

Brookfield Renewable Energy/Met Towers Mitigation Monitoring and Reporting Program

Purpose of and Need for Monitoring

In compliance with CEQA, an EIR has been prepared for the proposed project. The Environmental Checklist prepared for the proposed project identified potentially significant impacts in the resource areas listed below, as well as mitigation measures to reduce these impacts to a less-than-significant level where possible.

Significant impacts pertaining to the following resource areas would be reduced to a less-than-significant level by mitigation measures identified in the EIR.

- Aesthetics impacts
- Expose sensitive receptors to substantial pollutant concentrations during construction
- Impacts on non-avian (birds and bats) biological resources
- Cultural resources impacts
- Geology, soils, mineral resources, and paleontological resources impacts
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases
- Hazards
- Water quality impacts

There are no impacts that cannot be reduced to a less-than-significant level.

CEQA requires that a lead agency adopt a Mitigation Monitoring and Reporting Program (MMRP) for the measures the agency has proposed to avoid or mitigate significant environmental effects (CEQA Guidelines Section 15097). The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR are implemented and to identify who is responsible for their implementation.

Table MMRP-1, which follows this introductory section, identifies the mitigation measures for the proposed project, the parties responsible for implementing and monitoring the measures, the timing of each measure, and a summary of the actions necessary to implement and monitor each measure.

Mitigation Monitoring and Reporting Program

The MMRP has been prepared for the proposed project in accordance with Public Resources Code 21081.6, which specifies that when a public agency makes findings required by paragraph (1) of subdivision (a) of Section 21081, it “shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” Public Resources Code 21081.6 further specifies that the MMRP will “ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within the County's authority to implement, including monitoring where identified, throughout all phases of development and operation of the proposed program.

Table MMRP-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
Aesthetics				
<p>Mitigation Measure AES-1: Limit construction to daylight hours</p> <p>Major construction activities will not be undertaken between sunset and sunrise or on weekends. Construction activity is specifically prohibited from using high-wattage lighting sources to illuminate work sites after sunset and before sunrise, with the exception of nighttime deliveries under the approved transportation control plan or other construction activities that require nighttime work for safety considerations.</p>	During construction	County—adopt a Condition of Approval; Operator—ensure construction hours are maintained	County	Monitor compliance with Conditions of Approval
Biological Resources				
<p>Mitigation Measure BIO-5c: Restore disturbed annual grasslands</p> <p>Within 30 days prior to any ground disturbance, a qualified biologist will prepare a Grassland Restoration Plan in coordination with CDFW and subject to CDFW approval, to ensure that temporarily disturbed annual grasslands and areas planned for the removal of permanent roads and turbine pad areas are restored to preproject conditions. The Grassland Restoration Plan will include but not be limited to the following measures.</p> <ul style="list-style-type: none"> • Gravel will be removed from areas proposed for grassland restoration. • To the maximum extent feasible, topsoil will be salvaged from within onsite work areas prior to construction. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the restoration site. • Where appropriate, restoration areas will be seeded (hydroseeding is acceptable) to ensure erosion control. Seed mixes will be tailored to closely match that of reference site(s) within the program area and should include native or naturalized, noninvasive species sourced within the project area or from the nearest available location. • Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel. <p>The plan will include a requirement to monitor restoration areas annually (between March and October) for up to 3 years following the year of restoration. The restoration will be considered successful when the percent cover for restored areas is 70% absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5% relative cover of the vegetation in the restoration areas will consist of invasive plant species rated as</p>	Prior to disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>“high” in Cal-IPC’s California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures prescribed in the plan will include supplemental seeding, weed control, and other actions as determined necessary to achieve the long-term success criteria. Monitoring may be extended if necessary to achieve the success criteria or if drought conditions preclude restoration success. Other performance standards may also be required as they relate to special-status species habitat; these will be identified in coordination with CDFW and included in the plan. The project proponent will provide evidence that CDFW has reviewed and approved the Grassland Restoration Plan. Additionally, the project proponent will provide annual monitoring reports to the County by January 31 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary) during the previous year.</p>				
<p>Mitigation Measure BIO-8a: Implement measures to avoid and minimize potential impacts on special-status and non-special-status nesting birds Where suitable habitat is present for raptors within 1 mile (within 2 miles for golden eagles) and for tree/shrub- and ground-nesting migratory birds (non-raptors) within 50 feet of proposed work areas, the following measures will be implemented to ensure that the proposed project does not have a significant impact on nesting special-status and non-special-status birds.</p> <ul style="list-style-type: none"> • Remove suitable nesting habitat (shrubs and trees) during the non-breeding season (typically September 1–January 31) for nesting birds. • To the extent feasible, avoid construction activities in or near suitable or occupied nesting habitat during the breeding season of birds (generally February 1–August 31). • If construction activities (including vegetation removal, clearing, and grading) will occur during the nesting season for migratory birds, a qualified biologist will conduct preconstruction nesting bird surveys within 7 days prior to construction activities. The construction area and a 1-mile buffer will be surveyed for tree-nesting raptors (except for golden eagles), and a 50-foot buffer will be surveyed for all other bird species. • Surveys to locate eagle nests within 2 miles of construction will be conducted during the breeding season prior to construction. A 1-mile no-disturbance buffer will be implemented for construction activities to protect nesting eagles from disturbance. Through coordination with USFWS, the no-disturbance buffer may be reduced to 0.5 mile if construction activities are not within line-of-sight of the nest. 	<p>During construction and operation</p>	<p>County—adopt a Condition of Approval; Operator—implement</p>	<p>County</p>	<p>Monitor compliance with Conditions of Approval</p>

