4.16.4 Impacts and Mitigation Measures

Methodology

Based on both construction and operational vehicle trips associated with the proposed project, an analysis was conducted to determine the impacts of these vehicle trips on current average daily traffic levels for roadways upon which these vehicle trips would likely occur. This section was prepared based on surface traffic analysis presented in the Preliminary Traffic Assessment North Sky River Wind Energy Project, Kern County, California April, 2011, prepared by CH2M Hill, and the Traffic Study Jawbone Wind Energy Project, Kern County, California November 2010, prepared by Ruettgers & Schuler. Both of these traffic studies are included as Appendix K of this EIR.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on Traffic and Transportation if it would:

- Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, and highways and freeways;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency or adopted County threshold for designated roads or highways. Specifically, would implementation of the project cause the Level of Service (LOS) for roadways and/or intersections to decline below the following thresholds or further degrade already degraded segments:
  - Metropolitan Bakersfield General Plan LOS “C”
  - Kern County General Plan LOS “D”
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

As discussed in Appendix A (Notice of Preparation/Initial Study [NOP/IS]), the proposed project was determined to have no impact with regard to the following impact thresholds and are not discussed further in this EIR:

- Exceed Metropolitan Bakersfield General Plan LOS “C”
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
Project Impacts

Impact 4.16-1: Exceed the Capacity of the Existing Circulation System, Based on an Applicable Measure of Effectiveness (as Designated in a General Plan Policy, Ordinance, etc.), Taking into Account All Relevant Components of the Circulation System

The proposed project would result in temporary, short-term increases in local traffic as a result of construction-related workforce traffic (employee travel to and from the site), heavy equipment delivery (e.g., cranes and bulldozers), and material deliveries (e.g., turbine components, gravel and concrete). Preliminary construction activities are scheduled to begin in the fourth quarter of 2011 and are expected to take 12 months to complete. Project construction for the Jawbone Wind Energy Project would occur between 5:30 a.m. and 9:00 p.m., Monday through Saturday. In addition, when required, in order to meet specific critical schedules, construction would occur between 7:00 a.m. and 6:00 p.m. on Sundays. Project construction for the North Sky River Wind Energy Project would occur from 6:00 a.m. to 9:00 p.m., Monday through Friday, and from 8:00 a.m. to 9:00 p.m. on Saturday.

An average of 120 workers will be employed during construction (with a peak workforce of 150) of the North Sky River Wind Energy Project. An average of 30 peak workers per day would be employed during construction of the Jawbone Wind Energy Project. It is anticipated that a minimum of 95 percent of the workers would live or stay in the surrounding communities (Lancaster, Palmdale, Tehachapi, California City and Mojave) and additional workers would come from the Bakersfield and northern Los Angeles County areas. Workers would arrive at the proposed project site via SR 14 to Jawbone Canyon Road and then proceed to project staging areas. Workers would then take a shuttle to the construction areas.

Based on these assumptions up to 300 daily worker trips and 366 daily truck trips would be generated during construction of both the North Sky River and Jawbone Wind Energy Projects combined, resulting in a total of 666 total estimated daily trips (with 98 trips occurring during the morning peak hour and 98 trips occurring during the afternoon peak hour). As it is likely that construction of the North Sky River and Jawbone Wind Energy Projects would occur at the same time, these trip assumptions were used to evaluate the maximum possible daily vehicle trips associated with proposed project construction on roadways.

A majority of these trips would access the project area from SR 14 and SR 58, with local access to the site provided by Jawbone Canyon Road off of SR 14. Trip distribution percentages of project traffic that will use the various routes are identified in Appendix K. Detailed level of service analyses were not completed because the surrounding roadways and intersections are assumed to operate well below capacity given the remote and rural nature of the area, and the existing low daily volumes on these roadways. Though the project will result in a notable temporary increase in traffic, it is anticipated that the increase will have little effect on roadway and intersection operations, therefore; those operations will still be within the County and Caltrans’ acceptable capacities and performance standards. Additionally, based on the short-term duration of projected traffic generation, the volume increase would be less than significant compared to the existing typical traffic volume on SR 14 and SR 58 (Caltrans, 2011a).

