Exhibit A
Written Findings of Significant Effects

In accordance with State CEQA Guidelines Sections 15091, the following findings and supporting facts address each significant environmental effect that has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the effect, as identified in the final EIR. The findings described below are organized by resource issue, in the same order as the effects are discussed in the EIR. The County's findings regarding the project alternatives follow the individual effect findings. The findings reference the final EIR (part of the record upon which the EBZA bases its decision) and mitigation measures in support of the findings. For specific resource mitigation measures, the section and page number where the full text of the mitigation measure occurs is noted in the finding.

Introduction

The proposed project consists of the repowering of an existing wind farm within the rural, unincorporated eastern Alameda County portion of the APWRA, east of the San Francisco Bay Area and near the western edge of the San Joaquin Valley in northern California. The project area, like much of the surrounding region, consists largely of cattle-grazed land on which operating wind turbines and ancillary facilities are currently installed. The region is mostly treeless and is generally characterized by rolling foothills of annual grassland, steeper on the west and gradually flatter on the east, sloping toward the floor of the Central Valley. The existing wind farm to be repowered consists of eight parcels in three separate areas, containing 433 wind turbines or turbine sites with an approved nameplate capacity of 25.4 MW.

The proposed project consists of two phases. The first phase, referred to as the Initial Repower, would involve the decommissioning and replacement of 73 existing turbines with 40 new shrouded turbines – the Applicant's proprietary wind turbine technology with a nameplate generating capacity of 100 kW each – thus replacing and reinstalling approximately 4 megawatts (MW) of generating capacity while concurrently performing an Avian Validation Study. A subsequent phase, known as the Full Repower, would involve replacement of the remaining 360 turbines with 300 new shrouded turbines, to provide 30 additional MW of generating capacity and a total nameplate capacity of 34 MW for both phases of repowering. The EIR was prepared in response to a request for a conditional use permit (CUP) authorizing the initial phase. The subsequent phase has not yet been applied for and would be subject to a separate CUP and CEQA review that would rely on the EIR to the extent applicable. These findings address the effects of both phases of the project.

Record of Proceedings and Custodian of Record

The record upon which all findings and determinations related to the approval of the project are based includes the following:

- The EIR and all documents referenced in or relied upon by the EIR
- All information (including written evidence and testimony) provided by County staff to the EBZA relating to the EIR, the approvals, and the project

- All information (including written evidence and testimony) presented to the EBZA by the environmental consultants who prepared the EIR or incorporated into reports presented to the EBZA
- All information (including written evidence and testimony) presented to the County from other public agencies related to the project or the EIR
- All applications, letters, testimony and presentations relating to the project
- All information (including written evidence and testimony) presented at any County hearing related to the project and the EIR
- All County-adopted or County-prepared land use plans, ordinances, including without limitation general plans, specific plans, and ordinances, together with environmental review documents, findings, mitigation monitoring programs, and other documents relevant to land use within the area
- The Mitigation Monitoring and Reporting Program for the project
- All other documents composing the record pursuant to Public Resources Code Section 21167.6(e)

The custodian of the documents and other materials that constitute the record of the proceedings upon which the County's decisions are based is Sandra Rivera, Assistant Planning Director, or her designee. Such documents and other material are located at 224 Winton Avenue, Room 111, Hayward, California, 94544.

Consideration and Certification of the EIR

In accordance with CEQA, the EBZA certifies that the EIR has been completed in compliance with CEQA. The EBZA has independently reviewed the record and the EIR prior to certifying the EIR and approving the project. By these findings, the EBZA confirms, ratifies and adopts the findings and conclusions of the EIR as supplemented and modified by these findings. The EIR and these findings represent the independent judgment and analysis of the County and the EBZA. The EBZA recognizes the EIR may contain clerical errors. The EBZA reviewed the entirety of the EIR and bases its determination on the substance of the information it contains. The EBZA certifies that the EIR is adequate to support the approval of the action that is the subject of the Resolution to which these CEQA findings are attached.

The EBZA certifies that the EIR is adequate to support approval of the project (the Initial Repower) described in the staff report, each component and phase of the project described in the EIR (both the Initial and Full Repower), any variant of the project described in the EIR, any minor modifications to the project or variants of the project described in the EIR, and the components of the project.

Absence of Significant New Information

The EBZA recognizes that the final EIR incorporates information obtained and produced after the draft EIR was completed, and that the EIR contains additions, clarifications, and modifications. The EBZA has reviewed and considered the final EIR and all of this information. The final EIR does not add significant new information to the draft EIR that would require recirculation of the EIR under CEQA. The new information added to the EIR does not involve a new significant environmental

impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure or alternative considerably different from others previously analyzed that the project sponsor declines to adopt and that would clearly lessen the significant environmental impacts of the project. No information indicates that the draft EIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the draft EIR. Thus, recirculation of the EIR is not required. The EBZA finds that the changes and modifications made to the EIR after the draft EIR was circulated for public review and comment do not individually or collectively constitute significant new information within the meaning of Public Resources Code Section 21092.1 or Section 15088.5 of the State CEQA Guidelines.

Severability

If any term, provision, or portion of these Findings or the application of these Findings to a particular situation is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of these Findings, or their application to other actions related to the project, shall continue in full force and effect unless amended or modified by the County.

CEQA Findings for Initial Repower Impacts

Findings and Recommendations Regarding Significant and Unavoidable Impacts

Aesthetics

Impact AESTH-2: Have a substantial adverse effect on a scenic vista

Potential Impact: The potential impacts related to scenic vistas are discussed beginning at page 3.1-12 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. Construction of the project's shrouded turbines would result in the exposure of moderately- and highly-visually sensitive viewers to potentially negative changes to existing scenic vistas.

Mitigation Measure(s): No mitigation measures are available for this impact. However, the draft EIR indicates (page 3.1-13) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on scenic vistas.

Remaining Impacts: Impacts related to scenic vistas will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts on scenic vistas. There are no

other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact AESTH-3: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway

Potential Impact: The potential impacts related to scenic resources are discussed beginning at page 3.1-13 of the draft EIR. The project's shrouded turbines would be more visually prominent than existing turbines and would therefore affect views from I-580, a State- and County-designated scenic route, and four other Alameda County-designated scenic routes in the project area: Altamont Pass Road, Grant Line Road, Mountain House Road, and Patterson Pass Road.

Mitigation Measure(s): No feasible mitigation measures are available to reduce the effects of the proposed project on scenic resources. However, the draft EIR indicates (page 3.1-14) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on scenic resources.

Remaining Impacts: Impacts related to scenic resources will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts on scenic resources along a scenic highway. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact AESTH-4: Substantially degrade the existing visual character or quality of the site and its surroundings

Potential Impact: The potential impacts related to degradation of visual character are discussed beginning at page 3.1-14 of the draft EIR. Because viewers have the potential to perceive visual changes negatively, the project's new, shrouded turbines would substantially degrade the existing visual character of the project area.

Mitigation Measure(s): No feasible mitigation measures are available to reduce the effects of the proposed project on existing visual character. However, the draft EIR indicates (page 3.1-14) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on visual character.

Remaining Impacts: Impacts related to visual character will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts on the existing visual character or quality of the sites and their surroundings. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Air Quality

Impact AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)

Potential Impact: The potential impacts related to criteria pollutants are discussed beginning at page 3.2-26 of the draft EIR. Construction-related exhaust emissions would exceed the BAAQMD threshold for NOx.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.2-28 and 3.2-29 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM AQ-2: Implement basic BAAQMD construction mitigation measures

MM AQ-3a: Ensure off-road equipment emission standards certification

MM AQ-3b: Implement BAAQMD's additional construction mitigation measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures AQ-2, AQ-3a and AQ-3b will reduce the project's construction-related NOx emissions but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact. The Applicant will be required to implement the following actions:

The following basic construction mitigation measures, as put forth in BAAQMD's CEQA Guidelines, shall be included in the project design and implemented during construction.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control

measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The Applicant will be required to ensure that all off-road equipment used by construction contractors during demolition and grading phases is certified to Tier 3 or higher emission standards. The Applicant will provide a record of the equipment used during these phases indicating make, model, year, horsepower, and certification level to the County as verification of compliance.

The Applicant will be required to include the following construction mitigation measures as put forth in BAAQMD's CEQA Guidelines, and implement them during construction:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOX and PM.

13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Remaining Impacts: Remaining impacts related to the project construction activities' contribution to the cumulatively considerable net increase of NOx emissions will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts of Project-related construction activities' contribution to the cumulatively considerable net increase of NOx emissions, which is a criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Biological Resources

Impact BIO-11: Operation of the proposed project could have direct impacts on special-status avian species

Potential Impact: The potential impacts related to special-status avian species are discussed beginning at page 3.4-55 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. Because the Avian Validation Study is not fully complete, and the new turbine type has not yet been tested in this regard, the potential impacts on avian species from the Initial Repower are unknown at this time. Based on the information available, and the theory that the shrouded turbines will present a physical barrier for birds resulting in less collision with moving blades, the new turbines are not expected to have greater impacts when compared to the existing turbines. However, three scenarios are possible: (1) the proposed project would have a significant reduction in avian impacts; (2) the proposed project would have some reduction in avian impacts; or (3) the proposed project would have no reduction in avian impacts. Because it cannot be ascertained whether fatality rates would be above or below the existing fatality rates for the focal species, this impact is considered significant and unavoidable.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-58 and 3.4-59 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-11a: Incorporate avian-safe practices into design of turbine-related infrastructure

MM BIO-11b: Compensate for the loss of burrowing owl and other focal species

MM BIO-11c: Mitigate for the loss of individual golden eagles by retrofitting electrical facilities

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-11a, BIO-11b, and BIO-11c will reduce the effects of the proposed project on special-status avian species but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

The Applicant will be required to apply the following measures when designing and siting turbine-related infrastructure. These measures will reduce the electrocution and collision risk of birds with turbine-related infrastructure.

- 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 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 allowable intensity, flashing frequency, and quantity allowed by FAA.
- When lines cannot be placed underground, appropriate avian protection designs must be employed (e.g., bird flight diverters or visibility enhancement such as spiral damping devices). As a minimum requirement, the collection system will utilize 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., lay-down 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, 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.

If avian impacts cannot be reduced to below baseline fatality through the implementation of the Applicant's own measures to monitor and reduce avian mortality with winter seasonal shut-downs (respectively described in the EIR as Applicant Proposed Measures or APMs 1 and 2), the Applicant will be required to compensate for the unavoidable loss of avian species through the purchase and preservation of conservation lands, on an in-perpetuity basis, from a local mitigation and/or conservation bank. One metric of describing potential impacts to avian species from wind project operations is the amount of risk area, often considered to be synonymous with the rotor-swept area. Thus, the amount of rotor-swept area can be used as a metric for mitigating potential impacts to avian species. The County has determined that this is the best currently available metric for mitigating impacts to burrowing owl and other focal species from operations in this specific instance.

Consequently, the Applicant shall preserve lands which provide habitat for burrowing owl (but which may also provide habitat for American kestrel and red-tailed hawk), the primary focal species potentially impacted by the proposed project, as well as other avian species. Lands will be preserved on a 1:1 rotor swept area basis, with the amount of land preserved in a ratio based on the total rotor swept area of the proposed turbines and the rate of estimated fatalities. Lands will be preserved on a 1:1 rotor-swept area basis (approximately 1.5 acres) if the rate of estimated fatalities (after monitoring is complete) is more than the baseline fatality rate, as determined by the lead agency. Conserved lands shall provide breeding opportunities for one or more of the primary focal species listed above in an effort to offset fatalities associated with operation of the Initial Repower. If necessary, enhancement measures will be implemented to ensure that the conserved lands provide breeding opportunities for one or more of the primary focal species. Types of habitat enhancement measures on the conserved lands will be weighted according to the relative abundance of focal species impacted by the project, the species-specific needs of those species, and the type and quality of habitat that may already exist on the

conserved land. The Applicant will consult with and obtain approval on the mitigation site from the County, including providing an assessment of the number of acres necessary to mitigate the annual impacts to burrowing owl and the other primary focal species (red-tailed hawk and American kestrel).

If golden eagle fatalities occur, the Applicant will mitigate for the proposed project's observed golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. The mitigation must occur within 140 miles of the proposed project, the area typically defined by the USFWS as the local population. The Initial Repower is projected to result in the fatality of up to approximately one eagle every 4 years (0.24 golden eagles/MW/yr., although a smaller fatality rate is also possible. As described under APM 1 in the EIR, the Applicant has committed to monitoring the effects of the proposed project, and the monitoring will include documentation of any golden eagle fatalities. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. The Applicant will therefore retrofit 29 utility poles as mitigation for each eagle fatality from the proposed project, as determined through the Avian Validation Study and any supplemental monitoring efforts. The Applicant may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion of the retrofits must be provided to the County. USFWS has estimated the cost of retrofits at $7,500 per pole, and therefore the Applicant may contribute the required funds, to a third party mitigation account (approved by Alameda County) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County within 1 year of completion of monitoring.

Remaining Impacts: Remaining impacts related to special-status avian species will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts of the direct impacts of the project on special-status avian species. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Greenhouse Gas

Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment

Potential Impact: The potential impacts related to greenhouse gas emissions are discussed beginning at page 3.7-13 of the draft EIR. The project would emit GHGs from upstream emission sources and direct sources (combustion of fuels from worker vehicles and construction equipment) in excess of the BAAQMD operational threshold during construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.7-15 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GHG-1: Implement BAAQMD BMPs for construction

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GHG-1 will reduce the effects of the proposed project related to greenhouse gas emissions but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

The project Applicant will be required to require all construction contractors to implement the BMPs recommended by BAAQMD to reduce GHG emissions. Emission reduction measures will include, at a minimum, the following three measures.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet.
- Recycle or reuse at least 50 percent of the construction waste or demolition materials.
- Use local-sourced building materials of at least 10 percent of total.

Remaining Impacts: Remaining impacts related to greenhouse gas emissions will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable temporary impacts of generating GHG emissions in excess of the available operational threshold. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Transportation/Traffic

Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

Potential Impact: The potential impacts related to construction traffic are discussed beginning at page 3.11-12 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. The project would result in temporarily increased traffic volumes associated with construction traffic on local routes.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will reduce the effects of the proposed project's construction traffic on local routes but

will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact. The Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Remaining impacts related to construction traffic on local routes will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the approved project that override the remaining significant and unavoidable impacts of adverse construction traffic on local routes. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Findings and Recommendations Regarding Significant Impacts Which are Mitigated to a Less-Than-Significant Level

Aesthetics

Impact AESTH-1: Temporary visual impacts caused by construction activities

Potential Impact: The potential visual impacts related to construction activities are discussed beginning at page 3.1-11 of the draft EIR. Construction of the Initial Repower would cause temporary changes in views of and from the project area.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.1-12 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM AESTH-1: Limit construction to daylight hours

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigation recommended by Mitigation Measure AESTH-1 will ensure that the construction-related visual impacts will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Construction activities will not continue past daylight hours (which varies according to season) or on weekends. This would reduce the amount of construction activities experienced by viewer groups because most construction activities would occur during business hours (when most viewer groups are likely at work) and would eliminate the need to introduce high-wattage lighting sources to operate in the dark.

Remaining Impacts: Any remaining temporary construction-related visual impacts will be less than significant.

Air Quality

Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Potential Impact: The potential impacts related to air quality violations are discussed beginning at page 3.3-24 of the draft EIR. Construction-related exhaust emissions would exceed the BAAQMD threshold for NOx.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.3-25 through 3.3-26 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM AQ-2: Implement basic BAAQMD construction mitigation measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure AQ-2 will ensure that the impacts associated with construction-related NOx emissions will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The following basic construction mitigation measures, as put forth in BAAQMD's CEQA Guidelines, shall be included in the project design and implemented during construction.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Remaining Impacts: Any remaining impacts related to construction-related NOx emissions will be less than significant.

Biological Resources

Impact BIO-1: Project construction could have direct or indirect impacts on special-status plants

Potential Impact: The potential impacts related to special-status plants are discussed beginning at page 3.4-33 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on special-status plants.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-33 through 3.4-37 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1a: Conduct surveys to determine the presence or absence of special-status plant species

MM BIO-1b: Avoid and minimize impacts on special-status plant species by establishing activity exclusion zones, where feasible

MM BIO-1c: Compensate for impacts on special-status plant species

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1a through BIO-1f will ensure that the impacts on special-status plants will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The Applicant shall conduct spring surveys for the special-status plant species within and adjacent (i.e., within 250 feet) to all areas of proposed temporary or permanent disturbance prior to construction-related activities. All surveys shall be conducted by qualified biologists using the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Game 2009) during the season that special-status plant species would be evident and identifiable, i.e., during their blooming season. Mitigation Measure BIO-1b will apply when the spring surveys determine that any special-status plant species is present.

Where surveys determine that a special-status plant species is present in or adjacent to a project parcel, direct and indirect impacts of the project on the species (e.g., heartscale and/or other species detected as a result of surveys conducted in compliance with Mitigation Measure BIO-1a) shall be avoided where feasible through the establishment of activity exclusion zones, within which no ground-disturbing activities shall take place, including construction of new facilities, construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species shall be established prior to construction activities around each occupied habitat site, the boundaries of which shall be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones shall not be required if no construction-related disturbances would occur within 250 feet of the occupied habitat site. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and with concurrence from CDFW based on site-specific conditions. Mitigation Measure BIO-1c will apply when activity exclusion zones are not feasible (i.e., footprint of new turbine foundations cannot be moved or adjusted).

Where avoidance of impacts on a special-status plant species is infeasible, loss of individuals or occupied habitat of a special-status plant species occurrence shall be compensated for through the acquisition, protection, and subsequent management in perpetuity of other existing occurrences at a 2:1 ratio (i.e., preserving two existing similar occurrences per individual similar occurrence impacts). Prior to implementing compensation measures, the Applicant shall provide detailed information to the lead agency and CDFW on the location of the preserved occurrences, quality of the preserved habitat, provisions for protecting and managing the areas in-perpetuity, responsible parties, and other pertinent information that demonstrates the feasibility of the compensation.

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be

allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Remaining Impacts: Any remaining impacts related to special-status plants will be less than significant.

Impact BIO-2: Construction of the proposed project has the potential to directly or indirectly affect sensitive natural communities

Potential Impact: The potential impacts related to sensitive natural communities are discussed beginning at page 3.4-37 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on wetlands and other sensitive natural communities present in the project area such as alkali grassland.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-37 and 3.4-38 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-2: Compensate for the loss of alkali meadow habitat

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f and BIO-2 will ensure that the impacts on sensitive natural communities will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.

- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

If alkali meadow habitat is filled or disturbed as part of the project, the Applicant shall compensate for the loss of this habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, off-site restoration, or mitigation credits. The Applicant shall provide the lead agency with proof of the pertinent state and federal agencies' approvals of the compensation and any related permits.

Remaining Impacts: Any remaining impacts related to sensitive natural communities will be less than significant.

Impact BIO-3: Construction of the proposed project has the potential to affect wetlands and other waters of the United States

Potential Impact: The potential impacts related to wetlands and other waters of the United States are discussed beginning at page 3.4-38 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on aquatic resources.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-38 through 3.4-40 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-3a: Identify and delineate waters of the United States and waters of the State (including wetlands)

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-3c: Compensate for unavoidable impacts on waters of the United States

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d, BIO-1e, and BIO-3a through BIO-3c will ensure that the impacts on wetlands and other waters of the United States will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is

observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

Prior to construction activities and final siting of individual work areas, the Applicant will retain a qualified wetland ecologist (i.e., a wetland ecologist with previous experience conducting wetland delineations in the region) to identify areas that could qualify as waters of the United States and waters of the State, including wetlands, assuming such features exist within or adjacent to work areas identified for each project element. Wetlands will be identified using both the USACE and USFWS/CDFW definitions of wetlands. USACE jurisdictional wetlands will be delineated using the methods outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and where appropriate, using the updated methods in the Arid West Supplement (U.S. Army Corps of Engineers 2008) to the 1987 manual. The jurisdictional boundary of other waters of the United States will be identified based on the shore

established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]). This information will be mapped and documented in a wetland delineation report and submitted to USACE with a copy provided to the lead agency.

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

If wetlands are filled or disturbed as part of the project, including situations where avoidance or minimization is infeasible, the Applicant shall compensate for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, off-site restoration, or mitigation credits. If onsite or off-site restoration is chosen, a restoration and monitoring plan shall be developed and implemented. The plan shall describe how wetlands shall be created and monitored over a minimum period of time and will be developed in consultation with the responsible agencies (e.g., CDFW, USFWS, and USACE). The plan will include restoration success criteria based on the actual impacts of the project to ensure that functions and values of the wetlands are replaced. At a minimum, the plan will include requirements to monitor restoration areas annually in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the wetlands

meet the restoration goals outlined in the plan. Additionally, the plan will include remedial measures to ensure the mitigation is completed, including but not limited to, supplemental seeding, planting, weed control, etc. as determined to be necessary to achieve the success criteria, as well as additional monitoring as necessary to verify the success of the remedial measures.

The Applicant shall provide the lead agency with proof of the pertinent state and federal agencies' approval of the compensation and any related permits prior to commencement of project construction.

Remaining Impacts: Any remaining impacts related to wetlands and other waters of the United States will be less than significant.

Impact BIO-4: Potential disturbance of vernal pool fairy shrimp, longhorn fairy shrimp, and vernal pool tadpole shrimp and their habitat

Potential Impact: The potential impacts related to vernal pool fairy shrimp, longhorn fairy shrimp, vernal pool tadpole shrimp and their habitat are discussed beginning at page 3.4-42 of the draft EIR. Construction and O&M activities within the project area could result in indirect effects on the federally listed longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp (vernal pool branchiopods) or their habitats. Changes in hydrology or sedimentation of habitat from erosion associated with Initial Repower construction could alter the suitability of habitat for vernal pool branchiopods.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39, and 3.4-41 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-4: Implement measures to avoid, minimize, and mitigate for potential impacts on longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b, and BIO-4 will ensure that the impacts on vernal pool branchiopods will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.

- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.

- Offroad vehicle travel will be avoided.

- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.

- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.

- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.

- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.

- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.

- Grading will be restricted to the minimum area necessary.

- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will

include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

The following AMMs will be implemented during construction to ensure that repowering activities do not have an adverse impact on listed vernal pool branchiopods. These measures are based on measures from the Conservation Strategy, with some modifications and additions. Additional conservation measures or conditions of approval may be required by applicable project permits (e.g., ESA incidental take permit).

- Ground disturbance within 250 feet of suitable vernal pool branchiopod habitat (i.e., ponds, vernal pools) will be avoided from the first day of the first significant rain (1 inch or greater) until June 1, or until pools remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.
- Locate staging areas at least 250 feet from suitable vernal pool branchiopod habitat (i.e., ponds, vernal pool).

- If suitable vernal pool brachiopod habitat is present within the work area or within 250 feet of the work area, a qualified biologist will stake and flag an exclusion zone prior to construction activities. The exclusion zone will be fenced with orange construction zone and erosion control fencing (to be installed by construction crew). The exclusion zone will encompass the maximum practicable distance from the worksite and at least 250 feet from the aquatic feature wet or dry.
- No herbicide will be applied within 100 feet of aquatic habitat, except when applied to cut stumps or frilled stems or injected into stems. No broadcast applications will be applied.
- Avoid modifying or changing the hydrology of aquatic habitats.
- Install utility collection and communication lines across ephemeral drainages by directional boring or overheading and/or rerouting lines around or over wetlands and ponds, where feasible.

If all potential indirect effects cannot be avoided, the Applicant will consult with USFWS before construction occurs. Additional conservation measures or conditions of approval, in addition to the measures listed above, may be required in applicable project permits (e.g., ESA incidental take permit). These measures may include, increased exclusion zones and additional erosion control measures.

Remaining Impacts: Any remaining impacts related to vernal pool branchiopods will be less than significant.

Impact BIO-5: Potential disturbance or mortality of and loss of suitable habitat for California tiger salamander and California red-legged frog

Potential Impact: The potential impacts related to California tiger salamander and California red-legged frog are discussed beginning at page 3.4-41 of the draft EIR. Construction activities such as excavation, grading, or stockpiling of soil, could fill, remove or otherwise alter suitable habitat for, or result in injury or mortality of California tiger salamander and California red-legged frog. O&M activities such as travel on maintenance roads during the rainy season or when amphibians are dispersing could result in mortality of individuals. Road and firebreak maintenance may also result in degradation of habitat or injury or mortality of special-status amphibians.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39 and 3.4-43 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-5: Implement measures to avoid, minimize, and mitigate for potential impacts on California tiger salamander and California red-legged frog

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b and BIO-5 will ensure that impacts on California tiger salamander and California red-legged frog will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.

- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

Where suitable aquatic (ponds, perennial wetland drainages) or upland (grassland) habitat for California tiger salamander and California red-legged frog occurs within proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an

adverse impact on these species. These measures are based on measures from the Conservation Strategy, with some modifications and additions. Implementation of some of these measures (i.e., relocation of listed species, excavation to install exclusion fencing) could result in take and will require that the Applicant consult with USFWS (California red-legged frog and California tiger salamander) and CDFW (California tiger salamander only) before construction begins. Additional conservation measures or conditions of approval, in addition to the measures listed below, may be required in applicable project permits (e.g., ESA incidental take permit).

- Direct impacts on potential breeding ponds will be avoided.
- Ground-disturbing activities within upland will be limited to dry weather between April 15 and October 31. No ground-disturbing work will occur during wet weather. Wet weather is defined as when there has been 0.25 inch of rain in a 24-hour period. Ground-disturbing activities halted due to wet weather may resume when precipitation ceases and the National Weather Service 72-hour weather forecast indicates a 30 percent or less chance of precipitation. No ground-disturbing work will occur during a dry-out period of 48 hours after the above referenced wet weather. If construction would need to continue past October 31, the Applicant will request an authorization from USFWS and CDFW to extend the work period.
- Where applicable, barrier fencing will be installed around the worksite to prevent amphibians from entering the work area. Barrier fencing will be removed within 72 hours of completion of work.
- Before construction begins, a qualified biologist will locate appropriate relocation areas and prepare a relocation plan for special-status amphibians that may need to be moved during construction. The proponent will submit this plan to USFWS and CDFW for approval prior to the start of construction.
- A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing activities (including equipment staging, vegetation removal, grading). The biologist will survey the work area and all suitable habitat within 300 feet of the work area. If individuals (including adults, juveniles, larvae, or eggs) are found, work will not begin until USFWS and/or CDFW is contacted to determine if moving these life-stages is appropriate. If relocation is deemed necessary, it will be conducted in accordance with the relocation plan. Incidental take permits are required for relocation of California tiger salamander (USFWS and CDFW) and California red-legged frog (USFWS).
- No monofilament plastic mesh or line will be used for erosion control.
- All construction activity will terminate 30 minutes before sunset and will not resume until 30 minutes after sunrise during the migration/active season from November 1 to June 15. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located.
- To prevent inadvertent entrapment of special-status amphibians during construction, all excavated, steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected by a qualified biologist prior to being filled.
- Work crews or onsite biological monitor will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for amphibians that may have become trapped or are seeking refuge.

- If special-status amphibians are found in the work area during construction and cannot or do not move offsite on their own, a USFWS and/or CDFW-approved biologist, will trap and move special-status amphibians in accordance with the relocation plan.

If all potential direct and indirect impacts on California tiger salamander and California red-legged frog cannot be avoided, the Applicant will consult with USFWS and CDFW under the ESA and CESA before construction can occur. Loss of habitat for California tiger salamander and California red-legged frog will be compensated for in accordance with the standardized mitigation ratios developed for the Conservation Strategy (Tables 3-7 and 3-8 of the Conservation Strategy). Based on the location of the impact site (proposed project area), which does not occur within designated critical habitat for either species and is within the California tiger salamander north mitigation area, the mitigation ratio would vary between 2.5:1 and 4:1 (2.5 to 4:1 acres of mitigation lands for every 1 acre affected). Because proposed habitat compensation would be mitigated consistent with the Conservation Strategy, which was developed in coordination with USFWS and CDFW, the proposed compensation is expected to fully mitigate for direct impacts associated with repowering.

Remaining Impacts: Any remaining impacts related to California tiger salamander and California red-legged frog will be less than significant.

Impact BIO-6: Potential disturbance or mortality of and loss of suitable habitat for Pacific pond turtle

Potential Impact: The potential impacts related to Pacific pond turtle are discussed beginning at page 3.4-44 of the draft EIR. Construction activities within the project area could result in direct effects on Pacific pond turtle or its habitats.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39, and 3.4-45 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-6: Conduct preconstruction surveys for Pacific pond turtle and monitor construction activities if turtles are observed

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b, and BIO-6 will ensure that the impacts on Pacific pond turtle will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No

more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

Where suitable upland habitat (grasslands within 1,300 feet of ponds, drainages, or perennial wetland drainages) for Pacific pond turtle occurs within proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on Pacific pond turtle.

- One week before and within 24 hours of beginning work in or adjacent to suitable aquatic habitat (ponds, drainages), a qualified biologist (one who is familiar with different species of turtles) will conduct surveys for Pacific pond turtle. The surveys should be timed to coincide with the time of

day and year when turtles are most likely to be active (during the cooler part of the day between 8 a.m. and 12 p.m. during spring and summer). Prior to conducting the surveys, the biologist should locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles. Each survey should include a 30-minute wait time after arriving onsite to allow startled turtles to return to open basking areas. The survey should consist of a minimum 15 minute observation time per area where turtles could be observed.

- If western pond turtles are observed during either survey, a biological monitor will be present during construction activities in the aquatic habitat where the turtle was observed. The biological monitor also will be mindful of suitable nesting and overwintering areas in proximity to suitable aquatic habitat and periodically inspect these areas for nests and turtles.
- If one or more western pond turtles are found in the work area during construction and cannot or do not move offsite on their own, a qualified biologist will remove and relocate the turtle to appropriate aquatic habitat outside and away from the construction area. Relocation of western pond turtle requires a letter from CDFW authorizing this activity.

Remaining Impacts: Any remaining impacts related to Pacific pond turtle will be less than significant.

Impact BIO-7: Potential disturbance or mortality of and loss of suitable habitat for Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip

Potential Impact: The potential impacts related to Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip are discussed beginning at page 3.4-45 of the draft EIR. Construction activities within the project area could result in direct effects on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip or their habitat (annual grasslands within the project area).

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, and 3.4-46 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-7: Implement measures to avoid, minimize, and mitigate for potential impacts on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, and BIO-7 will ensure that the impacts on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources

impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.

- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the

restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (annual grassland) for Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip is identified within proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on these species. These measures are based on measures from the EACCS, with some modifications and additions. Implementation of some of these measures for the Alameda whipsnake would only apply if required by USFWS or CDFW after consultation under ESA or CESA. Additional conservation measures or conditions of approval may be required in applicable project permits (i.e., ESA incidental take permit).

- A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing active-ties (including equipment staging, vegetation removal, grading) associated with repowering. If Blainville's horned lizard, Alameda whipsnake, or San Joaquin coachwhip are found, work will not begin until they are moved out of the work area to a USFWS- and/or CDFW-approved relocation site. Incidental take permits from USFWS and CDFW are required for relocation of Alameda whipsnake. Relocation of Blainville's horned lizard and San Joaquin coachwhip requires a letter from CDFW authorizing this activity.
- No monofilament plastic mesh or line will be used for erosion control.
- Where applicable, barrier fencing (sediment control material or similar) material will be used to exclude Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip. Barrier fencing will be removed within 72 hours of completion of work.
- Work crews or an on-site biological monitor will inspect open trenches, pits, and under construction equipment and materials left onsite for special-status reptiles each morning and evening during construction.
- Vegetation within the proposed work area will be removed prior to grading. Vegetation outside the work area will not be removed. All vegetation removal will be monitored by the qualified biologist to minimize impacts on special-status reptiles.
- If special-status reptiles are found in the work area during construction and cannot or do not move offsite on their own, a USFWS- and/or CDFW-approved biologist will trap and move special-status reptiles to a USFWS- and/or CDFW-approved relocation area.

If all potential direct impacts on Alameda whipsnake cannot be avoided consultation with USFWS and CDFW under the ESA and CESA will be required before construction can occur. Loss of habitat for Alameda whipsnake will be compensated for in accordance with the standardized mitigation ratios developed for the Conservation Strategy (Table 3-9 of the Conservation Strategy). The Applicant could acquire parcels, through fee title purchase and/or conservation

easements, where known populations occur. Similarly, acquisition or protection of parcels that include parts of important linkages as described in the Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California (U.S. Fish and Wildlife Service 2002b), may be approved as mitigation for this species. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW and USFWS have reviewed and approved the proposed compensation plan. Because proposed habitat compensation would be mitigated consistent with the Conservation Strategy, which was developed in coordination with USFWS and CDFW, the proposed compensation would fully mitigate for direct impacts associated with repowering.

Remaining Impacts: Any remaining impacts related to Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip will be less than significant.

Impact BIO-8: Potential construction-related disturbance or mortality of special-status and non-special-status migratory birds

Potential Impact: The potential impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds are discussed beginning at page 3.4-47 of the draft EIR.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, and 3.4-48 through 3.4-50 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-8a: Implement measures to avoid and minimize potential impacts on special-status and non-special-status nesting birds

MM BIO-8b: Implement measures to avoid and minimize potential impacts on western burrowing owl

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-8a and BIO-8b will ensure that the impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing

work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.

- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.

- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will

include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (grassland, shrubs, trees) is present for tree/shrub- and ground-nesting migratory birds in and within 0.5 mile of proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an adverse impact on nesting special-status and non-special-status birds.

- Remove suitable nesting habitat (grassland or other ground vegetation) during the non-breeding season (September 1 through January 31) for nesting birds.
- 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 0.5-mile buffer area will be surveyed for Swainson's hawk nests. The construction area and a 500-foot buffer will be surveyed for all other raptors and a 50-foot buffer will be surveyed for all other bird species. Additional preconstruction surveys for nesting birds prior to 7 days before construction are recommended to identify any areas that may need to be avoided and would affect the construction schedule or plans.
- If an active nest is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1 to August 31), a no-activity zone will be established by a qualified biologist in coordination with USFWS and/or CDFW. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity zone will be developed based on the type and extent of the proposed activity in proximity to the nest, the duration and timing of the activity, the sensitivity and habituation of the species nesting, and the dissimilarity of the proposed activity to background activities. The no-activity zone will be large enough to avoid nest abandonment and will range between 50 feet and 1,000 feet from the nest, or as otherwise required by USFWS and/or CDFW.

Where suitable habitat (grasslands) is present for western burrowing owl in and within 500 feet of proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on burrowing owls. The following measures are consistent with the EACCS and CDFW's revised *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 2012).

- 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.
- To the maximum extent feasible (i.e., 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).

- If an active burrow is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1– August 31), a no-activity zone will be established by a qualified biologist and 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 through 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 burrowing owl behavior will evaluate site-specific conditions and in coordination with CDFW, recommend a smaller buffer (if possible) that still minimizes the potential to disturb the owls (and is deemed to still allow reproductive success during the breeding season). The site-specific buffer 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.
- If burrowing owls are present within the direct disturbance area and cannot be avoided during non-breeding season (generally September 1 through January 31), passive relocation techniques (e.g., installing one-way doors at burrow entrances) shall be used instead of trapping. Passive relocation may also be used during the breeding season (February 1 through August 30) if a qualified biologist, coordinating with CDFW, determines through site surveillance and/or scoping that the burrow is not occupied by burrowing owl adults, young, or eggs by. Passive relocation would be accomplished by installing one-way doors (e.g., modified dryer vents or other CDFW approved method). The one-way doors shall be left in place for a minimum of one week and monitored daily to insure that the owls have left the burrow. Excavation of the burrow shall be conducted using hand tools and a section of flexible plastic pipe (at least 3 inches in diameter) shall be inserted into the burrow tunnel to maintain an escape route for any animals that may be inside the burrow.
- Avoid destruction of unoccupied burrows outside the work area and place visible markers near burrows to ensure they are not collapsed.
- Conduct ongoing surveillance of the project parcels for burrowing owls during project activities. If additional owls are observed using burrows within 500 feet of construction, the onsite biological monitor will determine if the owl(s) would be affected by future construction and if additional exclusion zones are required.

Remaining Impacts: Any remaining impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds will be less than significant.

Impact BIO-9: Permanent and temporary loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds

Potential Impact: The potential impacts related to permanent and temporary loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds are discussed beginning at page 3.4-50 of the draft EIR. Implementation of the Initial Repower would result in the temporary and permanent loss of grassland that provides suitable foraging habitat for Swainson's hawk, burrowing owl, and many other special-status and non-special status migratory birds.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-37 and 3.4-50 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-9: Compensate for the permanent loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1f and BIO-9 will ensure that the permanent and temporary impacts on the loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual

monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Permanent removal of suitable foraging habitat for Swainson's hawks will be mitigated by providing offsite habitat management lands as described in CDFW's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* (California Department of Fish and Game 1994). The final acreage of off-site management lands to be provided will depend on the distance between the project area and the nearest active nest site. The mitigation ratio varies from 0.5:1 to 1:1(dependent on the location of the closest known nest site) of habitat preserved for each acre lost. In lieu of acquiring offsite mitigation lands, the Applicant may purchase mitigation credits for Swainson's hawk foraging habitat from a lead agency-approved mitigation or conservation bank that sell upland habitat credits with equal or similar habitat function to lands that are permanently affected by the project. Information on the nearest nest will be collected during preconstruction Swainson's hawk surveys conducted under Mitigation Measure BIO-8a, to determine the appropriate mitigation ratio. If no active nests are found during this survey, a search of the CNDDB will be conducted, and CDFW will be contacted to determine the nearest active nest. The protection of this habitat will also compensate for the loss of foraging habitat for other special-status and non-special-status bird species that depend on grassland for foraging habitat.

If construction activities will result in the removal of occupied burrowing owl habitat (determined during preconstruction surveys described in Mitigation Measure BIO-8a), this habitat loss will be mitigated by providing mitigation land as described in CDFW's *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 2012:11–13). The standardized mitigation ratios for non-listed species developed for the Conservation Strategy will be used for the loss of habitat for burrowing owl (Table 3-10 in the Conservation Strategy).

Remaining Impacts: Any remaining impacts related to the permanent and temporary impacts on the loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds will be less than significant.

Impact BIO-10: Potential injury or mortality of and loss of habitat for San Joaquin kit fox and American badger

Potential Impact: The potential impacts related to the potential injury or mortality of and loss of habitat for San Joaquin kit fox and American badger are discussed beginning at page 3.4-51 of the draft EIR. Construction activities within the project area could result in direct effects on San Joaquin kit fox and American badger or their habitat (grassland). mortality or injury of individuals from construction vehicles or heavy equipment, direct mortality or injury of individuals from den collapse and subsequent suffocation, temporary harassment from noise and human presence associated with construction activities, and harassment of individuals by construction personnel. Additionally, exposed pipes, large excavated holes, or trenches that are left open after construction has finished for the day could entrap San Joaquin kit foxes or American badgers. O&M activities, such as road and firebreak maintenance, may also result in injury or mortality of individuals.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37 and 3.4-51 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-10: Implement measures to avoid, minimize, and mitigate for potential impacts on San Joaquin kit fox and American badger

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, and BIO-10 will ensure that the impacts on San Joaquin kit fox and American badger will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.

- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (grassland) is present for San Joaquin kit fox or American badger on or within 200 feet of proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an adverse impact on San Joaquin kit fox or American badger. These measures are based on measures from the EACCS, with some modifications and additions, and are consistent with the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox* (U.S. Fish and Wildlife Service 2011). Implementation of some of these measures (i.e., relocation of listed species, excavation to install exclusion fencing) could result in take and will require that the Applicant consult with USFWS and/or CDFW under the ESA and/or CESA for San Joaquin kit fox. Additional conservation measures, in addition to those measures listed below, or conditions of approval may be required in applicable project permits.

- The Applicant 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) in areas proposed for disturbance as well as a 200-foot buffer around the disturbance area. Resumes of biologists will be submitted to the USFWS for review and approval prior to the start of the survey. The biologist(s) will also survey for American badger dens in conjunction with the San Joaquin kit fox surveys.
- To the maximum extent feasible, suitable dens for San Joaquin kit fox and American badger will be avoided.

- As described in U.S. Fish and Wildlife Service 2011, the preconstruction San Joaquin kit fox 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 the San Joaquin kit fox. The biologist(s) will conduct den searches by systematically walking transects through project disturbance areas and a buffer area to be determined in coordination with USFWS and CDFW. Transect distance should be determined based on the height of vegetation such that 100 percent visual coverage of the project disturbance area is achieved. 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).
    - 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, or ground squirrel) that otherwise have appropriate characteristics for kit fox use; or a human-made structure that otherwise has appropriate characteristics for kit fox use.
    - Known den: Any existing natural den or manmade structure that is used or has been used at any time in the past by a San Joaquin kit fox. 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 *active* and *inactive* 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).
    - 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 and/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 human-made 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.
- Written results of the survey including the locations of any potential or known San Joaquin kit fox dens will be submitted to the USFWS within 5 days following the completion of the survey and prior to the start of ground disturbance and/or construction activities.
- After preconstruction den searches and before the commencement of construction activities, exclusion zones will be established as measured in a radius outward from the entrance or cluster of entrances of each den. Construction activities will be prohibited or greatly restricted within these exclusion zones to the extent avoidance is feasible. 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 as follows.

  - 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 at 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.
  - 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 infra-red 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: Potential dens can be removed (preferably by hand excavation) by biologist or under the supervision of a biologist without monitoring if authorized by USFWS and CDFG during ESA and CESA consultation. . If any den was considered a potential den but was later determined during monitoring or destruction to be currently or previously used by kit fox (e.g., kit fox sign is found inside), then all construction activities will cease and USFWS and CDFW will be notified immediately.
- Nighttime work will be minimized to the extent possible. The speed-limit will be reduced to 10 mph during nighttime work.
- A representative will be appointed by the Applicant who will be the contact for any employee or contractor who might inadvertently kill or injure a kit fox or finds a dead, injured, or entrapped kit fox. The representative will be identified during environmental sensitivity training (Mitigation Measure BIO-1d) and their name and phone number will be provided to USFWS and CDFW. Upon such incident or finding, the representative will immediately contact USFWS at (916) 414-6620 or (916) 414-6600 and CDFW at (916) 445-0045 (State Dispatch) and/or the local warden or Mr. Paul Hoffman, wildlife biologist, at (530) 934-9309.

- The Sacramento USFWS office and CDFW will be notified in writing within 3 working days of the accidental death or injury to a San Joaquin kit fox during proposed project-related activities. Notification must include the date, time, and location of the incident, and any other pertinent information.

Compensation for permanent loss of San Joaquin kit fox habitat will be required before construction can occur and the standardized mitigation ratios developed for the EACCS will be applied (Table 3-11 of the Conservation Strategy). The standardized mitigation ratios for non-listed species developed for the EACCS will be used for the loss of habitat for American badger (Table 3-10of the EACCS). Because proposed habitat compensation would be mitigated consistent with the EACCS, which was developed in coordination with USFWS and CDFW, the proposed compensation is expected to fully mitigate for direct impacts on San Joaquin kit fox (a state and federally endangered species), associated with repowering.

Remaining Impacts: Any remaining impacts related to San Joaquin kit fox and American badger will be less than significant.

