted to arid transitional, scrub habitats. Common wildlife species include raptors and other birds, small mammals, lizards, rabbits, deer, and coyotes. The greatest threats to connectivity and migration on the proposed project site are roads, off-road vehicles, and grazing.

Literature review and field surveys resulted in the identification of 39 special-status species has having the potential to occur within the proposed project site. These include three plant species, 20 avian species,

eight bat species, four species of herptofauna, and four mammal species. For a complete list of species identified, please refer to Table 4.4-2 of the PdV EIR.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

- **Have a substantial adverse impact on Special-Status Species**

The proposed project could potentially impact 33 special-status species comprised of avian, bat, mammal, and herptofauna species. No individual sensitive plant species would be impacted. Approximately 96 percent of the proposed project site would provide habitat for special-status species during operation. Construction activities could potentially injure or kill individuals at the onset of construction when animals may not have relocated yet. During operation of the proposed project, potential exists for injury or mortality to raptors, other birds, and bats if collision with wind turbines occurs. The displacement of sensitive resident avian species may occur as the area impacted by the moving rotors extends for several meters and could potentially disturb and displace nesting and foraging birds. Although unlikely, the proposed project has the potential to impact the coast horned lizard, American badger, and San Joaquin pocket mouse, since suitable habitat exists on the proposed project site. Implementation of mitigation measures would ensure that impacts to these and other sensitive species are less than significant.

Sensitive bat and bird species that migrate at elevations less than 500 feet above the ground surface are not expected to be impacted significantly by the proposed project since these species migrate through the proposed project area over a very limited time period. However, uncertainty exists regarding the level of incidences of injury and mortality due to collisions with turbines and other structures. This impact is considered potentially significant and unavoidable.

Mitigation Applicable to all Special Status Species

MM 4.4-1: The applicant shall minimize to the greatest extent feasible the area required for project construction and operation.

MM 4.4-2: Prior to the issuance of building or grading permits, the applicant shall develop and submit to the Kern County Planning Department for review and approval a plan for restoring all areas of temporary impact to their previous condition. The Restoration Plan shall identify success criteria for each habitat type and develop monitoring measures to ensure that success criteria will be met.

MM 4.4-3: The applicant shall retain a biological firm as an on-call service provider to recover and relocate ground-dwelling special-status species as encountered during construction.

MM 4.4-4: The applicant shall provide environmental training to all personnel working on the site during project construction and operation. The training shall include a review of special-status species known to occur in the project site to promote their awareness, and implementation measures if a species is encountered or killed. If a species is encountered or killed, the appropriate employee will be required to contact the on-call biological services provider. In addition, all personnel shall be trained in the following California condor-specific measures, which shall be required of the project: construction and operations personnel shall be required to observe a "microtrash-free" policy of keeping the project clear of all debris that may constitute an attractive nuisance for California condors (e.g., cans, bottle caps, nails, small pieces of metal,

etc.), including collection of any trash left behind at the end of each day. The placing of "anti-debris" signs in areas where personnel congregate shall also be required. All on-site trash repositories shall be securely closed at all times.

MM 4.4-5: If an injured or dead special-status species is encountered during construction, the applicant shall stop work within the immediate vicinity. The applicant shall notify the Kern County Planning Department, the on-call biologist, and the appropriate resources agency (e.g., USFWS or CDFG) before construction is allowed to proceed.

Mitigation Applicable to Sensitive Wildlife Species

MM 4.4-6: Prior to issuance of building or grading permits, the applicant shall provide the Kern County Planning Department with documentation that a qualified biologist has reviewed the final siting plan (including conducting a GIS spatial analysis) and verified that the 10 acres of suitable habitat for the San Joaquin pocket mouse has been avoided. A copy of the final report shall be submitted to the CDFG and USFWS.

MM 4.4-7: Prior to initial ground-disturbing activities (e.g., mechanized clearing or rough grading) for all project-related construction activities, a qualified biologist shall conduct a preconstruction sweep of the project site for special-status wildlife species. During these surveys the biologist will:

a. Ensure that potential habitats become inaccessible to wildlife (e.g., burrows are removed that would otherwise provide temporary refuge);

b. In the event of an unanticipated discovery of a specials-status ground-dwelling animal, recover and relocate the animal to adjacent suitable habitat within the project site at least 200 feet from the limits of grading; and

c. For sites requiring the relocation of American badger, install and maintain exclusion fencing throughout all construction activities that involve the use of heavy equipment in the vicinity of burrows occupied by American badger.

MM 4.4-8: Prior to the issuance of building permits, the applicant shall implement the following siting constraint measures and provide documentation that these design measures have been met on the final siting plan:

a. All wind turbines shall be sited at least 500 feet from known nest sites or sites that may provide suitable nesting habitat for raptors.

b. All ground-disturbing work and any work involving hazardous materials shall be conducted at least 100 feet from wetlands.

c. Specifications for wind tower foundations shall provide at least a 2,500-square-foot (50 feet by 50 feet) clear zone.

d. Specifications for wind tower foundations shall prevent under-burrowing by small mammals to the maximum extent practicable.

e. Turbine specifications shall ensure that the lower reach of rotor blades is no lower than approximately 85 feet above the ground surface.

Mitigations Applicable to Sensitive Bird and Bat Species

MM 4.4-9: To reduce collisions of avian and bat species with turbines, the applicant shall coordinate with the FAA to minimize the number of wind turbines that require night lighting, and use low-frequency red strobe lights, as allowed.

MM 4.4-10: To reduce collisions of avian and bat species with other appurtenant structures, the applicant shall coordinate with the FAA to minimize lighting to the extent feasible by using minimal-intensity, directional, low-sodium lights.

MM 4.4-11: The applicant or its representative shall perform Post-construction Avian/Bat Mortality Monitoring in the first and second years following the initial operation of the project to demonstrate to the Kern County Planning Department that migration is compatible with operation of wind turbines and that the level of incidental injury and mortality does not result in an unanticipated long-term decline in migratory raptor species in the vicinity of the project site. Post-construction Avian/Bat Mortality Monitoring shall include a Mortality Analysis, which shall be conducted as follows:

a. The applicant shall provide the Kern County Planning Department with the results of a mortality study for migratory raptors and bats on an annual basis. A qualified wildlife biologist shall conduct mortality monitoring using a statistically significant sample size of operational turbine sites within the wind energy development project.

b. The Mortality Analysis shall note species number, location, and distance from the turbine for each recovered migratory raptor and bat, availability of raptor and bat prey species, and apparent cause of avian or bat mortality. The applicant shall provide all results to the Wildlife Response and Reporting System database within 90 days of completion of the annual study.

c. The mortality monitoring shall follow standardized guidelines outlined by the National Wind Coordinating Committee, and shall include carcass scavenging and searcher efficiency trials.

d. The results of the Mortality Analysis shall be provided to the Kern County Planning Department and regional entities involved in the conservation of migratory species, including the USFWS, the CDFG, and the Audubon Society. At a minimum, the Mortality Analysis shall consider three factors:

    i. Number of annual avian and bat mortalities per turbine,

    ii. Disproportionate representation of a particular species, and

    iii. Comparison to existing data on wind farm mortality.

MM 4.4-12: If after two years of Post-construction Avian/Bat Mortality Monitoring, the Kern County Planning Department, in consultation with the CDFG and the USFWS, determines that the project is resulting in unanticipated significant adverse impacts on the population of a migratory species or is substantially interfering with any migratory corridor, the applicant shall provide supplemental mitigation. A net reduction of 10 percent shall be uses as a threshold of significance for evaluating project impacts to migratory species at the project site. Supplemental measures to be considered could include:

a. Additional migration count surveys, conducted using a methodology that allows comparison with the surveys conducted in autumn 2004.

b. Provision of additional nesting structure or platforms shall be erected in suitable habitats within the region at off-site locations approved by the USFW and CDFG.

c. Contribution to research that addresses the sources of mortality and population impacts on the species of concern; and

d. Funding of regional conservation measures with the intention of enhancing and preserving existing foraging/nesting habitat. Enhanced off-site habitat may encourage existing avian populations to relocate to regional locations, therefore reducing mortality rates in the project site. Similarly, preserved off-site habitat could prevent avian populations from relocating to the project site, which could increase mortality rates.

MM 4.4-13: The applicant or its representative shall conduct Post-construction Breeding Monitoring in the first and second years following the initial operation of the project to demonstrate to the Kern County Planning Department that sensitive resident birds are compatible with operation of wind turbines, and that the level of incidental injury and mortality does not result in a long-term decline in sensitive resident bird species in the region. Post-construction Breeding Monitoring shall include a Nesting Analysis and a Wintering Analysis that shall be conducted as follows:

a. Nesting Analysis:

i. The applicant shall provide the Kern County Planning Department with the results of a study and comparative data analysis, using the same methods used in the summer 2005 methods of nesting raptors. Qualified ornithologists shall conduct the study of nesting raptors.

ii. Nesting raptor surveys shall be conducted throughout the project site between February 15 and August 15.

iii. Directed field surveys for nesting raptors shall be conducted during the breeding season by vehicle and on foot to determine the presence or absence of raptor nests, especially mid-sized to large raptor nests within suitable habitat areas.

iv. If at the end of the second year of monitoring, the operation of wind turbines has been determined to result in a level of incidental injury and mortality to nesting birds that constitutes a significant adverse impact on a breeding population, the applicant shall undertake supplemental compensatory measures to support regional conservation of migratory birds.

The results of the Nesting Analysis shall be made available to regional entities involved in research related to the conservation of nesting birds such as the Audubon Society.

b. Wintering Analysis:

i. Qualified ornithologists shall conduct a wintering raptors study showing the presence/absence of winter raptors at the project site using either telemetry or counts from late November to early February in the two years following initiation of operation of the wind energy development project.

ii. The applicant shall provide the Kern County Planning Department with the results of the study and comparative data analysis using the same methods used in winter 2004–2005 methods for wintering raptors.

If after two years of Post-construction Breeding Monitoring, the Kern County Planning Department, in consultation with the CDFG and the USFWS, determines that the project is resulting in unanticipated significant adverse impacts to the population of a breeding species, the applicant shall provide supplemental mitigation. Supplemental measures to be considered could include:

c. Provision of additional nesting structure or platforms.

d. Contribution to research that addresses the sources of mortality and population impacts on the species of concern.

e. Funding of regional conservation measures with the intention of enhancing and preserving existing breeding habitat.

MM 4.4-14: Prior to any grading and grubbing activities undertaken during the breeding season of nesting birds, a qualified biologist shall conduct preconstruction nesting surveys for nests occurring in the project site to prevent injury or mortality of these species. The approximate

breeding seasons for nesting birds observed in the project site are as follows, but may vary and should be evaluated by a qualified biologist at the time of construction:

- Burrowing owls - February 15 and August 15
- Loggerhead shrike - February 1 and July 31
- Le Conte's thrasher - February 15 and June 30
- Sage sparrow - March 1 and July 31
- Lawrence's goldfinch - March 1 and September 15

MM 4.4-15: If nesting birds are encountered during preconstruction nesting surveys during the breeding season, the applicant shall consult with the appropriate resources agencies (e.g., CDFG and USFWS) to identify appropriate measures to prevent impacts on the species, such as establishing a buffer around occupied nests.

MM 4.4-16: A qualified biologist provided by the applicant shall conduct preconstruction passive relocation of burrowing owls for burrows occupied by burrowing owls encountered within 500 feet of areas scheduled for grubbing or grading between August 16 and February 14 as follows:

a. Identified burrows shall be closed, and individuals shall be passively relocated. Passive relocation shall occur outside of the breeding season (February 15 to August 15). Passive relocation shall be performed as prescribed in CDFG burrowing owl mitigation guidelines.

b. Once it has been determined that the burrow is no longer active, the burrow shall be removed.

Other Impacts

- **Have a Substantial Adverse Impact on Any Riparian Habitat or Other Sensitive Natural Community**

The proposed project would impact riparian habitat and sensitive natural communities, including Desert Native Grassland (state-designated), Joshua Tree Woodland (state-designated), and Oak Woodlands, which are identified as a sensitive community by Kern County. The permanent footprint of the proposed project in addition to clearing and grading activities would result in direct impacts to plant communities. They can also be impacted indirectly by fugitive dust during construction, the accidental release of hazardous materials, and the introduction of invasive species.

Access roads for project construction and operation would intersect with drainage at 38 locations resulting in permanent impact on approximately 0.1 acre of riparian habitat. Access roads, wind turbines, and other aboveground facilities would impact over 30 acres of Desert Native Grassland habitat. Between 11 to 13 acres of Joshua Tree Woodland habitat would be disturbed by the proposed project.

A total of 67 oak trees are located within the northwestern area of the proposed project site. Implementation of the proposed project would not result in impacts on these oak trees. However, since the final siting of proposed project facilities could change, potential impacts to these oak trees may occur. Implementation of these mitigation measures would reduce impacts on riparian habitat, sensitive plant communities, and oak trees to less than significant.