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> If an active nest (other than golden eagle) is identified near a proposed work area and work cannot be conducted outside the nesting season (February 1–August 31), a no-activity zone will be established around the nest by a qualified biologist in coordination with USFWS and/or CDFW. Fencing and/or flagging will be used to delineate the no-activity zone. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity zone will be based on the distance of the activity to the nest, the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the species, and the dissimilarity of the proposed activity to background activities. The no-activity zone will be large enough to avoid nest abandonment and will be between 50 feet and 1 mile from the nest, or as otherwise required by USFWS and/or CDFW. 				
<p>Mitigation Measure BIO-8b: Implement measures to avoid and minimize potential impacts on western burrowing owl</p> <p>Where suitable habitat for western burrowing owl is in or within 500 feet of proposed work areas, the following measures will be implemented to avoid or minimize potential adverse impacts on burrowing owls.</p> <ul style="list-style-type: none"> To the maximum extent feasible (e.g., where the construction footprint can be modified), construction activities within 500 feet of active burrowing owl burrows will be avoided during the nesting season (February 1–August 31). A qualified biologist will conduct preconstruction take avoidance surveys for burrowing owl no less than 14 days prior to and within 24 hours of initiating ground-disturbing activities. The survey area will encompass the work area and a 500-foot buffer around this area. If an active burrow is identified near a proposed work area and work cannot be conducted outside the nesting season (February 1–August 31), a no-activity zone will be established by a qualified biologist in coordination with CDFW. The no-activity zone will be large enough to avoid nest abandonment and will extend a minimum of 250 feet around the burrow. If burrowing owls are present at the site during the non-breeding season (September 1–January 31), a qualified biologist will establish a no-activity zone that extends a minimum of 150 feet around the burrow. If the designated no-activity zone for either breeding or non-breeding burrowing owls cannot be established, a wildlife biologist experienced in 	<p>During construction and operation</p>	<p>County—adopt a Condition of Approval; Operator—implement</p>	<p>County</p>	<p>Monitor compliance with Conditions of Approval</p>

