Appendix H

Comments on the Draft Subsequent Environmental Impact Report and Responses to Comments

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The draft SEIR was circulated initially for 45 days for review and comment by the public, other interested parties, and public agencies, commencing on Friday, November 6, 2020 and scheduled to end on Monday, December 21, 2020. At the request of some commenters, the County extended the comment period for 18 additional calendar days ending on Friday, January 8, 2021, thus providing over 60 days for public comment. The County held a public hearing on December 8, 2020 to request comments on the draft SEIR. No verbal or other public comments were received at the public hearing. The County received seven comment letters on the draft SEIR, as shown in Table H-1. This includes a letter from the California Department of Justice that was received on January 14, 2021, after the close of the extended draft SEIR comment period. Although not required by CEQA, the County has provided responses to the comments raised in this letter.

State CEQA Guidelines Sections 15088(a) and 15088(b) require that comments raising environmental issues must receive reasoned, good faith, written responses in the final EIR. This chapter contains all the comments received on the draft SEIR and the County 's responses to these comments. In general, the responses provide explanation or amplification of information contained in the draft SEIR.

CEQA is primarily focused on the potential significant environmental impacts that may result from a project. Comments that are outside the scope of CEQA review will be provided to the County for consideration as part of the project decision process. These comments are answered with a general response.

The comment letters have been numbered as shown in Table H-1. Within each letter, individual comments have been numbered consecutively. For example, Comment 1-1 is the first comment in the comment letter received from the United States Fish and Wildlife Service.

Table H-1. Comment Letters Received on the Draft SEIR

ID#	Name	Date
1	United States Fish and Wildlife Service	January 7, 2021
2	California Department of Fish and Wildlife	January 8, 2021
3	East Bay Regional Park District	January 8, 2021
4	East Bay Community Energy	January 8, 2021
5	Adams Broadwell Joseph & Cardozo	January 8, 2021
6	Golden Gate Audubon Society	January 8, 2021
7	California Department of Justice	January 14, 2021

Revisions made to the draft SEIR in response to comments are presented in the final SEIR as text to be deleted (~~strikethrough~~) and text to be added (<u>underline</u>) and are referenced by page number in the response to comment. The final SEIR incorporates these changes, as well as minor, clarifying revisions made by the County as the CEQA Lead Agency.

The revisions to the draft SEIR include staff-initiated revisions in Section 3.4, *Biological Resources*, that address the United States Fish and Wildlife Service's (USFWS) December 15, 2020 announcement that listing the monarch butterfly as endangered or threatened under the Endangered Species Act (ESA) is warranted but precluded by higher priority listing actions. The monarch butterfly is now designated as a candidate for listing under ESA and its status will be reviewed annually until a listing decision is made. The draft SEIR has been revised to include an analysis of the proposed project's impacts to monarch butterfly. As discussed on pages 3.4-147 to 3.4-148 of the final EIR, impacts would be less than significant. This information is not a significant modification to the draft SEIR analysis and does not warrant recirculation pursuant to CEQA Guidelines Section 15088.5.

Responses to Comments

The section provides the County's responses to comments letters received on the draft SEIR. No verbal comments were received at the public hearing held on December 8, 2020.

Comment Letters

Letter 1— United States Fish and Wildlife Service

Response to Comment 1-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 1-2

The comment recommends revising the project objective of "improving understanding [etc.] of the effects [etc.] by applying an avian mortality monitoring protocol…" to focus on evaluating and determining whether or not the project would cause project-level and APWRA-wide thresholds established in the PEIR to be exceeded and to implement adaptive management measures if needed to reduce mortality to levels below the identified thresholds. The County agrees that the objective of the monitoring program (and its protocols) should focus on whether the thresholds are exceeded, and for the Project to carry out necessary adaptive management measures to reduce mortality to a point below the thresholds, and has clarified one of the project's secondary objectives accordingly in the final SEIR Executive Summary, Section ES.2, and in Chapter 2, *Project Description*, Section 2.1.3.

Response to Comment 1-3

The comment is understood to refer to the draft SEIR's discussion of golden eagle behavioral studies on pages 3.4-52 to 3.4-55, and to assert that its conclusions about the population impacts of the project on this species were based on methods different from those to be used by the United States Fish and Wildlife Services (Service) in its anticipated consideration of an Eagle Take Permit for the project. The County acknowledges that the Service will follow their own, distinct process and methods for evaluating impacts to golden eagles relevant to issuance of an Eagle Take Permit. The SEIR also acknowledges rates of golden eagle loss and the severity of wind turbine mortality in the vicinity of the project site and concurs with the view that the population of this protected species within the APWRA would not be sustainable without recognizing the population dynamics of other regional metrics such as the Diablo Range or the Mulqueeney local area population (LAP). In

recognizing this research, the County does not conclude in the draft SEIR either that cumulative golden eagle mortality within the APWRA, as predicted in the PEIR with wind repowering projects such as Mulqueeney Ranch, could cause the 'population sink' effect to worsen, or to be moderated or effectively balanced by the immigration of subadults from outside the APWRA. These points are clearly made in the draft SEIR, with reference to the same published sources cited by commenter. In comment 1-7, the commenter acknowledges that "[t]he Service's analysis of eagle take associated with the project and potential cumulative effects will follow the approach in our Incidental Take Regulations and supporting documents which differs from the approach presented in the draft SEIR. However, we agree with the significant and unavoidable impacts presented in ES 3.2 as related to golden eagles." Responses to comments below provide further discussion of the cumulative effects on golden eagle populations.

Response to Comment 1-4

The draft SEIR analysis is consistent with the points raised by the commenter in that a large fraction of golden eagle pairs in the Altamont Pass Wind Resource Area (APWRA) is recognized to contain a subadult member. The draft SEIR's interpretation of the historical survey limitations described by commenter is that it is difficult to clearly conclude that this condition has worsened over time, but regardless, it is clearly problematic for the status of the Diablo Range eagle population and indicates that immigration from elsewhere in the local area population (LAP) appears to be necessary to sustain the Diablo Range eagles.

Response to Comment 1-5

The points raised in the comment are largely consistent with the analysis in the draft SEIR. However, the statement that the draft SEIR "implies there are no population level impacts from take of eagles at the APWRA" is incorrect. The draft SEIR analysis determines that significant impacts would occur to golden eagles at all spatial scales up to and including the LAP. The commenter recognizes the decline in eagle productivity observed during drought years; the draft SEIR analysis also notes that drought reduces eagle productivity (see page 3.4-103 in the draft SEIR). As indicated in response to comment 1-3 above, the County and SEIR concludes that the local APWRA population of golden eagles will be cumulatively and adversely affected by the project, but in light of the population estimates made by multiple researchers at other geographic scales, considers it appropriate to recognize the likelihood that the population of the species within the larger regions could be greatly underestimated.

Response to Comment 1-6

The commenter notes that wildfires occurred within golden eagle habitat during the 2020 fire season. The commenter states that these fires "likely impacted golden eagle territories and populations within the local area and within the Pacific Flyway Eagle Management Unit". Although the commenter does not cite specific evidence of that effect, the County acknowledges the concern. However, there is no known study which would serve to quantify the effect. As noted in response to comment 1-5, the draft SEIR analysis concludes that cumulative impacts to golden eagle populations would be significant and unavoidable.

Response to Comment 1-7

Besides summarizing points raised in foregoing comments, the commenter notes that golden eagle nest tree habitat should be protected. As stated under Impact BIO-8b in the draft SEIR (page 3.4-88), construction of the proposed project would avoid removal of large trees or disturbance of existing electrical towers that could provide nesting habitat for raptors, including golden eagles. Atypical nesting substrate for eagles, such as rock outcrops or smaller trees and shrubs, may be temporarily disturbed during construction, but removal of nesting habitat for golden eagles is not anticipated. In addition, Mitigation Measure Bio-8a includes preconstruction surveys for eagles within a 2-mile radius and avoidance of any active nests.

Response to Comment 1-8

The commenter's reference to "discrepancies between [the] draft SEIR and its Appendices" is not clearly specified. Draft SEIR page 3.4-54 cites United States Geological Survey (USGS) data showing 4 nests and 7 activity centers within 2 miles of the project boundary, while Appendix D of the draft SEIR, page 3-12, presents the same evidence, citing the same source.

Appendix D presents the results of nesting surveys undertaken to support draft SEIR preparation. The project applicant is expected to perform future surveys, as suggested by commenter, with frequency and extent required by law and regulation, including but not limited to any conditions of an Eagle Take Permit from the Service, including annual nesting surveys, if required. With respect to the commenter's suggestion to implement curtailment of turbines within one mile of nesting eagles, the text of 2020 Updated PEIR Mitigation Measure BIO-11i has been revised to encourage the County's Wind Repowering/Avian Protection Technical Advisory Committee (TAC) to evaluate the merits of curtailment near raptor nests (see pages 3.4-122 and 3.4-123 in the final SEIR); such an action would necessarily also include surveys to identify those nests.

Response to Comment 1-9

The commenter presents information on burrowing owl declines in the study area and statewide. Page 5-10 of the final SEIR (Chapter 5, *Other CEQA Considerations*; Cumulative Impacts) has been revised to acknowledge that there is an ongoing statewide decline for this species. This revision is consistent with the draft SEIR's determination of a significant cumulative impact on burrowing owl, to which the 450 MW Program EIR alternative would have a cumulatively considerable contribution because it would further the overall decline in burrowing owl populations. As indicated in revisions to Table 2-6, page 2-27 in the final SEIR, the combined gross total of all approved, operational and proposed projects in the County portion of the APWRA is now under 400 MW (365 MW), which, while not avoiding the potential cumulatively considerable impact on this species, is expected to make the extent of the impact less certain.

Response to Comment 1-10

As the commenter notes, the draft SEIR states that the project site is known to support burrowing owls. Impact BIO-8b (draft SEIR page 3.4-88) states that burrowing owls are expected to be nesting on the project site and are known to occupy adjacent preserve lands. The commenter recommends that burrowing owl surveys be conducted to inform the project's potential impacts; however, as acknowledged by the commenter (comment 1-9), owl movement is irruptive by nature and makes population trends difficult to determine. Burrowing owl surveys could provide a snapshot in time regarding the current population of burrowing owls breeding or wintering on the project site, but

this information would not change the conclusion of the draft SEIR, which is that construction could result in the loss of burrowing owls or permanent removal of occupied habitat, which would be considered a significant impact (as stated under Impact BIO-8b and Impact BIO-9a), and that repowering would result in significant and unavoidable impacts on burrowing owl fatalities (Impact BIO-11). The commenter indicates concern with the draft SEIR conclusion that the project would have a less-than-significant impact after mitigation; however, this is true only for construction impacts (Impact BIO-8b and Impact BIO-9a); the post-construction/operational impact of the project on burrowing owls is identified as significant and unavoidable (Impact BIO-11), along with impacts on the other focal raptor species. The determination for construction impacts is an appropriate conclusion because mitigation measures BIO-5c, BIO-8b, and BIO-9 require surveys to identify occupied habitat, the establishment of no-activity zones to protect active burrows, restoration of disturbed grassland, and compensation for permanent loss of habitat, which would prevent take of burrowing owls and compensate for habitat disturbance and loss. The 2020 Updated PEIR Mitigation Measure BIO-8b has been modified in the final SEIR to specify a total of three preconstruction take-avoidance surveys at different stages prior to construction.

The commenter states that the Two Sisters Burrowing Owl Preserve is located within the project site; to clarify, the square preserve is surrounded on each of its four sides by properties associated with the project, but not within the project site. The proposed project would have no direct construction impacts on owls that occupy preserves. See also response to comment 1-15.

Response to Comment 1-11

The analysis in the draft SEIR notes the presence of potential tricolored blackbird habitat in the project area and evaluates the proposed project's potential impacts on the species assuming they are present. Accordingly, protocol surveys are not planned since confirming presence of the species would not change the draft SEIR analysis.

The draft SEIR states there would be no permanent or temporary losses of freshwater marsh as a result of the proposed project (draft SEIR page 3.4-86). Along Patterson Creek, only a small amount of forested wetland habitat (riparian) could be temporarily disturbed during installation of a power collection line. This impact would be less than 0.001 acre and is considered negligible. Due to rounding, this acreage was shown as 0 in Table 3.4-6 of the draft SEIR but has been revised in the final SEIR to show 0.001 acre. Forested wetland is not considered breeding (nesting) habitat for tricolored blackbird. Overall, the proposed project would not remove breeding habitat for tricolored blackbird. The draft SEIR acknowledges that breeding habitat is present within the project site, and Mitigation Measure BIO-8b includes measures to conduct surveys and avoid active nesting colonies to prevent construction-related impacts on breeding tricolored blackbirds.

Response to Comment 1-12

See response to comment 1-11. The proposed project would not remove breeding habitat for tri-colored blackbirds, and Mitigation Measure BIO-1b includes measures to protect and avoid sensitive habitats (including freshwater marsh) that are near construction work areas and access roads; therefore, no compensatory mitigation for tricolored blackbird breeding habitat is proposed.

Response to Comment 1-13

The commenter notes that exploratory flights by condors documented near the project site may be indicative of future range expansion. However, the data cited by the commenter do not necessarily

predict that condor use of the project site is expected to increase within the next 5-10 years. Bakker et. al. 2017 identifies a positive trend in survival rates of condors released from captivity based on modeling and concludes that "as condor flocks grow, they are increasingly expressing behaviors typical of wild condors, which range widely." Overall, this modeling data indicates that condor survival rates are trending upwards, which could result in range expansion. The commenter also cites habitat modeling efforts used to identify potential condor reintroduction sites (D'Elia et. al. 2015). This study developed ecological niche models for condor nesting, roosting, and feeding across the condor's historical range. Based on Figure 4 within D'Elia et. al. 2015, the project site is located outside of predicted nesting, roosting, and feeding habitat for condors. No condor fatalities have ever been recorded in the APWRA. Based on the limited observation of condors in the vicinity of the project site, distance from the closest breeding site at Pinnacles National Park (more than 85 miles), and results of predictive modeling data, the potential for condor range expansion into the APWRA, and resulting condor fatalities due to wind turbine operations of the project, remains difficult to predict. Because of the extraordinary importance of California condors in the Diablo Range and their continued recovery as a native species, some potential for a blade strike and fatality is recognized, and therefore, some limited and focused analysis is warranted.

The County also notes that a draft habitat conservation plan has been proposed to address the possibility of California condor incidental take at a southern California wind farm (Avangrid Renewables LLC 2020), which identifies a number of potential minimization measures. Should condors appear in the APWRA, the TAC could require appropriate mitigation through the adaptive management provisions of 2020 Updated PEIR Mitigation Measure BIO-11i; that mitigation measure has been revised in the Final SEIR to incorporate ADMM-8 addressing the management response if California condors are identified within the project area. Briefly, that response consists of coordination with USFWS to identify and implement appropriate measures to minimize the risk of a condor fatality.