MM 4.4-17: Prior to the issuance of building or grading permits, the applicant shall provide the Kern County Planning Department with a report from a certified botanist demonstrating that the final extent of the impact of the siting of project facilities in riparian habitat associated with Cottonwood Creek is limited to approximately 0.1 acre.

MM 4.4-18: The applicant shall compensate for the permanent impacts on riparian habitat along Cottonwood Creek subject to CDFG jurisdiction by on-site restoration of affected Mojave Desert Scrub at a 1:1 ratio. This shall be accomplished by the preparation of a Mojave Desert Scrub Replacement Plan along Cottonwood Creek as follows:

a. A qualified botanist shall prepare the replacement plan;

b. The replacement plan shall be submitted to the Kern County Planning Department prior to issuance of the building or grading permits for the project;

c. The replacement plan shall include details on site preparation, propagation and planting of species characteristic to each crossing, and maintenance and monitoring activities and shall include those measures outlined in Section 5.3.2.3 of the technical biological report provided in Appendix C.

d. Plantings shall be installed within five business days of the first wetting during the rainy season (October 15 to April 15) or, if no rain occurs by February 15, planting shall be installed and irrigated to meet the average rainfall for the region.

MM 4.4-19: The applicant shall obtain a Streambed Alteration Agreement from the CDFG if one is required.

MM 4.4-20: The applicant shall mitigate impacts on Joshua Tree Woodland by preparing and submitting a Joshua Tree Impact Plan to the Kern County Planning Department detailing the amount of acres of Joshua Tree Woodlands and/or individual Joshua trees removed. The applicant shall contribute funding to the City of Lancaster Prime Desert Woodlands Preserve managed by the City of Lancaster Parks, Recreation & Arts Department to compensate for the loss at a ratio of 1:1 prior to the issuance of a building permit in the area affected.

MM 4.4-21: The applicant shall realign access roads in areas with Desert Native Grassland to conform to the alignment of existing roads to the maximum extent practicable. This realignment is anticipated to reduce permanent impacts on Desert Native Grassland by five acres through alignment with the existing 12-foot-wide road that crosses the Desert Native Grassland. The applicant shall revegetate the 10-foot-wide area on either side of the roadway realignment following construction.

MM 4.4-22: The applicant shall compensate for permanent impacts on Class 3 and 4 Desert Native Grasslands through on-site restoration of Class 2 grasslands within the project site at a 1:1 ratio such that the percent of native cover on restored Class 2 grasslands will be higher than 30 percent. To achieve this, the applicant shall develop a Desert Native Grassland Replacement Plan as follows:

a. A qualified botanist shall prepare the replacement plan;

b. The replacement plan shall be submitted to the Kern County Planning Department prior to issuance of building or grading permits;

c. The replacement plan shall include details on site preparation, propagation and planting of characteristic species, and maintenance and monitoring activities and shall include those measures outlined in Section 5.3.1.3 of the technical biological report provided in Appendix C.

d. Performance criteria shall include the attainment of at least a 10 percent cover of native grass species in the first year and 15, 20, 25, and 30 percent cover, in each subsequent year respectively, of native grass species over a five-year period as determined by the point-intercept transect method.

MM 4.4-23: The applicant shall ensure that the final siting design avoids significant impacts on Southern Willow Scrub habitat, as shown on Figure 3-1, the constraints map. If this measure is

not met, the applicant shall be required to compensate for the loss on a 1:1 basis prior to issuance of the project Building Permit.

MM 4.4-24: The applicant shall ensure that the final siting design avoids any impact on individual mature oak trees and oak canopy areas.

MM 4.4-25: The applicant shall implement the following best management practices to reduce indirect impacts on all of the plant communities within the project site:

a. To reduce the transport of fugitive dust particles related to construction activities, soil stabilization and/or watering shall be implemented. Construction materials and stockpiled soil shall be covered if they are a source of fugitive dust.

b. Erosion controls that comply with County, state, and federal standards shall be applied, including the implementation of best management practices. Practices such as use silt fences and check dams shall be applied near disturbed areas to minimize and control erosion.

c. To minimize potential impacts on existing plant communities from accidental fuel spills, all refueling shall occur in a designated fueling area that includes a temporary berm to limit the spread of any spill. Drip pans shall be used during refueling to contain accidental releases, and drip pans shall be used under fuel pump and valve mechanisms of any bulk fueling vehicles parked at the construction site. Spills shall be immediately addressed per the appropriate spill management plan, and soil cleanup and soil removal shall be initiated if needed.

d. To minimize the potential establishment of invasive weed species during project implementation, tires and surfaces of all trucks and construction equipment shall be washed when they enter and exit the project site to minimize the transport of seeds from weedy species; certified weed-free mulch shall be used when stabilizing areas of disturbed soil; and on-site soil shall be used to the maximum extent practicable for fill, avoiding the top 10 inches of soil used for banking.

MM 4.4-26: A 100-foot setback from NWI-mapped wetlands shall be required to avoid indirect impacts during construction.

- **Have a Substantial Adverse Impact on Federally Protected Wetlands**

The proposed project in its current configuration would not impact federally protected wetlands. To ensure that impacts remain less than significant, the following mitigation measures should be implemented.

MM 4.4-27: The applicant shall demonstrate on the final siting plan that final locations of project facilities will not impact the 5.6 acres of NWI-mapped wetlands in the project site, as shown on the constraints map provided as Figure 3-1.

MM 4.4-28: To avoid any impacts on the federally protected wetlands on site, the applicant shall establish a 100-foot setback from these wetlands for all construction activities, including refueling of equipment.

- **Interfere with Wildlife Movement or with Migration Corridors**

Some disruption of movement is caused by Highway 138, from the San Gabriel Mountains north into the Tehachapi Mountains. Sufficient wildlife movement exists at the corridors located south from the Tehachapi Mountains into the proposed project area since there is a lack of extensive roads and development. Temporary impacts during construction would result from the proposed project on the drainages located within the proposed project area that could be used as wildlife movement corridors. Studies show that the proposed project site receives little use by migrating, wintering, or nesting birds, including raptors. Nevertheless, all bird species would be at an increased risk of individual

mortalities. Despite individual mortalities, the proposed project would not cause a significant impact to wildlife movement. No mitigation measures would be required.

- **Conflict with Any Local Policies or Ordinances Protecting Biological Resources, such as a Tree Preservation Policy or Ordinance**

  The proposed project would be constructed in compliance with the requirements of the Kern County General Plan and would not conflict with local policies or ordinances protecting biological resources.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan and no additional mitigation would be required.

- **Conflict with an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan**

  The proposed project is located within the far western area of the West Mojave Plan, which is comprised of a pending habitat conservation plan and an approved amendment to the California Desert Conservation Area Plan for the desert tortoise and Mohave ground squirrel. Both of these species were determined to be absent from the proposed project site. The proposed project would not conflict with the pending habitat conservation plan, or Natural Communities Conservation Plan, or any other applicable local, regional, or state habitat conservation plan.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan and no additional mitigation would be required.

- **Result in Biological Resource Impacts due to SCE Facility Improvements**

  The proposed project vicinity lacks riparian areas and sensitive natural communities, and no wetlands or other waters of the United States have been observed in the proposed project area. Trees or sensitive habitats would not be affected by the SCE facilities portion of the proposed project and other plans or protections would not be conflicted with. The proposed project would have no adverse effect on sensitive or special-status species, and no mitigation would be necessary.

- **Remove and/or Disturb a Habitat as a Result of Special Protection Scheme Construction Activities**

  The replacement of any existing structures would not be required by proposed project construction. A preconstruction survey would be conducted by SCE to confirm that no special-status species or their habitats are present within the work area.

  MM 4.4-29: SCE shall conduct a preconstruction survey to document that no special status species or their habitats are present within the work area. If special status species or their habitats are identified, all work shall be conducted in areas where impacts to the species and their habitats will be avoided. If avoidance is not feasible, the qualified biologist will confer with the appropriate agencies (USFWS and/or CDFG) to address potential relocation measures or direct impacts to special status species or their habitat.

1.3.5 Cultural Resources

Setting

A records search for archaeological sites did not identify any previously recorded historic archaeological resources on the proposed project site. Field surveys identified one prehistoric site on the proposed project

site, which has been heavily disturbed. Activities such as camping, off-road vehicle traffic, and road maintenance have greatly altered the landscape and suggest that unauthorized collection of artifacts may have occurred. Field surveys also identified seven historic sites on the proposed project site. Historic evidence indicated temporary and semi-permanent periods of occupation between the 1930s and 1940s.

Thirteen areas of high significance were identified for paleontological resources. These deposits have the potential to contain vertebrate fossils of the Pleistocene age.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource**

  Construction activities for the proposed project would occur within 60 feet of identified historic archaeological resources. Since these areas are located outside the area to be graded, they would not be impacted by the proposed project. However, since the final siting of turbines and associated facilities may vary from the planned locations, prehistoric and historic archaeological sites may potentially be affected. There is also a potential to encounter buried significant historical archaeological resources (including human remains) that were not previously identified during construction activities. This impact is considered potentially significant and mitigation is required.

  MM 4.5-1: The applicant shall inform and train all construction personnel on the awareness of cultural resources, exclusion zones, and the procedures to follow in the event of an unanticipated discovery.

  MM 4.5-2: Prior to issuance of the grading or building permit the applicant shall provide Kern County Planning Department with documentation that a qualified archeologist has reviewed the final siting of project facilities and planned work areas and that:

  a. All facilities and planned ground-disturbing activities would occur within the area surveyed for this EIR (see Figure 4.5-1; if the revised location would occur outside of this area, implementation of *MM 4.5-6* shall be required); and

  b. Known prehistoric and historic archeological sites would be avoided.

  c. The evaluation by a qualified historian may be done via spatial analysis of existing data using GIS relative to final location of project facilities.

  MM 4.5-3: The final location of all project facilities shall be located such that all ground-disturbing activities would occur at least 60 feet way from known prehistoric and historic archeological sites. This shall be documented and verified by a qualified archeologist with a written report submitted to the Kern County Planning Department.

  MM 4.5-4: The applicant shall install exclusion fencing around the historic archeological sites located within 60 feet of project facilities and planned ground-disturbing activities. Verification of completion shall be submitted to the Kern County Planning Department.

  MM 4.5-5: The applicant shall provide for a qualified archeologist to monitor initial ground-disturbing activities where they occur within 60 feet of the historic archeological sites, namely at

PdV 11, PdV 16, PdV 61, PdV 66, PdV 67, PdV 77, PdV 82, and PdV 88. The monitor shall maintain a daily log of activities and shall submit a final monitoring report to Kern County Planning Department on findings upon the completion of construction monitoring for the project.

MM 4.5-6: If the applicant revises the location of proposed facilities and ground-disturbing activities that affect areas beyond the area surveyed for this EIR (see Figure 4.5-1), the applicant shall:

a. Not conduct work in those areas until approval has been received from Kern County Planning Department;

b. Provide for a qualified archaeologist to conduct a supplemental Phase I evaluation (records search and pedestrian surveys) of all new areas that would be affected (i.e., within the revised area of impact);

c. Provide a supplemental technical report to Kern County Planning Department discussing the supplement Phase I evaluation and potential impacts and avoidance and minimization measures;

d. Based on the results of the supplemental Phase I evaluation, ensure that the qualified archeologist provides documentation to Kern County Planning Department verifying that all newly identified sites would be avoided and that all ground-disturbing activities would occur at least 60 feet away;

e. If the revised location of facilities avoids newly identified sites but ground-disturbing activities are located within 60 feet of the sites, provide for a qualified archeologist during initial ground-disturbing activities (as with *MM 4.5-4*); and

f. If the revised location of facilities impacts newly identified sites (e.g., sites could not be avoided), consult with the Kern County Planning Department regarding further requirements, possibly including a Phase II and Phase III evaluation, and additional mitigation to reduce potential impacts to a less than significant level.

MM 4.5-7: The applicant shall minimize or avoid impacts on potentially significant prehistoric and historic resources discovered during construction by developing and implementing an Unanticipated Discovery Protocol. The Unanticipated Discovery Protocol shall be submitted to the Kern County Planning Department for review and approval prior to the start of grading or construction and shall include discussion of the following:

a. Specific wording that if evidence of archeological resources (e.g., chipped or ground stone, historic debris, building foundations, or human bone) is identified during excavation, all work within 100 feet of the discovery site shall stop until a qualified archaeologist can assess the significance of the find;

b. Notification requirements, including immediate notification by the applicant to a qualified archeologist and to Kern County Planning Department;

c. Consultation with the Kern County Planning Department, the qualified archaeologist, and the applicant to determine whether the discovered resource can be avoided and, if impacts have not occurred, work can continue. If it is determined that the resource has been impacted and an assessment of its significance is required:

   i. A qualified archaeologist shall develop appropriate treatment measures for the discovered and impacted resource in consultation with Kern County Planning Department, the Office of Historic Preservation, and other appropriate agencies; and

   ii. Work will not resume until permission is received from Kern County.

MM 4.5-8: Southern California Edison will conduct a literature review, review of maps and aerial photographs and a reconnaissance survey of any portion of the Special Protection Scheme right-of-way that does not have current documentation. Any significant resources shall be avoided during ground-disturbing work.