To minimize potential impacts related to proposed project construction traffic with respect to the existing traffic load and capacity of the local street system, Mitigation Measure (MM) 4.16-1 is
proposed and would require the project proponents to prepare a Construction Traffic Control Plan prior to construction in order to reduce the impact of construction-related traffic impacts. Implementation of MM 4.16-1 would reduce temporary construction-related traffic impacts to the existing traffic load and capacity of the street system to the maximum extent feasible.

Furthermore, the Construction Traffic Control Plan required by MM 4.16-1 would address and minimize potential construction vehicle conflicts with off highway vehicle (OHV) users of the BLM controlled Jawbone Canyon OHV Area, located along Jawbone Canyon Road (as shown in Figure 4.16-1). Refer to EIR Section 4.15, Recreation, for a detailed analysis of this topic.

Project construction would require a total of 366 trucks trips per day during peak construction. Jawbone Canyon Road is a County-maintained road of approximately 25 feet in width that crosses two aqueducts maintained by the Los Angeles Department of Water and Power (LADWP). At least one of these aqueduct crossings has a load rating of AASHTO (American Association of State Highway and Transportation Officials) HL-93. The traffic analyses prepared by the project applicants did not address the structural integrity of these crossings or of Jawbone Canyon Road; therefore, to ensure that the use of Jawbone Canyon Road by project-related construction truck traffic would not result in adverse effects to the structural integrity of the roadway or the aqueduct crossings, MM 4.16-2 requires a pavement index assessment and load rating assessment to determine the required pavement structure necessary to accommodate the additional truck trips and then implementation of pavement repairs to achieve the index determined and as approved by the LADWP.

Regarding operations-related trips, the Kern County Guidelines and the Caltrans Guide for the Preparation of Traffic Impact Studies state that a traffic impact analysis is not required if project traffic peak hour trip generation is less than 50 trips at intersections currently operating at or above LOS C. The LOS on existing County roads is now at or above the acceptable LOS D as specified by the KCGP Circulation Element. Therefore, an operational traffic capacity analysis was not required for the proposed project as operational traffic is not expected to exceed 50 trips and the current peak hour LOS are acceptable.

Mitigation Measures

**MM 4.16-1** Prior to the issuance of grading or building permits, the project proponents shall prepare and submit a Construction Traffic Control Plan to Kern County Roads Department, Bureau of Land Management, and Caltrans District 9 office for approval. The Construction Traffic Control Plan shall be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook and must include, but not be limited to, the following issues:

- Overall Project Area and connecting roads:
  - Timing of deliveries of heavy equipment and building materials;
  - Directing construction traffic with a flag person;
  - Temporary signing, lighting, and traffic control devices placement if required;
  - Determining the need for construction work hours and arrival/departure times outside peak traffic periods;
  - Ensuring access for emergency vehicles to the project site;
• Temporary closure of travel lanes or disruptions to street segments and intersections during materials delivery, trenching activities within roadway rights-of-way, transmission line stringing activities, or any other utility connections;

• Maintaining access to adjacent property;

• Specification of both construction-related vehicle travel and oversize load haul routes, the minimization of construction traffic during the AM and PM peak hour, distributing construction traffic flow across alternative routes to access the proposed project site; and

• Identification of vehicle safety procedures for entering and exiting site access roads.

Jawbone Canyon Road – Jawbone Canyon OHV Area

• Transporters shall follow Kern County regulations for the transportation of oversized and overweight loads on all county roads, including the segment of Jawbone Canyon Road that would be utilized for access to the project. These regulations include provisions for time of day, pilot cars, law enforcement escorts, speed limits, flaggers, and warning lights.

• During project construction, delivery of equipment and materials shall be prohibited on Jawbone Canyon Road on the following holiday periods:
  - Veterans Day, from 12 p.m. on the preceding Thursday to the following Monday;
  - Thanksgiving, from 12 p.m. on the preceding Wednesday to the following Monday;
  - Christmas and New Years, from 12 p.m. on the Friday preceding Christmas to the Tuesday following New Years;
  - Martin Luther King Day, from 12 p.m. on the preceding Friday to the following Tuesday;
  - Presidents Day, from 12 p.m. on the preceding Friday to the following;
  - Easter, from 12 p.m. on the preceding Friday to the following Monday;
  - Memorial Day, from 12 p.m. on the preceding Friday to the following; and
  - Labor Day, from 12 p.m. on the preceding Friday to the following Tuesday.