Response to Comment 1-14

The commenter's remarks largely align with the existing draft SEIR analysis for bats (Impact BIO-14) with regard to both impact assessment and mitigation requirements. To address the commenter's mitigation recommendations not covered in the draft SEIR:

- The County agrees that acoustic mitigation is potentially feasible and could produce a demonstrable reduction in turbine-caused bat mortality based on the experience cited at other wind projects. Because it is still a relatively unproven technology and the magnitude of the potential reduction is not certain, an adaptive management approach is preferable. The County has incorporated acoustic mitigation pursuant to the adaptive management provisions of PEIR Mitigation Measure BIO-14d. This has been added to page 3.4-137 of the final SEIR as ADMM-8: Acoustic Mitigation, which is subject to oversight by the Alameda County Wind Repowering / Avian Protection Technical Advisory Committee (TAC). The Bat Adaptive Management Plan required by PEIR Mitigation Measure BIO-14d was expanded by 2020 Updated Mitigation Measure BIO-14d with adaptive management measures (ADMMs) to reduce impacts on bats to be implemented as appropriate. However, one specific measure, *ADMM-7, Seasonal Turbine Cut-in Speed Increase*, will be implemented at the commencement of project operations. As stated in the draft SEIR, "Cut-in speed increases offer the most promising and immediately available approach to reducing bat fatalities at fourth-generation wind turbines." (p. 3.4-126).

- The commenter suggests a spring migration curtailment period. This mitigation measure has been incorporated in the adaptive management provisions of PEIR Mitigation Measure BIO-14d, in the form of a seasonal spring cut-in speed increase and potentially a "smart curtailment" strategy; such mitigation is subject to oversight by the TAC (final SEIR page 3.4-136). At this time, the County does not have substantial evidence to support that such a mitigation measure would produce a demonstrable reduction in turbine-caused bat mortality and thus, a demonstrable change in project impacts.
- The commenter suggests that the County not follow a "strict statement" to specify that changes can be requested only after the first three years of the August to October nightly curtailment be adjusted to include the possibility of changes to the curtailment after the first year of operations." The County notes that such a decision is already implicit in TAC authority, but that it is likely to not be practicable because the first year of operations is needed simply to collect initial data; that monitoring at other repowered sites has indicated substantial year-to-year variability in bat fatalities, especially with regard to timing and size of seasonal migrations; and because of necessary time lags in the design, conduct, assessment and revision of adaptive management studies. Although this suggested change has not been incorporated, as indicated above, the TAC will have the ability to recommend adaptive management measures after the first year of operations.

Response to Comment 1-15

The commenter suggests a turbine setback and/or curtailment to minimize impacts to burrowing owls. The commenter raises two issues: setback from active owl burrows and setback from boundaries between the project area and adjacent burrowing owl conservation/mitigation sites. Siting turbines at a certain setback from active owl burrows is not feasible because burrowing owls are highly mobile birds that utilize different burrows, in different locations, on a year-to-year basis. For this reason, the location of burrows at any given point in time is not a practical or effective constraint on permanent turbine siting. With regard to boundary setbacks, the County acknowledges and agrees that proximity to the burrowing owl conservation/mitigation sites would suggest a higher potential for burrowing owl presence and potential for collisions. Four turbine sites are proposed within 0.3 mile (about 1,600 ft.) of the exterior south and west boundaries of the Two Sisters Burrowing Owl Preserve, including two at a distance of approximately 650 feet (nos. 14 and 15), one at a distance of approximately 1,060 feet (no.12), and one at approximately 1,250 feet (no. 23). It is acknowledged that there may be times when owls nest within the Preserve, at distances of less than 0.3 miles from these turbines. The conservation/mitigation sites were established following construction of wind power facilities within the APWRA, and it is the County's priority to minimize conflicts between these adjacent uses through TAC-recommended adaptive management measures to be adopted in the APP, including temporary curtailment during seasonal nesting periods. Such measures, which are expected to reduce fatalities of all birds, can be continued or discontinued after the first year of monitoring depending on the detection of turbine-related burrowing owl fatalities compared to the baseline of fatalities under non-repowered turbines.

Response to Comment 1-16

The commenter suggests that the presence of lattice towers associated with the high-tension power lines that traverse the project site, which provide perches and nest sites for raptors, may increase risks of turbine collision for those birds. The County agrees with the comment. The draft SEIR text notes recorded raptor nesting in these towers (pages 3-24, 3-25, 3-28, 3-29, 3-50, 3-88) and the final

SEIR has been modified (final SEIR page 3.4-101) to recognize that among other avian habitat factors, nesting and roosting in electrical transmission towers may be a factor in the observed variation in raptor fatality rates recorded at different repowered sites across the APWRA. The setbacks required for turbine sites from transmission lines for safety and infrastructure security reasons, typically at least 1,000 feet, may be expected to have some moderating effect. The relative final position of turbines to transmission towers will be documented in the APP. Regarding permanent meteorological towers, none would be of lattice construction.

Response to Comment 1-17

The comment does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 1-18

The commenter accurately quotes the draft SEIR. For the subject project alternative, daylight cut-in speed would be set at 5 m/s year-round to minimize turbine-caused mortality of golden eagles, and nighttime cut-in speed would be set at 5 m/s during August and September to minimize anticipated turbine-caused mortality of bats. There is no discrepancy. The text on page 4-20 of the draft SEIR has been revised to clarify this (see final SEIR p. 4-21).

Letter 2—California Department of Fish and Wildlife

Response to Comment 2-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 2-2

The comment provides an accurate summary of the proposed project and the Reduced Project Alternative. The County notes, however, the address given of "170257" is actually "17257," which is the address for the northeasternmost parcel. The comment states that it is unclear if the Reduced Project Alternative is the actual proposed project which forms the basis of the impacts analysis and the avoidance and minimization measures. The proposed project is the 36-turbine project described in Chapter 2, *Project Description*, of the draft SEIR. The proposed project is the subject of the impacts analysis in Chapter 3, *Impact Analysis*, of the draft SEIR. The 24-turbine Reduced Project Alternative described in Chapter 4, *Alternatives*, of the draft SEIR is an alternative to the proposed project. The Reduced Project Alternative was developed through a an initial micro-siting study that is included in Appendix F and is the basis of the 36-turbine Micro-Sited Alternative studied in Chapter 4, *Alternatives*. A supplemental micro-siting study for the proposed project is included in Appendix G of the draft SEIR; the supplemental micro-siting study is the final basis for the 24-turbine Reduced Project Alternative.

Per Public Resources Code Sections 21002-21002.1 and 21004, the lead agency has the authority to adopt a project alternative rather than the proposed project, particularly if the agency finds that the alternative will be less environmentally damaging than the project as proposed.

Response to Comment 2-3

The commenter's description of the project's environmental setting is accurate and consistent with the draft SEIR. Figure 3.4-1 has been updated to accurately depict the southern boundary of Jess Ranch.

Response to Comment 2-4

The commenter expresses concerns regarding the proposed project's significant impacts with respect to turbine-related bird and bat fatalities. The observations expressed in the comment are consistent with the analysis in the draft SEIR (see Impact BIO-11 and Impact BIO-14 in Section 3.4, *Biological Resources*, and Section 5.2, *Cumulative Impacts*). The commenter does not raise a specific issue or concern with the analysis. The County remains committed to working with the project applicant and state and federal wildlife agencies to develop feasible and effective methods to curtail avian and bat fatalities within the APWRA.

Response to Comment 2-5

The commenter's suggested revision has been made to the text on page 3.4-3 in Section 3.4, *Biological Resources*, of the draft SEIR on page 3.4-3 of the final SEIR.

Response to Comment 2-6

The commenter states that the draft SEIR and Appendix D incorrectly cite tricolored blackbird breeding colonies as being surveyed by CDFW rather than reported to CDFW. The text on page 3.4-27 of the draft SEIR has been revised on page 3.4-29 of the final SEIR to state that the two nearby tricolored blackbird breeding colonies were reported to CDFW instead of surveyed by CDFW.

The commenter also recommends that a project species impact analysis on tricolored blackbird and Swainson's hawk be included in the SEIR. Impacts on tricolored blackbird and Swainson's hawk nesting and foraging habitat are analyzed in the draft SEIR under Impact BIO-8a and Impact BIO-8b (nesting) and Impact BIO-9b (foraging). Focused tricolored blackbird surveys and raptor surveys were conducted in May and June 2019 to evaluate nesting and foraging habitat throughout the project site and to identify any occupied breeding sites to support the project analysis. This information is summarized in the draft SEIR and described in Appendix D. See also response to comment 1-11.

Response to Comment 2-7

The comment notes that the project is located within the boundaries of the East Alameda County Conservation Strategy (EACCS) and is subject to the mitigation strategies set forth in the EACCS. The County notes that only species covered by the EACCS are subject to EACCS migration ratios. 2020 Updated PEIR Mitigation Measure BIO-1d has been revised to clarify that for focal species identified in the EACCS (San Joaquin spearscale, big tarplant, Congdon's tarplant, palmate-bracted bird's-beak, Livermore Valley tarplant, and recurved larkspur), loss of individuals and occupied habitat will be compensated at 5:1, consistent with the EACCS.

Response to Comment 2-8

The commenter recommends that the SEIR identify all tricolored blackbird nesting habitat on and within 0.5 miles of the project site. The draft SEIR acknowledges that suitable habitat is present on

the project site and that impacts on special-status birds, including tricolored blackbird, could occur as a result of project construction, assuming presence of the species. Accordingly, surveys are not planned since confirming presence of nesting habitat would not change the draft SEIR analysis. The discussion under Impact BIO-8a of the draft SEIR has been revised to include alkali wetland as potential nesting habitat for tricolored blackbird and to add an additional preconstruction survey 30 to 60 days ahead of construction to identify suitable nesting habitat that would be targeted during the preconstruction nesting surveys. Impact BIO-9b specifically addresses loss of foraging habitat for tricolored blackbird. Mitigation Measure BIO-8a includes measures to conduct surveys and avoid active nesting colonies to prevent construction-related impacts on breeding tricolored blackbirds and Mitigation Measure BIO-5c requires that temporarily disturbed grasslands be restored to offset construction-related impacts on foraging habitat.

Response to Comment 2-9

The commenter recommends that the SEIR clarify that suitable nesting habitat for special-status birds be avoided by project construction unless absolutely necessary. The County would agree in principle, except that a limited quantity of nesting habitat, particularly grassland, cannot be avoided by project construction. The draft SEIR stated that tree removal will be avoided in the description of Impact BIO-8a, and Mitigation Measure BIO-8a includes requirements to avoid impacts on nesting birds and raptors. The draft SEIR (Table 3.4-7) acknowledges that the project would result in the permanent loss and temporary disturbance of habitats (that have been identified as suitable nesting substrate for special-status and non-special-status birds and raptors. The draft SEIR also acknowledges that the project could destroy or disturb active bird or raptor nests. The discussions under Impact BIO-8a and Impact BIO-8b in the draft SEIR have been revised to clarify that permanent loss and temporary disturbance of suitable nesting habitat would occur from the project, and that these impacts could result in the loss or disturbance of active nests.

The commenter also recommends that compensatory mitigation be provided for loss of nesting and foraging habitat. As shown in Table 3.4-7 of the draft SEIR, less than 0.1 acre of vegetated and unvegetated aquatic habitats would be permanently impacted by construction. The remaining permanent impacts would occur within grassland that accounts for approximately 0.6 percent of the overall grassland habitat available on the project site. While specific compensation was not identified for bird nesting and foraging habitat, compensation for loss of these habitats would be required under Mitigation Measure BIO-18 (regulated aquatic resources), Mitigation Measure BIO-5b (special-status amphibian aquatic and upland habitat), and Mitigation Measure 10b (San Joaquin kit fox and American badger).

Response to Comment 2-10

The commenter recommends that the SEIR include compensatory mitigation for temporary disturbance of annual grassland habitat for burrowing owl. Temporarily disturbed habitat would be restored following construction. Because only six percent of the total available grassland habitat would be disturbed in one construction season, it is not expected that this temporary disturbance would result in significant long-term impacts on burrowing owl. Therefore, compensatory mitigation for temporary impacts is not proposed.

Response to Comment 2-11

The commenter recommends that the SEIR include compensatory mitigation for loss of permanent and temporary foraging and nesting habitat for tricolored blackbird. See responses to comments 2-9 and 2-10, which describe the proposed project's compensatory mitigation plan for grassland and wetland habitats.

Response to Comment 2-12

The commenter notes that data regarding avian fatalities are incomplete, a subject discussed at length in the draft SEIR, primarily in the discussion under Impact BIO-11 in Section 3.4, *Biological Resources*. No further clarification is needed.

Response to Comment 2-13

The text on draft SEIR page 3.4-102 describing burrowing owl use of the project site has been revised on pages 3.4-107 and 3.4-108 of the final SEIR to avoid implying that causes other than turbine collision account for a substantial portion of burrowing owl mortality. Also, as discussed in response to comment 1-8, the text of 2020 Updated PEIR Mitigation Measure BIO-11i has been revised to encourage the TAC to evaluate the merits of curtailment near raptor nests, including burrowing owl colonies. See also responses to comment 1-9 and comment 1-10 regarding the burrowing owl analysis.

Response to Comment 2-14

To the extent the commenter is requesting that the SEIR discuss the status of Swainson's hawk on other wind project sites in the APWRA, the County does not consider such an analysis to be necessary. Operational impacts to Swainson's hawk are assessed entirely on the basis of comparison to fatality rates observed elsewhere in the APWRA, an approach established in the PEIR and maintained in the current SEIR. The requested analysis does not appear likely to yield results that would alter the findings of significance or mitigation measures identified in the SEIR or to substantially alter its analyses or conclusions.

Nonetheless, the draft SEIR acknowledges that there is a known Swainson's hawk nest on the project site and analyzes impacts to nesting Swainson's hawk under Impact BIO-8b. This impact discussion states that construction of the project would not directly remove any trees that could be used by nesting raptors but acknowledges that active nests that are in proximity to construction could be disturbed by noise and visual disturbances that could result in incidental loss of nesting birds. Mitigation Measure BIO-8a would be implemented to avoid take of Swainson's hawk by conducting preconstruction nesting surveys for raptors within 1 mile of activities and establishing a no-activity zone large enough to avoid impacts that would cause loss of eggs or young, as determined around the nest by a qualified biologist in coordination with USFWS and/or CDFW.

The applicant would obtain an ITP for species as deemed appropriate, based on consultation with the CDFW.

Response to Comment 2-15

The commenter recommends annual surveys for raptor species and curtailment of turbines near raptor nests. See response to comment 1-8, which indicates that annual eagle nest surveys could be

required by the USFWS under the terms of an Eagle Take Permit. Annual surveys of other raptor species and the tricolored blackbird extending for a mile from all turbine locations, extending over seven months per year, as well as focused overwintering studies of burrowing owl, would be an activity best suited to an all-APWRA study shared among all operators, as would wide-scale curtailment. Curtailment specific to project impacts will be addressed in the Avian Protection Plan required by PEIR Mitigation Measure BIO-11a.