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>burrowing owl behavior will evaluate site-specific conditions and, in coordination with CDFW, recommend a smaller buffer (if possible) and/or other measure that still minimizes disturbance of the owls (while allowing reproductive success during the breeding season). The site-specific buffer (and/or other measure) will consider the type and extent of the proposed activity occurring near the occupied burrow, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity to background activities.</p> <ul style="list-style-type: none"> • If burrowing owls are present in the direct disturbance area and cannot be avoided during the non-breeding season (generally September 1 through January 31), burrowing owls may be excluded from burrows through the installation of one-way doors at burrow entrances. A burrowing owl exclusion plan, prepared by the project proponent, must be approved by CDFW prior to exclusion of owls. One-way doors (e.g., modified dryer vents or other CDFW-approved method) will be left in place for a minimum of 1 week and monitored daily to ensure that the owl(s) have left the burrow(s). Excavation of the burrow will be conducted using hand tools. During excavation of the burrow, a section of flexible plastic pipe (at least 3 inches in diameter) will be inserted into the burrow tunnel to maintain an escape route for any animals that may be inside the burrow. Owls will be excluded from their burrows as a last resort and only if other avoidance and minimization measures cannot be implemented. • Avoid destruction of unoccupied burrows outside the work area and place visible markers near burrows to ensure that they are not collapsed. • Conduct ongoing surveillance of the project site for burrowing owls during project activities. If additional owls are observed using burrows within 500 feet of construction, the onsite biological monitor will determine, in coordination with CDFW, if the owl(s) are or would be affected by construction activities and if additional exclusion zones are required. 				
<p>Mitigation Measure BIO-10a: Implement measures to avoid and minimize potential impacts on San Joaquin kit fox and American badger Where suitable habitat is present for San Joaquin kit fox and American badger in and adjacent to proposed work areas, the following measures, consistent with measures developed in the EACCS, will be implemented to ensure that proposed projects do not have a significant impact on San Joaquin kit fox or American badger. <i>Implementation of some of these measures will require that the project proponent</i></p>	<p>During construction and operation</p>	<p>County—adopt a Condition of Approval; Operator—implement</p>	<p>County</p>	<p>Monitor compliance with Conditions of Approval</p>

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><i>obtain incidental take permits from USFWS and CDFW (San Joaquin kit fox) before construction begins.</i> Additional conservation measures or conditions of approval may be required in applicable project permits.</p> <ul style="list-style-type: none"> • To the maximum extent feasible, suitable dens for San Joaquin kit fox and American badger will be avoided. • All project proponents will retain qualified approved biologists (as determined by USFWS) to conduct a preconstruction survey for potential San Joaquin kit fox dens (U.S. Fish and Wildlife Service 2011). Resumes of biologists will be submitted to USFWS for review and approval prior to the start of the survey. • Preconstruction surveys for American badgers will be conducted in conjunction with San Joaquin kit fox preconstruction surveys. • As described in U.S. Fish and Wildlife Service 2011, the preconstruction survey will be conducted no less than 14 days and no more than 30 days before the beginning of ground disturbance, or any activity likely to affect San Joaquin kit fox. The biologists will conduct den searches by systematically walking transects through the project area and a buffer area to be determined in coordination with USFWS and CDFW. Transect distance should be based on the height of vegetation such that 100% visual coverage of the project area is achieved. If a potential or known den is found during the survey, the biologist will measure the size of the den, evaluate the shape of the den entrances, and note tracks, scat, prey remains, and recent excavations at the den site. The biologists will also determine the status of the dens and map the features. Dens will be classified in one of the following four den status categories defined by USFWS (U.S. Fish and Wildlife Service 2011). <ul style="list-style-type: none"> ○ Potential den: Any subterranean hole within the species' range that has entrances of appropriate dimensions and for which available evidence is sufficient to conclude that it is being used or has been used by a kit fox. Potential dens include (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, ground squirrel) that otherwise has appropriate characteristics for kit fox use; or an artificial structure that otherwise has appropriate characteristics for kit fox use. ○ Known den: Any existing natural den or artificial structure that is used or has been used at any time in the past by a San Joaquin kit fox. 				

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Evidence of use may include historical records; past or current radiotelemetry or spotlighting data; kit fox sign such as tracks, scat, and/or prey remains; or other reasonable proof that a given den is being or has been used by a kit fox (USFWS discourages use of the terms <i>active</i> and <i>inactive</i> when referring to any kit fox den because a great percentage of occupied dens show no evidence of use, and because kit foxes change dens often, with the result that the status of a given den may change frequently and abruptly).</p> <ul style="list-style-type: none"> ○ Known natal or pupping den: Any den that is used, or has been used at any time in the past, by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two; therefore, for purposes of this definition either term applies. ○ Known atypical den: Any artificial structure that has been or is being occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings. 				
<p>Written results of the survey including the locations of any potential or known San Joaquin kit fox dens will be submitted to USFWS within 5 days following completion of the survey and prior to the start of ground disturbance or construction activities.</p> <ul style="list-style-type: none"> ● After preconstruction den searches and before the commencement of repowering activities, exclusion zones will be established as measured in a radius outward from the entrance or cluster of entrances of each den. Repowering activities will be prohibited or greatly restricted within these exclusion zones. Only essential vehicular operation on existing roads and foot traffic will be permitted. All other repowering activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited in the exclusion zones. Barrier fencing will be removed within 72 hours of completion of work. Exclusion zones will be established using the following parameters. 				