Cultural Resources

Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5

Potential Impact: The potential impacts related to changes in the significance of archaeological resources are discussed beginning at page 3.5-10 of the draft EIR. No archaeological resources were identified as a result of this study, but it is still possible that significant buried archaeological materials are present within the project area. Disturbance or destruction of these resources may result from ground-disturbing activities associated with construction of the Initial Repower.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.5-11 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM CUL-2: Stop work in case of accidental discovery of buried archeological resources

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure CUL-2 will ensure that the impacts on archaeological resources will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if avoidance is not possible, develop appropriate treatment measures such as recordation and excavation, in consultation with the County. If the find is Native American in origin, consultation with the NAHC and local Native American representatives will be initiated.

Remaining Impacts: Any remaining impacts related to archaeological resources will be less than significant.

Impact CUL-3: Disturb any human remains, including those interred outside of formal cemeteries

Potential Impact: The potential impacts related to disturbance of human remains are discussed beginning at page 3.5-11 of the draft EIR. Although no known human remains are present within the project area, it is possible that human remains, particularly those outside a designated cemetery, may be encountered during ground-disturbing activities associated with Initial Repower construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.5-11 through 3.5-12 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM CUL-3: Stop work in case of accidental discovery of buried human remains

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure CUL-3 will ensure that the impacts on human remains will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC Section 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the Alameda County coroner has been informed and has determined that no investigation of the cause of death is required; and
- if the remains are of Native American origin,
- the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98, or
- the NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

Remaining Impacts: Any remaining impacts related to human remains will be less than significant.

Geology, Soils, and Paleontological Resources

Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of rupture of a known fault

Potential Impact: The potential impacts related to rupture of a known fault are discussed beginning at page 3.6-16 of the draft EIR. If a turbine were constructed on a fault and the fault ruptured, the turbine could be damaged or collapse and possibly injure personnel in the immediate area. Although there are no known active faults in the area, the potentially active Midway fault crosses the west parcel and runs nearby the southeast parcel.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural

engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to rupture of a known fault will be less than significant.

Impact GEO-2: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of strong seismic ground shaking

Potential Impact: The potential impacts related to strong seismic ground shaking are discussed beginning at page 3.6-17 of the draft EIR. The project area is in a seismically active area, with the potential for moderately strong ground shaking from sources such as the Greenville fault and the Calaveras fault. If turbine foundations were not designed to withstand this ground shaking, they could fail and cause damage to or collapse of the turbine towers.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.

- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to strong seismic ground shaking will be less than significant.

Impact GEO-3: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of seismic-related ground failure, including liquefaction and landslides

Potential Impact: The potential impacts related to seismic-related ground failure, including liquefaction and landslides, are discussed beginning at page 3.6-18 of the draft EIR. Construction in the project area could have the potential to expose persons or structures to landslides, either by destabilizing existing slopes or by creating unstable (poorly designed or constructed) cut or fill slopes. If turbine foundations were not designed appropriately, land sliding could cause damage to or collapse of the turbine towers.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all

geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to seismic-related ground failure, including liquefaction and landslides, will be less than significant.

Impact GEO-5: Be located on expansive soil creating substantial risks to life or property

Potential Impact: The potential impacts related to expansive soil are discussed beginning at page 3.6-18 of the draft EIR. Expansive soils underlie most of the project area. If improperly designed or installed, turbine foundations, power collection systems, and communication lines could be subject to damage.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to expansive soil will be less than significant.

Impact GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Potential Impact: The potential impacts related to a unique paleontological resource or site or unique geologic feature are discussed beginning at page 3.6-19 of the draft EIR. Geologic units with potential to contain paleontological resources include all units in the project area because they are sedimentary rocks. If fossils are present in the project area, they could be damaged by earth-disturbing construction activities, such as excavation for foundations, placement of fills, trenching, and grading for road work and staging areas. The more extensive and deeper the earth-disturbing activity, the greater the potential for damage to paleontological resources.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-19 through 3.6-20 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM GEO-6a: Retain a qualified professional paleontologist to monitor significant ground-disturbing activities

MM GEO-6b: Educate construction personnel in recognizing fossil material

MM GEO-6c: Stop work if substantial fossil remains are encountered during construction

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures GEO-6a through GEO-6c will ensure that impacts on paleontological resources will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The Applicant will retain a qualified professional paleontologist as defined by the SVP's *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (2010) (Standard Procedures) to monitor activities with the potential to disturb sensitive paleontological resources. Data gathered during detailed design of the Initial Repower will be used to determine the activities that will require the presence of a monitor pursuant to SVP's Standard Procedures. In general, these activities include any ground-disturbing activities involving excavation deeper than 3 feet in areas with high potential to contain sensitive paleontological resources. Recovered fossils will be prepared so that they can be properly documented. Recovered fossils will then be curated at a facility that will properly house and label them, maintain the association between the fossils and field data about the fossils' provenance, and make the information available to the scientific community.

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.

If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, activities within a 100-foot radius 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 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.

Remaining Impacts: Any remaining impacts related to paleontological resources will be less than significant.

Hydrology and Water Quality

Impact WQ-1: Violate any water quality standards or waste discharge requirements

Potential Impact: The potential impacts related to water quality standards and waste discharge requirements are discussed beginning at page 3.9-8 of the draft EIR. Construction activities would introduce the potential for increased erosion and sedimentation, with subsequent effects on drainage and water quality.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 will ensure that the impacts on water quality standards and waste discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to water quality standards and waste discharge requirements will be less than significant.

Impact WQ-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite

Potential Impact: The potential impacts related to alteration of the existing drainage pattern in a manner that would result in substantial erosion or siltation onsite or offsite are discussed beginning at page 3.9-10 of the draft EIR. The Initial Repower would be constructed in an area with existing 1980s–'90s era turbines, and would result in minor alteration of topography and existing drainage patterns.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 will ensure that the impacts on water quality standards and waste discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to alteration of the existing drainage pattern in a manner that would result in substantial erosion or siltation onsite or offsite will be less than significant.

Impact WQ-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite

Potential Impact: The potential impacts related to increased rate or amount of surface runoff in a manner that would result in flooding onsite or offsite are discussed beginning at page 3.9-10 of the draft EIR. New buildings and other infrastructure can alter existing topography and impede existing drainage flows.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9, and 3.9-11, are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM WQ-1: Comply with NPDES requirements

MM WQ-4: Comply with local hydrological and drainage requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 and WQ-4 will ensure that the impacts related to increased rate or amount of surface runoff in a manner that would result in flooding onsite or offsite will be mitigated

to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If

necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

The Applicant will perform a hydrological and drainage study for the Initial Repower according to the requirements of the Alameda County Hydrology and Hydraulic requirements, if necessary, and will design the Initial Repower so that the postconstruction volume and rate of drainage flows do not exceed preconstruction flows.

Remaining Impacts: Any remaining impacts related to increased rate or amount of surface runoff in a manner that would result in flooding onsite or offsite will be less than significant.

Impact WQ-5: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff

Potential Impact: The potential impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff are discussed beginning at page 3.9-11 of the draft EIR. The minor increased impervious area associated with the project could increase the volume of surface runoff into surface waters and stormwater systems.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9, and 3.9-11, are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM WQ-1: Comply with NPDES requirements

MM WQ-4: Comply with local hydrological and drainage requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 and WQ-4 will ensure that the impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

The Applicant will perform a hydrological and drainage study for the Initial Repower according to the requirements of the Alameda County Hydrology and Hydraulic requirements, if necessary, and will design the Initial Repower so that the postconstruction volume and rate of drainage flows do not exceed preconstruction flows.

Remaining Impacts: Any remaining impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff will be less than significant.

Impact WQ-6: Otherwise substantially degrade water quality

Potential Impact: The potential impacts related to degradation of water quality are discussed beginning at page 3.9-12 of the draft EIR.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure WQ-1 will ensure that the impacts on water quality standards and waste discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to degradation of water quality will be less than significant.

Noise

Impact NOI-4: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Potential Impact: The potential impacts related to temporary or periodic increases in ambient noise levels are discussed beginning at page 3.10-17 of the draft EIR. Several residences are within several hundred feet of where turbine removal, installation, and restoration activities could occur. The results in Table 3.10-18 (page 3.10-20 of the draft EIR) indicate that these activities could result in noise that exceeds Alameda County Noise Ordinance standards during non-exempt hours.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.10-21 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM NOI-4: Employ noise-reducing practices during construction

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure NOI-4 will ensure that the impacts related to temporary or periodic increases in ambient noise levels will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The project Applicant will employ a combination of the following noise-reducing practices so that construction noise does not exceed Alameda County Noise Ordinance standards at the relevant property lines. Measures that can be used to limit noise include, but are not limited to those listed below.

- Prohibit noise-generating activities before 7 a.m. and after 7 p.m. Monday through Friday, and before 8 a.m. and after 5 p.m. on Saturday and Sunday.
- Locate equipment as far as practical from noise-sensitive uses.
- Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.

- Use noise-reducing enclosures around noise-generating equipment where practicable.
- Implement other measures with demonstrated practicability in reducing equipment noise, upon prior approval by the County.

In no case will the Applicant be allowed to use gasoline or diesel engines without muffled exhausts.

Remaining Impacts: Any remaining impacts related to temporary or periodic increases in ambient noise levels will be less than significant.

Transportation/Traffic

Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

Potential Impact: The potential impacts related to construction traffic on regional routes are discussed beginning at page 3.11-12 of the draft EIR. Decommissioning and construction of the Initial Repower phase would generate increased traffic levels on regional and local roadways from worker commutes (expected to be in light-duty trucks or automobiles) and large construction vehicles used to transport materials and equipment from and to the project parcels. These activities would temporarily increase vehicle traffic on regional and local access routes in the project vicinity.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).

- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to construction traffic on regional routes will be less than significant.

Impact TRA-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 for designated roads or highways

Potential Impact: The potential impacts related to construction-related truck trips on roads designated as deficient are discussed beginning at page 3.11-18 of the draft EIR. Project-related construction trips on nearby roadways with levels of services ranging from D to F would result in

short-term, temporary, but significant impacts on these roadway segments by exacerbating peak period congestion roadway performance and safety conditions.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.

- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to construction-related truck trips on roads designated as deficient will be less than significant.

Impact TRA-4: Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

Potential Impact: The potential impacts related to traffic hazards are discussed beginning at page 3.11-21 of the draft EIR. The project's construction-related traffic would have the potential to result in traffic hazards or incompatible uses (e.g., large, slow moving vehicles) on local county roads used for access to project area as well as contribute to road deterioration or damage associated with on-going increased use of these roadways for the duration of construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to traffic hazards will be less than significant.

Impact TRA-5: Result in inadequate emergency access

Potential Impact: The potential impacts related to emergency access are discussed beginning at page 3.11-21 of the draft EIR. Slow-moving construction trucks could delay or obstruct the movement of emergency vehicles on county roads used for haul routes in the project area. In addition, if any lane/road closures are required during delivery of oversized loads, roadway capacity could be affected and potentially increase the response time for emergency vehicles if traveling through the area.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.

- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to emergency access will be less than significant.

Impact TRA-6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

Potential Impact: The potential impacts related to bicycle safety are discussed beginning at page 3.11-22 of the draft EIR. Construction-related lane closures, detours, and the presence of heavy construction vehicles on local routes, have the potential to cause short-term disruption of the routes and safety concerns for any bicyclists who use the routes.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 are hereby adopted and will be implemented as provided in the Mitigation Monitoring and Reporting Program:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the

Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to bicycle safety will be less than significant.

Findings and Recommendations Regarding Impacts which are Less Than Significant

Specific impacts within the following categories of environmental effects were found to be less than significant as set forth in more detail in the draft EIR.

Aesthetics

Impact AESTH-5: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area

The project's potential impacts related to light and glare are discussed on page 3.1-14 of the draft EIR. The shrouded turbines are not expected to require FAA marking or lighting because they would be less than 200 feet tall. The bright white paint of the turbines would create glare. However, the proposed project would comply with the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions.* This potential impact is determined to be less than significant.

Agricultural and Forestry Resources

Impact AG-5: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use

The project's potential impacts related to Farmland conversion are discussed on page 3.2-7 of the draft EIR. Existing agricultural activities would not be restricted in any way beyond current limitations. Continued operation of the wind power facilities precludes the conversion of these agricultural lands to other nonagricultural uses, and the Initial Repower would not result in the conversion of any Farmland to nonagricultural uses. This potential impact is determined to be less than significant.

Air Quality and Greenhouse Gases

Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan

The project's potential impacts related to the applicable air quality plan are discussed on page 3.3-23 of the draft EIR. Initial Repower construction would not induce population or employment growth and would result in no net increase in vehicle miles traveled in the Air Basin. This potential impact is determined to be less than significant.

Impact AQ-4: Expose sensitive receptors to substantial pollutant concentrations

The project's potential impacts related to exposure of sensitive receptors to pollutants are discussed on page 3.3-31 of the draft EIR. The project would not expose sensitive receptors to substantial pollutant concentrations of CO, DPM, or NOA. This potential impact is determined to be less than significant.

Impact AQ-5: Create objectionable odors affecting a substantial number of people

The project's potential impacts related to odors are discussed on page 3.3-33 of the draft EIR. Diesel exhaust and VOCs would be emitted during construction of the Initial Repower; these emissions are

objectionable to some; however, such odorous emissions would disperse rapidly from the project area and therefore should not reach an objectionable level at nearby residences. This potential impact is determined to be less than significant.

Biological Resources

Impact BIO-12: Operation of the proposed project could have direct impacts on special-status bat species

The project's potential impacts related to special-status bat species are discussed on page 3.4-59 of the draft EIR. Historically, the number of bat fatalities detected as part of the avian fatality monitoring program at old generation turbines in the APWRA has been extremely low. As in other parts of North America, the majority of documented fatalities in the APWRA have occurred during the fall migration season and have consisted of migratory bat species. Bat fatalities are being recorded as part of the Avian Validation Study. During the first year of monitoring for the Avian Validation Study (i.e., the *before* aspect of the study), only one bat species fatality was detected, a Mexican free-tailed bat; this result is consistent with the overall monitoring results for the APWRA and indicates that the rate of bat impacts, for the existing turbines, is very low. This potential impact is determined to be less than significant.

Geology, Soils and Paleontological Resources

Impact GEO-4: Result in substantial temporary, construction-related soil erosion or the loss of topsoil

The project's potential impacts related to construction-related soil erosion are discussed on page 3.6-18 of the draft EIR. Although ground-disturbing earthwork associated with construction of the Initial Repower may increase soil erosion rates, compliance with the federal and local erosion-related regulations applicable to the project (i.e., the SWPPP that is developed for the site and the requirements of the County's Stormwater Quality Management Plan) would ensure that the construction activities do not result in significant erosion This potential impact is determined to be less than significant.

Greenhouse Gases

Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

The project's potential impacts related to plans and policies are discussed on page 3.7-15 of the draft EIR. The project is consistent with relevant plans and policies, including the Alameda County (Unincorporated Areas) Community Climate Action Plan and the Assembly Bill 32 Scoping Plan. This potential impact is determined to be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

The project's potential impacts related to hazardous materials are discussed on page 3.8-11 of the draft EIR. Construction of the Initial Repower would involve small quantities of commonly used materials, such as fuels and oils, to operate construction equipment. However, standard

construction BMPs would be implemented to reduce pollutant emissions during construction. This potential impact is determined to be less than significant.

Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

The project's potential impacts related to release of hazardous materials into the environment are discussed on page 3.8-12 of the draft EIR. Site workers, the public, and the environment could be inadvertently exposed to preexisting contaminants onsite during project construction and operation of the Initial Repower. However, the handling and disposal of these materials would be governed according to regulations enforced by CUPA, Cal/OSHA, and DTSC, and regulations under the CWA require contractors to avoid allowing the release of materials into surface waters as part of their SWPPP and NPDES permit requirements. This regulatory structure would ensure that safety measures and precautions are taken, thereby reducing any potential impacts associated with the accidental upset or release of hazardous materials. This potential impact is determined to be less than significant.

Impact HAZ-7: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan during construction

The project's potential impacts related to emergency plans are discussed on page 3.8-13 of the draft EIR. The Initial Repower would not conflict with any adopted emergency response plan or emergency evacuation plan. This potential impact is determined to be less than significant.

Impact HAZ-8: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

The project's potential impacts related to wildland fires are discussed on page 3.8-14 of the draft EIR. The potential for wildland fires already exists in the project area due to the presence of the wind energy facilities. Because CAL FIRE and ACFD already provide fire protection services to the area, the fire protection facilities and infrastructure required to protect the existing facilities are in place. The Initial Repower would not alter the Altamont Pass Wind Farms Fire Requirements as described in Exhibit C of the 2005 CUPs. This potential impact is determined to be less than significant.

Impact HAZ-9: During normal operation, the effects of bending and stress on rotor blades over time could lead to blade failure and become a potential blade throw hazard

The project's potential impacts related to blade throw are discussed on page 3.8-14 of the draft EIR. The shrouded turbine apparatus includes an electrical generator and wind rotor (blades) surrounded by two shrouds. Although the main purpose of the shrouds is to channel air to the rear of the turbine to improve the efficiency of energy production, the shrouds also serve to contain the blades in the event of a blade or blade fragment failure. This potential impact is determined to be less than significant.

Impact HAZ-10: Because of their large size and proposed location, the proposed turbines have the potential to interfere with microwave, radar, and communications signals and be a hazard to public safety

The project's potential impacts related to microwave, radar, and communications signals are discussed on page 3.8-15 of the draft EIR. Although wind turbines have the potential to interfere

with communications signals, the RF Engineering Report prepared for the Sand Hill Wind Project (Appendix K of the draft EIR), found that the proposed project would not result in any significant effects on communication or radar signals. This potential impact is determined to be less than significant.

Hydrology and Water Quality

Impact WQ-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)

The project's potential impacts related to groundwater are discussed on page 3.9-10 of the draft EIR. Construction of the Initial Repower involves relatively small footprints that would not result blocking groundwater infiltration to a point that would deplete groundwater supplies or interfere substantially with any agricultural wells nearby. For the Initial Repower, no groundwater supplies would be needed for construction or operational purposes because water supplies would be trucked in from Zone 7 Water Agency in Livermore for water for dust control and revegetation activities during construction activities. This potential impact is determined to be less than significant.

Noise

Impact NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies

The project's potential impacts related to local noise standards are discussed on page 3.10-16 of the draft EIR. Noise levels generated by the new turbines at all positions are predicted to be less than existing noise levels. This potential impact is determined to be less than significant.

Impact NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels during construction

The project's potential impacts related to groundborne vibration are discussed on page 3.10-17 of the draft EIR. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from receiver. Additionally, vibration from these activities would be of short duration and would end with completion of construction. This potential impact is determined to be less than significant.

Impact NOI-3: Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

The project's potential impacts related to permanent increases in ambient noise levels are discussed on page 3.10-17 of the draft EIR. Implementation of the Initial Repower is not expected to cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This potential impact is determined to be less than significant.

Transportation/Traffic

Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of

transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit, during Initial Repower operations

The project operations' potential impacts related to the effectiveness of the circulation system are discussed on page 3.11-12 of the draft EIR. The Initial Repower would not entail any changes to existing land uses in the project area, and operation of the facilities would not be likely to generate any traffic beyond that presently associated with O&M activities of the current facility. This potential impact is determined to be less than significant.

Impact TRA-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 for designated roads or highways, due to the low volume of construction-related worker commutes and operations-related traffic

The project's potential impacts related to level of service and congestion management programs are discussed on page 3.11-18 of the draft EIR. The anticipated traffic associated with the Initial Repower operations would not be expected to differ substantially from existing conditions, and would not increase traffic volumes on area roads. Based on construction work hours, it would be expected that the majority of worker commutes would avoid AM peak and PM peak travel periods on these roadways and would not exacerbate existing commute traffic congestion and related performance or safety concerns that may exist. This potential impact is determined to be less than significant.

Utilities and Service Systems

Impact UT-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

The project's potential impacts related to water or wastewater treatment facilities are discussed on page 3.12-4 of the draft EIR. Water for use in the project area would be obtained and trucked in from Zone 7 Water Agency. Water necessary for construction would be used for dust control and revegetation activities. The amounts required for construction and operation of the Initial Repower would not result in excessive water use requiring the construction or expansion of existing facilities. Wastewater would be managed through use of an existing septic tank during operations and portable toilets during construction. This potential impact is determined to be less than significant.

Impact UT-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

The project's potential impacts related to stormwater drainage facilities are discussed on page 3.12-5 of the draft EIR. The Initial Repower would not substantially modify the existing stormwater drainage patterns of the project parcels, and increases in impermeable surfaces onsite would be primarily limited to tower foundations. This potential impact is determined to be less than significant.

Impact UT-4: Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed

The project's potential impacts related to water supplies are discussed on page 3.12-5 of the draft EIR. The project proponent plans to draw needed water for these activities from Zone 7 Water Agency which, as stated above, indicates a sufficient water supply for the next 5 years. This potential impact is determined to be less than significant.

Impact UT-6: Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction

The project's potential impacts related to landfill capacity are discussed on page 3.12-6 of the draft EIR. The amount of solid waste generated would not be substantial because turbines and components would be sold or recycled, thereby reducing the amount of solid waste taken to landfills. This potential impact is determined to be less than significant.

Impact UT-7: Comply with federal, state, and local statutes and regulations related to solid waste

The project's potential impacts related to solid waste regulations are discussed on page 3.12-6 of the draft EIR. The Initial Repower would be required to comply with local, state, and federal solid waste regulations. This potential impact is determined to be less than significant.

CEQA Findings for Full Repower Impacts

Findings and Recommendations Regarding Significant and Unavoidable Impacts

Aesthetics

Impact AESTH-2[F]: Have a substantial adverse effect on a scenic vista

Potential Impact: The potential impacts related to scenic vistas are discussed beginning at page 3.1-15 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. Construction of the project's shrouded turbines would result in the exposure of moderately- and highly-visually sensitive viewers to potentially negative changes to existing scenic vistas.

Mitigation Measure(s): No feasible mitigation measures are available for this impact. However, the draft EIR indicates (page 3.1-15) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on scenic vistas.