Response to Comment 2-16

With regard to PEIR Mitigation Measure BIO-11b, the commenter describes the review by the CDFW of the micro-siting analyses and design layout alternatives, and reports that the CDFW does not consider the outcome of the analyses to yield a significant benefit to reducing avian fatality rates. The commenter recommends elimination, down-sizing turbine size, or curtailment of turbines determined to be high-risk or moderate-high risk in the project's micro-siting study. The County finds that the applicant has submitted a thorough effort to comply with the PEIR's micro-siting requirement embodied in PEIR Mitigation Measure BIO-11b. The applicant will be subject to the 2020 Updated PEIR Mitigation Measure BIO-11b, which, as revised in this final SEIR, confirms and clarifies the role of the County's Wind Repowering/Avian Protection Technical Advisory Committee (TAC), which includes representatives of the CDFW and the USFWS, in reviewing and making recommendations on the micro-siting analysis. No PEIR mitigation measure exists that would explicitly require the County to eliminate any turbine or require seasonal curtailment on the basis of a micro-siting study, although the TAC could decide to make either of these recommendations. The County has instead relied on the TAC, as a group of experts (including representatives from the CDFW) that has evaluated several prior micro-siting studies for consistency with the requirements of PEIR Mitigation Measure BIO-11b, to make explicit recommendations to reduce avian and bat fatality rates on a project-by-project basis. As now formally required by the 2020 Updated PEIR Mitigation Measure BIO-11b, revised in this Final SEIR, the TAC will make recommendations regarding the results of the micro-siting study, which the County planning director will have the discretion to require. The Board of Zoning Adjustments could choose to modify the approval to limit the number of turbines or its operation on the basis of the identified risk levels of individual turbines. The micro-siting analysis could also be further revised though the TAC review or to inform final decisions by the Board of Zoning Adjustments.

Response to Comment 2-17

The commenter recommends implementing some Adaptive Management Measures ("ADMMs") as part of project construction that could preemptively reduce avian mortality, such as blade painting. Blade painting is among the ADMMs identified in the PEIR (PEIR Mitigation Measure BIO-11i, PEIR page 3.4-117). Like all ADMMs, any specific program for blade painting is subject to TAC review and subsequent County approval. As defined in the PEIR, blade painting would involve testing a sample control group of painted turbine blades to be compared to turbines without painted blades. The project proponent has indicated that blade painting would not be economically feasible for the proposed project because it would violate the turbine warranty agreement. The project proponent will be required to consult with the TAC on the feasibility of implementing blade painting and other ADMMs, and the TAC will ultimately make a recommendation to the County. See response to comment 2-16, above.

As defined in the PEIR, ADMMs are to be proposed as part of the project's adaptive management program (AMP) for implementation after completion of three years of monitoring, whereas the

commenter has suggested preemptive implementation of such measures. There is no requirement in the PEIR to preemptively implement ADMMs, although it is noted that the Reduced Project Alternative which is identified as the environmentally superior alternative in Chapter 4, *Alternatives*, of the draft SEIR would implement ADMM-6 from PEIR Mitigation Measure BIO-11i (i.e., reducing cut-in speeds) upon commencement of operation. Before the project APP is adopted or approved by the County, the TAC could consider adding other ADMMs to be implemented by the project proponent at the commencement of project operations.

Response to Comment 2-18

The commenter notes the substantive requirements of 2020 Updated PEIR Mitigation Measure BIO-14a to use the best information available to site turbines so as to reduce the risk of bat collisions. The commenter also notes the requirement of 2020 Updated PEIR Mitigation Measure BIO-14a to conduct bat habitat and roosting surveys (which is itself identified as PEIR Mitigation Measure BIO-12a). An extended discussion of micro-siting with respect to bat mortality is provided in the responses to comments 5-14 and 7-29.

The County agrees that impacts to bats are most effectively reduced through mitigation measures. The commenter mentions cut-in speeds; the Reduced Project Alternative, which is identified as the environmentally superior alternative in Chapter 4, *Alternatives*, of the draft SEIR, includes a cut-in speed limit of 5 m/s with a requirement for an adaptive management process, to be overseen by the TAC, seeking improved mitigation effectiveness through a "smart curtailment" process that also considers factors such as bat detection and meteorological conditions. As discussed in Response to Comment 2-2, the County has the authority to adopt a project alternative rather than the proposed project, particularly if the agency finds that the alternative will be less environmentally damaging than the project as proposed. The commenter mentions reduced lighting; lighting at the project site cannot reasonably be further reduced, due to FAA requirements for lighting wind turbines. The commenter also mentions "Project-wide curtailment during Spring and Fall migration periods." The County is unaware of evidence supporting this measure, and commenter provides none. Curtailment measures for bats are detailed in Mitigation Measure BIO-14d, measure ADMM-7 of the draft SEIR (note that this measure must be implemented from the beginning of project operations).

Response to Comment 2-19

As required by CEQA, after the Board of Zoning Adjustments has certified the final SEIR, the County will submit payment for applicable CDFW fees upon filing of the Notice of Determination.

Letter 3— East Bay Regional Park District

Response to Comment 3-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 3-2

The commenter is correct that a variety of micro-siting models have been applied in the APWRA, including a variety of collision hazard models, and that performance of the collision hazard models as a group seems to have generally improved over time. The micro-siting study and supplemental micro-siting study, which are included in Appendix G and Appendix F of the SEIR, respectively, did

not use a collision hazard model, and the use of such a model is not required by PEIR Mitigation Measure BIO-11b. The County is not aware of any studies that have compared the performance of collision hazard models with performance of the APWRA Scientific Review Committee (SRC) siting guideline approach used in the micro-siting studies. The micro-siting study in Appendix F includes a discussion of the two modeling approaches, questioning whether the collision hazard model can provide "higher certainty with regard to a potential reduction in fatalities of target species compared with a field assessment" (p. 7). This issue is discussed on draft SEIR page 3.4-58. It is the County's determination that the choice of model used for micro-siting is not critically important, given that the effectiveness of the micro-siting process in general has not yet been fully proven in reducing fatality risks, and that the applicant for the proposed project has elected to propose many turbines assessed as having "high" fatality risk (e.g., see the response to comment 2-16). Page 4-15 of the draft SEIR states that, "[t]he micro-siting process does not address risk to small birds or to bats, so there is no expectation that fatalities in those groups would be reduced under the Micro-Sited Alternative. It is also important to note that the magnitude of the difference in raptor fatalities, relative to the project, cannot be quantified because the efficacy of micro-siting remains unknown. Although micro-siting has routinely been applied at most sites proposed for repowering in the APWRA, and at other areas such as in the nearby Montezuma Hills Wind Resource Area, still there have been no studies to verify the existence or magnitude of any biological benefits from micro-siting." Consequently, the County's determination is that the type of micro-siting model used would have little effect on the proposed project's significant impacts with respect to avian and bat fatalities.

Response to Comment 3-3

The comment requests additional quantification of turbine specifications in the micro-siting study included in Appendix G of the SEIR. See response to comment 3-2 regarding the effectiveness of a different collision hazard model. As the commenter notes, the draft SEIR discloses information on the specifications of the proposed turbines, and also discusses the implications of using larger turbines in the Reduced Project Alternative (draft SEIR p. 4-18 to 4-24). The commenter correctly notes that the Reduced Project Alternative retains a number of "high" fatality risk turbine sites. This is why the draft SEIR concludes that this alternative, like the proposed project, would have significant and unavoidable impacts on avian and bat fatalities after mitigation. See also response to comment 2-16 regarding the TAC's review of the micro-siting studies.

Response to Comment 3-4

The commenter's description of the current state of the Diablo Range golden eagle population is consistent with the discussion on draft SEIR pages 3.4-52 to 3.4-54. The commenter disputes the potential for golden eagle breeding outside the Diablo Range, but the draft SEIR assessment of the LAP relies on a 2016 golden eagle habitat model developed by CDFW (p. 5-10; California Department of Fish and Wildlife [2016]). The final SEIR (page 3.4-46) has been revised to cite this model.

Response to Comment 3-5

The commenter is referred to pages 5-5 through 5-15 of the draft SEIR, which provide the requested analysis of effects in the context of regional population trends for avian (and bat) species of interest. Note that the analysis already concludes a declining population trend for the burrowing owl in the APWRA. Comment 1-9 presents substantive evidence that the owl also has a statewide declining

trend, and the draft SEIR has been revised with this information. The anecdotal evidence from Dr. Smallwood that is presented in the comment does not change the draft SEIR's assessment of a declining trend in the burrowing owl population, and does not constitute sufficient factual information to introduce a new mitigation measure or conclude its effectiveness.

Response to Comment 3-6

The commenter correctly notes that prairie falcon fatalities have been recorded in the APWRA. The draft SEIR provides an analysis of potential effects on the prairie falcon population (see pages 5-5 through 5-11), which finds a cumulative impact at the scale of the APWRA plus the MHWRA. The County disagrees that cumulative impacts do not consider nest fatalities. The consideration of a cumulative effect is not based simply on a number of bird fatalities, but on evidence of a declining population trend, which inherently accounts for nest fatalities.

Response to Comment 3-7

See response to comment 3-6.

Response to Comment 3-8

See response to comment 1-13.

Response to Comment 3-9

The comment includes numerous statements regarding small bird and bat population and fatality trends, and states that the SEIR should compare nationwide or regional trends of species groups with existing APWRA mortality reports to highlight those species undergoing declining trends that may warrant additional mitigation options. This is consistent with the methodology described on pages 5-5 to 5-9 of the draft SEIR, and all of the issues raised by the commenter are consistent with the information provided in that analysis.

Response to Comment 3-10

The commenter requests analysis and mitigation for potential impacts to Swainson's hawk and tricolored blackbird. The analysis in Section 3.4, *Biological Resources*, of the draft SEIR discusses potential impacts to both Swainson's hawk and tricolored blackbird, and proposes minimization and mitigation measures to address potential impacts on those species.

Response to Comment 3-11

The commenter states that the draft SEIR should include landscape-level approaches to mitigation, such as enhancing ground squirrel populations. However, the commenter does not provide evidence that this type of mitigation would feasibly reduce or eliminate the significant impacts of the proposed project. No changes to the draft SEIR have been made.

Response to Comment 3-12

The commenter requests an analysis of cumulative effects on regional population trends for a variety of avian and bat species. This analysis is provided in Chapter 5, *Other CEQA Considerations*, of the draft SEIR (pages 5-5 through 5-15). The assessment not only considers 450 MW development of the APWRA, but also effects of the APWRA combined with the MHWRA. The commenter's

suggestion that cumulative impacts can be avoided through collision hazard modeling is unsupported by evidence, as discussed in the responses to comments 3-2 and 3-3. The County agrees that disqualification of all high-risk turbine sites would likely reduce impacts substantially, but such an action is inappropriate due to the need for TAC review of the micro-siting recommendations, as discussed in the response to comment 2-16. The commenter's suggestion to impose a moratorium on planned wind projects is outside the scope of CEQA and the draft SEIR analysis.

Response to Comment 3-13

The comment provides a closing remark and does not raise a specific issue on the substance of the draft SEIR.

Letter 4— East Bay Community Energy

Response to Comment 4-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 4-2

The comment expresses support for the proposed project and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 4-3

The comment does not raise a specific issue on the substance of the draft SEIR.

Letter 5— Adams Broadwell Joseph & Cardozo

Response to Comment 5-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-2

The comment states that the draft SEIR's project description is deficient because it does not adequately describe the proposed project's potential utilization of horizontal directional drilling (HDD) and decommissioning activities. See responses to comments 5-3 and 5-4.

Response to Comment 5-3

The comment states that the draft SEIR's project description is deficient because it does not describe where horizontal directional drilling (HDD) activities would occur. As described in Chapter 2, *Project Description*, of the draft SEIR, the proposed project could use HDD to install electrical collection lines under wetlands and streams. The locations of the proposed electrical collection lines are shown in Figure 2-3. In most cases, the medium-voltage lines would be installed using the cut-and-cover method. However, to minimize surface disturbance within wetlands and streams, collection lines may be installed under wetlands and other waters using HDD techniques, where

feasible. The draft SEIR evaluates potential impacts to riparian habitat, including wetlands, from the installation of roads and electrical infrastructure (Impact BIO-16 in Section 3.4, *Biological Resources*). The analysis acknowledges that the exact locations where HDD may be used are not currently known, due to final siting decisions that depend on the final project approval, including alternatives to the project and recommendations of the TAC. Therefore, the draft SEIR conservatively assumes that the installation of any electrical infrastructure within riparian habitat would result in a significant impact on that resource. Table 3.4-6 shows the permanent and temporary impacts of project construction by land cover type. This impact would be mitigated to a less-than-significant level through implementation of 2020 Updated PEIR Mitigation Measure BIO-1b, PEIR Mitigation Measure BIO-1e, and PEIR Mitigation Measure BIO-16, which require the implementation of best management practices, the retention of a biological monitor during ground disturbing activities, and compensation for any loss of riparian habitat. CEQA establishes that a project description should not supply extensive detail beyond that needed for evaluation and review of the environmental impact (CEQA Guidelines Section 15124). In this case, the draft SEIR project description provides sufficient information to ascertain the project's environmentally significant effects and identify appropriate mitigation.

Response to Comment 5-4

The comment states that the draft SEIR's project description is deficient because it does not disclose "the full range and severity" of project impacts and appears to allege without supporting evidence that analysis of impacts is "chopped up" into many separate parts, without due consideration of all reasonably foreseeable future activities associated with the project. More particularly, the comment recognizes that the draft SEIR describes decommissioning activities associated with the proposed project, yet asserts the draft SEIR treatment of the subject is inadequate in excluding decommissioning from part of the project analysis. As described on pages 2-23 and 2-24 of the draft SEIR, the timing, and indeed whether decommissioning would occur at all, is uncertain and therefore speculative. For the purpose of CEQA, the SEIR deems the project or a similar successor operation to be in place for the foreseeable future, and the County has no supporting evidence to agree with the commenter that the decommissioning is in fact necessarily part of the project. It is known that decommissioning would primarily disturb areas on which permanent facilities are planned to be constructed. As a standard condition of approval, a Restoration and Reclamation Plan would require those areas be restored to pre-project conditions in the event of decommissioning. The commenter provides no substantial evidence for asserting that the draft SEIR implies undisclosed significant environmental effects that could occur as a result of decommissioning the project site. Standard conditions of approval for each repowering project require the applicant to obtain approval prior to construction of a Restoration and Reclamation Plan and to post a bond to ensure implementation of such a plan. However, actually carrying out such a plan would depend on the final siting of the project facilities and infrastructure, and after a minimum life span of thirty years and potentially forty to fifty years or more for the turbines, it would be exceedingly speculative to predict more than generalities about the environmental consequences of decommissioning.

Response to Comment 5-5

The commenter cites CEQA requirements regarding the need to provide a complete and accurate environmental setting and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-6

The commenter states that Peregrine falcon should be identified in the SEIR as a special-status species with potential to occur on the project site based on observations of the species within the project's airspace. The peregrine falcon was not called out specifically because the project site does not support suitable nesting habitat for the species. However, the draft SEIR discloses on page 3.4-19 that, "Other special-status birds may migrate through or forage in the project site but are not expected to nest within the project site. As such, these species are not addressed specifically in this SEIR but are addressed generally under migratory birds subject to operational effects. Such species are relevant to and part of this analysis to the extent they have been identified through postconstruction fatality studies in the APWRA".

The commenter argues that any species protected from take under the California Fish and Game Code should be considered a special-status species and addressed in the SEIR. However, this would apply to every non-game migratory bird in California. The code prohibits take of non-game birds but does not designate special status to individual species under those codes (3503, 3503.5, and 3800). Compliance with the California Fish and Game Code as it relates to non-game birds and raptors is addressed as a whole under Impact BIO-8a (migratory birds) and Impact BIO-8b (raptors) in Section 3.4, *Biological Resources*, of the draft SEIR.