With at least four weeks notification to the Los Angeles Department of Water and Power, prohibit construction deliveries on additional sanctioned event weekends in the Jawbone Canyon OHV Area.

• On weekends and holiday periods during the high-use recreation season in the Jawbone Canyon OHV Area (late fall to late spring), construction workers shall be prohibited from travel in individual vehicles on Jawbone Canyon Road and shall be shuttled to and from the project site in multi-person vehicles beginning on the day preceding the weekend or holiday. This limitation on the use of vehicles does not include conducting limited critical activities associated with minimal security and safety monitoring and construction management.
During construction, the existing cattle guards shall be maintained and new cattle guards provided if none exist at entry gates on Jawbone Canyon Road to prevent livestock from entering the Jawbone Canyon OHV Area.

During the high-use recreation season in the Jawbone Canyon OHV Area (late fall to late spring), the delivery of large loads on Jawbone Canyon Road shall be avoided to the extent practicable on weekends (in addition to those weekends during which project deliveries shall be prohibited). In addition, the transportation safety plan shall include time of day limitations during which no project-related traffic, except limited critical activities associated with minimal security and safety monitoring and construction management, shall be allowed on Jawbone Canyon Road. Transportation permits for oversized and overweight loads on County-maintained portions of Jawbone Canyon Road on high-use weekends shall be issued at the direction of the Kern County Roads Department.

No construction activity related to road improvements on Jawbone Canyon Road shall be conducted during high-use recreation periods in the Jawbone Canyon OHV Area. All road improvements shall be completed in a manner and according to a schedule that provides uninterrupted access on Jawbone Canyon Road during high-use recreation periods in the Jawbone Canyon OHV Area. If a temporary closure of the County-maintained portions of Jawbone Canyon Road is allowed, it shall be in accordance with Kern County Roads Department policies and standards.

A training program regarding the rules and regulations for project-related travel shall be conducted with all project transporters and drivers within ten days of each employee’s first day working at the site. The program shall address issues such as vehicle speed limits, pilot vehicle requirements, and warnings regarding potential safety conflicts with recreation use in the Jawbone Canyon OHV Area. All drivers shall be strictly monitored to ensure compliance with rules and regulations, and consequences (e.g., revocation of permission to deliver or drive for the project) shall be applied to individuals and/or the project for noncompliance. Enforcement measures shall be defined in the Construction Traffic Control Plan.

Traffic signs shall be provided to control traffic and ensure safety along Jawbone Canyon Road and at designated crossings of the road within the Jawbone Canyon OHV Area. These signs shall adhere to the Federal Highway Administration Manual on Uniform Traffic Control devices and shall include regulatory signs (e.g., stop, speed limits, yield), warning signs (e.g., OHV road crossings), and construction signs (e.g., temporary lane closures, flaggers). All signs shall be maintained throughout the project construction.

The project proponents shall continue to consult with the Friends of Jawbone, other recreation groups, the Bureau of Land Management, and the Kern County Roads Department regarding concerns related to project construction traffic on Jawbone Canyon Road. The project proponents shall notify the Off Highway Vehicle groups, the Bureau of Land Management, and the Kern County Roads Department of any scheduled or unscheduled transportation activities related to project construction traffic.
Department of the date and anticipated duration of construction deliveries on Jawbone Canyon Road.

- A brochure describing the project and its construction, including a copy of the Construction Traffic Control Plan, shall be posted at the Jawbone Canyon OHV Area information kiosk and made available at the Jawbone Station.