Remaining Impacts: Impacts related to scenic vistas will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts on scenic vistas. There

are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact AESTH-3[F]: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway

Potential Impact: The potential impacts related to scenic resources are discussed beginning at page 3.1-16 of the draft EIR. The project's shrouded turbines would be more visually prominent than existing turbines and would therefore affect views from I-580, a State- and County-designated scenic route, and four other Alameda County-designated scenic routes in the project area: Altamont Pass Road, Grant Line Road, Mountain House Road, and Patterson Pass Road.

Mitigation Measure(s): No feasible mitigation measures are available to reduce the effects of the proposed project on scenic resources. However, the draft EIR indicates (page 3.1-17) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on scenic resources.

Remaining Impacts: Impacts related to scenic resources will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to scenic resources. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact AESTH-4[F]: Substantially degrade the existing visual character or quality of the site and its surroundings

Potential Impact: The potential impacts related to degradation of visual character are discussed beginning at page 3.1-17 of the draft EIR. Because viewers have the potential to perceive visual changes negatively, the project's new, shrouded turbines would substantially degrade the existing visual character of the project area.

Mitigation Measure(s): No feasible mitigation measures are available to reduce the effects of the proposed project on existing visual character. However, the draft EIR indicates (page 3.1-17) that the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions* would reduce this impact, but not to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: No feasible mitigation measures are available to reduce the effects of the proposed project on visual character.

Remaining Impacts: Impacts related to visual character will remain significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to visual character. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Air Quality

Impact AQ-3[F]: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)

Potential Impact: The potential impacts related to criteria pollutants are discussed beginning at page 3.2-34 of the draft EIR. Construction-related exhaust emissions would exceed the BAAQMD threshold for ROG, NOx, PM10, and PM2.5.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.2-35 will be implemented as provided and as required at the time of project approval:

MM AQ-2: Implement basic BAAQMD construction mitigation measures

MM AQ-3a: Ensure off-road equipment emission standards certification

MM AQ-3b: Implement BAAQMD's additional construction mitigation measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures AQ-2, AQ-3a and AQ-3b will reduce the project's construction-related NOx emissions but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact. The Applicant will be required to implement the following actions:

The following basic construction mitigation measures, as put forth in BAAQMD's CEQA Guidelines, shall be included in the project design and implemented during construction.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control

measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The Applicant will be required to ensure that all off-road equipment used by construction contractors during demolition and grading phases is certified to Tier 3 or higher emission standards. The Applicant will provide a record of the equipment used during these phases indicating make, model, year, horsepower, and certification level to the County as verification of compliance.

The Applicant will be required to include the following construction mitigation measures as put forth in BAAQMD's CEQA Guidelines, and implement them during construction:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOX and PM.

13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Remaining Impacts: Remaining impacts related to the project's construction-related NOx emissions will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to the project's construction-related NOx emissions. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Biological Resources

Impact BIO-11[F]: Operation of the proposed project could have direct impacts on special-status avian species

Potential Impact: The potential impacts related to special-status avian species are discussed beginning at page 3.4-69 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. As with the Initial Repower, because the Avian Validation Study is not fully complete, and the new turbine type has not yet been tested in this regard, the potential impacts on avian species from the Initial Repower are unknown at this time. Based on the information available, and the theory that the shrouded turbines will present a physical barrier for birds resulting in less collision with moving blades, the new turbines are not expected to have greater impacts when compared to the existing turbines. However, three scenarios are possible: (1) the proposed project would have a significant reduction in avian impacts; (2) the proposed project would have some reduction in avian impacts; or (3) the proposed project would have no reduction in avian impacts. Because it cannot be ascertained whether fatality rates would be above or below the existing fatality rates for the focal species, this impact is considered significant and unavoidable.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-70 and 3.4-71 will be implemented as provided and as required at the time of project approval:

MM BIO-11a: Incorporate avian-safe practices into design of turbine-related infrastructure

MM BIO-11b: Compensate for the loss of burrowing owl and other focal species

MM BIO-11c: Mitigate for the loss of individual golden eagles by retrofitting electrical facilities

MM BIO-11d: Implement additional measures to reduce Full Repower avian fatality rates

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-11a, BIO-11b, and BIO-11c will reduce the effects of the proposed project on special-status avian species but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

The Applicant will be required to apply the following measures when designing and siting turbine-related infrastructure. These measures will reduce the electrocution and collision risk of birds with turbine-related infrastructure.

- 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 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 allowable intensity, flashing frequency, and quantity allowed by FAA.
- When lines cannot be placed underground, appropriate avian protection designs must be employed (e.g., bird flight diverters or visibility enhancement such as spiral damping devices). As a minimum requirement, the collection system will utilize 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., lay-down 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, 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.

If avian impacts cannot be reduced to below baseline fatality through the implementation of the Applicant's own measures to monitor and reduce avian mortality with winter seasonal shutdowns (respectively described in the EIR as Applicant Proposed Measures or APMs 1 and 2), the Applicant will be required to compensate for the unavoidable loss of avian species through the purchase and preservation of conservation lands, on an in-perpetuity basis, from a local mitigation and/or conservation bank. One metric of describing potential impacts to avian species from wind project operations is the amount of risk area, often considered to be synonymous with the rotor-swept area. Thus, the amount of rotor-swept area can be used as a metric for mitigating potential impacts to avian species. The County has determined that this is the best currently available metric for mitigating impacts to burrowing owl and other focal species from operations in this specific instance.

Consequently, the Applicant shall preserve lands which provide habitat for burrowing owl (but which may also provide habitat for American kestrel and red-tailed hawk), the primary focal species potentially impacted by the proposed project, as well as other avian species. Lands will be preserved on a 1:1 rotor swept area basis, with the amount of land preserved in a ratio based on the total rotor swept area of the proposed turbines and the rate of estimated fatalities. Lands will be preserved on a 1:1 rotor-swept area basis (approximately 1.5 acres) if the rate of estimated fatalities (after monitoring is complete) is more than the baseline fatality rate, as determined by the lead agency. Conserved lands shall provide breeding opportunities for one or more of the primary focal species listed above in an effort to offset fatalities associated with operation of the Initial Repower. If necessary, enhancement measures will be implemented to ensure that the conserved lands provide breeding opportunities for one or more of the primary focal species. Types of habitat enhancement measures on the conserved lands will be weighted according to the relative abundance of focal species impacted by the project, the species-specific needs of those species, and the type and quality of habitat that may already exist on the

conserved land. The Applicant will consult with and obtain approval on the mitigation site from the County, including providing an assessment of the number of acres necessary to mitigate the annual impacts to burrowing owl and the other primary focal species (red-tailed hawk and American kestrel).

If golden eagle fatalities occur, the Applicant will mitigate for the proposed project's observed golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. The mitigation must occur within 140 miles of the proposed project, the area typically defined by the USFWS as the local population. The Initial Repower is projected to result in the fatality of up to approximately one eagle every 4 years (0.24 golden eagles/MW/yr., although a smaller fatality rate is also possible. As described under APM 1, the Applicant has committed to monitoring the effects of the proposed project, and the monitoring will include documentation of any golden eagle fatalities. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. The Applicant will therefore retrofit 29 utility poles as mitigation for each eagle fatality from the proposed project, as determined through the Avian Validation Study and any supplemental monitoring efforts. The Applicant may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion of the retrofits must be provided to the County. USFWS has estimated the cost of retrofits at $7,500 per pole, and therefore the Applicant may contribute the required funds, to a third party mitigation account (approved by Alameda County) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County within 1 year of completion of monitoring.

If the results of the Avian Validation Study demonstrate that the Full Repower will likely cause avian fatality rates in excess of the Initial Repower reduction targets outlined in the Applicant's own measures to reduce avian mortality with winter seasonal shutdowns (APM 2), the results of the Avian Validation Study will be analyzed to formulate avian impact reduction measures to reduce the effects of the Full Repower to or below specified fatality rates. The specific form such reduction measures may take will depend on the results of the Avian Validation Study and engagement with the County, USFWS and CDFW on the basis of such results. Examples of potential measures may include the following.

- Technology modifications
- Hazard-based micrositing
- Hazard-based capacity limitations
- Hazard-based cut-in-speed or real-time curtailment
- Compensatory research funding, habitat protection, ground squirrel control restrictions, or electric pole retro-fits to APLIC standards
- Partial or full siting of conventional turbines instead of shrouded turbines

Such other measures as may be required by the County, USFWS or CDFW under their respective regulatory regimes applicable to avian species (e.g., County planning and zoning regulations, BGEPA, MBTA, California Fish & Game Code)

If any of the reduction measures listed above are deemed necessary to reduce the potential impacts of the Full Repower on avian species, the Applicant will implement a fatality monitoring program to measure the results of the measures. The fatality monitoring program will be described by the Applicant in the project description for the Full Repower and at a minimum will include the following:

- Fatality monitoring for birds and bats for a period of 3 years using a statistically valid sampling approach.
- Yearly reports (submitted to the County for review and approval) which describe the monitoring methods and results, and which describe the potential effects of the reduction measures implemented on the project.
- Methods for implementing adaptive management during the monitoring period to ensure appropriate measures are being implemented to reduce impacts on birds and bats.

Remaining Impacts: Remaining impacts related to special-status avian species will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts on special-status avian species. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Greenhouse Gas

Impact GHG-1[F]: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment

Potential Impact: The potential impacts related to greenhouse gas emissions are discussed beginning at page 3.7-17 of the draft EIR. The project would emit GHGs from upstream emission sources and direct sources (combustion of fuels from worker vehicles and construction equipment) in excess of the BAAQMD operational threshold during construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.7-18 will be implemented as provided and as required at the time of project approval:

MM GHG-1: Implement BAAQMD BMPs for construction

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GHG-1 will reduce the effects of the proposed project related to greenhouse gas emissions but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact. The Applicant will be required to:

The project Applicant will be required to require all construction contractors to implement the BMPs recommended by BAAQMD to reduce GHG emissions. Emission reduction measures will include, at a minimum, the following three measures.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet.
- Recycle or reuse at least 50 percent of the construction waste or demolition materials.
- Use local-sourced building materials of at least 10 percent of total.

Remaining Impacts: Remaining impacts related to greenhouse gas emissions will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to greenhouse gas emissions. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Transportation/Traffic

Impact TRA-1[F]: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

Potential Impact: The potential impacts related to construction traffic are discussed beginning at page 3.11-22 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. The project would result in temporarily increased traffic volumes associated with construction traffic on local routes and on regional route I-580/I-205 in the project vicinity.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.11-27 will be implemented as provided and as required at the time of project approval:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will reduce the effects of the proposed project's construction traffic on local routes but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).

- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Remaining impacts related to construction traffic on local routes and on regional route I-580/I-205 in the project vicinity will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to construction traffic on local routes and on regional route I-580/I-205 in the project vicinity. There are no

other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact TRA-2[F]: 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 for designated roads or highways

Potential Impact: The potential impacts related to peak period construction-related traffic trips on CMP-designated deficient roads are discussed beginning at page 3.11-28 of the draft EIR and are further clarified in Chapter 3, *Responses to Comments*, of the final EIR. The project's construction-related vendor / haul truck trips to would affect traffic flow and safety concerns on roadway segments (I-580, I-238, and I-880 west of the project vicinity, and on I-5 and I-205 east of the project vicinity) that are CMP-designated as deficient or operate at LOS F during peak AM and PM travel periods.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.11-27 will be implemented as provided and as required at the time of project approval:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will reduce the effects of the proposed project's construction traffic on local routes but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.

- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Remaining impacts related to construction traffic on CMP-designated deficient roadways will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to construction traffic on CMP-designated deficient roadways. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact TRA-4[F]: Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

Potential Impact: The potential impacts related to traffic hazards are discussed beginning at page 3.11-30 of the draft EIR. The project's construction-related traffic would have the potential to result in traffic hazards or incompatible uses (e.g., large, slow moving vehicles) on local county roads used for access to project area as well as contribute to road deterioration or damage associated with on-going increased use of these roadways for the duration of construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.11-30 will be implemented as provided and as required at the time of project approval:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will reduce the effects of the proposed project's construction traffic on local routes but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).

- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Remaining impacts related to hazards associated with construction traffic on local routes will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to hazards associated with construction traffic on local routes. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Impact TRA-6[F]: Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

Potential Impact: The potential impacts related to bicycle facilities are discussed beginning at page 3.11-31 of the draft EIR. The project's construction-related lane closures, detours, and the presence of heavy construction vehicles on local bicycle routes, have the potential to cause short-term disruption of these routes and safety concerns for any bicyclists who use the routes.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.11-31 will be implemented as provided and as required at the time of project approval:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will reduce the effects of the proposed project's construction traffic on local routes but will not mitigate this impact to a less-than-significant level, as there is no feasible way to avoid the significant impact.

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).

- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Remaining impacts related to construction traffic on local bicycle routes will be significant and unavoidable.

Overriding Considerations: As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the Full Repower project that override the remaining significant and unavoidable impacts related to construction traffic on local bicycle routes. There are no other feasible mitigation measures, or changes to the project that would reduce this impact to a less than significant level.

Findings and Recommendations Regarding Significant Impacts Which are Mitigated to a Less-Than-Significant Level

Aesthetics

Impact AESTH-1[F]: Temporary visual impacts caused by construction activities

Potential Impact: The potential visual impacts related to construction activities are discussed beginning at page 3.1-15 of the draft EIR. Construction of the Full Repower would cause temporary changes in views of and from the project area.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.1-15 will be implemented as provided and as required at the time of project approval:

MM AESTH-1: Limit construction to daylight hours

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigation recommended by Mitigation Measure AESTH-1 will ensure that the construction-related visual impacts will be mitigated to a less-than-significant level. The project Applicant will be required to limit construction activities to weekdays during daylight hours.

Remaining Impacts: Any remaining construction-related visual impacts will be less than significant.

Impact AESTH-5[F]: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area

Potential Impact: The potential visual impacts related to construction activities are discussed beginning at page 3.1-17 of the draft EIR. Construction of the Initial Repowerwould cause temporary changes in views of and from the project area.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.1-17 and 3.1-18 will be implemented as provided and as required at the time of project approval:

MM AESTH-5[F]: Minimize exterior and interior lighting fixtures to those needed to ensure safety and security

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigation recommended by Mitigation Measure AESTH-5[F] will ensure that the nighttime exterior and interior lighting associated with the new O&M building will be mitigated to a less-than-significant level. The project Applicant will be required to design and install limited O&M building to meet appropriate safety and security requirements in compliance with International Dark-Sky Association approved fixtures.

Remaining Impacts: Any remaining lighting impacts will be less than significant.

Air Quality

Impact AQ-2[F]: Temporary visual impacts caused by construction activities

Potential Impact: The potential impacts related to air quality violations are discussed beginning at page 3.3-33 of the draft EIR. Construction-related exhaust emissions would exceed the BAAQMD threshold for for NOx.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.3-25 through 3.3-26 will be implemented as provided and as required at the time of project approval:

MM AQ-2: Implement basic BAAQMD construction mitigation measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure AQ-2 will ensure that the impacts associated with construction-related NOx emissions will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The following basic construction mitigation measures, as put forth in BAAQMD's CEQA Guidelines, shall be included in the project design and implemented during construction.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Remaining Impacts: Any remaining impacts related to construction-related NOx emissions will be less than significant.

Impact BIO-1[F]: Project construction could have direct or indirect impacts on special-status plants

Potential Impact: The potential impacts related to special-status plants are discussed beginning at page 3.4-60 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on special-status plants.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-33 through 3.4-37 will be implemented as provided and as required at the time of project approval:

MM BIO-1a: Conduct surveys to determine the presence or absence of special-status plant species

MM BIO-1b: Avoid and minimize impacts on special-status plant species by establishing activity exclusion zones, where feasible

MM BIO-1c: Compensate for impacts on special-status plant species

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1a through BIO-1f will ensure that the impacts on special-status plants will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The Applicant shall conduct spring surveys for the special-status plant species within and adjacent (i.e., within 250 feet) to all areas of proposed temporary or permanent disturbance prior to construction-related activities. All surveys shall be conducted by qualified biologists using the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Game 2009) during the season that special-status plant species would be evident and identifiable, i.e., during their blooming season. Mitigation Measure BIO-1b will apply when the spring surveys determine that any special-status plant species is present

Where surveys determine that a special-status plant species is present in or adjacent to a project parcel, direct and indirect impacts of the project on the species (e.g., heartscale and/or other species detected as a result of surveys conducted in compliance with Mitigation Measure BIO-1a) shall be avoided where feasible through the establishment of activity exclusion zones, within which no ground-disturbing activities shall take place, including construction of new facilities, construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species shall be established prior to construction activities around each occupied habitat site, the boundaries of which shall be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones shall not be required if no construction-related disturbances would occur within 250 feet of the occupied habitat site. The size of activity exclusion zones may be reduced through consultation with a

qualified biologist and with concurrence from CDFW based on site-specific conditions. Mitigation Measure BIO-1c will apply when activity exclusion zones are not feasible (i.e., footprint of new turbine foundations cannot be moved or adjusted).

Where avoidance of impacts on a special-status plant species is infeasible, loss of individuals or occupied habitat of a special-status plant species occurrence shall be compensated for through the acquisition, protection, and subsequent management in perpetuity of other existing occurrences at a 2:1 ratio (i.e., preserving two existing similar occurrences per individual similar occurrence impacts). Prior to implementing compensation measures, the Applicant shall provide detailed information to the lead agency and CDFW on the location of the preserved occurrences, quality of the preserved habitat, provisions for protecting and managing the areas in-perpetuity, responsible parties, and other pertinent information that demonstrates the feasibility of the compensation.

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.

- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Remaining Impacts: Any remaining impacts related to special-status plants will be less than significant.

Impact BIO-2[F]: Construction of the proposed project has the potential to directly or indirectly affect sensitive natural communities

Potential Impact: The potential impacts related to sensitive natural communities are discussed beginning at page 3.4-61 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on wetlands and other sensitive natural communities present in the project area such as alkali grassland.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-37 and 3.4-38 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-2: Compensate for the loss of alkali meadow habitat

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f and BIO-2 will ensure that the impacts on sensitive natural communities will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to

determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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

project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.

- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

If alkali meadow habitat is filled or disturbed as part of the project, the Applicant shall compensate for the loss of this habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, off-site restoration, or mitigation credits. The Applicant shall provide the lead agency with proof of the pertinent state and federal agencies' approvals of the compensation and any related permits.

Remaining Impacts: Any remaining impacts related to sensitive natural communities will be less than significant.

Impact BIO-3[F]: Construction of the proposed project has the potential to affect wetlands and other waters of the United States

Potential Impact: The potential impacts related to wetlands and other waters of the United States are discussed beginning at page 3.4-62 of the draft EIR. Ground-disturbing activities during project construction could result in direct and indirect impacts on aquatic resources.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-38 through 3.4-40 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-3a: Identify and delineate waters of the United States and waters of the State (including wetlands)

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-3c: Compensate for unavoidable impacts on waters of the United States

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d, BIO-1e, and BIO-3a through BIO-3c will ensure that the impacts on wetlands and other waters of the United States will be mitigated to a less-than-significant level. The Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.

- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

Prior to construction activities and final siting of individual work areas, the Applicant will retain a qualified wetland ecologist (i.e., a wetland ecologist with previous experience conducting wetland delineations in the region) to identify areas that could qualify as waters of the United States and waters of the State, including wetlands, assuming such features exist within or adjacent to work areas identified for each project element. Wetlands will be identified using both the USACE and USFWS/CDFW definitions of wetlands. USACE jurisdictional wetlands will be delineated using the methods outlined in the 1987 Corps of Engineers Wetlands Delineation

Manual (Environmental Laboratory 1987) and where appropriate, using the updated methods in the Arid West Supplement (U.S. Army Corps of Engineers 2008) to the 1987 manual. The jurisdictional boundary of other waters of the United States will be identified based on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 CFR 328.3[e]). This information will be mapped and documented in a wetland delineation report and submitted to USACE with a copy provided to the lead agency.

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

If wetlands are filled or disturbed as part of the project, including situations where avoidance or minimization is infeasible, the Applicant shall compensate for the loss of wetland habitat to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, and USACE). The compensation shall be at a minimum 1:1 ratio (1 acre restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, off-site restoration, or mitigation credits. If onsite or off-site restoration is chosen, a restoration and monitoring plan shall be developed and implemented. The plan shall describe how wetlands shall be created and monitored over a minimum period of time and will be developed in consultation with the responsible agencies (e.g., CDFW, USFWS, and USACE). The plan will include restoration success criteria based on the actual impacts of the project to ensure that

functions and values of the wetlands are replaced. At a minimum, the plan will include requirements to monitor restoration areas annually in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the wetlands meet the restoration goals outlined in the plan. Additionally, the plan will include remedial measures to ensure the mitigation is completed, including but not limited to, supplemental seeding, planting, weed control, etc. as determined to be necessary to achieve the success criteria, as well as additional monitoring as necessary to verify the success of the remedial measures.

The Applicant shall provide the lead agency with proof of the pertinent state and federal agencies' approval of the compensation and any related permits prior to commencement of project construction.

Remaining Impacts: Any remaining impacts related to wetlands and other waters of the United States will be less than significant.

Impact BIO-4[F]: Potential disturbance of vernal pool fairy shrimp, longhorn fairy shrimp, and vernal pool tadpole shrimp and their habitat

Potential Impact: The potential impacts related to vernal pool fairy shrimp, longhorn fairy shrimp, vernal pool tadpole shrimp and their habitat are discussed beginning at page 3.4-63 of the draft EIR. Construction and O&M activities within the project area could result in indirect effects on the federally listed longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp (vernal pool branchiopods) or their habitats. Changes in hydrology or sedimentation of habitat from erosion associated with Initial Repower construction could alter the suitability of habitat for vernal pool branchiopods.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39, and 3.4-41 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-4: Implement measures to avoid, minimize, and mitigate for potential impacts on longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b, and BIO-4 will ensure that the impacts on vernal pool branchiopods will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No

more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

The following AMMs will be implemented during construction to ensure that repowering activitiesdo not have an adverse impact on listed vernal pool branchiopods. These measures are based on measures from the Conservation Strategy, with some modifications and additions. Additional conservation measures or conditions of approval may be required by applicable project permits (e.g., ESA incidental take permit).