The commenter also states that the SEIR fails to include birds designated by USFWS as Birds of Conservation Concern (BCC) as special-status species. As stated by USFWS, "The overall goal of the Birds of Conservation Concern is to accurately identify the migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent our highest conservation priorities". The intent of these lists is to prioritize efforts for conservation and is not meant to provide specific species designations. The Birds of Conservation Concern 2008 states that "While all of the bird species included in BCC 2008 are priorities for conservation action, this list makes no finding with regard to whether they warrant consideration for ESA listing. Our goal is to prevent or remove the need for additional ESA bird listings by implementing proactive management and conservation actions". The SEIR is consistent with the USFWS conservation goals because it addresses all special-status and non-special-status migratory birds and raptors under Impact BIO-8a (migratory birds) and Impact BIO-8b (raptors) and provides mitigation that requires breeding surveys be conducted and active nests be avoided during construction to avoid take. The permanent and temporary loss of potential nesting and foraging habitat for all special-status and non-special-status migratory birds is addressed under Impact BIO-9b in Section 3.4, *Biological Resources*, of the draft SEIR.

Response to Comment 5-7

See response to Comment 5-6 related to Birds of Conservation Concern.

Response to Comment 5-8

The commenter claims that the draft SEIR erroneously concludes that California condor, bald eagle, and sandhill crane have low or no potential to occur in the project area. As stated under Impact BIO-11, "Several special-status avian species, including California condor, bald eagle, and sandhill crane have been observed flying over or near to the proposed project and/or within the APWRA but only once or infrequently and have not had recorded fatalities in any monitoring within the APWRA. Since there are no recorded fatalities based on either the non-repowered turbine monitoring or the repowering projects monitored to date, potential fatality rates cannot be predicted, and fatalities are

unlikely". With regard to the California condor, see the response to comment 1-13, and for the other two species cited, see the response to comment 5-10.

Response to Comment 5-9

See response to comment 1-13.

Response to Comment 5-10

As the commenter notes, the draft SEIR only referenced the bald eagle observations from the 2020 eagle use surveys and did not include the avian use survey results (Appendix D). Table 3.4-3 of the draft SEIR and the discussion of bald eagle on page 3.4-41 was updated on page 3.4-43 of the final SEIR to include the additional 7 bald eagle observations from the avian use surveys. The County agrees that the likelihood for occurrence on the project site should be considered high; however, these occurrences are considered flyovers, and the draft SEIR's conclusion that the project site does not provide suitable nesting and foraging habitat for this species is valid. Based on the low likelihood that bald eagles would nest or forage in the project area, construction impacts on bald eagle are not expected.

The commenter claims that the draft SEIR's conclusion that sandhill cranes are not expected to occur on the project site is erroneous based on an observation of the species during project avian use surveys and other known detections in the greater AWPRA. As noted in the draft SEIR (page 3.4-25), one sandhill crane was observed during avian use surveys flying greater than 200 meters above the project site and was considered a flyover. This flyover observation would not be sufficient to conclude occupancy on the project site. Other detections made by Dr. Smallwood in the APWRA as referenced by the commenter were auditory night detections that further support possible flyovers but do not confirm occupancy. The commenter provides no data to suggest that Sandhill cranes use the project site for breeding or foraging. The draft SEIR's conclusion that sandhill cranes are not expected to be present on the project site is valid.

Regarding the risk of bald eagle or sandhill crane fatalities, draft SEIR Impact BIO-11 states "Several special-status avian species, including California condor, bald eagle, and sandhill crane have been observed flying over or near to the proposed project and/or within the APWRA but only once or infrequently and have not had recorded fatalities in any monitoring within the APWRA. Since there are no recorded fatalities based on either the non-repowered turbine monitoring or the repowering projects monitored to date, potential fatality rates cannot be predicted, and fatalities are unlikely". Nonetheless, the project will be subject to rigorous pre- and post-construction surveys to observe and monitor the presence of all volant species.

Response to Comment 5-11

The comment states that the project fails to comply with the Rivers and Harbors Act of 1899. The Rivers and Harbors Act applies to navigable waters of the United States, which include tidal waters and tidal wetlands. There are no tidal or designated navigable waters on the project site. The nearest navigable waters of the U.S. are Old River and the San Joaquin River. The proposed HDD activities would only require a Section 10 permit, such as Nationwide Permit 12 for utility lines, if it would occur in, over, or under navigable waters of the U.S. A Clean Water Act Section 404 permit, such as a Nationwide Permit 12, would only be required if the HDD activity were to result in a discharge of fill material into waters of the U.S. HDD is typically used to cross under waters of the U.S., which is not regulated under CWA Section 404.

Response to Comment 5-12

The commenter cites CEQA requirements regarding disclosure of significant environmental effects and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-13

The draft SEIR's conclusions regarding impacts on condor, bald eagle, and sandhill crane are based on available scientific data for these species pertaining to the project area and their likelihood to be present. See response to comment 5-10 regarding revisions to the likelihood of occurrence of bald eagle and the draft SEIR's assessment of the potential project impacts.

Regarding the comment asserting that all special-status species were erroneously omitted from the environmental setting, the commenter does not indicate which species were omitted other than those noted above. See also response to comment 1-13 with respect to the California condor.

Response to Comment 5-14

The commenter's heading and introductory remarks assert that the draft SEIR disregards PEIR Mitigation Measures BIO-11b and BIO-14a by withholding completion of a micro-siting analysis for bats in the project area, and otherwise failing to make use of the best available science and methods to site turbines. The County recognizes that PEIR Mitigation Measure BIO-11b and its bat-focused counterpart PEIR Mitigation Measure BIO-14a were mandated in the PEIR to require that siting (aka micro-siting) of turbines minimize bat collision risk by taking bat use and landscape features such as trees, edge habitats, riparian areas, other water bodies and wetlands into consideration. At the time that the PEIR was certified, all bird and bat species were expected to benefit from such siting techniques, however there is little documentation of the effective such micro-siting efforts in mitigating or avoiding bat collisions. The County has required previous applicants to present their micro-siting studies to the APWRA Technical Advisory Committee (TAC) for review and comment. The TAC is made up of a group of wildlife agency and other experts convened by the County and therefore is best qualified to review and comment on these technical studies. The micro-siting studies prepared by the project proponent for the development of an alternative to the project (Chapter 4*, Alternatives to the Project*), will be evaluated by the TAC to assess the proposed turbine siting with respect to the requirements of 2020 Updated PEIR Mitigation Measure BIO-14a to reduce bat collision risks. The TAC may consider the commenter's analysis as well in making their recommendations for final turbine siting. In addition, the PEIR and these mitigation measures do not mandate that the final siting or bat roost and habitat surveys be completed prior to circulation of second-tier CEQA documents, but do require them to inform final turbine siting decisions as approved by the Planning Director.

The subject is addressed in greater detail in response to comment 7-29 regarding the County's rationale for not requiring a separate or supplemental micro-siting analysis for bat mortality, and also regarding the timing of bat roosting surveys on the project site. See also response to comment 2-16 regarding revisions made to PEIR Mitigation Measure BIO-11b in this final SEIR that confirm and clarify the role of the TAC in reviewing and making recommendations on the micro-siting analysis. See also the response to comment 2-18 regarding the absence of a bat micro-siting analysis and the absence of substantive consequences in view of the County's understanding of bat use of the project site and selection of appropriate mitigation.

Response to Comment 5-15

The commenter is correct that detailed bat roost surveys described in PEIR Mitigation Measure BIO-12a were not conducted during project surveys intended to provide a basis for existing conditions to support the draft SEIR analysis. The habitat evaluation conducted for bats on the project site identified likely areas of bat habitat (pages 3.4-27 and 3.4-28 of the draft SEIR) to inform the impact analysis and to identify areas where PEIR Mitigation Measures BIO-12a would apply. The commenter implies that PEIR Mitigation Measure 12a requires roost surveys to be performed as part of subsequent CEQA analysis. The measure in fact does not state this but requires that the roost surveys be performed prior to project development of the site to facilitate avoidance during construction and inform turbine siting, as noted in 2020 Updated PEIR Mitigation Measure BIO-14a.

Response to Comment 5-16

See response to comment 3-2 regarding the selection of a micro-siting model. The commenter incorrectly states "The efficacy of the collision risk models was tested through peer-review publications;" see the cited source (Smallwood comments at p. 65), which is part of commenter's submittal. The commenter also incorrectly states that use of a collision risk model "is therefore supported by the PEIR;" in fact the cited source (PEIR page 3.4-109) says "Project proponents will utilize currently available guidelines such as the Alameda County SRC guidelines for siting wind turbines," which is exactly what is done in the draft SEIR.

Regarding Dr. Smallwood's micro-siting analysis, see response to comment 5-68.

Response to Comment 5-17

The commenter states that the draft SEIR fails to analyze the additional permanent impacts to grasslands that may be caused by repeat disking to prevent turbine-caused wildfires. The project will adhere to the *Altamont Pass Windfarms Fire Requirements*, which require the "removing and clearing away of flammable vegetation and combustible growth from within 30 feet of [a] structure" by installing a gravel pad around each turbine. These areas are considered a permanent loss of grassland habitat. No disking is proposed as part of project maintenance and operation. See also response to comment 5-110.

Response to Comment 5-18

The comment correctly states that a Phase I Environmental Site Assessment (ESA) was prepared for the project. Refer to Section 3.9, *Hazards and Hazardous Materials*, Impact HAZ-4 of the draft SEIR, which contains details on this Phase I ESA, and to Table 3.9-2, which describes the recognized environmental conditions (RECs) identified in the Phase I ESA. The Phase I ESA is contained in Appendix E to the Draft EIR. With respect to the comment's concern regarding three of the five identified RECs; a burn pit on APN # 99B-7925-2-4, chemical storage containers on APN# 99B-7925-2-1, and residual staining on APN# 99B-7925-2-4, draft SEIR Impact HAZ-4 has been revised to clarify that the continued application of PEIR Mitigation Measure HAZ-4 would be required for the proposed project. Application of PEIR Mitigation Measure HAZ-4, construction best management practices (BMPs), and compliance with regulations would ensure that the project does not result in the creation of a significant hazard to the public or the environment. With respect to the nature of the project BMPs, Chapter 2, *Project Description,* of the Draft EIR states that construction of the proposed project would implement BMPs consistent with standard practice and with the requirements of the Program Environmental Impact Report (PEIR) that was prepared for the

planned repowering of the APWRA and certified in 2014, as well as any state or federal permits. The PEIR further provides context that these practices include those normally required by building permits for large projects (e.g., dust suppression, erosion control measures, traffic management, noise controls, covering or enclosure of dry materials, controlled handling of hazardous materials), and describes the nature of a Hazardous Materials Business Plan (HMBP) developed for the project. Furthermore, as addressed in Chapter 2, *Project Description,* of the Draft EIR, soil disturbance would be limited to grading and excavation for the foundation pads and trenching for line installation, and as such would not be widespread throughout the project site. Thus, should construction of the project require interaction with any of the RECs identified in the Phase I ESA, any potential handling and treatment practices would adhere to be pre-established handling and disposal procedures per use of BMPs.

Response to Comment 5-19

The comment suggests a quantitative health risk assessment (HRA) should be conducted. The assessment of construction and operational related health risks was prepared consistent with CEQA and Bay Area Air Quality Management District guidance. See response to comment 5-120 for a detailed response to this comment.

Response to Comment 5-20

The comment includes a general statement that the draft SEIR analysis is not supported by substantial evidence, but does not provide specific concerns or questions regarding the draft SEIR analysis. To the extent the comment is in reference to other comments provided in the commenter's letter, responses to those comments are provided herein.

Response to Comment 5-21

The commenter asserts that the draft SEIR underestimates the Project's construction impacts on grassland habitat based on observations of ground disturbance on other wind projects in the APWRA, with a suggested nine-fold increase in permanent ground disturbance of areas graded or disturbed during construction. In turn, the commenter gives as an example of inadequate disclosure of such disturbance, grassland-dwelling birds for which the draft SEIR provided an underestimate of potential impact. The commenter uses surveys from a nearby habitat preserve to estimate the 30-year loss of potential chick production (45,144 individuals) due to the expected lag in revegetation. This estimate is drawn from surveys on nearby grasslands that support a variety of bird species that utilize grasslands in a multitude of ways, (i.e., nesting, foraging, refuge) and are closely tied to the use of the site by small mammals. While a lag in revegetation could affect the use of the area by birds that typically nest in dense grasslands, many of the birds that the commenter references are birds that forage on the small mammals, reptiles, and insects that occupy these areas and would still be present in grasslands that are not fully restored. Other species mentioned such as horned lark and killdeer prefer sites that have less vegetation density. Therefore, the estimates for loss of breeding potential are speculative and not based on surveys that have documented actual losses of breeding birds following construction. Overall, the draft SEIR analysis is based on an assessment of effects and characteristics specific to the proposed project and the project site. That impacts are different from the impacts of other wind projects, each of which has its own individual characteristics and considerations, does not render the draft SEIR analysis inadequate. The commenter does not point to specific deficiencies or inaccuracies in the specific assumptions that are the basis for this draft SEIR analysis.

Response to Comment 5-22

Thresholds of significance relevant to the avian mortality analysis are defined in Section 5.4.2.2 in Chapter 5, *Other CEQA Considerations*, of the SEIR, and include the following:

- A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites.

The commenter contends that "The DSEIR's thresholds are not supported by substantial evidence because the thresholds were developed utilizing outdated data from older generation turbines" but the relevance of that comment is not evident. Regardless of the source of data or the outcomes of prior investigations, it is intrinsically true that actions tending to adversely affect a special-status species have potential to contribute to the decline of that species, an outcome antithetical to the purpose of laws enacted to protect those species. This, not data from wind turbines, is the basis of the significance threshold. A similar rationale applies to the protection of wildlife movement corridors, and in this case is supported by evidence that wind turbines in general, both globally and at the scale of the APWRA, result in fatalities of migratory wildlife. In particular, most bat fatalities in the APWRA are incurred during migration, a topic discussed at length in the draft SEIR's treatment of Impact BIO-14 in Section 3.4, *Biological Resources*.

The commenter also notes that "2020 Updated PEIR MM BIO-11 and BIO-14d require the project proponent to implement adaptive management strategies for avian and bat species, respectively, if postconstruction fatality monitoring exceeds the preconstruction baseline fatality estimates." The County notes that this is not a CEQA significance threshold. It is, as described in the respective mitigation measures, a trigger for adaptive management action. The commenter incorrectly states "the thresholds were developed utilizing outdated data from older generation turbines." As a matter of history, this threshold reflects the 2010 Settlement Agreement between NextEra Energy Resources and the California Attorney General, which resulted in the strategy of repowering APWRA turbines to reduce fatality rates to below rates recorded prior to repowering. The commenter provides no substantive evidence or rationale for changing this threshold, and no evidence for adopting any other threshold.

The commenter then makes a series of statements with rationale and evidence supported only by commenter's later comments. In this connection, please see the response to comment 5-72 regarding underestimation of avian fatalities. Please see the response to comment 5-74 regarding interannual variation in fatalities. Please see the response to comments 5-62 through 5-67 regarding particular species of concern.

Response to Comment 5-23

Please refer to the Response to Comment 5-18, above, which addresses the findings for Impact HAZ-4 in the Draft EIR.