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> ○ Potential and atypical dens: A total of four or five flagged stakes will be placed 50 feet from the den entrance to identify the den location. ○ Known den: Orange construction barrier fencing will be installed between the work area and the known den site at a minimum distance of 100 feet from the den. The fencing will be maintained until construction-related disturbances have ceased. At that time, all fencing will be removed to avoid attracting subsequent attention to the den. ○ Natal/pupping den: USFWS will be contacted immediately if a natal or pupping den is discovered in or within 200 feet of the work area. ● Any occupied or potentially occupied badger den will be avoided by establishing an exclusion zone consistent with a San Joaquin kit fox potential burrow (i.e., four or five flagged stakes will be placed 50 feet from the den entrance). ● In cases where avoidance is not a reasonable alternative, limited destruction of potential San Joaquin kit fox dens may be allowed as follows. <ul style="list-style-type: none"> ○ Natal/pupping dens: Natal or pupping dens that are occupied will not be destroyed until the adults and pups have vacated the dens and then only after consultation with USFWS. Removal of natal/pupping dens requires incidental take authorization from USFWS and CDFW. ○ Known dens: Known dens within the footprint of the activity must be monitored for 3 days with tracking medium or an infrared camera to determine current use. If no kit fox activity is observed during this period, the den should be destroyed immediately to preclude subsequent use. If kit fox activity is observed during this period, the den will be monitored for at least 5 consecutive days from the time of observation to allow any resident animal to move to another den during its normal activity. Use of the den can be discouraged by partially plugging its entrance(s) with soil in such a manner that any resident animal can escape easily. Only when the den is determined to be unoccupied will the den be excavated under the direction of a biologist. If the fox is still present after 5 or more consecutive days of monitoring, the den may be excavated when, in the judgment of the biologist, it is temporarily vacant, such as during the fox's normal foraging activities. Removal of known dens requires incidental take authorization from USFWS and CDFW. ○ Potential dens: If incidental take permits have been received (from 				