- To mitigate potential safety impacts caused by haul truck movements onto and off of Jawbone Canyon and Pine Tree Canyon roads, the following measures are proposed:
  - The contractor shall apply for encroachment permits with Caltrans and County of Kern and post warning signs in State and local road rights-of-way (State Route 14 and Jawbone Canyon Road).
  - The contractor shall discuss construction plans for truck movements with State and County transportation officials prior to the start of construction.
  - The contractor shall apply for installation of appropriate California Department of Transportation warning signage for Jawbone and Pine Tree intersections. This could include California Department of Transportation Warning Sign SW-40 Truck Crossing and/or Warning Sign SC-5 Special Event Ahead pursuant to State Highway Design Guidelines.
  - As required by State or local transportation departments, traffic control flaggers, pilot cars, and signage warning of construction activity shall be employed.

**MM 4.16-2** Prior to the issuance of grading or building permits, the project proponents shall conduct a pavement index assessment and load rating analysis to ensure Jawbone Canyon Road can accommodate construction related truck traffic, particularly over crossing of the Los Angeles Aqueduct. The traffic index assessment shall determine the required pavement structure required to accommodate the additional truck trips and then implement pavement repairs to achieve save passage of construction-related truck traffic. The project proponents shall implement all recommendations of the pavement including roadway rehabilitation or other structural improvements. The project proponents shall coordinate with the affected jurisdictions (Los Angeles Department of Water and Power and Kern County) and shall obtain any required permits prior to construction of improvements. The project proponents shall implement appropriate wheel load weight distribution and/or physical improvements to aqueduct crossings to ensure such crossings are adequately protected.

**Level of Significance after Mitigation**

Impacts would be less than significant.
Impact 4.16-2: Conflict with an Applicable Congestion Management Program, Including, but not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency or Adopted County Threshold for Designated Roads or Highways

The Circulation Element of the KCGP states that the design LOS for Kern County is LOS C. The minimum LOS for conformance with the KCGP is LOS D. The LOS on existing County roads is now at or above the acceptable LOS D as specified by the KCGP Circulation Element (Kern County, 2007). As discussed above, detailed LOS analyses were not completed at this time because the surrounding roadways and intersections are assumed to operate well below capacity given the remote and rural nature of the area and the existing low daily volumes on these roadways. Though the project will result in a temporary increase in traffic, it is anticipated that the increase will have little effect on roadway and intersection operations and will still be well within the County and Caltrans’ acceptable capacities and performance standards.

Additionally, MM 4.16-1 would limit the amount of construction traffic traveling during the AM and PM peak periods, and require construction-related traffic to be distributed over multiple routes, thus reducing construction traffic impacts to existing LOS on area roads. As described above in Impact 4.16-1, the amount of traffic generated during proposed project operation would not be great enough to affect existing LOS on area roads. Therefore, proposed project construction and operations-related traffic is not expected to exceed Kern County LOS thresholds and would be in compliance with established KCGP LOS Standards (Policy 2).

According to the most recently published Caltrans Transportation Concept Reports for both SR 14 and SR 58, the LOS for both highways along the nearest segments closest to the proposed project site is at or above LOS D (Caltrans, 2011a). As discussed above, MM 4.16-1 is proposed to reduce construction-related traffic impacts to existing LOS. Therefore, proposed project traffic would not be expected to result in a substantial increase in congestion that would affect the existing LOS on State highways. Likewise, traffic generated during operations would also not be great enough to affect the existing LOS on State highways.

Mitigation Measures

Implement Mitigation Measure 4.16-1.

Level of Significance after Mitigation

Impacts would be less than significant.

Impact 4.16-3: Change in Air Traffic Patterns that Result in Substantial Safety Risks

The WE Combining District establishes 600 feet as the maximum height for WTGs (subject to the height restrictions outlined in Section 19.64 and Figure 19.08.160 of the Kern County Zoning Ordinance). Because the proposed project does not include structures exceeding 500 feet in height (refer to Section 3.5), it would comply with Kern County Zoning Ordinance 19.08.160 and Section 3.3.1 of the Kern County ALUCP. Furthermore, because the western boundary of the Edwards Air Force Base is located 20 miles southeast of the proposed project site, the proposed project is not considered to be within close enough proximity to Edwards Air Force Base to result in significant impacts and is therefore consistent with Section 4.17.2.3 of the Kern County ALUCP.
Because the WTGs and meteorological towers would be more than 200-feet in height, the proposed project would be required to comply with FAA Advisory Circular 70/7460-1, Obstruction Lighting/Marking requirements. All new met towers and transmission line towers may require the proponent to file a form 7460-1, “Notification of Proposed Construction or Alteration,” with the FAA. Furthermore, all temporary construction equipment over 200-feet in height or meeting FAA requirements will be required to have lighting and marking consistent with FAA Advisory circular 70/7460-1 K, Obstruction Marking and Lighting, 34 (Markers) for temporary construction equipment so not to create a hazard to air navigation.