Response to Comment 5-24

The comment provides CEQA Guidelines and case law information and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-25

The commenter observes that the draft SEIR acknowledges potential impacts associated with HDD bores if they result in the release of drilling fluids into waterbodies and associated habitat for special-status species, but does not identify mitigation measures that would reduce the potential impacts of an inadvertent return from use of HDD to a less-than-significant level. If HDD is used for aquatic resource avoidance, the project would prepare and implement an Inadvertent Release Contingency Plan (IRCP) to address response and clean-up in the event that an inadvertent release occurs during HDD boring. Preparation and implementation of an IRCP is a standard requirement when HDD is used. The IRCP would describe measures to minimize the potential for inadvertent release of drilling fluids associated with HDD activities, provide for the timely detection of inadvertent releases should they occur, and include measures to contain and clean up releases. If HDD is used by the project as finally designed and approved, an IRCP will be prepared and reviewed by applicable resource agencies as part of the project permits. ,. Information regarding the IRCP has been added to Section 2.1.4.4 in Chapter 2, *Project Description*, of this final SEIR.

Response to Comment 5-26

The comment asserts that the draft SEIR fails to consider all feasible onsite mitigation measures to reduce air quality impacts prior to requiring emissions offsets. The comment requests the draft SEIR be revised to include additional control measures. The draft ESIR requires mitigation measures that are recommended by the Bay Area Air Quality Management District for reducing project-level air quality impacts. See responses to comments 5-119, 5-121, and 5-122 for specific responses to this and related comments.

Response to Comment 5-27

The commenter suggests that mitigation measures need to be identified in the SEIR to address "the long-term impacts to land uses" and ensure such impacts "remain less-than-significant." With respect to the opening sentence of this comment, which refers to unspecified long-term land use impacts, the County notes that no such impacts were identified in Section 3.11, *Land Use and Planning*, of the draft SEIR. The County agrees with the commenter's implication that decommissioning activities are a County concern, and such activities are addressed in the standard conditions of approval for all wind projects (see the Sand Hill Wind Repowering approved County Resolution R-2020-555 for example, Conditions no. 11 & 12). However, these conditions for preparation and review of a Restoration and Reclamation Plan, with most of the elements listed in the comment including financial assurances, and more specificity about the Plan provisions, are matters of practicality and are not the outcome of an identified significant environmental impact. Decommissioning of the project may have certain environmental effects, which should be assessed and mitigated in the SEIR if they were anticipated to occur in the foreseeable future. However, as discussed in the response to comment 5-4, the timing of decommissioning for the proposed project is highly speculative, and conducting any such analysis would be equally so. In any case, the commenter provides no substantial evidence for asserting that there may be undisclosed significant environmental effects that could result from decommissioning the project site.

Response to Comment 5-28

The commenter summarizes material from comments 5-111 through 5-115. See the responses to comments 5-111 through 5-115.

Response to Comment 5-29

The comment provides closing remarks and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-30

The comment provides background on the commenter's qualifications to provide comments and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-31

The commenter asserts that the draft SEIR insufficiently identifies the suite of special-status species that use the project area. Please see the response to comment 5-48, which discusses the commenter's assertions in detail.

Response to Comment 5-32

The commenter asserts that impacts from grading are not properly assessed. Please see response to comment 5-60 which discusses the commenters assertions regarding grading.

Response to Comment 5-33

The commenter asserts that no surveys were performed for bats although the PEIR required them. Please see response to comment 5-104 which discusses the commenter's recommendations regarding bat surveys and the requirements of the PEIR and the SEIR.

Response to Comment 5-34

The commenter asserts that the draft SEIR did not evaluate impacts to "aerohabitat." Please see response to comment 5-46 which discusses the concept of "aerohabitat".

Response to Comment 5-35

The commenter asserts that the analysis of avian fatalities is flawed. Please see response to comments 5-63, 5-64, 5-65, and 5-66, which discuss the commenter's assertions regarding the avian fatality analysis for several species in detail.

Response to Comment 5-36

The commenter asserts that the draft SEIR incorrectly draws conclusions regarding burrowing owl abundance. Please see response to comment 5-65 which discusses the commenter's assertions in detail.

Response to Comment 5-37

The commenter asserts that wind turbine mortality is misrepresented for old-generation turbines and for modern turbines in repowered projects. The commenter notes that Table 3.4-10 in the draft SEIR presents only the first year of fatality data at Vasco Winds despite monitoring occurring for 3 years.

The County notes that there is no Table 3.4-10 in the draft SEIR. It is assumed that the commenter is referring to Table 3.4-4, which is an updated table from Table 3.4-10 in the PEIR. However, as noted in the footnotes to Table 3.4-4, the estimates presented for Vasco Winds do represent an average of all 3 years of monitoring as reported in Brown et al. (2016). Consequently, the information presented in the draft SEIR related to Vasco Winds fatality rates is correct and no corrections are needed.

The commenter also asserts that comparisons between pre-repowered and post-repowered projects are wrong for several reasons, primarily because additional information on monitoring (including shorter search intervals, the use of scent-detection dogs, advancements in detection probability, etc.) is not included and adjustments are not made to the fatality rates for these considerations. The County acknowledges that the science of fatality monitoring and estimation has continued to advance after the PEIR was certified, and that numerous factors confound the comparison of avian fatality rates between old and new turbines. The County also acknowledges the importance of highligting the contrast between the basis for analysis in the PEIR to the current analysis in the draft SEIR. Pages 3.4-64 and 3.4-65 of the draft SEIR discuss and acknowledge the potential biases involved in the fatality estimates. Lastly, the County notes that the recent repowering projects, Vasco Winds, Golden Hills, and Golden Hills North, have all incorporated updated detection probability in their estimates, and Golden Hills and Golden Hills North have also utilized scent-detection dogs and shorter search intervals in their methods. The County believes that the draft SEIR appropriately acknowledges the potential biases in the fatality estimates, and also already includes adjusted estimates of mortality, and therefore the analysis and conclusions of the draft SEIR are appropriate in this context.

Response to Comment 5-38

The commenter asserts that the analysis of avian fatalities is flawed. Please see responses to comments 5-63, 5-64, 5-65, and 5-66, which discuss the commenter's assertions regarding the avian fatality analysis for several species in detail.

Response to Comment 5-39

The commenter asserts that the analysis of cumulative impacts to birds and burrowing owl fatalities is flawed. Please see responses to comments 5-63, 5-64, 5-65, and 5-66, which discuss the commenter's assertions regarding the avian fatality analysis for several species, including burrowing owl, in detail. Please also see responses to comments 5-111, 5-112, 5-113, 5-114, and 5-115, which discuss the commenter's assertions regarding cumulative impacts in detail.

Response to Comment 5-40

The commenter asserts that the draft SEIR is flawed in its micro-siting to minimize collision impacts to raptors and should instead use other "best available information" and the latest models of how raptors use terrain-influenced winds, including telemetered golden eagles and models developed by

the commenter. While it is correct that PEIR Mitigation Measure BIO-11b, included in the draft SEIR as 2020 Updated PEIR Mitigation Measure BIO-11b, requires siting of turbines to minimize potential raptor collisions, this measure does not refer to it directly as micro-siting, nor does it specify the time at which such siting must be done. However, the term has been used by the County in all subsequent repowering applications. Three other repowering projects were approved by the County as tiered under the PEIR, without micro-siting studies completed, including the Summit Wind Project and Golden Hills North Projects, for which micro-siting was completed later with the review of its APP, and an earlier approved proposal for the Sand Hill Wind Project. Only one project prior to the Mulqueeney Ranch Project, the Sand Hill Wind Project approved by the Board of Supervisors in December 2020, has had a micro-siting study completed prior to the project approval and in its case, certification of a separate Subsequent EIR.

The County first notes that it is not the function of the SEIR to micro-site turbines, nor is the SEIR required to evaluate the micro-siting proposed by the applicant. However, the applicant has completed a micro-siting study and a supplemental micro-siting study, which is included with the draft SEIR in Appendix F and Appendix G, respectively. The results of these micro-siting studies are evaluated as project alternatives in Chapter 4, *Alternatives*, of the draft SEIR. Under the requirements of PEIR Mitigation Measure BIO-11b, applicants must conduct micro-siting of turbines to minimize collection impacts to raptors using a variety of information sources including previous micro-siting studies. The County has required previous applicants to present their micro-siting studies to the APWRA Technical Advisory Committee (TAC) for review and comment. The TAC is made up of a group of wildlife agency and other experts convened by the County and therefore is best qualified to review and comment on these technical studies. The County will continue to coordinate with the TAC to evaluate micro-siting studies for consistency with the PEIR, this SEIR, and future SEIRs as appropriate. Additional comments on this topic are addressed below.

Response to Comment 5-41

The commenter asserts that efficacies of mitigation measures are mischaracterized, and the adaptive management process is not clear. The County has developed mitigation measures during development of the PEIR and the draft SEIR. Through public comment, and using the best information available, the County has designed and included measures to avoid, minimize, and mitigate impacts. The County acknowledges that the science of avoidance, minimization, and mitigation of avian and bat impacts is continuing to advance. For this reason, each of the adaptive management measures were written with a potential "menu" of options; the ultimate measures to be implemented would be chosen by the applicant and vetted with the TAC (see response to Comment 5-40). The adaptive management approach also allows new measures, which may be developed over time, to be used if they are shown to be effective, again with review and input from the TAC. The County believes this approach is most aligned with an effective adaptive management approach and provides the County and applicants with the most options for implementing measures that are shown to be effective.

Response to Comment 5-42

The comment provides an introduction to subsequent comments and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-43

The comment notes that the commenter previously recommended a minimum blade-to-ground clearance of 29 m (Smallwood and Thelander 2004). However, the commenter has not provided evidence to substantiate this recommendation. The County acknowledges that "airspace" is more crowded close to the ground, with some birds such as burrowing owls flying at rather low heights. However, there is no evidence to show that this effect is material, measurable, or statistically significant. The County is not aware of a source that presents information that could be used to develop a quantitative estimate of the relationship between blade-to-ground clearance and fatality risk. Other repowered projects used to develop fatality rate estimates in the draft SEIR use turbines having various different blade-to-ground clearances; yet in no case has that factor been described, in fatality monitoring reports, as a substantial influence on recorded fatality rates at the various projects. As the commenter notes, the PEIR does not contain a blade clearance requirement, though draft versions of the PEIR did. Typically, final documents are regarded as more credible than draft documents, and in the absence of evidence to the contrary, that is presumably the case here as well.

Response to Comment 5-44

The commenter asserts that the draft SEIR should provide more information about the proposed project relative to the capacity of turbines on the project site prior to 2014. The County notes that Chapter 2, *Project Description*, of the Draft SEIR describes the number of turbines on the project site (518) as of the date the PEIR was prepared, but describes that all these turbines were removed in 2016 in preparation for repowering. The commenter is correct that the proposed project would result in more capacity relative to the new project (approximately 51.8MW versus 80MW), however the PEIR and the draft SEIR evaluate new proposed projects relative to the total capacity authorized for the APWRA under the PEIR (450 MW), not on an individual specific project area basis. The County has provided an appropriate baseline against which to compare the environmental effects of the proposed project. See responses to comments 7-18 and 7-19.

Response to Comment 5-45

The commenter notes that the draft SEIR should more clearly disclose the turbine layout. Chapter 2, *Project Description*, of the Draft SEIR clearly defines the proposed project as the installation of up to 36 new wind turbines. The layout of individual proposed turbine locations are depicted on Figure 2-3 of the draft SEIR. As noted by the commenter, alternatives to the proposed project are also described in Chapter 4, *Alternatives*, of the draft SEIR, as required under CEQA. See also the response to comment 2-2.

Response to Comment 5-46

The commenter asserts that additional baseline information regarding birds, as well as interviews of experts, should be considered in the draft SEIR. The County acknowledges that a large amount of information exists regarding wind and wildlife interactions in the APWRA. As evidence of this, the County notes that the draft SEIR cites nearly 90 references considered in the preparation of the draft SEIR. Among the references and information considered, 18 of these sources were authored by the commenter. Collectively, the County believes that the information considered forms the basis for a robust assessment of baseline conditions. However, the County also acknowledges the significant contribution of experts including wildlife agency and other experts, which is why the implementation of several mitigation measures for birds is guided by the TAC.

The commenter also asserts that the draft SEIR should describe wind conditions on the project site, including what the commenter refers to as "aerohabitat". The County agrees that wind speeds and directions are essential considerations for a wind energy project, however they are considerations relevant to the selection of turbine models and locations. The County's responsibility under CEQA is to assess the impacts of the proposed project on the environment. The project would not alter wind speeds or wind directions in any measurable way, and therefore there are no impacts to assess.

Lastly, the commenter introduces a term called "aerohabitat", noting that the draft SEIR fails to analyze wildlife use of aerohabitat. While the County understands the concept of aerohabitat suggested by the commenter, the County could find no published literature or guidance on this topic that would allow it to be defined or analyzed as suggested by the commenter. For example, the County reviewed the USFWS Land-Based Wind Energy Guidelines (USFWS 2012) as well as the USFWS Eagle Conservation Plan Guidelines (USFWS 2013), and the concept of aerohabitat is not discussed , in either guidance document. Similarly, a search of available literature related to the APWRA did not identify information useful in analyzing this concept. The County notes that this draft SEIR does use a new metric to assess impacts to avian and bat species: rotor swept area. This is essentially a recognition that the size of the rotor swept area is a significant variable that should be considered when assessing impacts. Consequently, the County believes that the analysis in the draft SEIR is sufficient and there is no basis for additional definition or analysis of aerohabitat.

Response to Comment 5-47

The commenter disagrees with the conclusions of the draft SEIR related to species described as occurring infrequently: California condor, bald eagle, and sandhill crane. The commenter states, without providing further evidence in the form of published reports or documents, that bald eagles "have been seen many times in the APWRA". The County based the conclusions of the draft SEIR related to bald eagle occurrence and abundance on published literature. The available information, including the survey report provided by the applicant for the project area, supports the statement that bald eagles occur infrequently in the project area. The commenter also notes that at least one bald eagle has been found as a fatality in the APWRA, and provides a photograph of the fatality. While the County appreciates this report, this information is not found in any published or publicly available reports. Notwithstanding, a reference to this potential turbine caused fatality has been added to the draft SEIR. Inclusion of this information does not change the findings or conclusions of the draft SEIR relative to bald eagle impacts. Lastly, the commenter notes that a sandhill crane was found as a fatality at a Patterson Pass wind turbine in March 2007 (apparently at non-repowered turbines). The commenter does not provide any evidence to support this fatality nor has this fatality been documented in any published reports of which the County is aware. Consequently, the conclusions of the draft SEIR remain unchanged with respect to sandhill crane.

Response to Comment 5-48

The commenter asserts that the draft SEIR does not correctly identify the likelihood for special-status species occurrence on the project site (see related response to comment 5-51). The County reviewed the table of species provided by the commenter (Table 1 in commenter's letter). Table 1 includes numerous species designated as a "Taxa to Watch List." Although these are not considered special-status species as defined under CEQA, the County notes that they are addressed overall within the draft SEIR, which discloses and discusses potential impacts to all birds. The County notes that Table 1 in the commenter's letter includes numerous species which have not been documented as fatalities in public reports (despite the commenter's assertion that the commenter has observed

them as fatalities). In response to this comment, three additional special-status passerine avian species have been documented as fatalities at repowered projects and have been added to Tables 3.4-3, 3.4-5, 3.4-8a, and 3.4-8b in the draft SEIR. The draft SEIR included these species within the "all birds" totals in the impact tables, however the County agrees that given their special-status designation, they should be presented as individual species in the tables. The additional details for these species do not change the significance of the impacts or findings of the draft SEIR.