- **Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature**

During the grubbing, grading, and excavation phases of ground-disturbing construction activities, potential exists for encountering unique paleontological resources within the proposed project site. The paleontological resources can be impacted and destroyed by construction equipment, project-related vehicles, exposure of alluvium during construction, unauthorized collection of fossils by project personnel, and vandalism. This impact is considered potentially significant and mitigation is required.

MM 4.5-9: The applicant shall retain a qualified paleontologist to prepare a Paleontological Resource Mitigation Plan for implementation during construction. The Paleontological Resource Mitigation Plan shall be submitted to Kern County Planning Department for review and approval prior to the start of grading or construction and shall include the following:

a. Procedures for the discovery, recovery, and salvage of paleontological resources encountered during construction, if any, in accordance with standards for recovery established by the Society of Vertebrate Paleontology;

b. Verification that the applicant has an agreement with a recognized museum repository (e.g., the Buena Vista Museum), for the disposition of recovered fossils and that the fossils shall be prepared prior to submittal to the repository as required by the repository (e.g., prepared, analyzed at a laboratory, curated, or cataloged); and

c. Description of monitoring reports that will be prepared, which shall include daily logs and a final monitoring report with an itemized list of specimens found to be submitted to Kern County Planning Department , the Buena Vista Museum of Natural History, and the Natural History Museum of Los Angeles County within 90 days of the completion of monitoring.

MM 4.5-10: The applicant shall provide for a qualified paleontologist to provide construction personnel with training on implementation of the Paleontological Resource Mitigation Plan and specifically procedures to be followed in the event that a fossil site or fossil occurrence is encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing.

MM 4.5-11: The applicant shall provide for a qualified paleontologist to monitor initial ground-disturbing construction activities in Sections 15, 16, 20 through 23, 25 through 28, and 32 through 34 in Township 10 North, Range 15 West and portions of Sections 2 and 4 in Township 9 North, Range 15 West of the USGS 7.5-minute series Tylerhorse Canyon topographic quadrangle. If a resource is encountered, the monitor will implement the procedures of the Paleontological Resource Mitigation Plan. If recovery of a large or unusually productive fossil occurrence is necessary, the following actions shall be taken:

a. The paleontological monitor shall immediately notify the applicant who shall contact the Kern County Planning Department; and

b. Construction activities in the immediate vicinity of the site shall stop until authorization for work to continue is provided by the Kern County Planning Department.

- **Disturb any Human Remains, including Those Interred Outside of Formal Cemeteries**

  During excavation activities, human remains that were not previously identified during field surveys could be inadvertently unearthed. This impact is considered potentially significant and mitigation is required.

  MM 4.5-12: If human remains are discovered, work in the immediate vicinity shall stop until the Kern County coroner can determine whether the remains are those of a Native American. If they are those of a Native American, the following would apply:

  d. The coroner shall contact the NAHC.

  e. If discovered human remains are determined to be Native American remains, and are released by the coroner, these remains shall be left in situ and covered by fabric or other temporary barriers.

  f. The human remains shall be protected until Kern County and the NAHC come to a decision on the final disposition of the remains.

  According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).

- **Result in Impacts on Cultural Resources due to SCE Facility Improvements**

  Subsurface resources would be detected during proposed project excavation, if present. A preconstruction cultural resources survey would be conducted to identify any resources on the proposed project site. "Impact Avoidance Protocols for the SCE Regional Special Protection Scheme" would be followed if resources are detected.

  - The contractor will be required to immediately cease ground-disturbing activities within 100 feet of a cultural resources discovery and immediately notify SCE.
  - In the instance of a possible discovery, the contractor will flag the area for easily visible identification while also protecting the discovery from vandalism, looting, or further disturbance of any kind.
  - SCE will contact a qualified archeologist to evaluate the find, and will coordinate with applicable agencies, including the CPUC.
  - The qualified archeologist will determine whether:
    – The resource can be avoided with avoidance measures and impacts on cultural resources have not occurred, in which case the PdV Wind Energy Project could proceed with implementation of avoidance measures and only after approval by the CPUC; or
    – The resource cannot be avoided or it has already been impacted by construction, in which case an assessment of its significance will be conducted in compliance with state law.
  - If the discovery includes human remains, the qualified archeologist will notify the CPUC and the County coroner to assist in determining the significance of the remains.
  - If the human remains are determined to be Native American, the most likely descendant will be contacted within 24 hours and provided the opportunity to visit the site and participate in determining appropriate treatment, which may include:
    – Preserving the remains in place and avoiding further impact (preferred method); or
    – Developing a plan for the recovery and documentation of the remains and any associated grave goods.

  Impact would be less than significant and no mitigation would be necessary.

1.3.6 Geology and Soils

Setting

The geology of the proposed project site is classified into three groups: late Paleozoic metamorphic rocks, Mesozoic crystalline rocks, and Quaternary age sedimentary deposits. Soil types, geology, and the average groundwater level at the proposed project site indicate a low potential for liquefaction. The soil at the proposed project site is composed of sand, gravel, and cobbles with very little to no fine-grained soil indicating a low probability of impact due to shrink-well soil behavior.

The proposed project site is not located within the boundaries of an Alquist-Priolo Special Studies Zone. The closest active fault to the proposed project site is located approximately 800 feet northwest. There is potential for ground surface rupture to occur within the proposed project site due to the presence of faults that have displaced recent alluvial deposits that cross the proposed project site. The proposed project site can be expected to experience strong ground shaking caused by moderate to strong earthquakes during the life of the proposed project. It is not located within a State California Seismic Hazard Zone for landslides.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Expose People or Structures to Substantial Adverse Effects Involving the Rupture of a Known Earthquake Fault**

  The proposed project is not located within an Alquist-Priolo Special Study Zone. It also would not involve the construction of structures for human occupancy. However, potential damage to wind turbines and associated facilities could occur from direct rupture along the closest faults (Garlock and Cottonwood Faults) to the proposed project site. This impact is considered potentially significant and mitigation is required.

  MM 4.6-1: Prior to the issuance of building or grading permits, the applicant shall conduct a full geotechnical study to evaluate soil conditions and geologic hazards on the project site and submit it to the Kern County Engineering and Survey Services Department for review and approval. The geotechnical study must be signed by a California-registered professional engineer and must identify the following:

  g. Location of fault traces and potential for surface rupture;

  h. Potential for seismically induced ground shaking, liquefaction, landslides, differential settlement, and mudflows;

  i. Stability of existing cut-and-fill slopes;

  j. Collapsible or expansive soils;

  k. Foundation material type;

  l. Potential for wind erosion, water erosion, sedimentation, and flooding;

  m. Location and description of unprotected drainage that could be impacted by the proposed development; and

n. Recommendations for placement and design of facilities, foundations, and remediation of unstable ground.

MM 4.6-2: The applicant shall determine the final siting of project facilities based on the results of the geotechnical study and implement recommended measures to minimize geologic hazards. The applicant shall not locate project facilities on or immediately adjacent to a fault trace as depicted on Figures 4.6-2, 4-9.2, and 3-4. Kern County Engineering and Survey Services Department will evaluate the applicant's final facility siting design prior to the issuance of any building or grading permits to verify that geological constraints have been avoided.

MM 4.6-3: Utility lines crossing potentially active faults shall be designed to withstand vertical and horizontal displacement. If determined necessary by the findings of the site-specific geotechnical study, the applicant shall remove and replace shrink-swell soils with a non-expansive or non-collapsible soil material.

- **Expose People or Structures to Substantial Adverse Effects Involving Strong Seismic Ground Shaking**

Damage to structures and individuals in or near the proposed project facilities could occur during strong seismic shaking. The proposed project site is located in a seismically active area. Impact is considered potentially significant and mitigation would be required.

Implement *MM 4.6-1* through *MM 4.6-3*.

MM 4.6-4: The applicant shall design wind turbines and all associated infrastructure to withstand substantial ground shaking. All project facilities shall be designed to in accordance with applicable UBC seismic design standards, Kern County Building Code, Chapter 17, and as recommended by a California registered professional engineer in the site-specific geotechnical review.

- **Expose People or Structures to Substantial Adverse Effects Involving Seismic-Related Ground Failure, Including Liquefaction**

The potential for liquefaction at the proposed project site is low due to deep groundwater levels and the make-up of the alluvial deposits (dense and coarse-grained) and crystalline bedrock (very dense and hard). Furthermore, an in-depth geotechnical evaluation would be conducted to determine recommended siting locations for proposed project facilities. This impact is considered less than significant and no mitigation is required.

- **Expose People or Structures to Substantial Adverse Effects Involving Landslides**

The crystalline bedrock underlying the proposed project site reduces the potential for landslides or other forms of natural slope instability to occur. Furthermore, an in-depth geotechnical evaluation would be conducted to determine recommended siting locations for proposed project facilities. However, potential exists for local landslides, debris flows, or rock fall that could affect individuals on the proposed project site. This impact is considered potentially significant and mitigation is required.

MM 4.6-5: The applicant shall design cut/fill slopes for an adequate factor of safety, considering material type and compaction, identified during the site-specific geotechnical study. The slope of cut surfaces shall be no steeper than 2:1 (horizontal to vertical units), unless the applicant furnishes a soils engineering or an engineering geology report, or both, stating that the site has

been investigated and giving an opinion that a cut at a steeper slope will be stable and will not create a hazard to public or private property.

MM 4.6-6: The applicant shall cut slopes with a slope ratio compatible with the known geologic conditions and/or shall stabilize the slope by using stabilizing methods such as a buttressed fill.

MM 4.6-7: Wind turbine sites where slopes exceed 4:1 shall require specific consultation and approval by the Kern County Engineering and Survey Services Department, with additional site-specific mitigation.

MM 4.6-8: The applicant shall avoid locating roads and structures near landslide and mudflow areas. Where avoidance of landslide areas is not feasible, the applicant shall construct relatively flat cut-and-fill at slopes not to exceed 2:1, or 26 percent, or flatter.

MM 4.6-9: The applicant shall avoid locating turbine locations, transmission lines, and associated structures astride faults, lineaments, or unstable areas.

- **Result in Substantial Soil Erosion or Loss of Topsoil**

Soil surface could be destabilized and the potential for soil erosion could be increased by construction activities at the proposed project site, including clearing vegetation, grading, cut-and-fill activities, and construction of access roads. Impact is potentially significant and mitigation is required.

MM 4.6-10: The applicant shall limit grading to the minimum area necessary for construction and operation of the project, and the applicant will retain a California registered professional engineer to review the final grading earthwork and foundation plans prior to construction.

MM 4.6-11: As required by Chapter 19.64 (WE Combining District) of the Kern County Zoning Ordinance, the applicant shall prepare a Soil Erosion and Sedimentation Control Plan to mitigate potential loss of soil and erosion. The plan will be prepared by a California registered civil engineer or other professional and submitted for review and approval by the Kern County Engineering and Survey Services Department. The plan will include the following:

o. BMPs will be implemented to minimize soil erosion and will be consistent with the requirements of the Kern County grading requirements and the California Regional Water Quality Control Board pertaining to the preparation and approval of Storm Water Pollution Prevention Plans (BMPs recommended by the Kern County Engineering and Survey Department will be reviewed for applicability).

p. Measures to be implemented where access roads cross washes to minimize erosion and sedimentation.

q. Provisions to maintain flow in washes, should it occur, throughout construction.

r. Provisions for site revegetation using native plants.

s. Sediment collection facilities as may be required by the Kern County Engineering and Survey Services Department.

t. A timetable for full implementation, estimated costs, and a surety bond or other security as approved by the County.

u. Other measures required by the County during permitting, including long-term monitoring (post-construction) of erosion control measures until site stabilization is achieved.

The applicant shall regularly inspect all erosion control measures throughout construction and particularly before and after major storm events. The applicant shall promptly replace damaged or ineffective materials or structures.

MM 4.6-12: The applicant shall conduct grading activities pursuant to Kern County Grading Codes, Chapter 17.28, and as follows:

a. Grade sites near slopes and embankments in a way that would prevent or minimize erosion damage to the slope.

b. Seed or otherwise revegetate completed slopes.

c. On steeper slopes, including on wash embankments, as necessary, use mulching or biodegradable erosion control blankets as appropriate to stabilize the topsoil until vegetation can be re-established.

d. On slopes where unusual flow conditions (e.g., flooding) are expected, employ more substantial erosion protection measures such as grouted cobble slope facings or manufactured slope protection.

MM 4.6-13: The applicant shall frequently water disturbed areas during construction to reduce dust and minimize loss of soils from wind (see Section 4.3, "Air Quality," for additional discussion).

MM 4.6-14: In all areas disturbed by the project, the applicant shall salvage topsoil and reuse during restoration.

MM 4.6-15: The applicant shall use existing roads to the greatest extent feasible to minimize increased erosion.

- **Be Located on Soil that is Unstable**

The proposed project is located on stable crystalline bedrock that is not likely to become unstable due to limited grading and excavation required for the proposed project. This impact is considered less than significant and no mitigation is required.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan.