- Ground disturbance within 250 feet of suitable vernal pool branchiopod habitat (i.e., ponds, vernal pools) will be avoided from the first day of the first significant rain (1 inch or greater)

until June 1, or until pools remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.

- Locate staging areas at least 250 feet from suitable vernal pool branchiopod habitat (i.e., ponds, vernal pool).
- If suitable vernal pool brachiopod habitat is present within the work area or within 250 feet of the work area, a qualified biologist will stake and flag an exclusion zone prior to construction activities. The exclusion zone will be fenced with orange construction zone and erosion control fencing (to be installed by construction crew). The exclusion zone will encompass the maximum practicable distance from the worksite and at least 250 feet from the aquatic feature wet or dry.
- No herbicide will be applied within 100 feet of aquatic habitat, except when applied to cut stumps or frilled stems or injected into stems. No broadcast applications will be applied.
- Avoid modifying or changing the hydrology of aquatic habitats.
- Install utility collection and communication lines across ephemeral drainages by directional boring or overheading and/or rerouting lines around or over wetlands and ponds, where feasible.

If all potential indirect effects cannot be avoided, the Applicant will consult with USFWS before construction occurs. Additional conservation measures or conditions of approval, in addition to the measures listed above, may be required in applicable project permits (e.g., ESA incidental take permit). These measures may include, increased exclusion zones and additional erosion control measures.

Remaining Impacts: Any remaining impacts related to vernal pool branchiopods will be less than significant.

Impact BIO-5[F]: Potential disturbance or mortality of and loss of suitable habitat for California tiger salamander and California red-legged frog

Potential Impact: The potential impacts related to California tiger salamander and California red-legged frog are discussed beginning at page 3.4-64 of the draft EIR. Construction activities such as excavation, grading, or stockpiling of soil, could fill, remove or otherwise alter suitable habitat for, or result in injury or mortality of California tiger salamander and California red-legged frog. O&M activities such as travel on maintenance roads during the rainy season or when amphibians are dispersing could result in mortality of individuals. Road and firebreak maintenance may also result in degradation of habitat or injury or mortality of special-status amphibians.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39, and 3.4-43 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-5: Implement measures to avoid, minimize, and mitigate for potential impacts on California tiger salamander and California red-legged frog

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b and BIO-5 will ensure that impacts on California tiger salamander and California red-legged frog will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more

aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.

- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

Where suitable aquatic (ponds, perennial wetland drainages) or upland (grassland) habitat for California tiger salamander and California red-legged frog occurs within proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an adverse impact on these species. These measures are based on measures from the Conservation Strategy, with some modifications and additions. Implementation of some of these measures (i.e., relocation of listed species, excavation to install exclusion fencing) could result in take and will require that the Applicant consult with USFWS (California red-legged frog and California tiger salamander) and CDFW (California tiger salamander only) before construction begins. Additional conservation measures or conditions of approval, in addition to the measures listed below, may be required in applicable project permits (e.g., ESA incidental take permit).

- Direct impacts on potential breeding ponds will be avoided.
- Ground-disturbing activities within upland will be limited to dry weather between April 15 and October 31. No ground-disturbing work will occur during wet weather. Wet weather is defined as when there has been 0.25 inch of rain in a 24-hour period. Ground-disturbing activities halted due to wet weather may resume when precipitation ceases and the National Weather Service 72-hour weather forecast indicates a 30 percent or less chance of precipitation. No ground-disturbing work will occur during a dry-out period of 48 hours after the above referenced wet weather. If construction would need to continue past October 31, the Applicant will request an authorization from USFWS and CDFW to extend the work period.
- Where applicable, barrier fencing will be installed around the worksite to prevent amphibians from entering the work area. Barrier fencing will be removed within 72 hours of completion of work.
- Before construction begins, a qualified biologist will locate appropriate relocation areas and prepare a relocation plan for special-status amphibians that may need to be moved during construction. The proponent will submit this plan to USFWS and CDFW for approval prior to the start of construction.
- A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing activities (including equipment staging, vegetation removal, grading). The biologist will survey the work area and all suitable habitat within 300 feet of the work area. If individuals (including adults, juveniles, larvae, or eggs) are found, work will not begin until USFWS and/or CDFW is contacted to determine if moving these life-stages is appropriate. If relocation is deemed necessary, it will be conducted in accordance with the relocation plan. Incidental take permits are required for relocation of California tiger salamander (USFWS and CDFW) and California red-legged frog (USFWS).
- No monofilament plastic mesh or line will be used for erosion control.
- All construction activity will terminate 30 minutes before sunset and will not resume until 30 minutes after sunrise during the migration/active season from November 1 to June 15. Sunrise

and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located.

- To prevent inadvertent entrapment of special-status amphibians during construction, all excavated, steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected by a qualified biologist prior to being filled.
- Work crews or onsite biological monitor will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for amphibians that may have become trapped or are seeking refuge.
- If special-status amphibians are found in the work area during construction and cannot or do not move offsite on their own, a USFWS and/or CDFW-approved biologist, will trap and move special-status amphibians in accordance with the relocation plan.

If all potential direct and indirect impacts on California tiger salamander and California red-legged frog cannot be avoided, the Applicant will consult with USFWS and CDFW under the ESA and CESA before construction can occur. Loss of habitat for California tiger salamander and California red-legged frog will be compensated for in accordance with the standardized mitigation ratios developed for the Conservation Strategy (Tables 3-7 and 3-8 of the Conservation Strategy). Based on the location of the impact site (proposed project area), which does not occur within designated critical habitat for either species and is within the California tiger salamander north mitigation area, the mitigation ratio would vary between 2.5:1 and 4:1 (2.5 to 4:1 acres of mitigation lands for every 1 acre affected). Because proposed habitat compensation would be mitigated consistent with the Conservation Strategy, which was developed in coordination with USFWS and CDFW, the proposed compensation is expected to fully mitigate for direct impacts associated with repowering.

Remaining Impacts: Any remaining impacts related to California tiger salamander and California red-legged frog will be less than significant.

Impact BIO-6[F]: Potential disturbance or mortality of and loss of suitable habitat for Pacific pond turtle

Potential Impact: The potential impacts related to Pacific pond turtle are discussed beginning at page 3.4-65 of the draft EIR. Construction activities within the project area could result in direct effects on Pacific pond turtle or its habitats.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37, 3.4-39, and 3.4-45 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-3b: Avoid and minimize disturbance of waters of the United States, including wetland communities

MM BIO-6: Conduct preconstruction surveys for Pacific pond turtle and monitor construction activities if turtles are observed

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-3b, and BIO-6 will ensure that the impacts on Pacific pond turtle will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the

appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

The Applicant will avoid and minimize impacts on delineated wetlands and other waters of the United States (creeks and streams) by implementing the following measures.

- Redesign or modify the location of work areas to avoid direct and indirect impacts on wetland habitats.
- Protect wetland habitats that occur near the project area by installing fencing around the environmentally sensitive area at least 20 feet from the edge of the wetland. Depending on site-specific conditions and permit requirements, this buffer may be wider than 20 feet (e.g., 250 feet for seasonal wetlands considered special-status wildlife habitat). The location of the fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits decommissioning- and reclamation-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area.
- Stabilize exposed slopes and streambanks immediately upon completion of decommissioning and reclamation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-program condition and that reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.

- During decommissioning and reclamation, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of drainages in a manner that minimizes disturbance of the drainage bed and bank.

Where suitable upland habitat (grasslands within 1,300 feet of ponds, drainages, or perennial wetland drainages) for Pacific pond turtle occurs within proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on Pacific pond turtle.

- One week before and within 24 hours of beginning work in or adjacent to suitable aquatic habitat (ponds, drainages), a qualified biologist (one who is familiar with different species of turtles) will conduct surveys for Pacific pond turtle. The surveys should be timed to coincide with the time of day and year when turtles are most likely to be active (during the cooler part of the day between 8 a.m. and 12 p.m. during spring and summer). Prior to conducting the surveys, the biologist should locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles. Each survey should include a 30-minute wait time after arriving onsite to allow startled turtles to return to open basking areas. The survey should consist of a minimum 15 minute observation time per area where turtles could be observed.
- If western pond turtles are observed during either survey, a biological monitor will be present during construction activities in the aquatic habitat where the turtle was observed. The biological monitor also will be mindful of suitable nesting and overwintering areas in proximity to suitable aquatic habitat and periodically inspect these areas for nests and turtles.
- If one or more western pond turtles are found in the work area during construction and cannot or do not move offsite on their own, a qualified biologist will remove and relocate the turtle to appropriate aquatic habitat outside and away from the construction area. Relocation of western pond turtle requires a letter from CDFW authorizing this activity.

Remaining Impacts: Any remaining impacts related to Pacific pond turtle will be less than significant.

Impact BIO-7[F]: Potential disturbance or mortality of and loss of suitable habitat for Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip

Potential Impact: The potential impacts related to Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip are discussed beginning at page 3.4-66 of the draft EIR. Construction activities within the project area could result in direct effects on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip or their habitat (annual grasslands within the project area).

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37 and 3.4-46 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-7: Implement measures to avoid, minimize, and mitigate for potential impacts on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f and BIO-7 will ensure that the impacts on Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is

observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (annual grassland) for Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip is identified within proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on these species. These measures are based on measures from the EACCS, with some modifications and additions. Implementation of some of these measures for the Alameda whipsnake would only apply if required by USFWS or CDFW after consultation under ESA or CESA. Additional conservation measures or conditions of approval may be required in applicable project permits (i.e., ESA incidental take permit).

- A qualified biologist will conduct preconstruction surveys immediately prior to ground-disturbing active-ties (including equipment staging, vegetation removal, grading) associated with repowering. If Blainville's horned lizard, Alameda whipsnake, or San Joaquin coachwhip are found, work will not begin until they are moved out of the work area to a USFWS- and/or CDFW-approved relocation site. Incidental take permits from USFWS and CDFW are required for relocation of Alameda whipsnake. Relocation of Blainville's horned lizard and San Joaquin coachwhip requires a letter from CDFW authorizing this activity.
- No monofilament plastic mesh or line will be used for erosion control.
- Where applicable, barrier fencing (sediment control material or similar) material will be used to exclude Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip. Barrier fencing will be removed within 72 hours of completion of work.
- Work crews or an on-site biological monitor will inspect open trenches, pits, and under construction equipment and materials left onsite for special-status reptiles each morning and evening during construction.

- Vegetation within the proposed work area will be removed prior to grading. Vegetation outside the work area will not be removed. All vegetation removal will be monitored by the qualified biologist to minimize impacts on special-status reptiles.
- If special-status reptiles are found in the work area during construction and cannot or do not move offsite on their own, a USFWS- and/or CDFW-approved biologist will trap and move special-status reptiles to a USFWS- and/or CDFW-approved relocation area.

If all potential direct impacts on Alameda whipsnake cannot be avoided consultation with USFWS and CDFW under the ESA and CESA will be required before construction can occur. Loss of habitat for Alameda whipsnake will be compensated for in accordance with the standardized mitigation ratios developed for the Conservation Strategy (Table 3-9 of the Conservation Strategy). The Applicant could acquire parcels, through fee title purchase and/or conservation easements, where known populations occur. Similarly, acquisition or protection of parcels that include parts of important linkages as described in the Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California (U.S. Fish and Wildlife Service 2002b), may be approved as mitigation for this species. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW and USFWS have reviewed and approved the proposed compensation plan. Because proposed habitat compensation would be mitigated consistent with the Conservation Strategy, which was developed in coordination with USFWS and CDFW, the proposed compensation would fully mitigate for direct impacts associated with repowering.

Remaining Impacts: Any remaining impacts related to Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip will be less than significant.

Impact BIO-8[F]: Potential construction-related disturbance or mortality of special-status and non-special-status migratory birds

Potential Impact: The potential impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds are discussed beginning at page 3.4-67 of the draft EIR.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37 and 3.4-48 through 3.4-50 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-8a: Implement measures to avoid and minimize potential impacts on special-status and non-special-status nesting birds

MM BIO-8b: Implement measures to avoid and minimize potential impacts on western burrowing owl

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f, BIO-8a and BIO-8b will ensure that the impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.
- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.

- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.

- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (grassland, shrubs, trees) is present for tree/shrub- and ground-nesting migratory birds in and within 0.5 mile of proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an adverse impact on nesting special-status and non-special-status birds.

- Remove suitable nesting habitat (grassland or other ground vegetation) during the non-breeding season (September 1 through January 31) for nesting birds.
- 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 0.5-mile buffer area will be surveyed for Swainson's hawk nests. The construction area and a 500-foot buffer will be surveyed for all other raptors and a 50-foot buffer will be surveyed for all other bird species. Additional preconstruction surveys for nesting birds prior to 7 days before construction are recommended to identify any areas that may need to be avoided and would affect the construction schedule or plans.
- If an active nest is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1 to August 31), a no-activity zone will be established by a qualified biologist in coordination with USFWS and/or CDFW. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity zone will be developed based on the type and extent of the proposed activity in proximity to the nest, the duration and timing of the activity, the sensitivity and habituation of the species nesting, and the dissimilarity of the proposed activity to background activities. The no-activity zone will be large enough to avoid nest abandonment and will range between 50 feet and 1,000 feet from the nest, or as otherwise required by USFWS and/or CDFW.

Where suitable habitat (grasslands) is present for western burrowing owl in and within 500 feet of proposed work areas, the following AMMs will be implemented to ensure that the repowering activities do not have an adverse impact on burrowing owls. The following measures are

consistent with the EACCS and CDFW's revised *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 2012).

- 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.
- To the maximum extent feasible (i.e., 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).
- If an active burrow is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1– August 31), a no-activity zone will be established by a qualified biologist and 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 through 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 burrowing owl behavior will evaluate site-specific conditions and in coordination with CDFW, recommend a smaller buffer (if possible) that still minimizes the potential to disturb the owls (and is deemed to still allow reproductive success during the breeding season). The site-specific buffer 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.
- If burrowing owls are present within the direct disturbance area and cannot be avoided during non-breeding season (generally September 1 through January 31), passive relocation techniques (e.g., installing one-way doors at burrow entrances) shall be used instead of trapping. Passive relocation may also be used during the breeding season (February 1 through August 30) if a qualified biologist, coordinating with CDFW, determines through site surveillance and/or scoping that the burrow is not occupied by burrowing owl adults, young, or eggs by. Passive relocation would be accomplished by installing one-way doors (e.g., modified dryer vents or other CDFW approved method). The one-way doors shall be left in place for a minimum of one week and monitored daily to insure that the owls have left the burrow. Excavation of the burrow shall be conducted using hand tools and a section of flexible plastic pipe (at least 3 inches in diameter) shall be inserted into the burrow tunnel to maintain an escape route for any animals that may be inside the burrow.
- Avoid destruction of unoccupied burrows outside the work area and place visible markers near burrows to ensure they are not collapsed.
- Conduct ongoing surveillance of the project parcels for burrowing owls during project activities. If additional owls are observed using burrows within 500 feet of construction, the onsite biological monitor will determine if the owl(s) would be affected by future construction and if additional exclusion zones are required.

Remaining Impacts: Any remaining impacts of construction-related disturbance or mortality of special-status and non-special-status migratory birds will be less than significant.

Impact BIO-9[F]: Permanent and temporary loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds

Potential Impact: The potential impacts related to permanent and temporary loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds are discussed beginning at page 3.4-68 of the draft EIR. Implementation of the Initial Repower would result in the temporary and permanent loss of grassland that provides suitable foraging habitat for Swainson's hawk, burrowing owl, and many other special-status and non-special status migratory birds.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-37 and 3.4-50 will be implemented as provided and as required at the time of project approval:

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-9: Compensate for the permanent loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1f and BIO-9 will ensure that the permanent and temporary impacts on the loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the

restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Permanent removal of suitable foraging habitat for Swainson's hawks will be mitigated by providing offsite habitat management lands as described in CDFW's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* (California Department of Fish and Game 1994). The final acreage of off-site management lands to be provided will depend on the distance between the project area and the nearest active nest site. The mitigation ratio varies from 0.5:1 to 1:1(dependent on the location of the closest known nest site) of habitat preserved for each acre lost. In lieu of acquiring offsite mitigation lands, the Applicant may purchase mitigation credits for Swainson's hawk foraging habitat from a lead agency-approved mitigation or conservation bank that sell upland habitat credits with equal or similar habitat function to lands that are permanently affected by the project. Information on the nearest nest will be collected during preconstruction Swainson's hawk surveys conducted under Mitigation Measure BIO-8a, to determine the appropriate mitigation ratio. If no active nests are found during this survey, a search of the CNDDB will be conducted, and CDFW will be contacted to determine the nearest active nest. The protection of this habitat will also compensate for the loss of foraging habitat for other special-status and non-special-status bird species that depend on grassland for foraging habitat.

If construction activities will result in the removal of occupied burrowing owl habitat (determined during preconstruction surveys described in Mitigation Measure BIO-8a), this habitat loss will be mitigated by providing mitigation land as described in CDFW's *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Game 2012:11–13). The standardized mitigation ratios for non-listed species developed for the Conservation Strategy will be used for the loss of habitat for burrowing owl (Table 3-10 in the Conservation Strategy).

Remaining Impacts: Any remaining impacts related to the permanent and temporary impacts on the loss of foraging habitat for Swainson's hawk, western burrowing owl, and other special-status and non-special-status birds will be less than significant.

Impact BIO-10[F]: Potential injury or mortality of and loss of habitat for San Joaquin kit fox and American badger

Potential Impact: The potential impacts related to the potential injury or mortality of and loss of habitat for San Joaquin kit fox and American badger are discussed beginning at page 3.4-68 of the draft EIR. Construction activities within the project area could result in direct effects on San Joaquin kit fox and American badger or their habitat (grassland). mortality or injury of individuals from construction vehicles or heavy equipment, direct mortality or injury of individuals from den collapse and subsequent suffocation, temporary harassment from noise and human presence associated with construction activities, and harassment of individuals by construction personnel. Additionally,

exposed pipes, large excavated holes, or trenches that are left open after construction has finished for the day could entrap San Joaquin kit foxes or American badgers. O&M activities, such as road and firebreak maintenance, may also result in injury or mortality of individuals.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.4-35 through 3.4-37 and 3.4-52 through 3.4-55 will be implemented as provided and as required at the time of project approval:

MM BIO-1d: Implement general avoidance and minimization measures from the Conservation Strategy

MM BIO-1e: Retain a biological monitor during ground-disturbing activities within environmentally-sensitive habitat areas

MM BIO-1f: Restore disturbed annual grasslands

MM BIO-10: Implement measures to avoid, minimize, and mitigate for potential impacts on San Joaquin kit fox and American badger

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures BIO-1d through BIO-1f and BIO-10 will ensure that the impacts on San Joaquin kit fox and American badger will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The general avoidance and minimization measures (AMMs) from the Conservation Strategy, with some modifications, have been included to avoid and minimize overall biological resources impacts. The general avoidance and minimization measures to be implemented include the following.

- Employees and contractors performing decommissioning and reclamation activities will receive environmental sensitivity training by a qualified biologist prior to commencing work. Training will include review of environmental laws and AMMs that must be followed by all personnel to reduce or avoid effects on special-status species during construction activities.
- Environmental tailgate trainings will take place on an as-needed basis in the field during decommissioning, construction, and reclamation activities. These trainings will be provided by the onsite biological monitor and will include a brief review of the biology of the covered species and guidelines that must be followed by all personnel to reduce or avoid negative effects on these species during decommissioning, construction, and reclamation. Directors, managers, superintendents, and the crew leaders will be responsible for ensuring that crewmembers comply with the guidelines.

The following will not be allowed at or near work sites for project activities: trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets.

- Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Offroad vehicle travel will be avoided.

- Vehicles will not exceed a speed limit of 15 mph on unpaved roads within natural land cover types, or during offroad travel.
- Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., a created berm made of sandbags or other removable material) is constructed and refueling is restricted to that area.
- Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites.
- To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw.
- 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. If an animal is observed to be occupying any construction materials that must be moved, the animal(s) will be allowed to passively leave on their own or the monitoring biologist will coordinate with the appropriate agency (USFWS for federally listed species and CDFW for all other species) to determine if trapping, rescue, or other measures are necessary and appropriate given the species and situation.
- Erosion control measures will be implemented during decommissioning, construction, and reclamation activities to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the project parcels. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.
- Material will be stockpiled only in areas that do not support special-status species or sensitive habitats.
- Grading will be restricted to the minimum area necessary.
- Prior to ground disturbing activities in sensitive habitats, construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats.
- Significant earth moving-activities will not be conducted in riparian areas within 24 hours of predicted storms or after major storms (defined as 1-inch of rain or more).
- Trenches and pits will be backfilled as soon as possible. Trenches that are left open overnight will be searched each day prior to construction activities to ensure no covered species are trapped. Earthen escape ramps will be installed at intervals prescribed by a qualified biologist. Work will not continue until trapped animals have moved out of open trenches.
- The Applicant will include special provisions in the bid solicitation package and final construction contract(s) that specify all relevant permit requirements and project AMMs that must be implemented during construction.

The Applicant will retain a qualified biologist (as determined by Alameda County) to conduct periodic monitoring of decommissioning and construction activities that occur adjacent to sensitive biological resources (e.g., special-status species, sensitive vegetation communities, wetlands). The biologist will assist the crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the Applicant or its contractors maintain exclusion areas adjacent to sensitive

biological resources, and for documenting compliance with all biological resources–related mitigation measures.

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 turbine pad areas are restored to preconstruction conditions. The Grassland Restoration Plan will include but not be limited to the following measures.