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>USFWS and CDFW), potential dens can be removed (preferably by hand excavation) by biologist or under the supervision of a biologist without monitoring, unless other restrictions were issued with the incidental take permits. If no take authorizations have been issued, the potential dens will be monitored as if they are known dens. If any den was considered a potential den but was later determined during monitoring or destruction to be currently or previously used by kit foxes (e.g., kit fox sign is found inside), then all construction activities will cease and USFWS and CDFW will be notified immediately.</p> <ul style="list-style-type: none"> • Nighttime work will be minimized to the extent possible. The vehicular speed limit will be reduced to 10 miles per hour during nighttime work. • Pipes, culverts, and similar materials greater than 4 inches in diameter will be stored so as to prevent wildlife species from using these as temporary refuges, and these materials will be inspected each morning for the presence of animals prior to being moved. • A representative appointed by the project proponent will be the contact for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped kit fox. The representative will be identified during environmental sensitivity training (Mitigation Measure BIO-1b) and his/her name and phone number will be provided to USFWS and CDFW. Upon such incident or finding, the representative will immediately contact USFWS and CDFW. • The Sacramento USFWS office and CDFW will be notified in writing within 3 working days of the accidental death or injury of a San Joaquin kit fox during project-related activities. Notification must include the date, time, and location of the incident, and any other pertinent information. 				
<p>Mitigation Measure BIO-11d: Incorporate avian-safe practices into design of turbine-related infrastructure</p> <p>All project proponents will apply the following measures when designing and siting turbine-related infrastructure. These measures will reduce the risk of bird electrocution and collision.</p> <ul style="list-style-type: none"> • Permanent meteorological stations will avoid use of guy wires. If it is not possible to avoid using guy wires, the wires will be at least 4/0 gauge to ensure visibility and will be fitted with bird deterrent devices. • All permanent meteorological towers will be unlit unless lighting is required by FAA. If lighting is required, it will be operated at the minimum 	Prior to site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>allowable intensity, flashing frequency, and quantity allowed by FAA.</p> <ul style="list-style-type: none"> To the extent possible, all powerlines will be placed underground. However, lines may be placed aboveground immediately prior to entering the substation. All aboveground lines will be fitted with bird flight diverters or visibility enhancement devices (e.g., spiral damping devices). When lines cannot be placed underground, appropriate avian protection designs must be employed. As a minimum requirement, the collection system will conform with the most current edition of the Avian Power Line Interaction Committee guidelines to prevent electrocutions. Lighting will be focused downward and minimized to limit skyward illumination. Sodium vapor lamps and spotlights will not be used at any facility (e.g., laydown areas, substations) except when emergency maintenance is needed. Lighting at collection facilities, including substations, will be minimized using downcast lighting and motion-detection devices. The use of high-intensity lighting; steady-burning or bright lights such as sodium vapor, quartz, or halogen; or other bright spotlights will be minimized. Where lighting is required it will be designed for the minimum intensity required for safe operation of the facility. Green or blue lighting will be used in place of red or white lighting. 				
Cultural Resources				
<p>Mitigation Measure CUL-2c: Conduct worker awareness training for archaeological resources prior to construction</p> <p>Prior to the initiation of any site preparation and/or the start of construction, the project applicant will ensure that all construction workers receive training overseen by a qualified professional archaeologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize archaeological resources (e.g., areas of shellfish remains, chipped stone or groundstone, historic debris, building foundations, human bone) in the event that any are discovered during construction.</p>	Prior to and during all site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval
<p>Mitigation Measure CUL-2d: Stop work if cultural resources are encountered during ground-disturbing activities</p> <p>The project applicant will ensure that construction specifications include a stop-work order if prehistoric or historic-era cultural resources are unearthed during ground-disturbing activities. If such resources are encountered, the project applicant will immediately halt all activity within 100 feet of the find until a qualified archaeologist can assess the significance of the find. Prehistoric materials</p>	During construction and other site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil (“midden”) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative (if appropriate), will develop a treatment plan that could include site avoidance, capping, or data recovery.				
<p>Mitigation Measure CUL-3: Stop work if human remains are encountered during ground-disturbing activities</p> <p>The project applicant will ensure the construction specifications include a stop-work order if human remains are discovered during construction or demolition. There will be no further excavation or disturbance of the site within a 100-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains. The Alameda County Coroner will be notified and will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the landowner will re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. A final report will be submitted to Alameda County. This report will contain a description of the mitigation program and its results, including a description of the monitoring and testing resources analysis methodology and conclusions and a description of the disposition/curation of the resources.</p>	During site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval
Geology, Soils, Mineral Resources, and Paleontological Resources				
<p>Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report</p> <p>Prior to construction activities at any site, the project proponent will retain a geotechnical firm with local expertise in geotechnical investigation and design to prepare a site-specific geotechnical report. This report will be prepared by a licensed geotechnical engineer or engineering geologist and will be submitted to the County building department as part of the approval process. This report will be</p>	Prior to site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>based on data collected from subsurface exploration, laboratory testing of samples, and surface mapping and will address the following issues.</p> <ul style="list-style-type: none"> • Potential for surface fault rupture and turbine site location: The geotechnical report will investigate the Greenville, Corral Hollow-Carnegie, and the Midway faults (as appropriate to the location) and determine whether they pose a risk of surface rupture. Turbine foundations and power collection systems will be sited according to recommendations in this report. • Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in project area and provide turbine foundation design recommendations, as well as recommendations for power collection systems. • Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific turbine foundation and power collection system plans engineered for the terrain, rock and soil types, and other conditions present at the program area in order to provide long-term stability. • Expansive soils: The geotechnical report will assess the soil types in the program area and determine the best engineering designs to accommodate the soil conditions. • Unstable cut or fill slopes: The geotechnical report will address geologic hazards related to the potential for grading to create unstable cut or fill slopes and make site-specific recommendations related to design and engineering. 				
<p>Mitigation Measure GEO-7b: Educate construction personnel in recognizing fossil material</p> <p>The applicant will ensure that all construction personnel receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that they can recognize fossil materials in the event any are discovered during construction.</p>	Prior to and during all site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval
<p>Mitigation Measure GEO-7c: Stop work if substantial fossil remains are encountered during construction</p> <p>If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, activities within 100 feet of the find will stop immediately until a state-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified</p>	During construction	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions						
professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The applicant will be responsible for ensuring that recommendations regarding treatment and reporting are implemented.										
Greenhouse Gas Emissions										
Mitigation Measure GHG-2a: Implement best available control technology for heavy-duty vehicles	During construction and during operation if applicable	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval						
<p>The applicant will require existing trucks/trailers to be retrofitted with the best available technology and/or ARB-approved technology consistent with the ARB Truck and Bus Regulation (California Air Resources Board 2011). The ARB Truck and Bus Regulation applies to all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds.</p> <p>Starting January 1, 2015, the applicant must replace lighter trucks (GVWR of 14,001 to 26,000 pounds) with engines that are 20 years or older with newer trucks. The Applicant has the option to install a PM filter retrofit on a lighter truck by 2014 to make the truck exempt from replacement until January 1, 2020, and any lighter truck equipped with a PM filter retrofit prior to July 2011 would receive credit toward the compliance requirements for a heavier truck or bus in the same fleet.</p> <p>Starting January 1, 2012, the applicant is required to meet the engine model year schedule shown below for heavier trucks (GVWR greater than 26,000 pounds). To comply with the schedule, the applicant will install the best available PM filter on 1996 model year and newer engines and would replace the vehicle 8 years later. The Applicant will replace trucks with 1995 model year and older engines starting in 2015. Replacements with 2010 model year or newer engines meets the final requirements, but the applicant could also replace trucks with used trucks that would have a future compliance date on the schedule. For example, a replacement with a 2007 model year engine complies until 2023. By 2023 all trucks and buses must have 2010 model year engines with few exceptions.</p>										
<table border="1"> <thead> <tr> <th colspan="2">Engine Model Year Schedule for Heavier Trucks</th> </tr> <tr> <th>Engine Year</th> <th>Requirement from January 1</th> </tr> </thead> <tbody> <tr> <td>Pre-1994</td> <td>No requirements until 2015, then 2010 engine</td> </tr> </tbody> </table>					Engine Model Year Schedule for Heavier Trucks		Engine Year	Requirement from January 1	Pre-1994	No requirements until 2015, then 2010 engine
Engine Model Year Schedule for Heavier Trucks										
Engine Year	Requirement from January 1									
Pre-1994	No requirements until 2015, then 2010 engine									