The applicant will file form 7460-1, Notification of Proposed Construction or Alteration, with the FAA for each WTG, met tower, transmission line tower and construction crane meeting the FAA 7460 requirements for a determination of no hazard to air navigation. Because FAA approval has not been obtained, MM 4.8-8, as described in Section 4.8 (Hazards and Hazardous Materials) of this EIR, is required to ensure the project proponents submit FAA Form 7460-1 requesting that the FAA issue a Determination of No Hazard to Air Navigation. If the FAA determines that the project would result in a potential obstruction unless reduced to a specified height, the project proponents would be required to work with the FAA to resolve any adverse effects on aeronautical operations.

As described above in Section 4.16-2, the proposed project is located near several private and public airports, including an unpermitted private airstrip (located 1.2 miles northwest of the project site), California City Municipal Airport (located 16.6 miles southeast of the project site), Tehachapi Municipal Airport (located 20 miles southwest of the project site), and the Mojave Air and Space Port (located 20 miles from the project site).

Additionally, nearby military installations that have aircraft overflights of the proposed project site include NAWS to the northeast and the Edwards AFB to the southeast of the project (both of which are located 30 miles from the project site). The project site falls inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex. For projects with components that would exceed the height limits set forth for the R-2508 Complex, Section 4 of the Kern County ALUCP requires military consultation to confirm that the project would not interfere with military communications or airspace (refer to section 4.16.3). MM 4.10-1, as described in Section 4.10 (Land Use), would ensure that the project proponents submit a final project design to the authorized officer of Edwards AFB and include final specifications on the height and location of the wind turbine generators to be installed as well as the anticipated schedule of construction.

Due to military air traffic restrictions, the WTGs would need to conform to the height requirements for the proposed project area as defined by Section 19.64 and Figure 19.08.160 of the Kern County Zoning Ordinance unless the military authority responsible for operations in that flight area first provides the planning director with written concurrence that the height of the proposed structure or building would create no significant military mission impacts. The project site is located across several of the military review zones in the WE Combining District, including green (no review requirement), yellow (all structures over 500 feet), and red (wind turbines and communications towers over 80 feet and all other structures over 100 feet). Without military review, those structures falling within the red zone, which includes the eastern portion of the site, would be limited to 80 feet above ground elevation for wind turbines and communications towers and 100 feet for all other structures.

Implementation of MM 4.8-8 as well as MM 4.10-1 would ensure that the proposed project is consistent with the Kern County ALUCP and would not impact operations of aircraft using Kern County airspace and accessing proximate public airports and military use of airspace by requiring
coordination and cooperation with airport operators, the County Department of Airports, the California Department of Transportation, Division of Aeronautics, affected cities, Edwards AFB, NAWS China Lake, the U.S. Department of Defense on ALUCP, review of land use applications, public education, and encroachment issues.

**Mitigation Measures**

Implement Mitigation Measure 4.8-8, as described in Section 4.8 (Hazards and Hazardous Materials) and Mitigation Measure 4.10-1, as described in Section 4.10 (Land Use).

**Level of Significance after Mitigation**

Impacts would be less than significant.

**Impact 4.16-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses**

During construction, the proposed project would require the delivery of heavy construction equipment and large WTG components using area roadways. The use of oversize vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space. The need for and number of California Highway Patrol escorts, as well as the timing of transport, will be at the discretion of Caltrans and Kern County, and will be detailed in respective oversize load permits. To ensure that proposed project construction oversize vehicle loads are in compliance with applicable California Vehicle Code sections and California Street and Highway Codes applicable to licensing, size, weight, load, and roadway encroachment of construction vehicles, MM 4.16-3 would require that all oversize vehicles used on public roadways during construction obtain required permits and comply with Caltrans and Kern County limitations on vehicle sizes and weights. In addition, MM 4.16-1 would also require this information be provided in the Construction Traffic Control Plan for Kern County approval. It is anticipated that no major road improvements will be needed to accommodate delivery and construction traffic along the public roads and highways.