Response to Comment 5-49

See response to comment 5-47.

Response to Comment 5-50

See response to comment 5-48.

Response to Comment 5-51

The commenter notes that they disagree with the way special-status species were categorized into low, medium, and high occurrence likelihood. Table 3.4-3 in the draft SEIR has been revised to clarify that species identified as having a "low" likelihood of occurrence also include species with extremely infrequent observations. Additionally, while CNDDB records were considered, the County agrees that they are not complete and therefore other data generated from past bird use surveys and wildlife fatality monitoring also inform the list. Lastly, three species that have been recorded as fatalities in the APWRA have been added to Tables 3.4-3, 3.4-5, 3.4-8a, and 3.4-8b in the draft SEIR; these are Vaux's swift, yellow-breasted chat, and yellow warbler, all listed by CDFW as species of special concern. The addition of these species does not change the overall findings and conclusions of the draft SEIR relative to avian impacts.

Response to Comment 5-52

Please see response to comment 5-47 and 5-48.

Response to Comment 5-53

The commenter notes that the draft SEIR mischaracterizes the California condor likelihood of occurrence. Table 3.4-3 in the draft SEIR clearly notes that one individual was observed flying over the project site. Table 3.4-3 has been revised to identify that species as having a "low" likelihood of occurrence, and to include other species with extremely infrequent observations. The California condor fits this definition, and to the County's knowledge, this is the first observation of the species ever recorded within the APWRA, supporting the conclusion that it is likely to be observed extremely infrequently.

Response to Comment 5-54

Please see responses to comments 5-48 and 5-51.

Response to Comment 5-55

The commenter asserts that the draft SEIR should disclose additional details regarding fatality monitoring methods and fatality estimation, fatality trends, behavior surveys, and micro-siting. The County acknowledges that there is a great deal of information related to all aspects of avian and bat

interactions with wind turbines, monitoring methods, and micro-siting, and that the science continues to rapidly evolve. As noted in responses to other comments of this nature, the County notes that the mitigation approaches in the PEIR and the draft SEIR require consideration of current research and methods during implementation such that the information presented in the SEIR is not static. For example, Mitigation Measure BIO-11g, postconstruction avian fatality monitoring, requires project proponents to use a monitoring protocol and methods which must be reviewed by the APWRA TAC, a body convened by the County and composed of agency and other experts. Throughout the draft SEIR, the County describes existing sources of information as well as uncertainties surrounding the information, where appropriate. As most relevant to the commenter's assertions, the draft SEIR describes potential biases in the avian fatality analysis methods, beginning on page 3.4-64 of the draft SEIR. Consequently, and in summary, the County believes it has considered all relevant information in the preparation of the Draft SEIR, while designing a mitigation approach that allows consideration of additional information and research that may become available in the future.

Response to Comment 5-56

The commenter asserts that the draft SEIR inconsistently and/or incorrectly considers the Diablo Winds project as well as projects in adjacent Contra Costa County, Vasco Winds and Buena Vista. The County disagrees with this assertion. The Diablo Winds project was considered and repowered prior to development and approval of the PEIR and this SEIR. While the Diablo Winds project is within the APWRA and is part of the total capacity in the APWRA, it is not a project considered or contemplated in the PEIR; it was a project that was already in place at the time the PEIR was prepared. Consequently, although the draft SEIR discloses the Diablo Winds project in Table 2-6, it is not considered in the context of the PEIR and the 450MW repowering alternative considered in the PEIR. Consideration of the impacts of the Diablo Winds turbines in the context of repowering is a separate issue and the County believes it is appropriate to include and discuss the project in that context. Lastly, the County notes that the cumulative impacts analysis in Chapter 5, *Other CEQA Considerations*, includes an analysis of cumulative impacts with the APWRA as a whole (all Alameda County and Contra Costa County projects). Therefore, Diablo Winds is addressed in the cumulative context. Footnote 2 in Table 5-2 has been revised in the final SEIR to clarify this.

Response to Comment 5-57

The commenter notes that Section 2.2.4 of the draft SEIR did not make sense to the commenter. This section of the SEIR is a summary of the updated information and assessment for cumulative impacts that is described in detail in Chapter 5, *Other CEQA Considerations*. No changes to this summary are needed.

Response to Comment 5-58

The commenter notes that Table 3.4-3 was not found in the draft SEIR. Table 3.4-3 can be found beginning on page 3.4-36 of the draft SEIR (final SEIR page 3.4-38).

Response to Comment 5-59

The commenter notes that the title of Impact BIO-8b should specify that all raptors are special-status species. The County partially agrees with the comment and has adjusted the title of Impact BIO-8b to remove the reference to "non-special-status raptors". The County notes the draft SEIR

already references Sections 3503 and 3503.5 of the California Fish and Game Code in Section 3.4.1.1 as regulations forming the regulatory setting. There are clear distinctions in how raptors are listed in California, whether under CESA, BGEPA, species listed as fully protected under California Fish and Game Code, or species listed as species of special concern by the California Department of Fish and Wildlife. The impact discussion clearly references the provisions of the California fish and Game Code. Regardless of the status of individual species, the County's intent, and the way raptors are addressed under Impact BIO-8b, is to consider all species of raptors in California. Consequently, the small change to the impact title does not change the impacts or conclusions of the draft SEIR relative to raptor impacts.

Response to Comment 5-60

The commenter provides an opinion regarding the extent of grading that may be required for the proposed project and notes observations of erosion problems following construction of other projects in the APWRA. As evidence that grading on the project site may be greater than that described in the draft SEIR, the commenter notes observations regarding grading at a nearby project site. The County notes that each project site is unique in terms of topography, turbine position, number of turbines, and geotechnical considerations, and thus comparisons to other areas may not be valid. Additionally, while the proposed turbines have a larger blade length and diameter, the foundations will be similar in size to other projects in the APWRA, indicating that the additional size of the blades will not influence the amount of grading required. With respect to erosion potential, the draft SEIR evaluates the potential for the project to result in substantial soil erosion (see Impact GEO-2 on page 3.7-24 of the draft SEIR). The analysis in the draft SEIR indicates that some of the soils in the project site are susceptible to water erosion and the project does have the potential to result in soil erosion. However, as described further in Impact GEO-2, construction of the project will require coverage under the state's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Among other requirements, the General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP), which requires numerous erosion prevention measures. Additionally, a restoration plan is required to be developed prior to construction, which would further reduce the potential for soil erosion. Collectively, these requirements support the conclusion that impacts related to soil erosion would be less than significant.

The commenter also asserts that impacts characterized as temporary are more appropriately considered as permanent, in the commenter's opinion. The County disagrees and again notes the requirements for a restoration plan, which will, among other requirements, require the project proponent to monitor for successful restoration of the project site. The commenter also notes that grading will result in the loss of grassland bird habitat including nest sites. The County agrees that the loss of grassland nesting habitat is a potential impact as described in Impact BIO-8a on page 3.4-86 of the draft SEIR. However, implementation of mitigation measure BIO-8a, which requires surveys and avoidance of nesting birds, will reduce this impact to a less than significant level. Lastly, the commenter asserts that grading may enhance wildlife collision risks by altering the terrain and subsequent use patterns by local wildlife, bringing them into conflict with the turbines. It is the County's expectation that micro-siting studies supporting recent projects consider the impacts of grading. This requirement has been added to PEIR Mitigation Measure BIO-11b in the final SEIR, pages 3.4-116 and 3.4-117 , to solidify this expectation as a requirement of future micro-siting studies, including those for the proposed project.

Response to Comment 5-61

The commenter provides extensive background on California condor and condor biology but does not provide additional data or information to justify a change in the findings or conclusions in the draft SEIR. See response to comment 1-13.

Response to Comment 5-62

The commenter provides background commentary on golden eagle biology and discusses efforts to estimate golden eagle abundance in the APWRA. The County acknowledges that local experts, such as the commenter, are conducting work in the APWRA and have their own analyses. However, the County also notes that it is required to consider information and analysis in published reports available at the time the draft SEIR is prepared. Additionally, the County notes that the commenter's analysis of eagle abundance does not change the fundamental analysis of impacts to eagles in the draft SEIR. The analysis in the SEIR is based on published fatality monitoring reports, with established fatality rates for eagles and other species applied to the proposed project to estimate potential impacts. Please see the discussion of the avian fatality analysis methods starting on page 3.4-60 of the draft SEIR for more information. In summary, the information presented by the commenter does not change the findings or conclusions of the draft SEIR relative to potential golden eagle impacts.

Response to Comment 5-63

The commenter provides background commentary on golden eagle fatalities in the APWRA over time and provides estimates of golden eagle fatalities in the APWRA. The estimates provided by the commenter were also adjusted for other factors. The County recognizes there is uncertainty in the estimate of avian fatalities presented in the draft SEIR, including the detection probability issues noted by the commenter. This uncertainty is described starting on page 3.4-64 of the draft SEIR. However, the County has considered published fatality monitoring reports, with established fatality rates for eagles, as described in Chapter 3.4, *Biological Resources*, of the draft SEIR. Cumulative impacts to golden eagles are estimated in Chapter 5, *Other CEQA Considerations*, of the draft SEIR. Although the County's estimates are different from the estimates presented by the commenter, the overall findings with respect to cumulative impacts to golden eagles are similar. The contribution of the APWRA and MHWRA impacts to golden eagles confirms a significant and unavoidable cumulative impact on golden eagles, as stated on pages 5-10 and 5-11 of the draft SEIR.

Response to Comment 5-64

The commenter provides commentary on red-tailed hawk biology, presents estimates of red-tailed hawk use of the APWRA, and presents an estimate of impacts within the APWRA. Please see responses to comments 5-62 and 5-63, which discuss the County's approach and findings related to avian use of the APWRA, as well as the County's approach to avian impact analysis (including findings regarding potential uncertainties in the impact analysis). Overall, the commenter concludes that "evidence to data is that repowering has reduced red-tailed hawk mortality in the APWRA and that full build-out under current siting trends would ultimately reduce red-tailed hawk mortality by 37%." The draft SEIR reaches a similar overall finding, as described on page 3.4-105 of the draft SEIR, but with a larger range of outcomes, "a 65% reduction to a 29% increase". The 29% increase was attributed to an elevated number of observed fatalities at a single project site, Golden Hills,

especially during the first year of monitoring. Overall, the analysis in the draft SEIR concludes that future fatalities of red-tailed hawk are likely and that impacts are significant and unavoidable.

Response to Comment 5-65

The commenter inaccurately states "This report is misleading, however, because the avian use surveys were not designed for burrowing owls." Draft SEIR, page 3.4-26, states "During summer 2019 field surveys, burrowing owls were observed in the northwestern portion of the project site (Figures 3.4-2a and 3.4-2b) and were presumed to be using this area for breeding since several burrows in the area had evidence of recent burrowing owl use (white wash, feathers, and pellets). Burrowing owls were also observed on numerous occasions throughout the project site during 2020 field surveys." Thus, the draft SEIR shows that burrowing owls occur on much of the project site, and evaluates potential impacts accordingly.

As acknowledged by the commenter, burrowing owls are transient breeders. While they tend to favor specific geographic areas, in this case the APWRA, their breeding locations vary greatly from year to year and are closely tied to availability of ground squirrel burrows. As expected, reductions in ground squirrels often result in the reduction of breeding attempts by burrowing owls, as demonstrated by the commenter's studies. The commenter attributes these declines to the use of ground squirrel control methods (poisons) and wind turbine collisions, yet fails to note that the reduction in nest attempts shown on Figure 10 of the comment letter is closely tied to drought conditions across that same time period, which would be expected to significantly impact rodent populations. Reductions in burrowing owls within the APWRA over the last decade are more likely to be attributed to climate. As described under Impact BIO-9a in Section 3.4, *Biological Resources*, of the draft SEIR, the permanent loss and temporary disturbance of available habitat within the project site is not expected to result in a significant impact on burrowing owl populations, as these impacts represent only a small proportion of the project site and have a small contribution to cumulative habitat loss in the APWRA (26 acres permanently impacted). The primary mode of impact associated with construction is expected to be direct disturbance of an active breeding site that is within or in close proximity to construction. As the commenter mentions, burrowing owl may regularly move breeding sites. To get the most accurate assessment of where breeding is occurring, preconstruction surveys are targeted within those areas where impacts are proposed and within a reasonable time to allow for modifications of construction timing or location to avoid active nest sites. To provide for additional lead time in developing an avoidance plan and to better inform mitigation needs of the project, PEIR Mitigation Measures BIO-8b has been modified in the final SEIR to include and additional preconstruction survey 30-60 days prior to construction.

The commenter presents considerable information on burrowing owl biology, but the approach to operational impacts on raptors taken in the PEIR and the draft SEIR is to predict fatality rates on the basis of observed fatality rates at other repowered projects. The commenter presents no information on population size, habitat use, or any other aspects of burrowing owl biology at other repowered projects. Thus the commenter's information cannot be used to ascertain whether the proposed project would be likely to have disproportionate impacts on burrowing owls, relative to other repowered projects. There is no basis to alter the draft SEIR conclusions regarding expected effects upon burrowing owls, which remain significant and unavoidable after mitigation.

Response to Comment 5-66

The commenter provides additional commentary regarding fatality estimates for all bird species, as well as estimates of fatalities for all birds. Please see responses to comments 5-62 and 5-63, which discuss the County's approach to avian impact analysis (including the draft SEIR's findings regarding potential uncertainties in the impact analysis). The County also notes that the draft SEIR does not break out and summarize "all birds" as a group, however "all raptors" and "all native non-raptors" collectively are similar to the group suggested by the commenter. The commenter concludes that "overall bird mortality probably declined since repowering, and it appears as though full repowering would result in at least a 50% reduction in avian mortality." The County partially agrees, but notes that the analysis and estimates presented in Tables 3.4-8a and 3.4-8b in the draft SEIR indicate a more complex picture of fatalities and trends. Several repowering projects have reported significant reductions for all birds (all raptors and all native non-raptors considered together), while other projects have reported significant increases. Overall, the analysis in the draft SEIR concludes that future fatalities for all avian species impacts are significant and unavoidable.

Response to Comment 5-67

The commenter evidently agrees with the conclusions of the draft SEIR, which include significant and unavoidable impacts on bats after mitigation, and concludes "that a fully repowered APWRA would kill thousands of bats annually" (see draft SEIR Table 5-1). The commenter also agrees with the draft SEIR that frequent surveys using trained dogs are needed to reliably estimate bat fatalities and that large correction factors are needed to estimate fatality rates at facilities that have not used such surveys. The commenter also estimates that the proposed project would kill about the same number of bats as shown in draft SEIR Table 3.4-8a. In summary, the County agrees with the commenter. No changes to the draft SEIR analysis are required.

Response to Comment 5-68

The commenter provides a micro-siting analysis for the proposed project. Please see response to comment 5-40 which discusses the County's requirements and process for review of project specific micro-siting reports. The County is not qualified to independently assess the information presented by the commenter, nor does it inform the findings or conclusions of the SEIR. The County relies on the APWRA TAC and their expertise with respect to micro-siting in order to determine the sufficiency and completeness of the micro-siting studies prepared for the proposed project.