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
1994–1995	No requirements until 2016, then 2010 engine			
1996–1999	PM filter from 2012 to 2020, then 2010 engine			
2000–2004	PM filter from 2013 to 2021, then 2010 engine			
2005–2006	PM filter from 2014 to 2022, then 2010 engine			
2007–2009	No requirements until 2023, then 2010 engine			
2010	Meets final requirements			

In addition, the applicant could comply with a phase-in option that would allow the applicant to decide which vehicles to retrofit or replace, regardless of engine model year. The applicant must report information about all heavier trucks starting January 31, 2012, to use this option.

The Applicant could comply by demonstrating that trucks have met the percentage requirement each year as shown in the table below. For example, by 2012 the applicant’s fleet would need to have PM filters on 30% of the heavier trucks in the fleet. This option counts 2007 model year and newer engines originally equipped with PM filters toward compliance and would reduce the overall number of retrofit PM filters needed. Any engine with a PM filter regardless of model year would be compliant until at least 2020. Beginning January 1, 2020, all heavier trucks would need to meet the requirements specified in the Compliance Schedule for Heavier Trucks.

Phase-In Option for Heavier Trucks	
Compliance Date	Vehicles with PM Filters
1-Jan-12	30%
1-Jan-13	60%
1-Jan-14	90%
1-Jan-15	90%
1-Jan-16	100%

Mitigation Measure GHG-2d: Comply with construction and demolition debris management ordinance	During construction and operation	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval
The applicant will comply with the County’s revised Green Building Ordinance regarding construction and demolition debris as follows: (1) 100% of inert waste and 50% wood/vegetative/scrap metal not including Alternative Daily Cover (ADC)				