- 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 and stockpiled for use in restoration. Imported fill soils will be limited to weed-free topsoil similar in texture, chemical composition, and pH to soils found at the reference 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 project area and should include native or naturalized, non-invasive species sourced within the project area or within 50 miles of the project area.
- Reclaimed roads will be restored in such a way as to permanently prevent vehicular travel.

The plan will include a requirement to monitor restoration areas annually (between March and May) in years 1–3 following the year of restoration. At the end of 3 years, the restoration will be considered successful if the percent cover for restored areas is 70 percent absolute cover of the planted/seeded species compared to the percent absolute cover of nearby reference sites. No more than 5 percent relative cover of the vegetation in the restoration areas will consist of species designated as invasive plants in Cal-IPC's California Invasive Plant Inventory Database (http://www.cal-ipc.org). Remedial measures will be employed by the Applicant if the restoration does not meet these success criteria. Remedial measures included in the plan will include supplemental seeding, weed control, etc. as determined necessary to achieve the long-term success criteria. Monitoring may be extended for 2 additional years if necessary to ensure achievement of the success criteria. 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. Prior to commencement of ground disturbing activities within the project area, the Applicant will provide evidence to the lead agency that CDFW has reviewed and approved of the Grassland Restoration Plan. Additionally, the Applicant will provide annual monitoring reports to the County by August 1 of each year, summarizing the monitoring results and any remedial measures implemented (if any are necessary).

Where suitable habitat (grassland) is present for San Joaquin kit fox or American badger on or within 200 feet of proposed work areas, the following AMMs will be implemented to ensure that repowering activities do not have an adverse impact on San Joaquin kit fox or American badger. These measures are based on measures from the EACCS, with some modifications and additions, and are consistent with the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox* (U.S. Fish and Wildlife Service 2011). Implementation of some of these measures (i.e., relocation of listed species, excavation to install exclusion fencing) could result in take and will require that the Applicant consult with USFWS and/or CDFW under the ESA and/or CESA for San Joaquin kit fox. Additional conservation measures, in addition to those measures listed below, or conditions of approval may be required in applicable project permits.

- The Applicant 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) in areas proposed for disturbance as well as a 200-foot buffer around the disturbance area. Resumes of biologists will be submitted to the USFWS for review and approval prior to the start of the survey. The biologist(s) will also survey for American badger dens in conjunction with the San Joaquin kit fox surveys.
- To the maximum extent feasible, suitable dens for San Joaquin kit fox and American badger will be avoided.
- As described in U.S. Fish and Wildlife Service 2011, the preconstruction San Joaquin kit fox 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 the San Joaquin kit fox. The biologist(s) will conduct den searches by systematically walking transects through project disturbance areas and a buffer area to be determined in coordination with USFWS and CDFW. Transect distance should be determined based on the height of vegetation such that 100 percent visual coverage of the project disturbance area is achieved. 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).
    - 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, or ground squirrel) that otherwise have appropriate characteristics for kit fox use; or a human-made structure that otherwise has appropriate characteristics for kit fox use.
    - Known den: Any existing natural den or manmade structure that is used or has been used at any time in the past by a San Joaquin kit fox. 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 *active* and *inactive* 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).
    - 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 and/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 human-made 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.
- Written results of the survey including the locations of any potential or known San Joaquin kit fox dens will be submitted to the USFWS within 5 days following the completion of the survey and prior to the start of ground disturbance and/or construction activities.

- After preconstruction den searches and before the commencement of construction activities, exclusion zones will be established as measured in a radius outward from the entrance or cluster of entrances of each den. Construction activities will be prohibited or greatly restricted within these exclusion zones to the extent avoidance is feasible. 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 as follows.
    - 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 at 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.
    - 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 infra-red 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: Potential dens can be removed (preferably by hand excavation) by biologist or under the supervision of a biologist without monitoring if authorized by USFWS and CDFG during ESA and CESA consultation. . If any den was considered a potential den but was later determined during monitoring or destruction to be currently or previously used by kit fox (e.g., kit fox sign is found inside), then all construction activities will cease and USFWS and CDFW will be notified immediately.
- Nighttime work will be minimized to the extent possible. The speed-limit will be reduced to 10 mph during nighttime work.

- A representative will be appointed by the Applicant who will be the contact for any employee or contractor who might inadvertently kill or injure a kit fox or finds a dead, injured, or entrapped kit fox. The representative will be identified during environmental sensitivity training (Mitigation Measure BIO-1d) and their name and phone number will be provided to USFWS and CDFW. Upon such incident or finding, the representative will immediately contact USFWS at (916) 414-6620 or (916) 414-6600 and CDFW at (916) 445-0045 (State Dispatch) and/or the local warden or Mr. Paul Hoffman, wildlife biologist, at (530) 934-9309.
- The Sacramento USFWS office and CDFW will be notified in writing within 3 working days of the accidental death or injury to a San Joaquin kit fox during proposed project-related activities. Notification must include the date, time, and location of the incident, and any other pertinent information.

Compensation for permanent loss of San Joaquin kit fox habitat will be required before construction can occur and the standardized mitigation ratios developed for the EACCS will be applied (Table 3-11 of the Conservation Strategy). The standardized mitigation ratios for non-listed species developed for the EACCS will be used for the loss of habitat for American badger (Table 3-10of the EACCS). Because proposed habitat compensation would be mitigated consistent with the EACCS, which was developed in coordination with USFWS and CDFW, the proposed compensation is expected to fully mitigate for direct impacts on San Joaquin kit fox (a state and federally endangered species), associated with repowering.

Remaining Impacts: Any remaining impacts related to San Joaquin kit fox and American badger will be less than significant.

Cultural Resources

Impact CUL-2[F]: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5

Potential Impact: The potential impacts related to changes in the significance of archaeological resources are discussed beginning at page 3.5-12 of the draft EIR. No archaeological resources were identified as a result of this study, but it is still possible that significant buried archaeological materials are present within the project area. Disturbance or destruction of these resources may result from ground-disturbing activities associated with construction of the Initial Repower.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.5-11 will be implemented as provided and as required at the time of project approval:

MM CUL-2: Stop work in case of accidental discovery of buried archeological resources

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure CUL-2 will ensure that the impacts on archaeological resources will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if avoidance is not possible, develop appropriate

treatment measures such as recordation and excavation, in consultation with the County. If the find is Native American in origin, consultation with the NAHC and local Native American representatives will be initiated.

Remaining Impacts: Any remaining impacts related to archaeological resources will be less than significant.

Impact CUL-3[F]: Disturb any human remains, including those interred outside of formal cemeteries

Potential Impact: The potential impacts related to disturbance of human remains are discussed beginning at page 3.5-12 of the draft EIR. Although no known human remains are present within the project area, it is possible that human remains, particularly those outside a designated cemetery, may be encountered during ground-disturbing activities associated with Initial Repower construction.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.5-11 through 3.5-12 will be implemented as provided and as required at the time of project approval:

MM CUL-3: Stop work in case of accidental discovery of buried human remains

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure CUL-3 will ensure that the impacts on human remains will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC Section 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- The Alameda County coroner has been informed and has determined that no investigation of the cause of death is required; and
- If the remains are of Native American origin,
- The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98, or
- The NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are

those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

Remaining Impacts: Any remaining impacts related to human remains will be less than significant.

Geology, Soils, and Paleontological Resources

Impact GEO-1[F]: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of rupture of a known fault

Potential Impact: The potential impacts related to rupture of a known fault are discussed beginning at page 3.6-20 of the draft EIR. If a turbine were constructed on a fault and the fault ruptured, the turbine could be damaged or collapse and possibly injure personnel in the immediate area. Although there are no known active faults in the area, the potentially active Midway fault crosses the west parcel and runs nearby the southeast parcel.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 will be implemented as provided and as required at the time of project approval:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).

- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to to rupture of a known fault will be less than significant.

Impact GEO-2[F]: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of strong seismic ground shaking

Potential Impact: The potential impacts related to strong seismic ground shaking are discussed beginning at page 3.6-21 of the draft EIR. The project area is in a seismically active area, with the potential for moderately strong ground shaking from sources such as the Greenville fault and the Calaveras fault. If turbine foundations were not designed to withstand this ground shaking, they could fail and cause damage to or collapse of the turbine towers.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 will be implemented as provided and as required at the time of project approval:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be

submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to strong seismic ground shaking will be less than significant.

Impact GEO-3[F]: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of seismic-related ground failure, including liquefaction and landslides

Potential Impact: The potential impacts related to seismic-related ground failure, including liquefaction and landslides, are discussed beginning at page 3.6-21 of the draft EIR. Construction in the project area could have the potential to expose persons or structures to landslides, either by

destabilizing existing slopes or by creating unstable (poorly designed or constructed) cut or fill slopes. If turbine foundations were not designed appropriately, land sliding could cause damage to or collapse of the turbine towers.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 will be implemented as provided and as required at the time of project approval:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).
- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the

project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to seismic-related ground failure, including liquefaction and landslides, will be less than significant.

Impact GEO-5[F]: Be located on expansive soil creating substantial risks to life or property

Potential Impact: The potential impacts related to expansive soil are discussed beginning at page 3.6-22 of the draft EIR. Expansive soils underlie most of the project area. If improperly designed or installed, turbine foundations, power collection systems, and communication lines could be subject to damage.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-16 through 3.6-17 will be implemented as provided and as required at the time of project approval:

MM GEO-1: Prepare a site-specific geotechnical report

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure GEO-1 will ensure that the impacts related to rupture of a known fault will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to any construction activities, 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, which will comply with all state and local code requirements, will be submitted to the County building department as part of the approval process. This report will address the following issues.

- Potential for surface fault rupture at turbine site location: The geotechnical report will investigate the Midway fault and determine whether it poses a risk of surface rupture. Turbine foundations will be sited according to recommendations in this geotechnical report.
- Strong ground shaking: The geotechnical report will analyze the potential for strong ground shaking in the project area, using accepted methodologies, and provide site-specific foundation design recommendations. The structural design requirements will be based on conformance with the most current version of the CBC, including applicable County amendments, to ensure that the project will withstand ground accelerations expected from known active faults.
- Slope failure: The geotechnical report will investigate the potential for slope failure (both seismically and nonseismically induced) and develop site-specific foundation plans engineered for the terrain, rock and soil types, and other conditions present at the project parcels. Site-specific engineering requirements for mitigation of slope failure will specify proven methods

generally accepted by registered engineers, including measures described in CGS Special Publication 117A (2008).

- Expansive soils: The geotechnical report will assess the soil types present at each project parcel and determine the best engineering designs to accommodate the soil conditions at the parcels.

Design requirements: Site-specific design to address the issues of surface fault rupture, strong ground motion, slope failure, and expansive soils will include final design parameters for earthwork, foundations, site preparation, structure, and infrastructure. The project structural engineer will review the site-specific design, provide additional design features, if necessary, to meet building code requirements, and incorporate all applicable design features from the investigation into the structural design plans to ensure that the final plans meet current building code requirements. Geologic hazards, including the potential for grading to create unstable cut or fill slopes, are addressed through the County's adopted building codes. The County enforces compliance with geotechnical report recommendations via the building permit process. Design and engineering recommendations in the geotechnical report will be implemented by the project proponent during construction. The County's registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report will review the geotechnical investigation, approve the final report, and require compliance with all geotechnical design features described in the report in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. The County building department personnel will review project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable building code requirements.

Remaining Impacts: Any remaining impacts related to expansive soil will be less than significant.

Impact GEO-6[F]: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Potential Impact: The potential impacts related to a unique paleontological resource or site or unique geologic feature are discussed beginning at page 3.6-22 of the draft EIR. Geologic units with potential to contain paleontological resources include all units in the project area because they are sedimentary rocks. If fossils are present in the project area, they could be damaged by earth-disturbing construction activities, such as excavation for foundations, placement of fills, trenching, and grading for road work and staging areas. The more extensive and deeper the earth-disturbing activity, the greater the potential for damage to paleontological resources.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.6-19 through 3.6-20 will be implemented as provided and as required at the time of project approval:

MM GEO-6a: Retain a qualified professional paleontologist to monitor significant ground-disturbing activities

MM GEO-6b: Educate construction personnel in recognizing fossil material

MM GEO-6c: Stop work if substantial fossil remains are encountered during construction

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures GEO-6a through GEO-6c will ensure that impacts on paleontological resources will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The Applicant will retain a qualified professional paleontologist as defined by the SVP's *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (2010) (Standard Procedures) to monitor activities with the potential to disturb sensitive paleontological resources. Data gathered during detailed design of the Initial Repower will be used to determine the activities that will require the presence of a monitor pursuant to SVP's Standard Procedures. In general, these activities include any ground-disturbing activities involving excavation deeper than 3 feet in areas with high potential to contain sensitive paleontological resources. Recovered fossils will be prepared so that they can be properly documented. Recovered fossils will then be curated at a facility that will properly house and label them, maintain the association between the fossils and field data about the fossils' provenance, and make the information available to the scientific community.

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.

If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, activities within a 100-foot radius 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 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.

Remaining Impacts: Any remaining impacts related to paleontological resources will be less than significant.

Hydrology and Water Quality

Impact WQ-1[F]: Violate any water quality standards or waste discharge requirements

Potential Impact: The potential impacts related to water quality standards and waste discharge requirements are discussed beginning at page 3.9-13 of the draft EIR. Construction activities would introduce the potential for increased erosion and sedimentation, with subsequent effects on drainage and water quality.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 will be implemented as provided and as required at the time of project approval:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 will ensure that the impacts on water quality standards and waste

discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If

necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to water quality standards and waste discharge requirements will be less than significant.

Impact WQ-3[F]: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite

Potential Impact: The potential impacts related to alteration of the existing drainage pattern in a manner that would result in substantial erosion or siltation onsite or offsite are discussed beginning at page 3.9-13 of the draft EIR. The Initial Repower would be constructed in an area with existing 1980s–'90s era turbines, and would result in minor alteration of topography and existing drainage patterns.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 will be implemented as provided and as required at the time of project approval:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 will ensure that the impacts on water quality standards and waste discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to alteration of the existing drainage pattern in a manner that would result in substantial erosion or siltation onsite or offsite will be less than significant.

Impact WQ-4[F]: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite

Potential Impact: The potential impacts related to increased rate or amount of surface runoff in a manner that would result in flooding onsite or offsite are discussed beginning at page 3.9-14 of the draft EIR. New buildings and other infrastructure can alter existing topography and impede existing drainage flows.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9, and 3.9-11 will be implemented as provided and as required at the time of project approval:

MM WQ-1: Comply with NPDES requirements

MM WQ-4: Comply with local hydrological and drainage requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 and WQ-4 will ensure that the impacts related to increased rate or amount

of surface runoff in a manner that would result in flooding onsite or offsite will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If

necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

The Applicant will perform a hydrological and drainage study for the Initial Repower according to the requirements of the Alameda County Hydrology and Hydraulic requirements, if necessary, and will design the Initial Repower so that the postconstruction volume and rate of drainage flows do not exceed preconstruction flows.

Remaining Impacts: Any remaining impacts related to increased rate or amount of surface runoff in a manner that would result in flooding onsite or offsite will be less than significant.

Impact WQ-5[F]: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff

Potential Impact: The potential impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff are discussed beginning at page 3.9-14 of the draft EIR. The minor increased impervious area associated with the project could increase the volume of surface runoff into surface waters and stormwater systems.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9, and 3.9-11 will be implemented as provided and as required at the time of project approval:

MM WQ-1: Comply with NPDES requirements

MM WQ-4: Comply with local hydrological and drainage requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measures WQ-1 and WQ-4 will ensure that the impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

The Applicant will perform a hydrological and drainage study for the Initial Repower according to the requirements of the Alameda County Hydrology and Hydraulic requirements, if necessary, and will design the Initial Repower so that the postconstruction volume and rate of drainage flows do not exceed preconstruction flows.

Remaining Impacts: Any remaining impacts related to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff will be less than significant.

Impact WQ-6[F]: Otherwise substantially degrade water quality

Potential Impact: The potential impacts related to degradation of water quality are discussed beginning at page 3.9-15 of the draft EIR.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.9-8 through 3.9-9 will be implemented as provided and as required at the time of project approval:

MM WQ-1: Comply with NPDES requirements

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure WQ-1 will ensure that the impacts on water quality standards and waste discharge requirements will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Project contractors will obtain coverage under the Construction General Permit before the onset of any construction activities where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley Water Board 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 Board.

Compliance and coverage with the *Storm Water Management Program* and Construction General 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.

BMPs to be implemented as part of the *Storm Water Management Program* and Construction General Permit (and SWPPP) may include the following practices.

- 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.

The contractor will select a combination of BMPs that can be expected to minimize runoff and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the Regional Water Board. The contractor will verify that a Notice of Intent 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 Regional Water Board immediately if there is a noncompliance issue and will require compliance. If necessary, Alameda County will require that additional BMPs be designed and implemented if those originally implemented do not achieve the identified performance standard.

Remaining Impacts: Any remaining impacts related to degradation of water quality will be less than significant.

Noise

Impact NOI-1[F]: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies

Potential Impact: The potential impacts related to increased noise levels are discussed beginning at page 3.10-21 of the draft EIR. Wind turbine noise from the Future Repower could result in noise that is greater than existing noise levels and would be in excess of applicable County noise standards for wind turbines.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.10-22 will be implemented as provided and as required at the time of project approval:

MM NOI-1[F]: Perform an acoustical evaluation and implement noise-reduction measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure NOI-1[F] will ensure that the impacts related to increased noise levels will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The Applicant will retain a noise specialist to conduct an acoustical evaluation of the entire project area. The acoustical evaluation will provide recommendations for measures that can be implemented to reduce noise levels to ensure compliance with applicable County noise standards[1]. Measures that could be implemented to ensure compliance may include but would not be limited to the following.

- Limiting the number of turbines that influence the noise level at any given residence.
- Modifying the operation of the turbines to reduce noise.
- Limiting operation of turbines at night.

Remaining Impacts: Any remaining impacts related to increased noise levels will be less than significant.

[1] County noise standards may be different from the current noise standards at the time of the Full Repower.

Impact NOI-3[F]: Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

Potential Impact: The potential impacts related to permanent increases in ambient noise levels are discussed beginning at page 3.10-22 of the draft EIR. Wind turbine noise from the Full Repower would likely result in noise levels greater than existing noise and would be a substantial permanent increase in ambient noise levels, in excess of levels existing without the project.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.10-22 will be implemented as provided and as required at the time of project approval:

MM NOI-1[F]: Perform an acoustical evaluation and implement noise-reduction measures

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure NOI-1[F] will ensure that the impacts related to permanent increases in ambient noise levels will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

The Applicant will retain a noise specialist to conduct an acoustical evaluation of the entire project area. The acoustical evaluation will provide recommendations for measures that can be implemented to reduce noise levels to ensure compliance with applicable County noise standards[2]. Measures that could be implemented to ensure compliance may include but would not be limited to the following.

- Limiting the number of turbines that influence the noise level at any given residence.
- Modifying the operation of the turbines to reduce noise.
- Limiting operation of turbines at night.

Impact NOI-4[F]: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Potential Impact: The potential impacts related to temporary or periodic increases in ambient noise levels are discussed beginning at page 3.10-23 of the draft EIR. Several residences are within several hundred feet of where turbine removal, installation, and restoration activities could occur. The results in Table 3.10-18 (page 3.10-20 of the draft EIR) indicate that these activities could result in noise that exceeds Alameda County Noise Ordinance standards during non-exempt hours.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at page 3.10-21 will be implemented as provided and as required at the time of project approval:

MM NOI-4: Employ noise-reducing practices during decommissioning

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure NOI-4 will ensure that the impacts related to temporary or periodic increases in ambient noise levels will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

[2] County noise standards may be different from the current noise standards at the time of the Full Repower.

The project Applicant will employ a combination of the following noise-reducing practices so that construction noise does not exceed Alameda County Noise Ordinance standards at the relevant property lines. Measures that can be used to limit noise include, but are not limited to those listed below.

- Prohibit noise-generating activities before 7 a.m. and after 7 p.m. Monday through Friday, and before 8 a.m. and after 5 p.m. on Saturday and Sunday.
- Locate equipment as far as practical from noise-sensitive uses.
- Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Use noise-reducing enclosures around noise-generating equipment where practicable.
- Implement other measures with demonstrated practicability in reducing equipment noise, upon prior approval by the County.

In no case will the Applicant be allowed to use gasoline or diesel engines without muffled exhausts.

Remaining Impacts: Any remaining impacts related to temporary or periodic increases in ambient noise levels will be less than significant.

Transportation/Traffic

Impact TRA-5[F]: Result in inadequate emergency access

Potential Impact: The potential impacts related to emergency access are discussed beginning at page 3.11-30 of the draft EIR. Slow-moving construction trucks could delay or obstruct the movement of emergency vehicles on county roads used for haul routes in the project area. In addition, if any lane/road closures are required during delivery of oversized loads, roadway capacity could be affected and potentially increase the response time for emergency vehicles if traveling through the area.

Mitigation Measure(s): The following mitigation measure(s), discussed in the draft EIR at pages 3.11-17 through 3.11-18 will be implemented as provided and as required at the time of project approval:

MM TRA-1: Develop and implement a construction traffic control plan

Findings: Based on the EIR and the entire record before the County, the County finds that:

Effects of Mitigation: Implementation of the mitigations recommended by Mitigation Measure TRA-1 will ensure that the impacts related to construction traffic on regional routes will be mitigated to a less-than-significant level. The project Applicant will be required to implement the following actions:

Prior to starting construction-related activities, the Applicant will be required to prepare and implement a Traffic Control Plan (TCP) that will reduce or eliminate impacts associated with the Initial Repower project. The TCP shall adhere to Alameda County and Caltrans requirements, and must be submitted for review and approval of the County Public Works Department prior to implementation. The TCP shall include the elements listed below. It is noted that the County and

Caltrans may require additional elements to be identified during their review and approval of the TCP.