Response to Comment 5-69

See responses to comments 5-40 and 5-68. The County relies on the APWRA TAC to assess the micro-siting studies prepared for the proposed project and to make recommendations regarding the studies to the County.

Response to Comment 5-70

The commenter provides commentary and assessment of independent micro-siting work and performance at the Golden Hills project site. The comment does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-71

The commenter does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-72

The commenter asserts that the draft SEIR uses the wrong baseline fatality rates. Please see response to comment 5-37.

Response to Comment 5-73

The commenter makes additional comments regarding baseline fatality rates and recommends that each baseline fatality rate should be specific to each repowered project. The County acknowledges the complex issues surrounding baseline fatality rates and has responded to comments regarding baseline rates extensively in the PEIR and other subsequent EIRs. Overall, the County disagrees with the commenter and has determined that a standardized baseline fatality rate is the most efficient to implement, accounts for variability over geography and time, and is easiest for the public to understand. Additionally, and perhaps most significantly, the County notes that although the PEIR and this draft SEIR compare baseline fatality rates to those expected under the proposed project, the ultimate conclusions of the SEIR are that impacts associated with avian fatalities are significant, even in cases where mortality rates are expected to decrease post repowering. Consequently, the County believes the approach to baseline fatality rates in the draft SEIR is appropriate.

Response to Comment 5-74

Please see response to comment 5-73.

Response to Comment 5-75

The commenter asserts that Table 3.4-8a inaccurately represents fatalities. The County disagrees. Zero values in reports indicate that a species was inventoried in the report but that no fatalities were found. Species assigned as “nd” indicate there is no data because the species were not mentioned at all in the report, not as fatalities, nor as birds observed during surveys, nor in any other context.

Response to Comment 5-76

The commenter asserts that statements in the draft SEIR are misleading with respect to burrowing owl. The County disagrees. The statement regarding burrowing owl abundance and fatality rates is in the context of reported fatality rates at repowered projects. Of the other projects referenced by the commenter, only Golden Hills has fatality data (Mulqueeney and Sand Hill have not been constructed and thus have no monitoring results) and a review of the Golden Hills report does not indicate a higher abundance of burrowing owls in a portion of project site. Consequently, the County believes the statements in the draft SEIR are accurate and the findings and conclusions of the SEIR are unchanged.

Response to Comment 5-77

Please see response to comment 5-76. The County believes the statement referenced by the commenter regarding red-tailed hawk abundance is correct in the context presented in the SEIR.

Response to Comment 5-78

The commenter disputes a statement on page 3.4-96 regarding golden eagle abundance at a particular site (which is not the proposed project site), and refers the reader to a figure in the commenter's letter. The County has reviewed this information and has found the conclusion asserted by the commenter to be unclear. No changes to the draft SEIR have been made.

Response to Comment 5-79

See response to comment 5-76. The County believes the statement referenced by the commenter regarding prairie falcon abundance is correct in the context presented in the SEIR.

Response to Comment 5-80

The comment provides a clarifying remark and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-81

The commenter asserts that there is an error in the calculation of the number of fatalities for various species when compared on a MW basis or a rotor swept area basis. The County disagrees. The analysis methods are described on page 3.4-61 of the draft SEIR. Estimates on an individual species and individual project basis would be identical for either fatality estimation method. However, when the rates are applied from different projects to the proposed project, as in the statement referenced by the commenter, the estimates are different. This is because the ratio of the capacity of a turbine in MWs to its total rotor swept area varies by turbine model, and turbine models vary by project. Consequently, the County believes the estimates presented in the draft SEIR are accurate.

Response to Comment 5-82

The commenter provides commentary on American kestrel biology and the commenter's personal observation of kestrels within wind turbine nacelles, and notes that the draft SEIR should "divulge the wind turbine designs and whether efforts would be made to prevent attracting American kestrels to cavities built into the turbine or its tower." The County concurs with the comment and notes that the draft SEIR includes PEIR Mitigation Measure BIO-11c, which requires project proponents to use turbine designs that reduce avian impacts. Among the requirements of this mitigation measure, project proponents must use turbine designs which "will limit or eliminate nesting or roosting opportunities. Openings on turbines will be covered to prevent cavity-nesting species from nesting in the turbines." This mitigation measure would apply to American kestrel, which is a cavity-nesting species.

Response to Comment 5-83

The commenter disagrees with statements in the draft SEIR related to observations of barn owls on the project site and points to the commenter's own observations of barn owl on the project site. The findings of the draft SEIR related to barn owl impacts do not rely on observations of burrowing owls on the project site or in the APWRA. The discussion of potential impacts primarily relies on the documented fatalities of the species at repowered project sites across the APWRA. Table 3.4-5 in Section 3.4, *Biological Resources*, of the draft SEIR presents annual adjusted fatality rates for barn owls for each repowered project. Tables 3.4-8a and 3.4-8b present potential impacts on barn owl on

the basis of the fatalities rates presented in Table 3.4-5. The County believes the draft SEIR accurately presents the potential impacts from the proposed project on barn owls.

Response to Comment 5-84

The commenter asserts that statements regarding burrowing owls and background mortality in the draft SEIR are incorrect. The discussion of this issue on page 3.4-102 of the draft SEIR presents the evidence available on the issue at the time the draft SEIR was prepared. As noted in the discussion, the patterns were not clear following a study conducted in 2016 by the Alameda County avian monitoring team. Additionally, the monitoring report for the Golden Hills project also noted that evidence suggested that predation was the primary cause of fatalities for burrowing owls. The draft SEIR acknowledges the existing sources of information and specifically notes the uncertainty surrounding the information on burrowing owl mortality rates. The County believes the draft SEIR presents an accurate representation of the information available.

Response to Comment 5-85

The commenter notes an apparent error in the fatality rate for golden eagle for one repowering project (Vasco Winds) on page 3.4-102 of the draft SEIR. The County acknowledges the error on this page, but notes that the correct fatality rate for the Vasco wind project is shown in Table 3.4-5 of the draft SEIR, and the analysis of impacts in Tables 3.4-8a and 3.4-8b use the correct fatality rate. The error on page 3.4-102 of the draft SEIR has been corrected on page 3.4-109 in the final SEIR.

Response to Comment 5-86

The commenter disagrees with the analysis of potential impacts to loggerhead shrike in the draft SEIR. The commenter notes that previous undocumented fatalities may have occurred which may underestimate loggerhead shrike mortality. The County must rely on published studies, and currently has no information available to support the hypothesis proposed by the commenter. The County notes that recent fatality monitoring efforts, such as those at Golden Hills, have used shorter search intervals as well as the use of scent detection dogs, which may help to address the concern that fatalities of small species such as the loggerhead shrike are being missed because they are difficult to detect. The commenter also notes that the size of the population needs to be considered, and provides a map (Figure 25 in the commenter's letter) of areas "sampled" by the commenter for loggerhead shrike nests. While the commenter has apparently done extensive research on this species, the information and methods are not part of a published study. Lastly, the County notes that Chapter 5, *Other CEQA Considerations*, of the Draft SEIR evaluates cumulative effects associated with avian fatalities, including the loggerhead shrike, both within the context of the APWRA as well as a larger geographic area. Consequently, the analysis suggested by the commenter is already included in the draft SEIR.

Response to Comment 5-87

The commenter disagrees with the treatment of Swainson's hawk in the draft SEIR. The commenter notes that previous undetermined fatalities may have been misidentified and could have been Swainson's hawks. The County must rely on published studies and currently has no information available to support the hypothesis proposed by the commenter. Additionally, there are few CNDDB records of Swainson's hawk in the APWRA and many records in the adjacent Central Valley. While CNDDB records alone are just one indicator and cannot be relied on for definitive presence or

absence of any species, they do generally indicate far greater numbers and abundance of Swainson's hawks in surrounding regions compared to those found in the APWRA. Avian use surveys in the APWRA and those conducted by the project applicant also support this conclusion. Collectively, the information available generally supports the determination that Swainson's hawks are generally infrequent visitors to most areas of the APWRA and are at low risk of turbine caused mortality because of their normal range and foraging habitat.

Response to Comment 5-88

The commenter asserts that the draft SEIR provides misleading information regarding impacts to tricolored blackbird, pointing to the timing of when fatalities were discovered or documented as evidence that the draft SEIR is misleading. The County disagrees and notes that Table 3.4-5 in the draft SEIR accurately describes the fatality rates for this species for the projects that have documented fatalities. Additionally, Tables 3.4-8a and 3.4-8b in the draft SEIR also estimate the potential fatalities that could be expected for the proposed project using those fatality rates for each project. Consequently, the County finds that the analysis and findings of the draft SEIR remain accurate with respect to tricolored blackbird impacts.

Response to Comment 5-89

Please see response to comment 5-86.

Response to Comment 5-90

The commenter asserts that the draft SEIR provides misleading information regarding impacts to white-tailed kite, pointing to the timing of when fatalities were discovered or documented as evidence that the draft SEIR is misleading. The County disagrees and notes that Table 3.4-5 in the draft SEIR accurately describes the fatality rates for this species for the projects that have documented fatalities. Additionally, Tables 3.4-8a and 3.4-8b in the draft SEIR also estimate the potential fatalities that could be expected for the proposed project using those fatality rates for each project. Consequently, the County finds that the analysis and findings of the draft SEIR remain accurate with respect to white-tailed kite impacts.

Response to Comment 5-91

The comment does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-92

See response to comment 5-40.

Response to Comment 5-93

The commenter provides suggestions on best practices related to 2020 Updated PEIR Mitigation Measure BIO-11g, Postconstruction Fatality Monitoring. The County notes that many of the best practices noted by the commenter are already requirements under 2020 Updated Mitigation Measure BIO-11g. As noted in previous responses to this comment letter, the County recognizes that the science of fatality monitoring and estimation and wind and wildlife interactions continues to advance. Consequently, the County relies on the expertise of the APWRA TAC, a group convened by the County and made up of agency and other experts on fatality monitoring and wind and wildlife

interactions, to review and provide recommendations for post-construction monitoring applicable to each project. The County believes that this is the best and most effective way to ensure current and appropriate monitoring techniques and methods are used.

Response to Comment 5-94

The commenter provides suggestions on the implementation of 2020 Updated PEIR Mitigation Measure BIO-11h. The measures suggested by the commenter are already part of the suite of potential conservation measures in 2020 Updated PEIR Mitigation Measure BIO-1h. As described in the mitigation measure, project proponents are required to submit for County approval an avian conservation strategy using a mix of the options presented in the measure (which includes the conservation and research elements suggested by the commenter). Additionally, the APWRA TAC, a group of agency and other experts, will review the mitigation proposal and provide input such that the plan provides the greatest possible benefits.

The commenter also notes that compensatory mitigation is needed to stop the poisoning of ground squirrels in the APWRA. The commenter suggests that such a measure could be implemented with local ranchers in exchange for damage reparations, essentially suggesting that such a measure could be included in 2020 Updated PEIR Mitigation Measure BIO-11h. 2020 Updated PEIR Mitigation Measure BIO-11h allows consideration of "other conservation measures identified in the future", which includes "the curtailment of prey elimination programs". 2020 Updated PEIR Mitigation Measure BIO-11h has been revised in the final SEIR to clarify that this measure can also include ceasing the use of rodenticide use.

Response to Comment 5-95

The commenter provides suggestions on the implementation of the avian adaptive management program defined under 2020 Updated PEIR Mitigation Measure BIO-11i. The primary suggestion of the commenter appears to be ensuring that the interested parties are defined. Interested parties have been defined during development of the PEIR. Through comments on each subsequent EIR, interested parties have continued to participate and provide comments to the County. Most recently, TAC meetings have included participation from several interested individuals and organizations outside of the TAC members, and these stakeholders are actively participating in the process, including during development of adaptive management plans on other projects. Additionally, the goals and specific thresholds triggering adaptive management are defined under the PEIR. Collectively, the County believes that the adaptive management measure and the process in place under the TAC provide a robust opportunity for stakeholders to participate and provide input, and no changes to this process are needed.

Response to Comment 5-96

The commenter asserts that the adaptive management measure for visual modifications is not appropriate. As noted in 2020 Updated PEIR Mitigation Measure BIO-11i, the measure requires project proponents to use the best measures available when the adaptive management plan is prepared. The measure also requires consultation with the APWRA TAC, a group made up of agency and other experts. The County notes that if 2020 Updated PEIR Mitigation Measure BIO-11i is triggered, the TAC will review the adaptive management proposed by applicants and will make recommendations based on the most current science related to the measures proposed. Additionally, the commenter provides a review of a recent study (May et al. 2020) regarding the

efficacy of blade painting in reducing fatalities. The County notes again that project proponents must use the measures suggested or other measures that are shown to be effective in reducing the impact. The County relies on the APWRA TAC to review the available studies and evidence and determine if the particular adaptive management measure is appropriate to implement. In the case of the May et al. (2020) study regarding blade painting, the County expects that the TAC will review the study and the efficacy of the measure if it is proposed by a project proponent in the future.

Response to Comment 5-97

The commenter asserts that the adaptive management measure is not appropriate. As noted in 2020 Updated PEIR Mitigation Measure BIO-11i, the measure requires project proponents to use the best measures available when the adaptive management plan is prepared. The measure also requires consultation with the APWRA TAC, a group made up of agency and other experts. If 2020 Updated PEIR Mitigation Measure BIO-11i is triggered, the TAC will review the adaptive management proposed by applicants and will make recommendations based on the most current science related to the measures proposed.

Response to Comment 5-98

See response to comment 5-97.

Response to Comment 5-99

Comment noted. Please see response to comment 5-97. Additionally, the County notes that the science of wind energy and wildlife interactions continues to advance and additional experimental technologies may be available in the future that are not currently forseeable. The County drafted the PEIR and PEIR Mitigation Measure BIO-11i, which was updated in the SEIR, with this in mind to allow the use of experimental technologies.

Response to Comment 5-100

See response to comment 5-97.

Response to Comment 5-101

Comment noted. Please see response to comment 5-97. Additionally, the County disagrees that there is no evidence that cut-in speeds have any bearing on collision mortality. For example, the County is aware that the USFWS uses an explicit collision risk model to estimate eagle impacts. Among other variables, one of the primary variables considered in the USFWS collision risk model is operational hours (essentially the amount of time turbines are operating and therefore presenting a risk to eagles). Under this model, a reduction in operational hours (e.g., curtailment) results in a reduction in predicted eagle fatalities. Consequently, there is evidence supporting cut-in speed changes as a potential adaptive management measure for birds.

Response to Comment 5-102

Comment noted. Please see response to comment 5-97. Additionally, the County notes that the Golden Hills project has applied a real-time curtailment system (IdentiFlight) to the project in an effort to reduce impacts on eagles. Although monitoring results are not yet available, preliminary

information indicates that the system does reduce golden eagle fatalities. Consequently, there is evidence that real-time turbine curtailment may be an effective adaptive management measure.

Response to Comment 5-103

The commenter introduces and suggests a subsequent list of "recommended mitigation measures" that should be considered. Each of the commenters suggestions is addressed below in responses to comments 5-104 through 5-109.

Response to Comment 5-104

The commenter suggests that surveys for bat roosts and avoidance as required by PEIR Mitigation Measures BIO-12a and BIO-12b are recommended. Both of these measures are included in the draft SEIR and would be required for the proposed project.