- **Be Located on Expansive Soils**

Soil found on the proposed project site are considered to have low to moderate shrink-swell potential and do not include expansive soils. Furthermore, a geotechnical analysis would be conducted as required under *MM 4.6-1* and include an assessment of expansive soils at the proposed project site. Facilities would also be designed to withstand variations in soil density. Impact is less than significant.

Implement *MM 4.6-2*.

- **Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems**

A 500- to 1,000-gallon septic system is planned by the proposed project and it is anticipated to impact up to 4 acres at the site of the Office and Maintenance Building. The septic system and leach line would be located away from surface waters to prevent sewage runoff into these features. If designed incorrectly, the septic system could cause health impacts, affect natural habitat, and pollute groundwater. This impact is considered potentially significant and mitigation is required.

MM 4.6-16: The applicant shall obtain required permits from the Kern County Environmental Health Services Department and implement all required conditions.

- **Result in Impacts on Geological Resources due to SCE Facility Improvements**

The Impact Avoidance Protocols for the SCE Regional Special Protection Scheme would be implemented. The proposed project would identify all seismic risks and would not result in added exposure of people or structures to rupture of a known earthquake fault, ground shaking or failure, or landslides. Impacts on soils through the use of septic tanks or wastewater disposal systems would not occur. Impacts would be less than significant.

1.3.7 Hazards and Hazardous Materials

Setting

The proposed project site is located in an area highly susceptible to wildfires and includes vegetation such as juniper woodland and Mojave Desert scrub, with extensive introduced annual grasses, native needle grass grassland, exotic annual grasses, and pine oak woodlands. The area is also known for high-velocity wind conditions and is occasionally subjected to Santa Ana-like wind conditions.

According to Kern County, the fire hazard rating for the proposed project site ranges from high to very high. Hazardous materials on surface or buried at the proposed project site could be encountered during construction excavation, and earthmoving activities. Land uses at the proposed project site, including open space use, recreation by off-road motorists and Pacific Trail hikers, and low density residential uses, would have a low probability of resulting in significant contamination from hazardous material use at the proposed project site.

The proposed project would be located within potential military flight test pathways and would have to comply with height restrictions. New technologies have improved wind turbine design to reduce the chances of tower collapse or blade dislocation. Setbacks for wind turbines and associated facilities have been developed by Kern County to prevent potential hazards to proposed project personnel or individuals in the vicinity of the proposed project.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Create a Significant Hazard for the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials**

  Various petrochemicals would be used by the proposed project during construction and operation of the proposed project. The proposed project would not require the use, treatment, disposal, or transport of significant quantities of hazardous materials, but presence and use of any quantity could expose and create health impacts to public and proposed project workers. Although blasting during proposed project construction is not anticipated, potential injury to proposed project personnel could occur if blasting is required. Implementation of the following mitigation measure would reduce the impact to less than significant.

  MM 4.7-1: In accordance with the California Health and Safety Code and Kern County regulations, the applicant shall prepare a Hazardous Materials Business Plan and submit it to the Kern County Environmental Health Services Department for review and approval.

The Hazardous Materials Business Plan will delineate hazardous material and hazardous waste storage areas; describe proper handling, storage, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing unanticipated hazardous materials encountered during construction; and establish notification procedures for spills. The applicant will provide the Hazardous Materials Business Plan to all contractors working on the project and will ensure that one copy is available at the project site at all times.

MM 4.7-2: If blasting is required, the applicant shall contract with a blasting contractor with experience conducting blasting activities, licensed to use Class A explosives, and licensed as a contractor in the State of California. The blasting contractor shall prepare a blasting plan for the proposed blasting activities to prevent endangering worker safety. The blasting plan shall be submitted for review to the Kern County Planning Department, in consultation with the Kern County Engineering and Survey Services Department, the Kern County Fire Department, and the Kern County Air Pollution Control District. The blasting plan shall be approved prior to commencement of any blasting activities. A copy of the blasting plan shall be provided to Edwards Air Force Base. The blasting plan shall:

v. Describe procedures to be implemented to protect workers during blasting, such as using a signaling system to alert workers of an impending blast and using blasting mats to prevent or reduce the number of rock particles thrown into the air;

w. Describe procedures for proper storage and transportation of explosive materials, including protecting explosives from wildfires;

x. Prohibit blasting during extreme fire danger periods; and

y. Comply with the U.S. Bureau of Mines and the Office of Surface Mining Reclamation and Enforcement guidelines for minimizing damage to structures from blasting and various mining operations.

- **Create a Hazard for the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment**

Hazardous materials used on-site and in equipment could be accidentally released to the environment during construction and operation of the proposed project. The likelihood of encountering buried hazardous materials is low based on the proposed project site's historical use and the identification of no known contaminated sites from the government database search. Impacts would be less than significant with implementation of the following mitigation measures.

Implement *MM 4.7-1*.

MM 4.7-3: The applicant shall site all fueling, hazardous materials storage areas, and operation and maintenance (O&M) activities involving hazardous materials at least 100 feet away from blue-line drainages as identified on U.S. Geological Survey topography maps and wetlands (see Figure 3-4, 4.8-1, and 4.8-2).

MM 4.7-4: The applicant shall construct a concrete containment berm around the main transformer storage area and propane tanks to prevent hazards associated with the release of transformer oil.

- **Result in a Safety Hazard for People Residing or Working in the Project Area for a Project Located within the Kern County ALUCP**

The proposed project site is located approximately 15 miles west of Edwards Air Force Base. It is also located within an area with height restrictions implemented to protect military operations. Since the proposed project is located several miles from the nearest airport, there are no potential hazards with air traffic. No safety impacts result from Electromagnetic Field (EMF) emissions of the proposed project. Implementation of the following mitigation measures would ensure that impacts due to the location of the proposed project site in proximity to military aviation operations are less than significant.

MM 4.7-5: The applicant shall limit all turbines to a height not to exceed 400 feet above ground level.

MM 4.7-6: The applicant shall comply with all requirements to maintain the FAA's Determination of No Hazard to Air Navigation during construction and operation of the turbines. The applicant shall work with the FAA to resolve any adverse effects on aeronautical operations prior to issuance of grading or building permits for the affected turbines or area where those disputed turbines will be constructed.

- **Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires**

Fire potential at the proposed project site would be reduced with manned operations, which would reduce traffic associated with non-property owners and decrease unauthorized use of the proposed project area to non-property owner off-road vehicle use, camping with open fires, and hunting. A network of fire breaks would be introduced by the new road, thus reducing the opportunity for fires to become out of control. Danger of fire will however increase during proposed project construction due to the use of heated mufflers, explosives, and possible disposal of cigarettes. Lightning strikes on wind turbines and fire sparks from the wind turbine generator during operation could result in a fire. This impact would be less than significant with the implementation of the following mitigation measures.

MM 4.7-7: The applicant shall develop and implement a Fire Safety Plan for use during construction and operation. The applicant shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval prior to issuance of the building permit. The plan shall contain notification procedures and emergency fire precautions, including the following:

Construction

a. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters.

b. Spark arresters shall be in good working order.

c. Light trucks and cars with factory-installed (type) mufflers, in good condition, may be used on roads where the roadway is cleared of vegetation.

d. Smoking signs and fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees during the fire season.

e. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.

Operation

a. Warning signs for high-voltage equipment shall be erected.

b. Brush and other dried vegetation around pad-mount transformers, riser poles, and the O&M building shall be cleared annually.

c. Fire extinguishers at the O&M building shall be installed.

d. Employees shall be trained in the implementation of the Fire Safety Plan.

- **Result in Other Potential Project-Related Hazards for Project Personnel or the Public**

Wind turbines have the potential for rotor and tower failure which could affect proposed project personnel or the public. The WE Combining District of the Kern County Ordinance requires the design of the proposed project to include required setbacks to prevent impacts to the public. Injury from work-related accidents may occur as well as risk of electrical shock from energized facilities. The following mitigation measures would be implemented to ensure impacts are less than significant.

MM 4.7-8: To prevent rotor and tower failure and avoid potential impacts, the applicant shall design the project to:

a. Conform to international standards for wind turbine generating systems, including the International Electrotechnical Commission's 61400-1: Wind Turbine Generator Systems – Part I: Safety Requirements (1999)—also, the project shall be certified according to these requirements to help assure that the static, dynamic, and defined life fatigue stresses of the blade would not be exceeded under the combined load expected at the project site;

b. Adhere to state and local building codes during turbine installation on the foundations, which would also minimize the risk of rotor and tower failure;

c. Prevent safety hazards from over-speed by installing a comprehensive protection system on each turbine, such as a redundant pitch control system and a backup disk brake system;

d. Prevent safety hazards from tower failure by designing the turbine towers and foundation to withstand wind speeds of 100 mph at the standard height of 30 feet; engineering the turbines according to the applicable seismic zone of the Uniform Building Code Earthquake Standards; and ensuring that all installed equipment shall meet the standards of the National Electrical Manufacturers Association (NEMA), the American National Standards Institute (ANSI), and California Occupational Safety and Health Act (Cal-OSHA);

e. Prevent safety hazards from electrical failure by using a California-registered electrical engineer to design all electrical systems and ensure that electrical systems meet national electrical safety codes and other national standards, including NEMA, ANSI, and Cal-OSHA standards; and

f. Provide the Kern County Planning Department with manufacturer's specifications for the wind turbines, specifying that all turbines be equipped with a braking system, blade pitch control, and/or other mechanism for rotor control and shall have both manual and automatic over-speed controls.

MM 4.7-9: To protect workers from electrical shock and other work-related accidents during the project, the applicant shall implement the following measures:

a. Grounding shall be designed and implemented to the standards of the Institute of Electrical and Electronics Engineers;

b. All turbines and utility lines shall be equipped with automatic and manual disconnect mechanisms;

c. Three circuit breakers that can be both manually and automatically operated shall be provided between each turbine and the connection to the electrical grid;

d. The electrical systems and substations shall be designed by California-registered electrical engineers and shall meet national electrical safety codes and other national standards, including NEMA, ANSI, and Cal-OSHA standards; and

e. These mechanisms shall be installed and tested before interconnection.

MM 4.7-10: To prevent accidents involving the public, the applicant shall implement the following measures:

a. Fence the project site or project infrastructure in accordance with Section 19.64.160 (Development Standards and Conditions) of the Kern County Zoning Ordinance;

b. Limit access to properly trained personnel only;

c. Lock all turbine towers;

d. Lock each down-tower electrical/communication cabinet and install a sign with high-voltage warning;

e. Secure all access road entry points with locking gates; and

f. Post signs at entrance gates that note the existence of on-site high-voltage and underground cables and warn people of electrocution hazards.

MM 4.7-11: The applicant shall establish a sampling protocol for all fly ash the site receives and will maintain electronic records detailing the source, quantity and analytical data for the fly ash. This information will be made available to the Environmental Health Services Department's Hazardous Materials Program, as requested.

- **Result in Hazards and Hazardous Materials Impacts as a Result of SCE Facility Improvements**

  The SCE facility improvements would not require the use, treatment, disposal, or transport of significant quantities of hazardous materials. The proposed project Hazardous Materials Business Plan/SPCC Plan and SWPP would be implemented by SCE in anticipation of accident conditions, hazardous emissions, and handling of hazardous materials. SCE would also comply with all safety standards listed in the "Impact Avoidance Protocols for the SCE Regional Protection Scheme". No impacts would result from the SCE facilities and no mitigation is required.

1.3.8 Hydrology and Water Quality

Setting

The proposed project site slopes gradually from the northwest to the southeast and elevation is between 3,100 and 5,800 feet above mean sea level (amsl). It is underlain by the Mojave Groundwater Basin, an area that encompasses the Mojave Desert. The Mojave Groundwater Basin is subdivided into many subunits, and the proposed project site is located within the Antelope Valley groundwater sub-basin, which consists of unconsolidated to moderately indurated, poorly sorted gravels, sands, silts, and clays.

Approximately 24.5 miles of blue-line drainages cross the proposed project site and the only named drainage, Cottonwood Creek, a jurisdictional water of the state, is located in the southwestern corner. It is a non-navigable stream that terminates approximately 2.4 miles southeast of the proposed project site at Rosamond Lake, which has no outlet. No aquatic vertebrates were observed at Cottonwood Creek or any of the other drainages within the proposed project site, and no state or federally listed species reside within the proposed project site. Swainson's hawk (*Buteo swainsoni*), a state-listed species, was observed as a migrant in the proposed project site during field surveys, although it was determined to be a non-resident species. The Los Angeles Aqueduct, a channelized water feature, also crosses the southwestern portion of the proposed project site. The National Wetland Inventory (NWI) maps identify only a very small area of wetlands located in the northwest corner of the proposed project site. Based on field surveys and literature reviews, no other wetlands were identified in the proposed project site.

Groundwater in the proposed project area is extracted from local wells and imported water from the Antelope Valley East Kern Water Agency. Water wells in the region derive potable water from a depth of about 200 to 300 feet. The proposed project may require the installation of a well to provide a potable water source for operations staff working at the proposed project site.