- Schedule construction hours to avoid the construction workers commuting to/from the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Limit truck access to the project parcels during typical peak commute hours (7 a.m. to 9 a.m. and 4 p.m. to 6 p.m.).
- Require that written notification be provided to contractors regarding appropriate haul routes to and from the project area, as well as the weight and speed limits on local county roads used to access the project area.
- Ensure access for emergency vehicles to and through the project area at all times.
- If lane/road closures are required during construction, the Applicant or its contractor, will provide advance notice to local fire, police, and emergency service providers to ensure that alternative evacuation and emergency routes are designated to maintain service response times.
- Provide adequate onsite parking for construction trucks and worker vehicles.
- Require suitable public safety measures in the project area and at the entrance roads, including fences, barriers, lights, flagging, guards, and signs, to give adequate warning to the public, including bicyclists that may use the project area bike routes or other county roadways, of the construction and of any dangerous conditions that could be encountered as a result thereof.
- Complete road repairs on local public roads as needed during construction to prevent excessive deterioration. This work may include construction of temporary roadway shoulders to support any necessary detour lanes.
- Ensure bicycle access on local county roads used by construction haul vehicles, including providing temporary bike routes to ensure access throughout the construction period.
- Repair or restore the road and road right-of-way to its original condition or better upon completion of the work.
- Coordinate related construction activities, including construction schedule, anticipated truck traffic, haul routes, and the timing for delivery of materials, with Alameda County, San Joaquin County, Caltrans, and the affected cities—Oakland, Stockton, and Tracy—to identify and minimize overlap with other area construction projects and to determine construction delivery schedules to avoid peak period congestion on CMP-designated routes (I-580, I-238, I-880, I-5, I-205).
- Coordinate with local and regional bicycling organizations regarding routes, events, and tours that use roads in the project vicinity, such as the California Amgen Tour's use of Patterson Pass Road.
- Provide local city and county emergency service providers with notification of the construction activity details – schedule, haul routes, detour routes, Applicant and contractor contact names and phone numbers – prior to and ongoing throughout the construction period if any changes are made.

Remaining Impacts: Any remaining impacts related to emergency access will be less than significant.

Findings and Recommendations Regarding Impacts which are Less Than Significant

Aesthetics

Impact AESTH-5[F]: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area

The project's potential impacts related to light and glare are discussed on page 3.1-17 of the draft EIR. The shrouded turbines are not expected to require FAA marking or lighting because they would be less than 200 feet tall. The bright white paint of the turbines would create glare. However, the proposed project would comply with the Color Treatment standard condition of the *Alameda County Windfarm Standard Conditions.* This potential impact is determined to be less than significant.

Agricultural and Forestry Resources

Impact AG-5[F]: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use

The project's potential impacts related to Farmland conversion are discussed on page 3.2-9 of the draft EIR. Existing agricultural activities would not be restricted in any way beyond current limitations. Continued operation of the wind power facilities precludes the conversion of these agricultural lands to other nonagricultural uses, and the Full Repower would not result in the conversion of any Farmland to nonagricultural uses. This potential impact is determined to be less than significant.

Air Quality and Greenhouse Gases

Impact AQ-1[F]: Conflict with or obstruct implementation of the applicable air quality plan

The project's potential impacts related to the applicable air quality plan are discussed on page 3.3-33 of the draft EIR. Initial Repower construction would not induce population or employment growth and would result in no net increase in vehicle miles traveled in the Air Basin. This potential impact is determined to be less than significant.

Impact AQ-4[F]: Expose sensitive receptors to substantial pollutant concentrations

The project's potential impacts related to exposure of sensitive receptors to pollutants are discussed on page 3.3-35 of the draft EIR. The project would not expose sensitive receptors to substantial pollutant concentrations of CO, DPM, or NOA. This potential impact is determined to be less than significant.

Impact AQ-5[F]: Create objectionable odors affecting a substantial number of people

The project's potential impacts related to odors are discussed on page 3.3-37 of the draft EIR. Diesel exhaust and VOCs would be emitted during construction of the Initial Repower; these emissions are objectionable to some; however, such odorous emissions would disperse rapidly from the project area and therefore should not reach an objectionable level at nearby residences. This potential impact is determined to be less than significant.

Biological Resources

Impact BIO-12[F]: Operation of the proposed project could have direct impacts on special-status bat species

The project's potential impacts related to special-status bat species are discussed on page 3.4-71 of the draft EIR. Historically, the number of bat fatalities detected as part of the avian fatality monitoring program at old generation turbines in the APWRA has been extremely low. The rate of bat impacts, for the existing turbines, is very low and the shrouded turbines are expected to have lower rates of bat impacts. This potential impact is determined to be less than significant.

Geology, Soils and Paleontological Resources

Impact GEO-4[F]: Result in substantial temporary, construction-related soil erosion or the loss of topsoil

The project's potential impacts related to construction-related soil erosion are discussed on page 3.6-21 of the draft EIR. Although ground-disturbing earthwork associated with construction of the Initial Repower may increase soil erosion rates, compliance with the federal and local erosion-related regulations applicable to the project (i.e., the SWPPP that is developed for the site and the requirements of the County's Stormwater Quality Management Plan) would ensure that the construction activities do not result in significant erosion This potential impact is determined to be less than significant.

Impact GEO-7[F]: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater

The project's potential impacts related to construction-related to septic and sewer systems are discussed on page 3.6-23 of the draft EIR. The Full Repower would include installation of a septic system for the onsite bathrooms. Site factors considered in the design of a septic system include ground slope (not to exceed 25%), absorptive quality of the soil, and soil percolation rate. The topography of much of the project area is steep and many soils of the soils may be too clayey to be suitable for septic systems. These factors and other will be addressed in the design of the septic system by a registered professional. The final design may include grading, importation of appropriate soils, and advanced septic system technologies. No septic system will be approved and built unless it meets the requirements of the county septic and water system ordinance, and no building permit will be issued until the permit for the septic system is approved. This potential impact is determined to be less than significant.

Greenhouse Gases

Impact GHG-2[F]: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

The project's potential impacts related to plans and policies are discussed on page 3.7-18 of the draft EIR. The project is consistent with relevant plans and policies, including the Alameda County (Unincorporated Areas) Community Climate Action Plan and the Assembly Bill 32 Scoping Plan. This potential impact is determined to be less than significant.

Hazards and Hazardous Materials

Impact HAZ-1[F]: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

The project's potential impacts related to hazardous materials are discussed on page 3.8-16 of the draft EIR. Construction of the Full Repower would involve small quantities of commonly used materials, such as fuels and oils, to operate construction equipment. However, standard construction BMPs would be implemented to reduce pollutant emissions during construction. This potential impact is determined to be less than significant.

Impact HAZ-2[F]: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

The project's potential impacts related to release of hazardous materials into the environment are discussed on page 3.8-16 of the draft EIR. Site workers, the public, and the environment could be inadvertently exposed to preexisting contaminants onsite during project construction and operation of the Initial Repower. However, the handling and disposal of these materials would be governed according to regulations enforced by CUPA, Cal/OSHA, and DTSC, and regulations under the CWA require contractors to avoid allowing the release of materials into surface waters as part of their SWPPP and NPDES permit requirements. This regulatory structure would ensure that safety measures and precautions are taken, thereby reducing any potential impacts associated with the accidental upset or release of hazardous materials.This potential impact is determined to be less than significant.

Impact HAZ-7[F]: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan during construction

The project's potential impacts related to emergency plans are discussed on page 3.8-18 of the draft EIR. The Full Repower would not conflict with any adopted emergency response plan or emergency evacuation plan. This potential impact is determined to be less than significant.

Impact HAZ-8[F]: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

The project's potential impacts related to wildland fires are discussed on page 3.8-18 of the draft EIR. The potential for wildland fires already exists in the project area due to the presence of the wind energy facilities. Because CAL FIRE and ACFD already provide fire protection services to the area, the fire protection facilities and infrastructure required to protect the existing facilities are in place. The Initial Repower would not alter the Altamont Pass Wind Farms Fire Requirements as described in Exhibit C of the 2005 CUPs. This potential impact is determined to be less than significant.

Impact HAZ-9[F]: During normal operation, the effects of bending and stress on rotor blades over time could lead to blade failure and become a potential blade throw hazard

The project's potential impacts related to blade throw are discussed on page 3.8-18 of the draft EIR. The shrouded turbine apparatus includes an electrical generator and wind rotor (blades) surrounded by two shrouds. Although the main purpose of the shrouds is to channel air to the rear of the turbine to improve the efficiency of energy production, the shrouds also serve to contain the

blades in the event of a blade or blade fragment failure. This potential impact is determined to be less than significant.

Impact HAZ-10[F]: Because of their large size and proposed location, the proposed turbines have the potential to interfere with microwave, radar, and communications signals and be a hazard to public safety

The project's potential impacts related to microwave, radar, and communications signals are discussed on page 3.8-15 of the draft EIR. Although wind turbines have the potential to interfere with communications signals, the RF Engineering Report prepared for the Sand Hill Wind Project (Appendix K of the draft EIR), found that the proposed project would not result in any significant effects on communication or radar signals. This potential impact is determined to be less than significant.

Hydrology and Water Quality

Impact WQ-2[F]: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)

The project's potential impacts related to groundwater are discussed on page 3.9-13 of the draft EIR. The shrouded turbine tower foundation options (large spread footing [inverted "T"]), a single pier foundation, or four individual steel reinforced concrete caissons) involve an excavation depth of 7–30 feet. If groundwater resources are found within this depth range, dewatering may be required. However, the volume of dewatered water would be minimal compared to the total groundwater aquifer volume and the Full Repower would not require use of groundwater supplies for construction (i.e., dust control and revegetation activities) and operation activities (i.e. cleaning of tower blades and other equipment) because supplies will be obtained and trucked in from Zone 7 Water Agency. This potential impact is determined to be less than significant.

Noise

Impact NOI-2[F]: Expose persons to or generate excessive groundborne vibration or groundborne noise levels during construction

The project's potential impacts related to groundborne vibration are discussed on page 3.10-22 of the draft EIR. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from receiver. Additionally, vibration from these activities would be of short duration and would end with completion of construction. This potential impact is determined to be less than significant.

Transportation/Traffic

Impact TRA-2[F]: 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 for designated roads or highways, due to the low volume of construction-related worker commutes and operations-related traffic

The project's potential impacts related to level of service and congestion management programs are discussed on page 3.11-28 of the draft EIR. The anticipated traffic associated with the Full Repower operations would not be expected to differ substantially from existing conditions, and would not increase traffic volumes on area roads. Based on construction work hours, it would be expected that the majority of worker commutes would avoid AM peak and PM peak travel periods on these roadways and would not exacerbate existing commute traffic congestion and related performance or safety concerns that may exist. This potential impact is determined to be less than significant.

Utilities and Service Systems

Impact UT-2[F]: 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

The project's potential impacts related to water or wastewater treatment facilities are discussed on page 3.12-7 of the draft EIR. Water for use in the project area would be obtained and trucked in from Zone 7 Water Agency. Water necessary for construction would be used for dust control and revegetation activities. The amounts required for construction and operation of the Initial Repower would not result in excessive water use requiring the construction or expansion of existing facilities. Wastewater would be managed through use of two septic tanks (one existing and one to be constructed) and portable toilets under the Full Repower. This potential impact is determined to be less than significant.

Impact UT-3[F]: 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

The project's potential impacts related to stormwater drainage facilities are discussed on page 3.12-7 of the draft EIR. Stormwater drainage under the Full Repower would not change significantly as compared to the Initial Repower. Even with the addition of up to 300 more turbine foundations, these impermeable surfaces would not significantly modify the existing stormwater drainage patterns at the project parcels. This potential impact is determined to be less than significant.

Impact UT-4[F]: Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed

The project's potential impacts related to water supplies are discussed on page 3.12-7 of the draft EIR. Although the project proponent plans to obtain the water for water trucks from an offsite source (Zone 7), the amounts needed would not be significant; not so much as to require the creation or expansion of entitlements. This potential impact is determined to be less than significant.

Impact UT-5[F]: Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

The project's potential impacts related to water supplies are discussed on page 3.12-7 of the draft EIR. No construction or expansion of wastewater systems would be required because the Full Repower would not be connected to a public sewer system. This potential impact is determined to be less than significant.

Impact UT-6[F]: Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction

The project's potential impacts related to landfill capacity are discussed on page 3.12-8 of the draft EIR. The amount of solid waste generated would not be substantial because turbines and components would be sold or recycled, thereby reducing the amount of solid waste taken to landfills. This potential impact is determined to be less than significant.

Impact UT-7[F]: Comply with federal, state, and local statutes and regulations related to solid waste

The project's potential impacts related to solid waste regulations are discussed on page 3.12-8 of the draft EIR. The Full Repower would be required to comply with local, state, and federal solid waste regulations. This potential impact is determined to be less than significant.

Findings for Cumulative Impacts

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an EIR when a project's incremental effects are cumulatively considerable. Cumulatively considerable "means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects the effects of other current projects and the effects of probable future projects." (CEQA Guidelines §15065(a)(3).) In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those which are outside of the control of the lead agency. The Initial Repower and Full Repower's cumulative contribution to various impacts were considered in conjunction with other proposed and approved projects, as set forth in Chapter 5 of the draft EIR.

Based on analysis in the EIR and the entire record before the County, the County makes the following findings with respect to the project's cumulatively considerable potential cumulative impacts of the Initial Repower and Full Repower projects.

Cumulatively Considerable Contributions to Potentially Significant Impacts that Cannot Mitigated to a Less Than Significant Level

Aesthetics

Based on the discussion in the EIR and the entire record before the County, the County finds that, when considered with other foreseeable projects, the Initial Repower and Full Repower would result in cumulatively considerable impacts to scenic vistas, designated scenic routes, and visual character and quality, and that there are no feasible mitigation measures that can reduce these impacts to a less-than-significant level. As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the project that override these cumulatively considerable impacts.

Air Quality

Based on the discussion in the EIR and the entire record before the County, the County finds that, when considered with other foreseeable projects, both the Initial Repower and Full Repower would

result in cumulatively considerable impacts to air quality. Construction emissions from the Initial and Full Repower would exceed the BAAQMD thresholds, even with mitigation measures implemented. There are no other feasible mitigation measures that can reduce these impacts to a less-than-significant level. As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the project that override these cumulatively considerable impacts.

Biological Resources

Based on the discussion in the EIR and the entire record before the County, the County finds that, when considered with other foreseeable projects, the Initial Repower and Full Repower would result in cumulatively considerable impacts to avian species. Although the evidence points to potential beneficial effects to avian species from repowering (when compared to the existing baseline impacts), there would still be impacts on common, special-status, and focal avian species considered important for management by Alameda County. Thus, although the impacts could be substantially reduced for some species based on the conclusions from some studies, there may be unintended or unanticipated impacts on other species. On this basis, impacts on avian species from the Initial and Full Repower, when taken into context with past, present, and reasonably foreseeable future projects, are considered cumulatively considerable, and there are no feasible mitigation measures that can reduce these impacts to a less-than-significant level. As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the project that override these cumulatively considerable impacts.

Transportation/Traffic

Based on the discussion in the EIR and the entire record before the County, the County finds that, when considered with other foreseeable projects, the Initial Repower and Full Repower would result in cumulatively considerable impacts to construction related traffic. Although the effects of individual projects generally would be short-term and temporary, the effect of overlapping and sequential construction schedules could result in conditions that adversely affect the performance of roads and conflict with congestion management policies and planning. In addition, the presence of large and often slow-moving construction vehicles and the introduction of worker trips for multiple projects could affect local access for motorists, bicyclists, and emergency providers, as well as introduce roadway hazards. Implementation of Mitigation Measure TRA-1 would reduce the level of impact on local county roads, but may not reduce these impacts to a less-than-significant level. And there are no other feasible mitigation measures that can reduce these impacts to a less-than-significant level. As more fully explained in the Statement of Overriding Considerations contained in Exhibit C to the Resolution to which these CEQA Findings are attached, the County finds that there are environmental, economic, or other benefits of the project that override these cumulatively considerable impacts.

Contributions to Cumulative Impacts that Can be Mitigated to a Less Than Significant Level

Aesthetics

Based on the discussion in the EIR and the entire record before the County, the County finds that because the Sand Hill Wind Project turbines would not be tall enough to require Federal Aviation Administration (FAA)-compliant safety lighting and, with the Color Treatment standard condition and mitigation to reduce impacts from a new source of light if a new O&M building is required, neither the Initial Repower nor the Full Repower are expected to result in a cumulatively considerable contribution to new sources of substantial light or glare.

Cultural Resources

Based on the discussion in the EIR and the entire record before the County, the County finds that simultaneous construction of multiple repowering projects in the project area and other development and infrastructure projects in the vicinity of the project area could potentially result in significant impacts on historic resources, archaeological resources, and human remains, should they be present within the project area or the vicinity of the project area. However, compliance with the mitigation measures discussed in Section 3.5 of the draft EIR, and with the County's historic preservation ordinance, would result in a less-than-significant impact on cultural resources and avoidance of adverse cumulative effects.

Geology, Soils, and Paleontological Resources

Based on the discussion in the EIR and the entire record before the County, the County finds that construction in a seismically active region puts people and structures at risk from a range of earthquake-related effects, such as surface fault rupture, strong ground shaking, and landsliding. However, various mechanisms are in place to reduce seismic-related risk, including mitigation measures, project-specific geotechnical investigation and seismic design standards promulgated by the County building codes and ordinances.

The County also finds that if the Initial and Full Repower construction activities were to result in the damage or loss of paleontological resources, the project could result in a cumulatively considerable contribution to a significant impact. However, implementation of the mitigation measures discussed in Section 3.6 of the draft EIR to protect paleontological resources would reduce this potential impact to a level of insignificance.

Hydrology and Water Quality

Based on the discussion in the EIR and the entire record before the County, the County finds that there is potential for the Initial Repower and Full Repower and other past, present and foreseeable development projects to cause significant cumulative hydrology and water quality impacts. These projects would involve land disturbance and other activities that would have impacts on hydrological and water quality conditions, which could result in overall cumulatively significant impacts, such as the discharge of sediments and other pollutants into surface water bodies leading to the Delta. However, mitigation measures based on standard BMPs and regulatory programs would be implemented as part of these projects to reduce the potential for the discharge of pollutants into water bodies and/or alterations of drainage patterns. Therefore, there would not be a significant

cumulative impact after application of mitigation measures based on standard BMP and regulatory programs.

Noise

Based on the discussion in the EIR and the entire record before the County, the County finds that there is potential for repowering projects to result in noise that exceeds County Noise Ordinance standards which would result in significant cumulative operational noise impacts. In addition, construction of multiple repowering projects simultaneously in the program area could potentially result in a cumulative construction noise impacts at residences near the construction activities. However, implementation of mitigation measures identified in the draft EIR would avoid the potential for the Initial Repower and Full Repower to have cumulatively considerable operational and construction-related noise impacts. Application of similar measures to other projects would also reduce the potential cumulative impact to a less than significant level.

No Contribution to a Cumulative Impact

Based on the discussion in Chapter 5 of the EIR and the entire record before the County, the County finds that neither the Initial Repower nor the Full Repower will have a cumulatively considerable contribution to the following:

- Prime farmland, unique farmland, farmland of statewide importance or forestry resources.
- Greenhouse Gases
- Hazards and Hazardous Materials
- Utilities and Service Systems

Findings for Alternatives Considered in the EIR

Section 15091(a)(3) of the State CEQA Guidelines requires findings about the feasibility of project alternatives whenever a project within the responsibility and jurisdiction of the lead agency will have a significant environmental effect that has not been mitigated to a less-than-significant level. The significant impacts that require such findings are:

Aesthetics (Initial Repower)

Impact AESTH-2: Have a substantial adverse effect on a scenic vista

Impact AESTH-3: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway

Impact AESTH-4: Substantially degrade the existing visual character or quality of the site and its surroundings

Aesthetics (Full Repower)

Impact AESTH-2: Have a substantial adverse effect on a scenic vista

Impact AESTH-3: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway

Impact AESTH-4: Substantially degrade the existing visual character or quality of the site and its surroundings

Air Quality (Initial Repower)

Impact AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors), due to high levels of NOx emissions during the construction period

Air Quality (Full Repower)

Impact AQ-3[F]: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors), due to high levels of NOx emissions during the construction period

Biological Resources (Initial Repower)

Impact BIO-11: Operation of the proposed project could have direct impacts on special-status avian species

Biological Resources (Full Repower)

Impact BIO-11[F]: Operation of the proposed project could have direct impacts on special-status avian species

Greenhouse Gas Emissions (Initial Repower)

Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, due to construction-related vehicle emissions

Greenhouse Gas Emissions (Full Repower)

Impact GHG-1[F]: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, due to construction-related vehicle emissions

Transportation/Traffic (Initial Repower)

Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit, due to construction traffic on local routes

Transportation/Traffic (Full Repower)

Impact TRA-1[F]: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways,

pedestrian and bicycle paths, and mass transit, due to construction traffic on regional route I-580/I-205 in the project vicinity and construction traffic on local routes

Impact TRA-2[F]: 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 for designated roads or highways, during construction

Impact TRA-4[F]: Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), due to construction-related traffic

Impact TRA-6[F]: Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, during construction

CEQA requires that EIRs assess feasible alternatives or mitigation measures that may substantially lessen the significant effects of projects prior to approval (Public Resources Code Section 21002). With the exception of the No Project Alternative, the specific alternatives or types of alternatives that must be assessed are not specified. CEQA "establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its own facts, which in turn must be reviewed in light of the statutory purpose (*Citizens of Goleta Valley v. Board of Supervisors* [1990] 52 Cal.3d. 553, 556). Because it will replace existing turbines, the Project will for the most part continue to use existing ancillary infrastructure (access roads, collector lines, substation, operations and maintenance building, etc.). The applicant has also committed to avian fatality reduction standards well below the environmental baseline under CEQA. As a consequence, the Project already incorporates design features intended to achieve an optimal balance between project objectives and environmental protection. This approach does not eliminate the need to discuss alternatives in the EIR. However, it does necessarily narrow the range of available alternatives offering environmental advantages in comparison with the proposed project. (See *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477.) This is particularly the case with regard to alternatives to the initial, 40-turbine repower; in part because it is already limited to the minimum number of turbines required to generate a statistically robust Before-After-Control-Impact (BACI) study of the shrouded turbines, but also because BACI studies are themselves a common form of mitigation. Similarly, the replacement of existing turbines with new turbine designs is itself a recognized "Advanced Conservation Practice" for the potential minimization and avoidance of risk to bald and golden eagles. The legislative purpose of CEQA is to avoid or mitigate environmental damage associated with development. This objective has been largely accomplished in the Project through the inclusion of the applicant's voluntarily proposed measures and mitigation measures identified in the EIR that reduce most potentially significant impacts of the project to a less than significant level, with the exception of impacts to aesthetics, air quality, biological resources, greenhouse gasses and transportation/traffic; impacts in these resource topic areas would .