Furthermore, the Construction Traffic Control Plan required by MM 4.16-1 would address and minimize potential construction vehicle conflicts with OHV users of the BLM controlled Jawbone Canyon OHV Area, located along Jawbone Canyon Road. Refer to EIR Section 4.15, Recreation, for a detailed analysis of this topic.

To ensure that the design of any new access and internal site roadways are compliant with all Kern County regulations and not result in increased hazards, MM 4.16-4 requires the project proponents to obtain Kern County approval of all proposed access road design prior to construction. Additionally, MM 4.16-4 requires the project proponents to repair any damaged roadways during construction to minimize the risk of any roadway hazards.

The incorporation of these measures ensures compliance with all State and KCGP polices and standards pertaining to roadway safety, encroachment, and design (refer to section 4.16.3).

**Mitigation Measures**

**MM 4.16-3** Prior to the issuance of grading or building permits, the project proponents shall obtain all applicable permits from the California Department of Transportation, Kern County, and any other applicable agencies pertaining to vehicle sizes, weights,
roadway encroachment, and travel routes and adhere to any conditions in these permits.

**MM 4.16-4** Prior to the issuance of grading or building permits, the project proponents shall complete the following:

- Submit engineering drawings of proposed access road design for the review and approval of the Kern County Roads Department.
- Shall obtain an encroachment permit from the Kern County Roads Department for applicable roads in the Kern County road maintenance system.
- 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.

While the project is under construction, the condition of Jawbone Canyon Road shall be monitored and the roadway shall be kept in a safe operating condition using generally accepted methods of maintenance. At the conclusion of construction, repair of damage to the roadway shall be completed to the satisfaction of the Kern County Roads Department.

**Level of Significance after Mitigation**

Impacts would be less than significant.

**Impact 4.16-5: Result in Inadequate Emergency Access**

The project site is located in a rural area with both north and south access roads allowing adequate egress/ingress to the site in the event of an emergency. Additionally, as part of the proposed project, internal access roadway improvements will occur. Therefore, the presence of the proposed project would not physically interfere with emergency vehicle access or personnel evacuation from the site.

As described above, increased project-related traffic would not cause a significant increase in congestion or affect the existing LOS on roads, which could indirectly affect emergency access. The project is not expected to require closures of public roads, which could inhibit access by emergency vehicles. Nevertheless, during the construction phase of the project, heavy construction-related traffic could interfere with emergency response to the project site or emergency evacuation procedures in the event of an emergency such as a wildfire, or a chemical spill at the site. Heavy construction-related traffic could also potentially interfere with emergency response through the area to residences or businesses in the project vicinity.

To ensure emergency access during construction, MM 4.16-1 requires the preparation of a construction traffic control plan and includes assurance of access for emergency vehicles to the project site. During project operation, MM 4.16-4 requires the project proponents to obtain Kern County approval of all proposed access road design prior to construction ensuring on-site emergency access is adequate. Additionally, MM 4.8-9, as presented in Section 4.8 (Hazards and Hazardous Materials) of this EIR, would reduce the significance of this impact by ensuring coordination between emergency responders and project construction crews. These measures would ensure proposed project construction and operational related traffic will be in compliance with KCGP Safety Element policies pertaining to emergency access.
Mitigation Measures

Implement Mitigation Measures 4.16-1 and 4.16-4, as presented above, and Mitigation Measure 4.8-9 as described in Section 4.8 (Hazards and Hazardous Materials).

Level of Significance after Mitigation

Impacts would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for transportation and traffic cumulative impacts is Kern County as a whole. This geographic scope of analysis is appropriate for transportation and traffic due to the regional nature of transportation and traffic impacts that could occur within the entire Kern County transportation network, particularly SR 14 and SR 58.