The Kern County map indicates that approximately 378 acres (6.5 percent of the proposed project site) along the low-lying areas of Cottonwood Creek are subject to flooding. These areas are located in a 100-year flood zone. The rest of the proposed project site lies within an area characterized as areas that have a less than 1 percent chance of flooding each year; areas that have a less than 1 percent chance of sheet flow flooding with an average depth of less than 1 foot; areas that have a less than 1 percent chance of stream flooding where the contributing drainage area is less than 1 square mile; or areas protected from floods by levees.

As currently designed, the proposed project site would locate several turbines and associated facilities within a 100-year flood zone.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Violate any Water Quality Standards or Waste Discharge Requirements**

  Construction activities at the proposed project site would disturb soils, making them more susceptible to erosion and more likely to be transported by stormwater runoff into nearby drainages, potentially affecting local and downstream water quality. Sedimentation in surface waters and wetlands can reduce water-carrying capacity, potentially leading to flooding; degrade water quality; increase turbidity (concentration of suspended particles), thereby reducing light penetration and inhibiting photosynthesis; and introduce fertilizers and other nutrients, which can lead to eutrophication.

  The amount of erosion and runoff into drainages at and in the vicinity of the proposed project site is expected to be limited as only approximately 6 percent of the proposed project site would be graded. Construction impacts from erosion and runoff are expected to be localized and temporary, and the applicant would implement measures to minimize and contain erosion and sedimentation in accordance with the Kern County Grading Code and project NPDES permit.

  No turbines or other aboveground buildings would be sited within surface waters. However, the applicant has identified locations where access roads would cross drainages. Three of these crossings occur at Cottonwood Creek.

  Since the proposed project would disturb more than 1 acre, the applicant would be required to obtain and comply with the NPDES regulations for surface discharge by acquiring a general construction stormwater discharge permit. In order to prevent hazardous materials from entering drainages and affecting water quality, the applicant would be required to implement a Hazardous Materials Business Plan and submit it to the Kern County Environmental Health Services Department for review.

  The proposed project would not cause a new point discharge source. To ensure that impacts on water quality are less than significant, the following mitigation measures would be implemented.

MM 4.8-1: The applicant shall provide environmental training to all construction personnel. The training shall emphasize the importance of protecting water quality and shall review the requirements of the project NPDES permit and Hazardous Materials Business Plan.

MM 4.8-2: The applicant shall complete the installation of the box culverts at the two crossings of the Los Angeles Aqueduct in as short a time period as practicable to minimize any temporary construction effects associated with the use of equipment containing hazardous materials that could be released into the aqueduct.

MM 4.8-3: Prior to the issuance of a grading permit for any work on the access road and drainage crossings, the applicant shall submit an appropriate drainage and/or flood hazard study to the Kern County Engineering and Survey Services Department for review and approval. The study shall include, but not be limited to, the following provisions at the location of access road and drainage crossings:

a. Ensure that soils do not accumulate in drainage beds at the gravel and dirt road crossing locations during construction and throughout operation of the project;

b. Use fill ramps rather than bank cutting to minimize impact on water quality affected by increased erosion;

c. Design access road and drainage crossings to accommodate the runoff of a 10-year storm system; and

d. Periodically check access road crossing locations during construction and throughout operation for spills of hazardous materials, and clean up all spills.

MM 4.8-4: The applicant shall site all storage of hazardous materials and conduct any refueling at least 100 feet away from the NWI-mapped wetlands and Cottonwood Creek.

MM 4.8-5: The applicant shall set back all soil stockpiles at least 10 feet from the NWI-mapped wetlands and drainages.

MM 4.8-6: If required, the applicant shall obtain a streamlined alteration agreement from the California Department of Fish and Game.

- **Deplete Groundwater Supplies or Interfere with Groundwater Recharge**

The proposed project may include the construction of a water well to supply water during construction and operation, but would not be expected to require a large quantity. Since the proposed project would not involve a substantial increase in impervious surfaces, the proposed project would have a less than significant impact on groundwater recharge.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Impacts on the Existing Drainage Patterns**

Short-term increases in erosion (including sedimentation build-up caused by access roads) as a result of ground disturbance would be minimized via implementation of the proposed project-specific Soil Erosion and Sedimentation Control Plan and/or SWPPP in accordance with NPDES requirements. Construction and operation of the proposed project would not require permanently altering the course of any of the blue-line drainages.

Implementation of *MM 4.8-3*, *MM 4.6-11*, and *MM 4.6-12* would ensure that impacts are less than significant.

- **Alter Existing Drainage Patterns of the Site or Area, Causing Flooding**

  Drainages at the proposed project site would be impacted at access road crossings, but the applicant would prevent the build-up of soils in the drainages, which would reduce the potential for local flooding. The applicant would also implement erosion and sediment control measures to reduce runoff. The proposed project is not anticipated to involve altering the course of drainages at the proposed project site.

  Implementation of *MM 4.8-3, MM 4.8-7, MM 4.6-11,* and *MM 4.6-12* would ensure that impacts are less than significant.

- **Result in Impacts on Runoff Water and Drainage Capacity**

  The proposed project would increase impervious surfaces by approximately 13 acres, which is only 0.2 percent of the entire proposed project site. Road construction or expansion can also increase water runoff rates, resulting in accelerated soil erosion. The applicant would implement applicable building codes during road construction to ensure appropriate drainage. In addition, the soils at the proposed project site are all classified by the Natural Resources Conservation System as having a moderate infiltration rate when thoroughly wet, and runoff is relatively low. Impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Place Within a 100-Year Hazard Area Structures that Would Impede or Redirect Flood Flows**

  The proposed project would involve the installation of turbines and associated facilities, within a Flood Zone. The proposed designated yard in the southwestern corner of the proposed project site is located immediately adjacent of Cottonwood Creek and the associated flood hazard zone overlying this feature. Depending on final facility siting, a permanent building may or may not be located at this yard. Kern County may require that additional conditions be applied to the building permit, such as requiring the installation of structures with electrical equipment to be above natural grade or setting a foundation depth for underground equipment. This impact would be potentially significant and mitigation is required.

  > *MM 4.8-7*: As required by Section 19.70.070 (Kern County Floodplain Combining District – Yards and Setbacks) of the Kern County Zoning Ordinance, the applicant shall locate all structures and facilities a minimum of 10 feet back from all waterways to avoid impediment or redirection of flood flow.

- **Result in Impacts Caused by Seiche, Tsunami, or Mudflow**

  Since the proposed project site is located inland, the potential for tsunami-related damage or a seismic seiche is low. Due to the dense, relatively hard, and massive nature of the crystalline bedrock underlying the mountainous portion of the proposed project site, lands within and surrounding the proposed project site are not subject to mudflows or other forms of natural slope instability. No impacts would occur.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Expose People or Structures to a Significant Risk of Loss, Injury, or Death involving Flooding**

  Only a limited area of the proposed project site would be located within the 100-year flood zone. Construction of the proposed project would increase impervious areas by less than 1 percent of the site area. In addition, the natural soil conditions at the proposed project site include moderate infiltration rates and relatively low runoff rates, which naturally mitigate flooding potential. Therefore, this impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Impacts on Hydrology and Water Quality as a Result of SCE Facility Improvements**

  The SCE facilities improvement area gradually slopes, but is generally flat, and features no rivers, creeks, or watercourses. The proposed project would occur almost entirely along existing roads and mostly in areas already altered for agricultural and other land uses, and would not involve actions that alter storm runoff drainage patterns. In addition, the water quality measures under "Impact Avoidance Protocols for the SCE Regional Special Protection Scheme" would be enacted as part of the proposed project to ensure against violating water quality standards or waste discharge requirements. Impacts are less than significant and no mitigation would be necessary.

1.3.9 Land Use and Planning

Setting

The proposed project site is currently owned by 43 private landowners. It is undeveloped and mostly used for grazing. Approximately 2,367 acres of the proposed project site is subject to Williamson Act Land Use contracts. The Pacific Crest Trail bisects and dirt roads crisscross the proposed project site. Land surrounding the proposed project site is rural, undeveloped desert scrub. Eight residences are scattered directly outside the proposed project boundary. The nearest residence, a limestone mining operation, is adjacent to and west of the proposed project site. Northrop Grumman Corporation operates a test facility located approximately 3 miles west of the proposed project. This facility is potentially impacted by the proposed project with respect to EMF emissions and interference with radar frequencies.

The existing land use designations for the proposed project site include Flood Hazard, Seismic Hazard, and Steep Slopes. The proposed project site is subject to Zoning Ordinance Section 19.08.160, Height of Structures, which limits the height of structures to 400 feet or less. A zoning change would need to be approved to combine the following districts with the WE Combining District: Exclusive Agriculture, Exclusive Agriculture and Geologic Hazard, and Exclusive Agriculture and Flood Plane Hazard. After approval, wind turbine development would be permitted in these zones.

A conditional use permit is being requested by the applicant to allow the temporary (during construction only) use of concrete batch plants to provide concrete and materials for turbine, substation, and operations and maintenance building foundations.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Physically Divide an Established Community**

  The proposed project site is located in a rural area with about eight residences scattered outside the proposed project boundary. No established community exists within several miles of the proposed project site. Impacts are less than significant.

- **Conflict with any Applicable Land Use Plan, Policy, or Regulation**

  The proposed project would be consistent with relevant policies of the Kern County General Plan and the Zoning Ordinance. For a detailed discussion, please refer to Table 4.9-3 of the PdV EIR. Impacts would be less than significant with implementation of the following mitigation measure.

  MM 4.9-1: The applicant shall submit the final project design in plot plans for review and approval by the Kern County Planning Department. The Planning Department will confirm that final facility locations avoid sensitive resources and hazard zones as depicted on the constraints map (see Figure 3-4) and/or as described throughout this EIR, unless otherwise approved by the Kern County Planning Director. In its final review, the Planning Department must confirm that project facilities are installed only within the area surveyed for environmental resources as described in the methodology section for each resource section throughout this EIR and in the technical reports provided in the appendices. The Planning Department must also confirm that all facilities are installed such that the area of impact and extent of impacts to sensitive resources is no greater than that evaluated in this EIR.

- **Cause Substantial Interference with Radar and Other Testing as to Cause an Incompatible Land Use**

  The proposed project's wind turbines may potentially impact the Northrop Grumman site by cluttering radar frequencies. The military test facility, as an existing use, maintains that allowing the construction of 400-foot wind turbines within three miles of its facility would threaten its test capability and introduce man-made electromagnetic noise that would raise the overall background noise floor and prevent them from measuring very low power levels. The following mitigation measure would ensure that impacts are less than significant.

  MM 4.9-2: The applicant shall reduce project radar clutter impacts to the Tejon Test Facility by implementing the following measures:

  a. Deactivate the turbines during low wind conditions based upon a published schedule which shall be reviewed by the Kern County Planning Department and provided to the Northrop Grumman Corporation.

  b. Array wind turbines in certain agreed bands where turbines would avoid cluttering a specific frequency of transmissions emanating from Tejon Test Facility radar antennas; and

  c. Micro-site wind turbines within bands to minimize RCS values.

  All site plans for development shall conform with these restrictions.

- **Conflict with any Applicable Habitat Conservation Plan or Natural Community Conservation Plan**

  The proposed project site is covered by the West Mojave Habitat Conservation Plan. The desert tortoise and Mohave ground squirrel are protected under the plan, but neither species was present on the proposed project site. The proposed project is not expected to impact these species and conflict with the habitat conservation plan. Impacts would be less than significant.

The proposed project would be in conformance with the goals, policies, and plans for the Kern County General Plan.

- **Result in Land Use Impacts due to SCE Facility Improvements**

  The SCE facilities would comply with the goals, policies, and implementation measures of the Kern County General Plan and would not physically divide an established community or conflict with the Kern County General Plan, habitat conservation plan, or natural community conservation plan. No impacts on land use resources would result and no mitigation is required. Impacts would be less than significant.

1.3.10 Mineral Resources

Setting

Kern County contains the following mineral resources: petroleum, boron, clay, gold, gypsum, and limestone. The proposed project site is not located in an area known for mineral resources of statewide or regional importance. Limestone is the mineral resource located closest to the proposed project site.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Result in the Loss of Availability of a Known Mineral Resource that Would Be of Value to the Region and the Residents of the State**

  The proposed project site does not contain significant aggregate resources and is not located within an identified mineral resource area. Since the lifespan of the proposed project is limited to 30 years, if minerals are determined to be present, they can be extracted at a later date. Impact is short-term and would not cause the loss of mineral resources. Therefore, impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in the Loss of Availability of a Locally Important Mineral Resource Recovery Site Delineated on a Local General Plan, Specific Plan, or Other Land Use Plan**

  The proposed project site does not contain significant aggregate resources and is not located within an identified mineral resource area. Since the lifespan of the proposed project is limited to 30 years, if minerals are determined to be present, they can be extracted at a later date. Impact is short-term and would not cause the loss of mineral resources. Therefore, impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Mineral Impacts as a Result of SCE Facility Improvements**

  Significant aggregate resources do not lie within the locations of the SCE facilities, nor within an identified mineral resource area. Impact would be less than significant and no mitigation is required.