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
and unsalvageable material will be put to other beneficial uses at landfills, and (2) 100% of inert materials (concrete and asphalt) will be recycled or put to beneficial reuse.				
Hazards and Hazardous Materials				
<p>Mitigation Measure HAZ-4: Perform a Phase I Environmental Site Assessment prior to construction activities and remediate if necessary</p> <p>Prior to construction, the project proponent will conduct a Phase I environmental site assessment in conformance with the American Society for Testing and Materials Standard Practice E1527-05. All environmental investigation, sampling, and remediation activities associated with properties in the project area will be conducted under a work plan approved by the regulatory oversight agency and will be conducted by the appropriate environmental professional consistent with Phase I site assessment requirements as detailed below. The results of any investigation and/or remediation activities conducted in the project area will be included in the project-level EIR.</p> <p>A Phase I environmental site assessment should, at a minimum, include the components listed below.</p> <ul style="list-style-type: none"> • An onsite visit to identify current conditions (e.g., vegetative dieback, chemical spill residue, presence of above- or underground storage tanks). • An evaluation of possible risks posed by neighboring properties. • Interviews with persons knowledgeable about the site’s history (e.g., current or previous property owners, property managers). • An examination of local planning files to check prior land uses and any permits granted. • File searches with appropriate agencies (e.g., State Water Resources Control Board, fire department, County health department) having oversight authority relative to water quality and groundwater and soil contamination. • Examination of historical aerial photography of the site and adjacent properties. • A review of current and historic topographic maps of the site to determine drainage patterns. • An examination of chain-of-title for environmental liens and/or activity and land use limitations. <p>If the Phase I environmental site assessment indicates likely site contamination, a</p>	Prior to site disturbance	County—adopt a Condition of Approval; Operator—implement	County	Monitor compliance with Conditions of Approval

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Phase II environmental site assessment will be performed (also by an environmental professional).</p> <p>A Phase II environmental site assessment would comprise the following.</p> <ul style="list-style-type: none"> • Collection of original surface and/or subsurface samples of soil, groundwater, and building materials to analyze for quantities of various contaminants. • An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination). <p>If contamination is uncovered as part of Phase I or II environmental site assessments, remediation will be required. If materials such as asbestos-containing materials, lead-based paint, or PCB-containing equipment are identified, these materials will be properly managed and disposed of prior to or during the demolition process.</p> <p>Any contaminated soil identified on a project site must be properly disposed of in accordance with DTSC regulations in effect at the time.</p> <p>Hazardous wastes generated by the proposed project will be managed in accordance with the California Hazardous Waste Control Law (HSC, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulation (Title 22, CCR, Division 4.5).</p> <p>If, during construction/demolition of structures, soil or groundwater contamination is suspected, the construction/demolition activities will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).</p>				
Hydrology and Water Quality				
<p>Mitigation Measure WQ-1: Comply with NPDES requirements</p> <p>Project contractors will obtain coverage under the General Construction Permit before the onset of any construction activities, because all projects will entail disturbance of 1 acre or more. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the appropriate Board’s requirements for NPDES compliance and implemented prior to the issuance of any grading permit before construction. The SWPPP will be kept onsite during construction activity and will be made available upon request to representatives of the Regional Water Boards.</p> <p>Compliance and coverage with the <i>Storm Water Management Program</i> and General</p>	<p>Prior to and during all site disturbance</p>	<p>County—adopt a Condition of Approval; Operator—implement</p>	<p>County</p>	<p>Monitor compliance with Conditions of Approval</p>

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Construction Permit will require controls of pollutant discharges that utilize BMPs and technology to reduce erosion and sediments to meet water quality standards. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff. Measures range from source control, such as reduced surface disturbance, to the treatment of polluted runoff, such as detention basins.</p> <p>BMPs to be implemented as part of the <i>Storm Water Management Program</i> and General Construction Permit (and SWPPP) may include the following practices.</p> <ul style="list-style-type: none"> • Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas. • Use a dry detention basin (which is typically dry except after a major rainstorm, when it will temporarily fill with stormwater), designed to decrease runoff during storm events, prevent flooding, and allow for off-peak discharge. Basin features will include maintenance schedules for the periodic removal of sediments, excessive vegetation, and debris that may clog basin inlets and outlets. • Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways. • Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways. • Ensure that no earth or organic material will be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water. • Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water. • Ensure that grass or other vegetative cover will be established on the construction site as soon as possible after disturbance. <p>The contractor will select a combination of BMPs (consistent with Section A of the Construction General Permit) that is expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the San Francisco Bay Regional Water Board and the Central</p>				

Table MMRP-1. Continued

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Valley Water Board.</p> <p>The contractor will verify that an NOI has been filed with the State Water Board and that a SWPPP has been developed before allowing construction to begin. The contractor will perform inspections of the construction area, to verify that the BMPs specified in the SWPPP are properly implemented and maintained. The contractor will notify the appropriate Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, the contractor or their agent will require that additional BMPs be designed and implemented if those originally constructed do not achieve the identified performance standard.</p>				