Identification of Project Objectives

The CEQA Guidelines state that the "range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one of more of the significant effects" of the project (CEQA Guidelines

Section 15126[d][2]). Thus, an evaluation of the project objectives is key to determining which alternatives should be assessed in the EIR.

The objectives of the proposed project are to:

- Through a phased permitting and development process, test and demonstrate a new wind energy generation technology in a proven wind resource area with a strong research record on wind-avian impacts in order to establish a scientifically-supported avian impact research record for this new technology.
- By March 2015, complete a Before-After-Control-Impact (BACI) Avian Validation Study primarily funded by a PIER grant from the CEC. The study would test whether 40 Ogin shrouded wind turbines on the project parcels are safer to birds than existing open-blade turbines on the same parcels, and would help to develop predictive turbine siting tools for shrouded and open-blade turbines, with the following study objectives.
    - Compare avian wind turbine interactions between Ogin shrouded turbines and multiple types of existing 1980s–'90s-era conventional wind turbines at sites with known high avian fatality rates during day and night and various wind and terrain conditions.
    - Compare avian fatality rates between Ogin shrouded turbines and existing turbines at known high fatality sites, using a short search interval and a BACI design.
    - Explain variation in fatality rates by turbine design, flight patterns, and avian interactions with wind turbines (e.g., avoidance behaviors).
    - Develop field-tested behavior survey methods and data that inform avoidance rates for use in collision risk models and map-based collision hazard models, with the eventual goal of using model results to assist with wind turbine siting.
- Use information derived from the Avian Validation Study to evaluate potential refinements to the Ogin shrouded turbine design and to inform Ogin's repowering plans for the entire project area.
- Use information derived from the Avian Validation Study and project operations to inform a long-term solution for repowering the APWRA that reduces impacts on avian species and potentially reduces costs to ratepayers by using surplus transmission capacity at the Tesla substation and locating wind energy facilities close to Bay Area load centers.
- Develop an economically viable wind energy project through commercially available financing that would maximize renewable energy production and economic viability by initially replacing 4 MW of aging wind energy assets with newer and more efficient shrouded turbines placed in service no later than March 2015 to substantiate the Avian Validation Study, with subsequent repowering phases of up to an additional 30 MW anticipated in later years.

The following are secondary objectives of the proposed project. An alternative need not include all of these objectives in order to qualify for analysis in the EIR.

- Minimize environmental impacts by using existing power transmission, access infrastructure and other existing ancillary facilities to the maximum extent feasible.
- Develop a viable source of clean energy to help California achieve its Renewables Portfolio Standard (RPS) with a low MW-to-acre disturbance ratio and without the need for large amounts of water.

- Offset the need for additional electricity generated from fossil fuels, and thereby assist the state in meeting its air quality goals and reducing greenhouse gas emissions.
- Contribute positively to economic activity during construction and operation.
- Increase local short-term and long-term employment opportunities.

Alternatives Analyzed in the EIR

The CEQA Guidelines state that the "range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects" of the project. The County evaluated the alternatives listed below.

No Project Alternative

CEQA requires every EIR to include an analysis of the No Project Alternative. The project area currently includes approximately 400 wind energy turbines. The project area also includes associated electricity collection and transmission infrastructure, access roads, and support facilities. Under the No Project Alternative, the proposed Initial and Full Repower phases would not be built. The existing wind turbines are assumed to continue to operate, under the conditions of the 2007 Settlement Agreement, until the existing use permits expire in 2018. At that point, the existing project would be decommissioned. The area would presumably be repowered—using conventional, open-blade, utility-scale wind turbines and no shrouded turbines—by another wind project in the near future. Such repowering is foreseeable because the site is located within one of the most significant resource areas for wind energy development in California and the applicable Alameda County general plan and zoning designations allow wind development on the site.

Findings: Based on the EIR and the entire record before the County, the County rejects the No Project Alternative as infeasible because it would not avoid or substantially lessen the significant unavoidable impacts of the Project and would not meet the primary objectives of the Project.

Explanation: Because future repowering of the Project site would be likely under the No Project Alternative due to the wind resources on the site and applicable planning and zoning regulations, the No Project Alternative would cause impacts to the environment similar to those of the proposed Project, including similar significant and unavoidable aesthetic, air quality, biological resources, greenhouse gas, and transportation/traffic impacts. In addition, the No Project Alternative would not serve the primary Project objectives of testing and demonstrating a new wind energy generation technology, implementing the Avian Validation Study primarily funded by a PIER grant from the CEC, informing Ogin's repowering plans for the entire project area and informing other decisions about long-term solutions for repowering the APWRA.

Alternative 1 – Reduced Avian Validation Study

Under this alternative, the Initial Repower would consist of only 10 shrouded turbines instead of 40 (representing 1 MW total capacity). The Full Repower would repower to the full proposed 34 MW of capacity at the project site with shrouded Ogin turbines through subsequent development phases, thus Alternative 1 would consist of a 1 MW Initial Repower phase and 33 MW Full Repower phase for a total capacity of 34 MW.

Findings: Based on the EIR and the entire record before the County, the County rejects Alternative 1 as infeasible because it would not fully satisfy the objectives of the Project and would not avoid or substantially lessen the significant unavoidable impacts of the Project.

Explanation: Alternative 1 is infeasible because it would address the fundamental project objective of conducting the Avian Validation Study to a substantially lesser degree than the Project. (An alternative may be found infeasible on the ground it will not fully satisfy project ibjectives. *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 201 Cal.App.4th 899, 947.) While the smaller sample size of 10 shrouded turbines for the Initial Repower would serve to suggest the general trend of avian effects of the shrouded turbines, it would not be large enough to provide robust, conclusive statistical results that could inform decisions about modifications to the new technology, Ogin's repowering plans for the entire project area, or other decisions about long-term solutions for repowering the APWRA. In addition, Alternative 1 would cause significant and unavoidable aesthetic, air quality, biological resources, greenhouse gas, and transportation/traffic impacts similar to those of the Project.

Alternative 2 – Conventional Turbines

Under this alternative, the initial development phase of the project would proceed as proposed, with a repower of 4 MW with 40 shrouded Ogin turbines. However, potential future repowering of the remainder of the project area would use up to 15 conventional, open-blade, utility-scale wind turbines instead of shrouded Ogin turbines. Potential turbine options for the subsequent development phases could include commercially available 1.5 MW GE turbines or 2.3 MW Siemens turbines or other utility-scale open-blade turbines within this range. Based on established agreements with USFWS and CDFW, the maximum nameplate generation capacity is assumed to be limited to the same capacity as exists in the project area, 25.5 MW.

Findings: Based on the EIR and the entire record before the County, the County rejects Alternative 2 because it would not avoid or substantially lessen the significant and unavoidable impacts of the Project.

Explanation: Alternative 2 would not avoid or substantially lessen the significant and unavoidable impacts of the Project. Alternative 2 would generate the same significant and unavoidable GHG impacts as the Project during construction of the Initial Phase, but moderately reduced GHG impacts relative to the Project during the construction of a subsequent full repower with conventional turbines because fewer turbines would be installed and less GHG-generating vehicles would be required for their installation. However, because the reduction would be moderate and only for the full repower phase, it would not substantially lessen the significant and unavoidable GHG impacts of the Project. In addition, both the Project and Alternative 2 would, over-time, compensate for their construction GHG emissions through the generation of clean energy. The aesthetics impacts of Alternative 2 would in fact be greater than the significant and unavoidable aesthetic impacts of the Project because conventional turbines require FAA lighting while the shrouded turbines do not. Alternative 2 also would result in essentially the same significant and unavoidable air quality, biological resources and transportation/traffic impacts as the Project.

Alternative 3 – High Risk Avoidance

Under this alternative, the first 40 turbines would be developed as proposed, in an Initial Repower phase in the same manner as the project. Additional future repowering phases would locate up to 300 shrouded Ogin turbines to avoid existing turbine locations exhibiting a high risk of avian

impacts at a rating of 8 or higher by the APWRA SRC consistent with the "Hazardous Rating Scale of the SRC." SRC document P69 (Final 2-1-08).

Findings: Based on the EIR and the entire record before the County, the County rejects Alternative3 because it would not avoid or substantially lessen the significant and unavoidable impacts of the Project.

Explanation: Alternative 3 would not avoid or substantially lessen the significant and unavoidable impacts of the Project. Alternative 3 would have the same significant and unavoidable aesthetic, air quality, greenhouse gas, and transportation/traffic impacts as the Project because it would involve the same number of shrouded turbines. The significant and unavoidable avian impacts of Alternative 3 are unlikely to be substantially less than those of the Project. Mitigation Measure 11(d) incorporated Alternative 3 into the Full Repower phase of the Project to implement, among other potential measures, hazard-based micrositing if warranted by the results of the Avian Validation study. Under the Project, the end result therefore would be the same as Alternative 3, and perhaps even better, if the results of the Avian Validation study demonstrated that other forms of mitigation – such as technology modifications, hazard-based capacity limitations, hazard-based cut-in-speed or real-time curtailment or partial conventional turbine siting – were more effective means of reducing avian fatalities than hazard-based micrositing. Moreover, the overall significant and unavoidable avian impacts of the Project are likely to be substantially less significant and unavoidable than those of Alternative 3 because the Project applicant has committed to Applicant Proposed Measures 1 and 2 which prohibit implementation of the Full Repower with Ogin turbines unless the Avian Validation Study shows that the avian fatality rates of the Project are below existing conditions and further require seasonal shutdown of the Project if avian fatality rates are not substantially reduced below existing rates.

Alternative 4 – Seasonal Avoidance

Under this alternative, the first 40 turbines would be developed as proposed, and, along with additional future repowering phases with shrouded FloDesign turbines, would be shut down annually from November 1 through February 15 of each year of operation.

Findings: Based on the EIR and the entire record before the County, the County rejects Alternative 4 because it would not fully satisfy the objectives of the Project and would not avoid or substantially lessen the significant and unavoidable impacts of the Project.

Explanation: Alternative 4 is infeasible because it would serve the fundamental project objective of conducting the Avian Validation Study to a substantially lesser degree than the Project. (An alternative may be found infeasible on the ground it will not fully satisfy project objectives. *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 201 Cal.App.4th 899, 947.) Shutting down the Project from November 1 through February 15 while performing the Avian Validation Study would prevent the study from obtaining data for more than a quarter of the year during a time when avian observations would be the most frequent – the winter migration period – and therefore most important to the study. Depriving the Avian Validation Study of this disproportionately large amount of avian data would substantially undermine its results. Alternative 4 also would not substantially reduce the significant and unavoidable avian impacts of the Project once the Full Repower is constructed because the Project applicant has committed to Applicant Proposed Measures 1 and 2 which require seasonal shutdown of the entire Project if the shrouded turbine

does not substantially reduce avian fatality rates below existing rates. In addition, as stated in the Final EIR, seasonal shutdown requirements may have adverse effects on burrowing owls, an outcome which the Project could avoid altogether if it substantially reduces avian fatality rates below exiting rates but which Alternative 4 could not avoid, irrespective of the fatality rates it generated. Alternative 4 would introduce more intense significant and unavoidable GHG impacts than the Project because the benefit of GHG reductions over time would be reduced by over 25 percent as a result of seasonal shutdowns. Finally, Alternative 4 would cause significant and unavoidable aesthetic, air quality, and transportation/traffic impacts similar to those of the Project.

Environmentally Superior Alternative

CEQA requires an EIR to examine a range of feasible alternatives to a proposed project. State CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify which of those alternatives is the environmentally superior alternative. The environmentally superior alternative is typically considered to be the alternative found to have the least environmental impact. If, in the course of identifying the environmentally superior alternative, the No Project Alternative is found to be the environmentally superior alternative, then Section 15126.6(e)(2) of the State CEQA Guidelines further requires that an EIR identify which among the other alternatives is the environmentally superior alternative. Consequently, although the No Project Alternative is evaluated and presented for comparison purposes, determination of the environmentally superior alternative in this chapter primarily reflects the differences in impacts among the remaining alternatives. Determination of the environmentally superior alternative uses the impact evaluations of the proposed project and of each alternative in a comparative process. The impacts of each alternative are identified and compared, as shown in draft EIR Section 4.3, *Alternatives Analysis*, to those of the proposed project. The relative severity and quantity of each alternative's impacts are evaluated, and the alternative found to have the least impact, as compared to the others, is determined to be the environmentally superior alternative.

In the case of the proposed project and alternatives, the No Project Alternative was not determined to be environmentally superior. Alternative 1 was found to be the environmentally superior alternative when considering the Initial Repower that is the subject of these findings. Alternative 4 was found to be the environmentally superior alternative when considering the Initial Repower and Full Repower together.

Alternative 1 differs from the proposed project and other alternatives primarily because the Initial Repower phase of this alternative would consist of only 10 shrouded turbines instead of 40. The reduced scale and duration of construction activities associated with Alternative 1 compared to the proposed project and other alternatives, all of which would entail installation of 40 turbines in the Initial Repower, lessens the potential for significant effects of the first phase of development on a number of resources.

Impacts on Aesthetics; Air Quality; Geology, Soils, Paleontology; Greenhouse Gases; Noise; and Transportation/Traffic would all be reduced for the Initial Repower phase under Alternative 1. Aesthetic effects on sensitive receptors would be reduced because of the shorter construction duration and placement of fewer turbines would result in a reduced effect on the visual character and quality as viewed relative to scenic vistas and designated scenic routes as well as decreasing new sources of glare that would be introduced to the project area. The amount of air quality and GHG emissions generated by construction of Alternative 1 would be reduced because of the smaller

scale and associated shorter construction period of the Initial Repower phase relative to the proposed project and other alternatives.

The potential for geological hazards to occur due to construction activity would be of a lesser magnitude because of the smaller project area associated with installing only 10 turbines rather than 40 for the Initial Repower. Similarly, the potential to disturb paleontological resources during this phase would be less for Alternative 1 than for the proposed project and other alternatives.

Noise associated with construction activities and operation of the proposed new turbines would be reduced under Alternative 1 relative to the proposed project and other alternatives. Finally, the generation of construction-related truck, vendor, and worker trips could be substantially less for installation of 10 turbines relative to 40 turbines and, depending on where the turbines would be placed, the effect on performance, and access for motorists, bicyclists, and emergency providers on one or more of the local county roads could be substantially reduced. However, when the proposed Project is viewed in its entirety, to include both the Initial Repower currently before the County and the Full Repower which is not yet under application, the effects of Alternative 1 would be similar to the Project, the only difference being the timing of when construction of the 11th through 40th shrouded turbines occurred. When comparing both phases of the proposed Project as a whole to each of the alternatives, Alternative 4 presents itself as the environmentally superior alternative because it would reduce the hazard, noise, and, most important, avian impacts, of the Project by preventing operation of the Project for 3.5 months (30 percent) of each year.

Alternative 3 has the potential to reduce avian impacts only, without improving upon any other categories of environmental impact relative to the Project. Alternative 2, on the other hand, would potentially reduce the cultural, paleontological, greenhouse gas and hydrological effects of the Project due to a need for fewer turbines and therefore less ground disturbance. Reductions in avian impacts may also occur, but this result still awaits confirmation through further post construction monitoring of other conventional repowers within the APWRA and is less assured than the reduction in avian impacts that would result from Alternative 4 by shutting down the Project for 3.5 months of the year. Furthermore, the increased aesthetic impacts (FAA lighting) and hazard impacts (blade-throw) of Alternative 2 overshadow its impact reductions to a greater degree than Alternative 4's reduced opportunity to offset GHG's; Alternative 4 would still generate renewable energy, just less of it, while Alternative 2 would introduce an entirely new kind of impact (FAA lighting) and a greater, more proximate and dangerous, risk of blade throw.

Findings and Recommendations Regarding Significant Irreversible Changes

CEQA Section 21100(b)(2)(B) requires that an EIR identify any significant effect on the environment that would be irreversible if the project were implemented. Section 15126.2(c) of the State CEQA Guidelines characterizes irreversible environmental changes as those involving a large commitment of nonrenewable resources or irreversible damage resulting from environmental accidents. The State CEQA Guidelines describe three distinct categories of significant irreversible changes,

including changes in land use that would commit future generations to specific uses; irreversible changes from environmental actions; and consumption of nonrenewable resources. The project's significant and irreversible changes are discussed in the draft EIR beginning at page 5-15.

Findings: Based on the EIR and the entire record before the County, the County finds that the Project would not result in any significant irreversible effect on the environment:**Explanation:** The project area is currently developed as a wind farm, with coexisting grazing activities that would continue. Because the ECAP designates the entire project area as Large Parcel Agriculture, the land carries a zoning designation of Agriculture, and Chapter 17.06.040 of the Alameda County Code of Ordinances indicates that privately owned wind facilities are a conditionally permitted use on non-prime farmland within the Agriculture zoning district, the Sand Hill Wind Project would not commit future generations to, or introduce, changes in land use that would vary from the existing conditions.

The project involves the removal of existing foundations, construction and repowering of an existing wind farm on approximately 1,000 acres in unincorporated eastern Alameda County. These activities are not expected to alter or affect the coexisting grazing uses, and are not expected to result in environmental accidents that would cause irreversible damage. Compliance with required plans, such as the Altamont Pass Wind Farms Fire Requirements, will minimize the potential for accidents that could result in environmental damage. No irreversible changes to the project area would occur as a result of the Sand Hill Wind Project.

Although removal of existing foundations, construction, and project operation and maintenance activities would require the consumption of nonrenewable resources, such as fuel for construction vehicles and equipment, such use would primarily be limited to the short-term decommissioning and construction periods, with some continuing use of fuel for O&M activities. As the site is already in use as a wind farm and subject to O&M activities, the continuing O&M of the project facilities would not increase the rate of use of nonrenewable resources relative to existing conditions. The temporary, construction-related increase would not result in significant use of nonrenewable resources and would not commit future generations to similar uses. Furthermore, two of the project's objectives are to develop a viable source of clean energy that will help California achieve its Renewables Portfolio Standard (RPS) with a low MW-to-acre disturbance ratio and without the need for large amounts of water, and to offset the need for additional electricity generated from fossil fuels, and thereby assist the state in meeting its air quality goals and reducing GHG emissions.

Findings: Based on the EIR and the entire record before the County, the County finds that the project would not commit future generations to, or introduce, changes in land use that would vary from the existing conditions, would not cause irreversible changes to the project area, and would

Findings and Recommendations Regarding Growth-Inducing Impacts

Section 15126.2(d) of the State CEQA Guidelines states that an EIR should discuss "…the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement and state that growth in any area is not "necessarily beneficial, detrimental, or of little significance to the environment" (State CEQA Guidelines Section 15126.2[d]). CEQA does not require separate mitigation for growth

inducement as it is assumed that these impacts are already captured in the analysis of environmental impacts. Furthermore, Section 15126.2(d) of the State CEQA Guidelines requires that an EIR "discuss the ways" a project could be growth inducing and to "discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment."

Growth can be induced in a number of ways, including through elimination of obstacles to growth, through the stimulation of economic activity within the region, or through precedent-setting action such as the provision of new access to an area, or a change in a restrictive zoning or general plan land use designation. In general, a project could be considered growth-inducing if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way. However, the State CEQA Guidelines do not require a prediction or speculation of where, when, and in what form such growth would occur (State CEQA Guidelines, Section 15145). The project's growth inducing impacts are discussed in the draft EIR starting at page 5-12.

Findings: Based on the EIR and the entire record before the County, the County finds that the Project would not induce growth for the following reasons:

Although the project involves the construction of new wind turbines, the widening of existing private service roads within the project parcels, and new connections to existing electrical infrastructure, no new service roads would be developed to access repower turbine sites. These existing roads do not, and would not, extend beyond the project parcels or provide connection points for offsite development. Therefore, the project would not be expected to indirectly induce population growth through the widening of existing service roads.

During construction, new connections between the existing collection system and the new turbines would be installed to replace the existing connections between the turbines proposed for decommissioning and the existing power collection system. The power collection system itself would not be altered or expanded. The new connections to the existing infrastructure would be located entirely within the project area and would enable the applicant to transfer power generated by the new, shrouded wind turbines to the regional electrical grid. Therefore, the project would not be expected to indirectly induce population growth through the connection of new turbines to the existing electrical infrastructure.

Typically, the growth-inducing potential of a project is considered significant if it fosters growth or a concentration of population in a different location or in excess of what is assumed in relevant general plans or land use plans, or projections made by regional planning agencies, such as the Association of Bay Area Governments (ABAG). As discussed in the March 6, 2013 Initial Study (IS), the project does not include the construction or demolition of any housing, and so would not have a direct impact on population or housing growth. Furthermore, the nature of the facilities is such that there would be no direct customers and no incentive for other residences or businesses to locate nearby. Production of electricity from the project facilities is ongoing and would not create additional availability of energy resources beyond those already permitted for the facilities.

Decommissioning and construction activities would result in a short-term increase in construction-related job opportunities in the Alameda County region. However, construction workers can be expected to be drawn from the existing construction employment labor force. The limited, short-term opportunities provided by decommissioning and construction would be unlikely to result in

the relocation of construction workers to the project region. Therefore, the employment opportunities provided by construction are not anticipated to induce indirect growth in the region.