1.3.11 Noise

Setting

The proposed project site is located in an undeveloped, open region of eastern Kern County. Eight residential structures are located adjacent to the proposed project site. No major human-made noise sources exist in the proposed project area, with the exception of occasional aircraft flyovers. No paved roads exist in the vicinity of the proposed project site and the nearest state highway is more than 7 miles away.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Expose Persons to Noise in Excess of Standards Established in the Kern County General Plan or Noise Ordinances, or Other Applicable Standards**

  The wind turbines (Vestas V90 and Mitsubishi MWT-1000A) may exceed the following limits: the County's WE Combining District outdoor limit of 50 dBA within 50 feet of a residence; the WE Combining District outdoor limit of 45 dBA for more than 5 minutes per hour; and the General Plan indoor limit of 45 dBA. The Mitsubishi turbine's low frequency impacts are not expected to be significant, while the Vestas turbine's low frequency impacts would be potentially significant. Implementation of the following mitigation measures would ensure that impacts are less than significant.

  MM 4.11-1: Prior to building permit approval and prior to final plot plan approval, the applicant shall submit a final noise report for residences located within one mile in a prevailing wind direction, or within one-half mile in any other direction, of the project's boundary. The report shall demonstrate compliance with County Code Section 19.64.140.J WE Combining District performance standards as well as the County General Plan Noise Element policies regarding outdoor and interior noise levels.

  MM 4.11-2: If the Vestas V90 wind turbines are selected for use in the project, the applicant shall implement one of the following methods to reduce low frequency noise impacts to a less than significant level:

  a. Submit a final noise report showing that by limiting the cut-on speed of these units to 9 m/s the noise impacts will be reduced to less than significant levels (Table 4.11-1);

  b. Submit a final noise report showing that a revised plot plan provides more distance between the turbines and the residences as described above and reduces noise levels to a less than significant level (to be confirmed during the final review of the Plot Plan); or

  c. Submit a final noise report showing that using a mix of Mitsubishi and Vestas V90 turbine models will reduce noise levels to a less than significant level (to be confirmed during the final review of the Plot Plan).

  MM 4.11-3: If the Vestas V90 wind turbines are selected for use in the project, the applicant shall implement the following, in addition to any other mitigation: Prior to issuance of a building permit for the project, the applicant shall submit an Operational Noise Complaint Plan to Kern

County for approval. The plan shall detail how the applicant will respond to operational noise complaints, keep the County apprised of all complaints, and document the resolution of those complaints.

- **Expose Persons to or Generate Excessive Groundborne Vibration or Groundborne Noise Levels**

  Earth movement during the construction phase as well as ongoing activities and operation of the proposed project could cause groundborne vibration or noise levels. The proposed project site is located in a rural area with very few scattered residences in the vicinity. One residential unit would be located in close proximity to a turbine generator, but this unit is currently unoccupied and far enough that it would not be subjected to excessive vibration. This impact would be less than significant.

  The proposed project would conform to the goals, policies, and implementation measures of the Kern County General Plan. No additional measures are proposed.

- **Cause a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity above Levels Existing without the Project**

  The wind turbines (Vestas V90 and Mitsubishi MWT-1000A) may exceed the following limits: the County's WE Combining District outdoor limit of 50 dBA within 50 feet of a residence; the WE Combining District outdoor limit of 45 dBA for more than 5 minutes per hour; and the General Plan indoor limit of 45 dBA. The Mitsubishi turbine's low frequency impacts are not expected to be significant, while the Vestas turbine's low frequency impacts would be potentially significant. Implementation of the following mitigation measures would ensure that impacts are less than significant.

  Implement *MM 4.11-1* through *MM 4.11-3*.

- **Cause a Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity above Existing Levels**

  Noise levels at residences near the proposed project site would increase temporarily during site preparation and construction activities at the proposed project site. During scraping, grading, and crane pad development and excavation for the turbine foundation, construction noise would be at its greatest level. No residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, or churches are located within the vicinity of the proposed project. The closest residential unit to the proposed project site is unoccupied and boarded up. There are no noise ordinances that apply directly to temporary construction noise. The following mitigation measures would ensure that impacts are less than significant.

  MM 4.11-4: The applicant shall limit noise-generating construction activities to the following hours: between 5:30 a.m. and as late as 9:00 p.m. Monday through Saturday. If required to meet critical schedule milestones, construction may also occur between 7:00 a.m. and 6:00 p.m. on Sundays.

  MM 4.11-5: The applicant shall cover equipment engines and ensure that mufflers are in good working condition. This measure can reduce equipment noise by 5 to 10 dBA (U.S. Environmental Protection Agency 1971).

  MM 4.11-6: The applicant shall locate all stationary equipment such as compressors and welding machines away from noise receptors to the extent practicable.

- **Expose People Residing or Working in the Project Area to Excessive Noise Levels for a Project Located within the Kern County Airport Land Use Compatibility Plan**

  No public use airports are located within or within 2 miles of the proposed project site. However, portions of the proposed project site may be located near existing military flight corridors, where noise levels usually exceed county standards. The proposed project is not expected to expose people to significant noise impacts.

  The proposed project would conform to the goals, policies, and plans of the Kern County General Plan. No additional measures are proposed.

- **Expose People Residing or Working in the Project Area to Excessive Noise Levels for a Project within the Vicinity of a Private Airstrip**

  No private airstrips are located within or within an 8-mile radius of the proposed project site. This impact would be less than significant.

  The proposed project would conform to the goals, policies, and plans of the Kern County General Plan. No additional measures are proposed.

- **Result in Noise Impacts as a Result of SCE Facility Improvements**

  SCE would implement all of the avoidance and minimization measures that are listed under the "Impact Avoidance Protocols for the SCE Regional Special Protection Scheme". The proposed transmission route options would not create significant noise impacts during construction. Impacts are less than significant.

1.3.12 Population and Housing

Setting

Eight residences are located adjacent to the proposed project site, with the closest located approximately 13 feet to the east. According to United States Census Bureau data, housing units in Kern County grew by 16.4 percent from 1990 to 2000. Nearly 305,000 persons make up the year-round labor force in Kern County. Industries that provide the greatest amount of employment opportunities in Kern County include educational, health, and social services; agriculture, forestry, fishing, hunting, and mining; and retail trade. A significant portion of Kern County residents are employed by the government. These jobs include teachers; local, state, and federal government employees; and correctional facility employees. The Central California Economic Development Corporation states Kern County's unemployment rate at 7.3 percent in 2006. As of 2003, 18.2 percent of individuals in Kern County live below poverty level.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Induce Substantial Population Growth**

  The number of jobs created by the proposed project would be minimal and would not induce substantial population growth. A portion of the construction work force is expected to come from the proposed project area which would negate an increase in population from individuals relocating to

Kern County. Additional energy availability alone would not cause an increase in population growth. The proposed project would not include road extensions or the development of other infrastructures, beyond the proposed project site that would indirectly cause population growth.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Displace Substantial Numbers of Existing Housing**

  No residences are located within the proposed project site. Thus, no residences would be displaced by the proposed project. There would be no impact.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Displace Substantial Numbers of People**

  The proposed project would not displace residents or remove existing housing. There would be no impact.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Impacts on Population and Housing as a Result of SCE Facility Improvements**

  The addition of a fiber optic cable to existing transmission poles and a microwave telecommunication tower would not create new permanent jobs, housing, or businesses that would induce growth. No residences or residents would be displaced by the SCE facilities. Impacts would be less than significant.

1.3.13 Public Services

Setting

The proposed project site is located within Battalion 1 of the Kern County Fire Department (KCFD). Three fire stations (Rosamond, Tehachapi, and Mojave) are located within approximately 20 miles of the proposed project site. The Mojave Office of the California Highway Patrol would provide emergency response and traffic regulation to the proposed project site. The Rosamond substation of the Kern County Sheriff's Department would provide police protection services to the proposed project site. The Kern County Emergency Medical Services Department would be responsible for coordinating the public, emergency service providers, and hospitals throughout the county.

The proposed project site is located in the Southern Kern Unified School District. Three public elementary schools, one public middle school, a public high school, and a public adult school serve the proposed project area. Five colleges are also located within the proposed project area.

The Tehachapi Mountain Park is the only regional park in close proximity to the proposed project. Several city and recreation district parks exist throughout Kern County.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Adversely Affect Fire Protection Services**

  Danger of fire would increase during proposed project construction due to the use of heated mufflers, explosives, and possible disposal of cigarettes. Lightning strikes on wind turbines and fire sparks from the wind turbine generator during operation could result in a fire. The proposed project has the potential to increase demand on the KCFD when a fire occurs. It is anticipated, however, that personnel and equipment between the three stations located near the proposed project would be sufficient to respond to a fire at the proposed project site, should one occur. The proposed project would not be expected to exceed existing fire services capacity and would not require additional, permanent fire protection services, equipment, facilities, or personnel. This impact is considered to be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Adversely Affect Protection/Law Enforcement Services**

  The proposed project is not expected to induce population growth in the area that would affect the ratio of one sworn officer per 1,000 residents and is not expected to result in the need to construct new, or to physically alter existing, police protection facilities to maintain an acceptable service level. During construction, the volume of traffic associated with the commute of temporary construction workers is not expected to exceed the California Highway Patrol's ability to patrol the highways. This impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Adversely Affect Medical Services**

  A temporary influx of 100 to 200 people during a construction emergency may require the need for emergency medical services. A small number of accidents may occur during the entire construction period, but the small number in addition to other non-project related accidents is not expected to exceed the capacity of existing medical services. The applicant would prepare and implement a Health and Safety Plan to minimize emergency incidents at the proposed project site. This impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Adversely Affect School Capacity**

  The potential exists for the children of temporary construction workers from out of the area, to be placed in local schools. It is expected that a portion of the construction workers would be local to the proposed project area and the addition of children for relocating workers would be minimal. The proposed project would require 10 to 16 permanent employees for operation. It is anticipated that these employees would be local to the proposed project area. In the event that permanent employees relocate from another area, the Southern Kern Unified School District would be able to accommodate an increase in the number of students. This impact would be less than significant.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Adversely Affect Parks**

  Since personnel at the proposed project site would be limited, the construction period would be limited, and there are numerous parks in the proposed project area, exceeding the capacity of existing parks would not be expected. The population increase would not exceed Kern County's standard of 2.5 acres of parkland per 1,000 residents. This impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures would be required.

- **Result in Public Services Impacts as a Result of SCE Facility Improvements**

  Under the "Impact Avoidance Protocols for the SCE Regional Special Protection Scheme," SCE would develop and implement a Grass Fire Control Plan for using during construction that would minimize fire risk. A barbed wire perimeter fence and motion sensitive lights would surround the Cottonwind Substation and increase security as well as mitigate impacts to local police protection. The applicant would prepare and implement a Health and Safety Plan to minimize emergency incidents at the proposed project site. In the event that permanent employees relocate from another area, the Southern Kern Unified School District would be able to accommodate an increase in the number of students. Since personnel at the proposed project site would be limited, the construction period would be limited, and there are numerous parks in the proposed project area, exceeding the capacity of existing parks would not be expected. Impacts would be less than significant.

1.3.14 Recreation

Setting

The Tehachapi Mountain Park is the primary park that would service the proposed project area. It is also the only regional park in close proximity to the proposed project. The Pacific Crest Trail, located in Kern County traverses the center of the proposed project area.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

- **Result in Increased Use of Parks**

  The limited addition of people to the area and the short-term duration of construction is not expected to cause a significant impact on park use or result in a detectable physical deterioration of parks because of additional use. The proposed project would affect the recreational experience for hikers using the Pacific Crest Trail because the proposed project would substantially alter the viewshed, increase noise, and potentially pose safety concerns. Relocation of the Pacific Crest Trail is not currently feasible and no mitigation measures exist to reduce its impact from the proposed project. Impacts would significant and unavoidable.

  MM 4.14-1: The applicant shall site all turbines and associated infrastructure other than roads or collector cable lines with a minimum setback of 150 feet from both edges of the Pacific Crest Trail. The setback shall be clearly delineated on all applicable site plans submitted prior to issuance of grading or building permits.

Other Impacts

- **Result in Construction or Expansion of New Parks**

  The construction or expansion of recreational facilities would not occur as a result of the proposed project. No impact would occur.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Impacts on Recreational Resources as a Result of SCE Facility Improvements**

  The limited addition of people to the area and the short-term duration of construction is not expected to cause a significant impact on park use or result in a detectable physical deterioration of parks because of additional use. The SCE facilities would not significantly contribute to the proposed project's significant adverse impact to the Pacific Crest Trail. The Cottonwind Substation would cause a minor change in the viewshed with respect to the proposed project as a whole. Impacts would be less than significant.

1.3.15 Traffic and Transportation

Setting

The local circulation system in Kern County is comprised of a network of public surface streets. Near the proposed project site, the local circulation system consists of Rosamond Boulevard, 170th West Street, Tehachapi-Willow Springs Road, Backus Road, Mojave Tropico Road, Oak Creek Road, and Silver Queen Road. All of these roads connect with smaller paved and dirt access roads. Rosamond Boulevard is the only area with heavy traffic.