Impact 4.16-6: Contribute to Cumulative Transportation and Traffic Impacts

With regard to a cumulative increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, as well as cumulatively exceeding LOS standards on County roads or State highways, future development of Kern County will contribute to congestion on area roadways that could be traveled by construction-related traffic associated with the proposed project. Future development within the County, such as other large wind energy projects (as identified in Table 3-9, within Section 3.0 Project Description) will generate a large number of trips to and from the respective project sites using local roadways. In addition, future residential development of Kern County will increase the overall number of vehicle trips within the County through the increase in population. Construction of these projects will also result in an increase in temporary delays and construction vehicle trips on the local roadway network. However, the implementation of MM 4.16-1 would reduce proposed project temporary construction traffic impacts. Furthermore, operations-related traffic associated with the proposed project would result in an increase of less than 50 average daily trips distributed on local roadways. While development of other large wind energy projects (as identified in Table 3-9) within the same proximate area of Kern County as the proposed project will result in cumulative project-related traffic impacts and additional traffic volumes on study area roadways (particularly SR 14 and SR 58), the proposed project’s contribution to this impact would be short-term and would reduce to nominal levels upon completion of construction. Therefore, impacts of the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact related to an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.

With regard to a cumulative change that could result in substantial aviation safety risks, all future development within Kern County (including the proposed project) will be subject to FAA and Kern County regulations on airspace and airport related encroachment. Additional development of the County, particularly other large wind energy projects as identified in Table 3-9, will likely contain structures requiring FAA Form 7460, Kern County Zoning Ordinance, and Kern County ALUCP compliance analysis. As such, each individual project within the County will require approval and compliance with these issues. The implementation of MM 4.8-8, as described in Section 4.8 (Hazards and Hazardous Materials) and MM 4.10-1, as described in Section 4.10 (Land Use),
would ensure that the proposed project is in compliance with the FAA for airspace encroachment and safety. Furthermore, it is assumed that any cumulative development within the County encroaching upon military airspace would also be subject to the Kern County ALUCP requirements of military consultation to confirm that the project would not interfere with military communications or airspace. Therefore, impacts of the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact related to a change in air traffic patterns that result in substantial safety risks.

With regard to a cumulative increase in traffic and transportation hazards caused by a design feature or incompatible uses, all future development within Kern County (including the proposed project) will be subject to Kern County and Caltrans regulations on roadway alterations/development and oversize vehicle trips. Additional development of the County will generate the need for new public roadways and access points. Furthermore, large wind energy projects (as identified in Table 3-9) will likely require the use of large oversized trucks on public roadways and highways during construction. However, each individual project will require Kern County and Caltrans approvals and permits pertaining to these issues. The implementation of MMs 4.16-1 through 4.16-4 would ensure that the proposed project is in compliance with applicable Kern County and Caltrans regulations for transportation and traffic safety. Therefore, impacts of the proposed project would not combine with impacts of past, present, and reasonably foreseeable projects to result in a significant cumulative impact with regard to an increase in transportation and traffic hazards.

With regard to a cumulative increase in inadequate emergency access, future development of Kern County will contribute to congestion on area roadways, as well as future construction that may temporarily limit emergency vehicle access and response times. Continued development projects within the area (particularly those renewable energy projects identified in Table 3-9) will increase the overall number of oversize vehicle trips on roads within the County. Furthermore, all development projects within the area (as identified in Tables 3-9 and 3-10) have the potential to require temporary roadway and access point closures during construction. However, the implementation of MMs 4.16-1 and 4.16-4, as presented above, and MM 4.8-9 as described in Section 4.8 (Hazards and Hazardous Materials) would reduce proposed project impacts to emergency access during construction. Therefore, impacts of the proposed project would not combine with impacts of past, present, and reasonably foreseeable projects to result in a significant cumulative impact.

**Mitigation Measures**

Implement Mitigation Measures 4.16-1 through 4.16-4, Mitigation Measures 4.8-8 and 4.8-9 as described in Section 4.8 (Hazards and Hazardous Materials), and Mitigation Measure 4.10-1, as described in Section 4.10 (Land Use).

**Level of Significance after Mitigation**

Cumulative impacts would be less than significant.