Access to the proposed project site would be from the corner of Rosamond Boulevard and north along 170th Street West to its terminus. From the terminus of 170th Street West, the applicant is proposing to construct a new, permanent public access road. Within the proposed project site, up to 37.5 miles of new unpaved roads would be constructed.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Cause an Increase in Traffic that is Substantial in Relation to the Existing Traffic Load and Capacity of the Street System**

  During construction, the proposed project would cause temporary, short-term increases in local traffic. There would only be 10 to 16 full-time staff during operation of the proposed project which would contribute a small amount of traffic to the local area. There would not be any long-term impacts on existing traffic in the proposed project area. Impacts would be less than significant with the following mitigation measure.

  MM 4.15-1: The applicant shall schedule construction equipment transport and deliveries to occur during the day to limit additional traffic during commuter hours and shall work with the Kern

County Roads Department to distribute construction traffic flow from State Highway 14 across alternative County routes.

- **Exceed Level of Service Standards on County Roads or State Highways**

  Level of service (LOS) on existing County roads is now at or above the acceptable LOS D as specified by the County of Kern General Plan Transportation/Circulation Element. Since a low volume of traffic currently exists on roads in the proposed project vicinity, additional traffic during proposed project construction and operation would not result in an exceedance of LOS C on County roads. Impacts would be less than significant with the following mitigation measure.

  Implement *MM 4.15-1*.

- **Change in Air Traffic Patterns that Results in Substantial Safety Risks**

  The proposed project is located in an area that requires a height limit to structures for the protection of military operations. Implementation of *MM 4.7-5* would limit turbine height to ensure that hazards resulting from the location of the proposed project in proximity to military aviation operations are less than significant. Because the turbines would be more than 200 feet tall, *MM 4.7-6* requires the applicant to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, requesting that the FAA issue a Determination of No Hazard to Air Navigation. Impacts would be less than significant with the following mitigation measures.

  Implement *MM 4.7-5* and *MM 4.7-6*.

- **Substantially Increase Hazards caused by a Design Feature (such as Sharp Curves or Dangerous Intersections) or Incompatible Uses (such as Agricultural Equipment)**

  The applicant has committed to designing new proposed project access roads using standard engineering practices and design measures. During construction, the proposed project would use heavy construction equipment on roadways which can result in damage to roads and may increase hazards for the public and proposed project personnel. Potential hazards also exist from tracking dust, soils, and other materials from graded construction sites onto public roads. Impacts are considered potentially significant and mitigation would be required.

  MM 4.15-2: Prior to construction, the applicant shall submit engineering drawings of proposed access road design for the review and approval of the Kern County Roads Department.

  MM 4.15-3: To minimize damage to existing roads that could increase hazards for the public and project personnel, the applicant shall:

  a. Use regulation-sized vehicles, except for specific construction equipment, which may haul oversized loads;

  b. Obtain local hauling permits from appropriate agencies prior to construction and adhere to any conditions in these permits;

  c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the state and or Kern County; and

  d. Post a security bond to cover the costs of road maintenance during construction.

MM 4.15-4: Prior to construction, the applicant shall obtain an encroachment permit from the Kern County Roads Department for applicable roads in the Kern County road maintenance system.

- **Result in Inadequate Emergency Access**

  The proposed project would not alter any existing emergency access routes or change existing patterns of emergency access. It also would not require closures of public roads, which could inhibit access by emergency vehicles. There would not be a significant increase in proposed project-related traffic that would affect the existing LOS on roads, which could indirectly affect emergency access. Therefore, this impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Inadequate Parking**

  The proposed project would not result in the physical displacement of existing parking. During construction and operation, a limited increase in demand for parking for construction equipment and personnel vehicles would exist. All parking would be accommodated within the proposed project site. Impacts are less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Conflict with Adopted Policies or Programs Supporting Alternative Transportation**

  Construction and operation of the proposed project would not conflict with implementation of existing programs supporting alternative transportation. On a project-specific basis, during construction, the applicant would promote ride-sharing and limit mid-day trips off-site for lunch by providing food on-site. The low volume of traffic to the proposed project site during operation would not warrant a project-specific alternative transportation program. Impacts would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.

- **Result in Transportation Impacts as a Result of SCE Facility Improvements**

  SCE would incorporate the avoidance measures listed under "Impact Avoidance Protocols for the SCE Regional Special Protection Scheme" to minimize transportation impacts.

  Construction of the SCE facilities would result in temporary, short-term increases in local traffic as a result of construction-related workforce traffic. Implementation of the SCE facility improvements would not exceed LOS standards established by Kern County.

  Air traffic patterns would not be impacted by the SCE facilities because all proposed structures are within the 200-foot height restrictions necessitated by the proximity to Edwards Air Force Base.

  During construction, the proposed project would use heavy construction equipment on roadways which can result in damage to roads and may increase hazards for the public and proposed project personnel. Potential hazards also exist from tracking dust, soils, and other materials from graded construction sites onto public roads. The proposed project would not alter any existing emergency access routes or change existing patterns of emergency access.

During construction and operation, a limited increase in demand for parking for construction equipment and personnel vehicles would exist. All parking would be accommodated within the proposed project site. Construction and operation of SCE facility improvements would not conflict with implementation of existing programs supporting alternative transportation.

Impacts would be less than significant.

1.3.16 Utilities

Setting

Due to the rural nature of the proposed project area, the existing water well near the O&M building or the use of trucked water would be used to provide water to the employees at the proposed project site. If there is a lack of sufficient water during construction, water would be purchased from another source and trucked in. Electricity generated by the proposed project would be sufficient to provide power to the on-site O&M building and other facilities, as needed. The proposed project would not require natural gas for construction or operation, and would use propane for heating or other support of the O&M building. Portable waste facilities would be used during construction of the proposed project, and a septic system and leach line would need to be installed for operation. A stormwater drainage system is not planned for the proposed project site given the limited amount of land area that would be converted to impervious surface. No fixed radio facilities were identified within the proposed project site, but 67 land mobile sites were identified in the proposed project vicinity. The frequency-based signal of four land mobile sites could possibly be affected by operation of the proposed project.

Impacts and Mitigation Measures

Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

Other Impacts

- **Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board**

  Project-generated wastewater would be minimal. Wastewater generated during construction would be contained within portable toilet facilities and disposed of at an approved site. The proposed project would not generate a significant amount of wastewater during operation since there would only be 10 to 16 permanent employees. A septic system and leach line would be constructed and conform to the permit requirements of the Kern County Environmental Health Services Department. This impact would be less than significant.

  The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan, Kern County Environmental Health Services Department, and the Lahontan Regional Water Quality Control Board. No additional mitigation measures are proposed.

- **Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects**

  To meet the proposed project's water needs during operation, a water well would be constructed on the proposed project site or agreements would be made with private water sources. Sewage would be

managed at the proposed project site by a septic system. Thus, new wastewater treatment facilities would not be required. Depending on the location of the septic system, this could potentially impact surface waters, groundwater, and vegetation. Implementation of the following mitigation measure would ensure impacts are less than significant.

MM 4.16-1: The applicant shall receive permits for and construct a septic system that meets all requirements of the Kern County Engineering and Survey Services Department prior to occupancy of the O&M building. The septic system shall be located a minimum of 100 feet from the banks of any watercourse, per the Floodplain Combining District, and shall not be located where it would impact wetlands or any of the three state designated sensitive plant communities identified in the Final EIR.

- **Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects**

Implementation of the project SWPPP would be sufficient to manage stormwater runoff during construction. Stormwater runoff from the proposed project site during operation is expected to be low since a limited amount of the proposed project area would be converted to impervious surfaces. No new stormwater drainage or treatment facilities would be required. Impact would be less than significant.

Implement *MM 4.16-1*.

- **Have Insufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Require New or Expanded Entitlements**

To meet the proposed project's water needs during operation, a water well would be constructed on the proposed project site or agreements would be made with private water sources. During operations, it is anticipated that well water would be sufficient to meet the needs of 10 to 16 employees. Since the proposed project would provide its own water source, it would not impact existing water supply systems. This impact would be less than significant.

MM 4.16-2: The applicant shall demonstrate sufficient water supply for the project with a well report, including a permit for potable water use of the existing well or other reliable documentation or enter in to a water supply contract with a private trucked water purveyor prior to the issuance of a grading or building permit to the satisfaction of the Kern County Environmental Health Services Department.

- **Result in a Determination by the Wastewater Treatment Provider which Serves or May Serve the Project that it Has Inadequate Capacity to Serve the Project's Projected Demand in Addition to the Provider's Existing Commitments**

A septic system with leach line is proposed by the proposed project and no services from a wastewater treatment provider would be required. Impacts would be less than significant.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures are proposed.

- **Be Served by a Landfill with Insufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs**

The proposed project is not expected to generate a significant amount of waste that would exceed the capacity of local landfills. Non-hazardous construction refuse and solid waste would be stored at the temporary staging area and periodically disposed of at the Mojave-Rosamond Landfill. Hazardous waste would be disposed of at an approved location. This impact would be less than significant.

The proposed project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional measures are proposed.

- **Conflict with Federal, State, and Local Statutes and Regulations Related to Solid Waste**

All relevant solid waste handling regulations would be complied with by the proposed project. To ensure compliance with policies to reduce waste sent to landfills, the following mitigation measures should be implemented.

MM 4.16-3: The applicant shall make an effort to reduce construction waste transported to landfills by recycling solid waste construction materials to the extent feasible, such as taking materials to recycling and reuse locations listed in the brochure on recycling construction and demolition materials available on the Kern County Waste Management Department Web site.

MM 4.16-4: The applicant shall provide a fenced recycling storage area identified for recycling on the site during construction and as part of the O&M building. A site plan showing the recycling storage area shall be submitted prior to the issuance of any grading or building permit for the site to the Kern County Planning Department and Kern County Waste Management Department.

- **Cause Substantial Interference with Frequency-Based Communications**

Operation of the wind turbines at the proposed project site has the potential to affect VHF and UHF frequencies from land mobile towers within 2 miles of the proposed project site. This impact is potentially significant and mitigation is required.

MM 4.16-5: Prior to issuance of building permits, the applicant shall micro-site the turbines in accordance with the Evans Report dated February 5, 2007, and attached as Appendix H. Specifically, to avoid interference with the known FCC-licensed RF facilities within 2 miles of the project site, the applicant shall not place turbines in any of the black-out zones identified in Figures 3 and 5 of the Evans Report. In addition, prior to issuance of building permits, the applicant shall notify the licensee(s) of the land mobile station identified as WPTS384 (Air France) regarding the project and provide them with contact information and a proposed turbine layout. If Air France notifies the County that any turbine will result in interference to its RF facility, the applicant shall relocate turbine(s) to avoid the interference.

MM 4.16-6: Prior to the issuance of the project building permit, the applicant shall notify the National Telecommunications and Information Administration (NTIA) and the Joint Program Office regarding the project and provide them with a proposed turbine layout. If the NTIA or the Joint Program Office notifies the County that any unlisted RF facilities will experience interference, the applicant shall consult with the affected facility operator and Kern County to relocate turbines to avoid such interference. In addition to the notification provided above, the applicant shall perform a physical inspection of the project site to determine whether there are any other unlisted or undocumented non-broadcast transmitters within the area or within a half-mile of project boundaries. If such facilities are located where interference is likely to occur, the applicant

shall make reasonable attempts to contact the facility operators and to relocate turbines to avoid interference.

- **Result in Impacts on Utilities as a Result of SCE Facility Improvements**

  During construction and operation, SCE facilities would have minimal wastewater. Wastewater would be contained within portable toilet facilities and disposed of at an approved site during construction activities. During operation, the proposed Cottonwind substation and telecommunication channels would not generate any wastewater because they would be unmanned. The SCE facilities would not require new wastewater treatment facilities or the expansion of existing facilities because sewage would be managed at the proposed project site.

  The SCE facilities would use water from private sources during construction. During operation, no water would be required because facilities would be unmanned.

  The proposed project would not require new stormwater drainage or treatment facilities or the expansion of existing stormwater facilities.

  The proposed project is not expected to generate a significant amount of solid waste that would exceed the capacity of local landfills. Non-hazardous construction refuse and solid waste generated would be stored at the temporary staging area and periodically disposed of at the Mojave-Rosamond Landfill. Hazardous waste generated during proposed project construction would be disposed of at an approved location. The SCE facilities would comply with all relevant solid waste handling regulations.

  Impacts would be less than significant.

References

Power Partners Southwest, LLC. 2007. PdV Draft Environmental Impact Report (EIR). September.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.1 Aesthetics			
4.1-1: Adversely Affect a Scenic Vista	Significant	There are no feasible mitigation measures that can be implemented to preserve the natural open space character.	Impacts would be significant and unavoidable for the view contained in Viewpoint 5 (Figure 4.1-7).
4.1-2: Alter or Damage a Major Landform or Scenic Resource	Less than significant	The project would conform to the goals, policies, and implementation measures of the Kern County General Plan and Wind Energy (WE) Combining District.	Impacts would be less than significant.
4.1-3: Alter or Degrade the Existing Visual Character or Quality of the Proposed Project Site and its Surroundings	Significant	There are no feasible mitigation measures that can be implemented to preserve the existing visual character.	Impacts would be significant and unavoidable.
4.1-4: Result in Light or Glare that Adversely Affects Day or Nighttime Views in the Area	Significant	MM 4.1-1 and MM 4.1-2.	Impacts would be significant and unavoidable.
4.1-5: Result in Aesthetics Impacts due to SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.2 Agricultural Resources			
4.2-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Nonagricultural Use	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan and the WE Combining District. No additional mitigation would be required.	Impacts would be less than significant.
4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contracts	Less than significant	MM 4.2-1.	Impacts would be less than significant.
4.2-3: Involve Other Changes in the Existing Environment which, Because of their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation would be required.	Impacts would be less than significant.
4.2-4: Result in the Cancellation of an Open- Space Contract, Williamson Act Contract, or Farmland Security Zone	Less than significant	MM 4.2-1.	Impacts would be less than significant.
4.2-5: Result in Agricultural Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.3 Air Quality			
4.3-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan	Significant	MM 4.3-1 through MM 4.3-5.	Impacts would be less than significant.
4.3-2: Violate Any Air Quality Standards or Contribute Substantially to an Existing or Projected Air Quality Violation	Significant	MM 4.3-1 and MM 4.3-2.	Impacts during construction would be significant and unavoidable.
4.3-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Region is Nonattainment for Federal or State Standards	Significant	MM 4.3-1 and MM 4.3-3.	Impacts would be cumulatively significant and unavoidable during construction.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.3-4: Expose Sensitive Receptors to Substantial Pollutant Concentration	Significant	MM 4.3-4, MM 4.3-5, and MM 4.3-6.	Impacts would be less than significant.
4.3-5: Create Objectionable Odors Affecting a Substantial Number of People	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan and WE Combining District.	Impacts would be less than significant.
4.3-6: Result in Air Quality Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.4 Biological Resources			
4.4-1: Have a Substantial Adverse Impact on Special-Status Species	Significant	MM 4.4-1 through MM 4.4-16.	Impacts would be less than significant. However, because of the uncertainty of the level of impact of operation of the project on avian and sensitive bat species as a result of collisions with turbines or other structures, impacts on these species would remain potentially significant and unavoidable, pending the results of the required Post-construction Avian/Bat Mortality Monitoring.
4.4-2: Have a Substantial Adverse Impact on Any Riparian Habitat or Other Sensitive Natural Community	Significant	MM 4.4-17, MM 4.4-18, MM 4.4-19, MM 4.4-20, MM 4.4-21, MM 4.4-22, MM 4.4-23, MM 4.4-24, MM 4.4-25, and MM 4.4-26.	Implementation of these mitigation measures would reduce impacts on riparian habitat, sensitive plant communities, and oaks to a less-than-significant level.
4.4-3: Have a Substantial Adverse Impact on Federally Protected Wetlands	Less than significant	MM 4.4-27 and MM 4.4-28.	Impacts would be less than significant.
4.4-4: Interfere with Wildlife Movement or with Migration Corridors	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.4-5: Conflict with Any Local Policies or Ordinances Protecting Biological Resources, such as a Tree Preservation Policy or Ordinance	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.4-6: Conflict with an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.4-7: Remove and/or Disturb a Habitat as a Result of Special Protection Scheme Construction Activities	Significant	MM 4.4-29.	Impacts would be less than significant.
4.4-8: Result in Biological Resource Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.5 Cultural Resources			
4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource	Significant	MM 4.5-1, MM 4.5-2, MM 4.5-3, MM 4.5-4, MM 4.5-5, MM 4.5-6, MM 4.5-7, MM 4.5-8 , and MM 4.5-9.	Impacts would be less than significant.
4.5-2: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature	Significant	MM 4.5-10, and MM 4.5-11.	Impacts would be less than significant.
4.5-3: Disturb any Human Remains, including Those Interred Outside of Formal Cemeteries	Significant	MM 4.5-12.	Impacts would be less than significant.
4.5-4: Result in Impacts on Cultural Resources as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.6 Geology and Soils			
4.6-1: Expose People or Structures to Substantial Adverse Effects Involving the Rupture of a Known Earthquake Fault	Significant	MM 4.6-1, MM 4.6-2, and MM 4.6-3.	Impacts would be less than significant by avoiding fault traces during construction and implementing design measures to minimize horizontal and vertical displacement.
4.6-2: Expose People or Structures to Substantial Adverse Effects Involving Strong Seismic Ground Shaking	Significant	MM 4.6-1 through MM 4.6-4.	Impacts would be less than significant.
4.6-3: Expose People or Structures to Substantial Adverse Effects Involving Seismic-Related Ground Failure, including Liquefaction	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.6-4: Expose People or Structures to Substantial Adverse Effects Involving landslides	Significant	MM 4.6-5, MM 4.6-6, MM 4.6-7, MM 4.6-8, and MM 4.6-9.	Impact would be less than significant.
4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil	Significant	MM 4.6-10, MM 4.6-11, MM 4.6-12, MM 4.6-13, MM 4.6-14, and MM 4.6-15.	Impacts would be less than significant.
4.6-6: Be Located on Unstable Soil	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.6-7: Be Located on Expansive Soils	Less than significant	MM 4.6-2.	Impacts would be less than significant.
4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems	Significant	MM 4.6-16.	Impacts would be less than significant.
4.6-9: Result in Impacts on Geological Resources as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.7 Hazards and Hazardous Materials			
4.7-1: Create a Significant Hazard for the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials	Significant	MM 4.7-1 MM 4.7-2.	Impacts would be less than significant.
4.7-2: Create a Hazard for the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment	Significant	MM 4.7-1, MM 4.7-3, and MM 4.7-4.	Impacts would be less than significant.
4.7-3. Result in a Safety Hazard for People Residing or Working in the Project Area for a Project Located within the Kern County Airport Land Use Compatibility Plan	Less than significant	MM 4.7-5.	Impacts would be less than significant.
4.7-4: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires	Significant	MM 4.7-7.	Impacts would be less than significant.
4.7-5: Result in Other Potential Project-Related Hazards for Project Personnel or the Public	Significant	MM 4.7-8, MM 4.7-9, MM 4.7-10, and MM 4.7-11.	Impacts would be less than significant.
4.7-6: Result in Hazards and Hazardous Materials Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.8 Hydrology and Water Quality			
4.8-1: Violate Any Water Quality Standards or Waste Discharge Requirements	Significant	MM 4.8-1, MM 4.8-2, MM 4.8-3, MM 4.8-4, MM 4.8-5, and MM 4.8-6.	Impacts would be less than significant.
4.8-2: Deplete Groundwater Supplies or Interfere with Groundwater Recharge	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.8-3: Result in Impacts on the Existing Drainage Patterns	Less than significant	MM 4.8-3, MM 4.6-11, and MM 4.6-12.	Impacts would be less than significant.
4.8-4: Alter Existing Drainage Patterns of the Site or Area, Causing Flooding	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.8-5: Result in Impacts on Runoff Water and Drainage Capacity	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.8-6: Place Within a 100-Year Hazard Area Structures that would Impede or Redirect Flood Flows	Significant	MM 4.8-7.	Impacts would be less than significant.
4.8-7: Result in Impacts from Seiche, Tsunami, or Mudflow	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.8-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death, including Flooding	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.8-9: Result in Impacts on Hydrology and Water Quality as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.9 Land Use and Planning			
4.9-1: Physically divide an established community	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.9-2: Conflict with any Applicable Land Use Plan, Policy, or Regulation	Less than significant	MM 4.9-1.	Impacts would be less than significant.
4.9-3: Cause Substantial Interference with Radar Testing	Potentially significant	MM 4.9-2.	Impacts would be less than significant.
4.9-4: Conflict with any Applicable Habitat Conservation Plan or Natural Community Conservation Plan	Less than significant	The project would be in conformance with the goals, policies, and plans for the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.9-5: Result in Land Use Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.10 Minerals			
4.10-1: Result in the Loss of Availability of a Known Mineral Resource that would be of Value to the Region and the Residents of the State	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.10-2: Result in the Loss of Availability of a Locally Important Mineral Resource Recovery Site Delineated on a Local General Plan, Specific Plan, or Other Land Use Plan	Short-term and Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.10-3: Result in Mineral Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.11 Noise			
4.11-1: Expose Persons to Noise in Excess of Standards Established in the Kern County General Plan or Noise Ordinances, or Other Applicable Standards	Potentially significant	MM 4.11-1, MM 4.11-2, and MM 4.11-3.	Impacts would be less than significant.
4.11-2: Expose Persons to or Generate Excessive Groundborne Vibration or Groundborne Noise Levels	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.11-3: Cause a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity above Levels Existing without the Project	Potentially significant	MM 4.11-1 through MM 4.11-3.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.11-4: Cause a Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity above Existing Levels	Potentially significant	MM 4.11-4, MM 4.11-5, and MM 4.11-6.	Impacts would be less than significant.
4.11-5: Expose People Residing or Working in the Project Area to Excessive Noise Levels for a Project Located within the Kern County Airport Land Use Compatibility Plan	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.11-6: Expose People Residing or Working in the Project Area to Excessive Noise Levels for a Project within the Vicinity of a Private Airstrip	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.11-7: Result in Noise Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.12 Population and Housing			
4.12-1: Induce Substantial Population Growth	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan. No additional mitigation measures are proposed.	Impacts would be less than significant.
4.12-2: Displace Substantial Numbers of Existing Housing	No Impact	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	There would be no impact.
4.12-3: Displace Substantial Numbers of People	No Impact	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	There would be no impact.
4.12-4: Result in Impacts on Population and Housing as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.13 Public Services			
4.13-1: Adversely Affect Fire Protection Services	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.13-2: Adversely Affect Protection/Law Enforcement Services	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.13-3: Adversely Affect Medical Services	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.13-4: Adversely Affect School Capacity	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.13-5: Adversely Affect Parks	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.13-6: Result in Public Services Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.14 Recreation			
4.14-1: Result in Increased Use of Parks	Significant	MM 4.14-1.	Impacts would be significant and unavoidable.
4.14-2: Result in Construction or Expansion of New Parks	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.14-3: Result in Impacts on Recreational Resources as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.
4.15 Transportation and Traffic			
4.15-1: Cause an Increase in Traffic that is Substantial in Relation to the Existing Traffic Load and Capacity of the Street System	Less than significant	MM 4.15-1.	Impacts would be less than significant.
4.15-2: Exceed Level of Service Standards on County Roads or State Highways	Less than significant	MM 4.15-1.	Impacts would be less than significant.
4.15-3: Result in a Change in Air Traffic Patterns that Results in Substantial Safety Risks	Less than significant	MM 4.7-5 and MM 4.7-6.	Impacts would be less than significant.
4.15-4: Substantially Increase Hazards Because of a Design Feature (such as Sharp Curves or Dangerous Intersections) or Incompatible Uses (such as Agricultural Equipment)	Potentially significant	MM 4.15-2, MM 4.15-3, and MM 4. 15-4.	Impacts would be less than significant.
4.15-5: Result in Inadequate Emergency Access	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.15-6: Result in Inadequate Parking	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.15-7: Conflict with Adopted Policies or Programs Supporting Alternative Transportation	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.15-8: Result in Transportation Impacts as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.

Table 1. Summary of Environmental Impacts and Mitigations for the Proposed PdV Project			
Environmental Impact	Impact Significance Before Mitigation	Mitigation Measures	Impact Significance After Mitigation
4.16 Utilities			
4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, Kern County Environmental Health Services Department, and the Lahontan Regional Water Quality Control Board. No additional mitigation measures are proposed.	Impacts would be less than significant.
4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects	Potentially significant	MM 4.16-1.	Impacts would be less than significant.
4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects	Less than significant	MM 4.16-1.	Impacts would be less than significant.
4.16-4: Have Insufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Require New or Expanded Entitlements	Less than significant	MM 4.16-2.	Impacts would be less than significant.
4.16-5: Result in a Determination by the Wastewater Treatment Provider which Serves or May Serve the Project that It Has Inadequate Capacity to Serve the Project's Projected Demand in Addition to the Provider's Existing Commitments	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.16-6: Be Served by a Landfill with Insufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs	Less than significant	The project would comply with the goals, policies, and implementation measures of the Kern County General Plan, and no additional mitigation would be required.	Impacts would be less than significant.
4.16-7: Conflict with Federal, State, and Local Statutes and Regulations Related to Solid Waste	Less than significant	MM 4.16-3 and MM 4.16-4.	Impacts would be less than significant.
4.16-8: Cause Substantial Interference with Frequency-Based Communications	Significant	MM 4.16-5 and MM 4.16-6.	Impacts would be less than significant.
4.16-9: Result in Impacts on Utilities as a result of SCE Facility Improvements	Less than significant	No mitigation would be required.	Impacts would be less than significant.