Response to Comment 5-105

The commenter suggests that micro-siting for bats, as required by 2020 Updated PEIR Mitigation Measure BIO-14a, is recommended. 2020 Updated PEIR Mitigation Measure BIO-14a is included in the draft SEIR and would be required for the proposed project.

Response to Comment 5-106

The commenter suggests that the County should "confer" with the commenter regarding the commenter's bat expertise and in the context of implementation of 2020 Updated PEIR Mitigation Measure BIO-14a. With respect to implementation of the mitigation measure, the project applicant is required to complete the mitigation measure as described in the SEIR under CEQA. The mitigation measure, among other requirements, notes that "turbine siting decisions will incorporate relevant bat us survey data and bat fatality records published by other projects in the APWRA." To the extent that the commenter's studies are publicly available, the County would expect the project applicant to consider them in the implementation of the mitigation measure.

Response to Comment 5-107

The commenter suggests that a "smart curtailment" approach could be implemented for bats, following the approach of Hayes et al. (2019). The County agrees, and Hayes et al. (2019) is referenced in 2020 Updated PEIR Mitigation Measure BIO-14d as a potential strategy for reducing impacts. The description of 2020 Updated PEIR Mitigation Measure BIO-14d has been revised slightly in the final SEIR to further clarify that "smart-curtailment" is a potential adaptive management option.

Response to Comment 5-108

The commenter quotes text from the PEIR on page 3.4-104. The County cannot find the quoted text on page 3.4-104 of the PEIR or on the same page of the draft SEIR. The County believes the commenter is referring to Mitigation Measure BIO-11b (micro-siting of turbines to minimize fatalities) on page 3.4-109 of the PEIR and starting on page 3.4-108 of the draft SEIR. However, the text quoted by the commenter does not appear in either the PEIR or the draft SEIR. In any case, the commenter's recommendation to conduct micro-siting of turbines to minimize collision impacts to raptors, and using a variety of information sources including previous micro-siting studies, is

required in the draft SEIR. Additionally, the project applicant has already completed a micro-siting study and a supplemental micro-siting study, which are included in Appendix F and Appendix G of the draft SEIR, respectively. Lastly, the County will coordinate with the APWRA TAC, a group of wildlife agency and other experts convened by the County, to evaluate the micro-siting studies for consistency with the requirements of 2020 Updated PEIR Mitigation Measure BIO-11b in the draft SEIR.

Response to Comment 5-109

The commenter suggests that removal of turbines should be required if a certain number of fatalities are associated with the turbines. The County disagrees and notes that there are numerous other mitigation measures which require the applicant to avoid, reduce, and mitigate impacts to birds. These include PEIR Mitigation Measure BIO-11a, which requires a project-specific avian protection plan, 2020 Updated PEIR Mitigation Measure BIO-11b, which requires siting turbines to minimize potential mortality of birds, PEIR Mitigation Measure BIO-11c, which requires turbine designs that reduce avian impacts, PEIR Mitigation Measure BIO-11d, which requires avian-safe practices in related infrastructure, PEIR Mitigation Measure BIO-11e, which requires retrofitting existing infrastructure to minimize risk to raptors, PEIR Mitigation Measure BIO-11f, which requires project proponents to discourage prey for raptors near turbines, 2020 Updated PEIR Mitigation Measure BIO-11g, which requires postconstruction avian fatality monitoring, 2020 Updated PEIR Mitigation Measure BIO-11h, which requires applicants to compensate for the loss of raptors and other species, and 2020 Updated PEIR Mitigation Measure BIO-11i, which requires an avian adaptive management program. 2020 Updated PEIR Mitigation Measure BIO-11i, adaptive management, is the most relevant to the comments made by the commenter. It includes specific thresholds to require adaptive management, including exceedance of the baseline fatality estimates listed in the PEIR. The County notes that under this measure, applicants must do the measures outlined, including curtailment of turbines, or any other measures that may be successful in reducing the impact, until the fatality rates are at or below the specified thresholds. Consequently, the County finds that the removal of turbines is not necessary or warranted.

Response to Comment 5-110

The commenter asserts that the draft SEIR does not contain a discussion of impacts from turbine-caused wildfires on wildlife, describes causes of wildfires, and further asserts that efforts to prevent wildfire degrade and remove habitat (calling attention to firebreaks around structures). The commenter asks that the draft SEIR be revised to add the disked fire-prevention areas around structures as annual grassland permanently removed by the project and asks that the draft SEIR account for impacts caused by repeated fires. As discussed in response to comment 5-17, no disking is proposed as part of project maintenance and operation. An analysis of impacts on wildlife habitat is included in Section 3.4, *Biological Resources*, including a mitigation measure relating to the restoration of annual grassland. Regarding potential impacts on wildlife related to wildfire, Section 3.19, *Wildfire*, contains a discussion of a range of impacts, noting that "short-term effects of wildfires include … loss of wildlife habitat." The section also includes plans and policies which describe the required maintenance of defensible space around structures in the APWRA. For example, the *Altamont Pass Windfarms Fire Requirements* require the "removing and clearing away of flammable vegetation and combustible growth from within 30 feet of [a] structure." This cleared area is necessary to protect the APWRA from any wildfire ignition resulting from turbines, and its regular maintenance would prevent it from being effective habitat. As discussed in the draft SEIR, the 36

new wind turbines would be installed in areas which were previously used for wind production, and the surrounding areas would have already been disturbed. The section also notes that the project would install fourth-generation turbines, which have improved on older models in terms of fire ignition risk, and goes on to describe other project features (such as internal protective control mechanisms) which would reduce ignition risk. Consequently, the County finds that the analysis and findings of the draft SEIR remain accurate with respect to impact related to wildfire. See also

Response to Comment 5-111

The commenter asserts that a general statement in the cumulative analysis indicating the project's cumulative contribution is misleading. The County notes that the cumulative impact analysis should be read in its entirety. Although the statement referenced by the commenter is noted as "approximate" contribution in the Draft SEIR, it is followed by additional discussion including an analysis on a project by project and species by species basis.

Response to Comment 5-112

The commenter suggests changes to Table 5-1 in the cumulative impacts analysis for clarity by presenting per MW rates or fatalities per MW per year. The County disagrees and has determined that at the cumulative impacts analysis is most appropriately presented on a total fatalities basis, which is the clearest and easiest for the public to understand and relate to population estimates as is done in Table 5-2. The commenter also makes comments regarding other projects in the APWRA which are not the subject of this SEIR.

Response to Comment 5-113

The commenter provides commentary on regional population estimates developed by Partners in Flight (PIF), and related issues surrounding the use of Bird Conservation Regions in the population estimates. The County acknowledges that information on local population numbers is lacking, as is the basic definition of what constitutes a "population" for most birds (excluding golden eagles which has been defined by the USFWS). However, the PIF population estimates represent the best available information and science available at this time to conduct a cumulative impact analysis.

Response to Comment 5-114

The commenter provides additional commentary on PIF population estimate methods. Please see response to comment 5-113.

Response to Comment 5-115

The commenter suggests that the cumulative analysis should consider the commenter's fatality estimates. The County acknowledges the commenter's long history of research on avian mortality in the APWRA. However, the cumulative analysis for birds was prepared on the basis of existing and published reports. Methods and sources are clearly described in the draft SEIR analysis and supporting tables. The commenter also suggests that other sources of avian fatalities in the region should be quantified in the analysis. The County considered other sources of avian fatalities; however, the quantification of fatalities from other sources is currently speculative, while published reports of fatalities within the APWRA and nearby MHWRA are well documented. Consequently, the County has focused the cumulative analysis on projects with the highest impacts to avian and bat species in the region, i.e., operating wind projects.

Response to Comment 5-116

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 5-117

The commenter summarizes concerns regarding hazards and hazardous materials (see response to comment 5-118) and air quality/health risk impacts (see responses to comments 5-119 through 5-122).

Response to Comment 5-118

See response to comment 5-18, which addresses the draft SEIR's findings for Impact HAZ-4. No revisions to the draft SEIR are necessary.

Response to Comment 5-119

The comment asserts that the draft SEIR fails to consider all feasible onsite mitigation measures to reduce air quality impacts prior to requiring emissions offsets. Construction impacts were assessed and mitigated according to the Bay Area Air Quality Management District's (BAAQMD) (2017) CEQA Guidelines. Specifically, BAAQMD's CEQA Guidelines note that all projects should implement their Basic Construction Mitigation Measures, which are required as PEIR Mitigation Measure AQ-2a. The BAAQMD (2017) further recommends that "all proposed projects, where construction-related emissions would exceed the applicable [thresholds], implement the Additional Construction Mitigation Measures." BAAQMD's Additional Construction Mitigation Measures are required as PEIR Mitigation Measure AQ-2b.

CEQA does not require lead agencies to analyze all possible mitigation measures or combinations of general strategies (*Santa Clarita Organization for Planning the Environment v. City of Santa Clarita*). Rather, lead agencies must identify and implement reasonable and feasible measures to reduce the impact. As noted above, PEIR Mitigation Measures AQ-2a and AQ-2b are consistent with BAAQMD's (2017) current CEQA Guidelines for the mitigation of construction generated criteria pollutant emissions. Furthermore, PEIR Mitigation Measure AQ-2b identifies a mix of feasible strategies, including a performance standard to reduce offroad equipment nitrogen oxide (NOx) and particulate matter (PM) emissions by 20 percent and 45 percent, respectively, compared to the statewide fleet average emissions intensity. As discussed in response to comment 5-121, this performance standard can be achieved by many of the actions cited by the commenter, as well as those directly referenced in PEIR Mitigation Measure AQ-2b (e.g., 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). These onsite reductions must be achieved through attainment of the performance standard prior to the procurement of emissions offsets under 2020 NEW Mitigation Measure AQ-2c. Therefore, no changes are required to the draft SEIR.

Response to Comment 5-120

The comment suggests a quantitative health risk assessment (HRA) should be conducted. Potential health risks from receptor exposure to diesel particulate matter (DPM, or PM2.5 exhaust) generated during construction and operations are assessed in Chapter 3.3, *Air Quality*, Impact AQ-3, of the draft

SEIR. The draft SEIR concludes that health risks during construction could exceed BAAQMD's thresholds, resulting in a potentially significant impact. Implementation of PEIR Mitigation Measures AQ-2a and AQ-2b would reduce this impact to a less-than-significant level. The DSEIR concludes that health risks during project operations would be minimal and would not result in a significant impact.

The assessment of construction and operational related health risks was prepared consistent with CEQA and BAAQMD guidance. CEQA does not mandate an in-depth quantitative risk assessment, but rather requires lead agencies make a reasonable effort to discuss relevant specifics such that the environmental document allows the public to make an informed decision. Likewise, while BAAQMD's (2017) CEQA Guidelines recommends that "all receptors located within a 1,000-foot radius of the project's fence line be assessed for potentially significant [health] impacts", it does not require a quantitative dispersion analysis or health risk assessment. Rather, BAAQMD's CEQA Guidelines highlight "land uses that would host a high number of non-permitted TAC sources, such as a distribution center" as an example of the types of projects that would warrant a "HRA using an acceptable air dispersion model."

The DSEIR evaluates the primary and relevant variables that influence DPM concentrations and health risks, including the intensity and duration of DPM emissions and the proximity of emission sources to receptors. Construction of the proposed project would generate only a minor amount of DPM. As shown in Table 3.3-9 in Chapter 3.3, *Air Quality*, maximum daily unmitigated PM2.5 exhaust emissions would not exceed nine pounds. With implementation of PEIR Mitigation Measures AQ-2a and AQ-2b, maximum daily emissions would be reduced to four pounds. These emissions would be spread throughout the entire 4,600-acre project site and not concentrated at a single location. Moreover, maximum daily emissions would only occur on a subset of construction days during concurrent project activities. Finally, construction of the project would only require seven months, which, as noted in Impact AQ-3, is far less than the exposure duration of 30 years that is typically associated with chronic cancer risk (OEHHA 2015).

The project area is largely comprised of open space and is sparely populated. Chapter 3.3, *Air Quality*, states that the closest receptor is the Mulqueeney Ranch, which is approximately 865 feet from the staging/laydown area. As shown in Table 3.3-10, mitigated daily PM2.5 exhaust emissions from construction of laydown and staging areas across the entire plan area would not exceed one pound per day. Emissions at the single laydown area near Mulqueeney Ranch would be even lower. Moreover, the concentration of DPM decreases dramatically as a function of distance from the source. For example, studies show that DPM concentrations at 1,000 feet from the source can be reduced by more than 65 percent, compared to concentrations directly at the source (CARB 2005). Consequently, DPM concentrations, and thus health risks, would be substantially reduced at the nearest receptor location.

With respect to long-term operation, the project would not "host a high number of non-permitted TAC sources". As disclosed in Appendix B of the draft SEIR, operational emission sources include worker trips, off-road equipment, and two generators. Passenger vehicles in California are predominantly gasoline-fueled, and therefore worker trips do not represent a substantial source of DPM. Approximately five off-road equipment would be required for routine maintenance. Each equipment would only be used 1 to 2 days per year, and therefore would result in negligible DPM emissions, even over multiple operational years. All project generators would be subject to the permitting requirements specified in BAAQMD Regulation 2, Rule 5, Section 302. Based on these permitting requirements, the generators would not receive a permit from the BAAQMD and would

not be allowed to operate if they would result in cancer or acute hazard effects in excess of the BAAQMD's health risk thresholds of significance.

The qualitative analysis of receptor-based health risks from project generated DPM emissions is consistent with relevant CEQA guidance given the project specific circumstances. The conclusions of Impact AQ-3 in Chapter 3.3, *Air Quality*, of the draft SEIR are likewise supported by substantial evidence as presented through the emissions modeling and narrative. Therefore, no changes are required to the draft SEIR.

Response to Comment 5-121

The comment asserts that the draft SEIR fails to quantify DPM emissions and fails to consider all feasible onsite mitigation measures to reduce air quality impacts. The comment lists diesel emission control strategies and requests the draft SEIR be revised to include these measures.

While DPM is a complex mixture of gases and fine particles that includes more than 40 substances listed by the EPA and CARB as hazardous air pollutants, OEHHA guidance (2015) indicates that the cancer potency factor developed to evaluate cancer risks was developed based on total (gas and PM) diesel exhaust. Unmitigated and mitigated diesel exhaust emissions (PM10 and PM2.5) generated during construction are presented in Tables 3.3-9 and 3.3-10, respectively, in Chapter 3.3, *Air Quality,* of the draft SEIR.

As noted in response to comment 5-119, PEIR Mitigation Measures AQ-2a and AQ-2b are consistent with BAAQMD's (2017) current CEQA Guidelines for the mitigation of construction generated criteria pollutant emissions. PEIR Mitigation Measure AQ-2b identifies a mix of feasible strategies, including a performance standard to reduce offroad equipment nitrogen oxide (NOx) and particulate matter (PM) emissions by 20 percent and 45 percent, respectively, compared to the statewide fleet average emissions intensity. The measure also requires all construction equipment, diesel trucks, and generators will be equipped with best available control technology, consistent with many of the strategies listed by the commenter. 2020 NEW Mitigation Measures AQ-2c requires construction contractors to provide daily construction activity monitoring data for all construction activities. This requirement is likewise consistent with the suggested strategies for reporting. Therefore, no changes are required to the draft SEIR.

Response to Comment 5-122

The comment provides the Sacramento Metropolitan Air Quality Management District's (SMAQMD) enhanced exhaust control practices and requests they be considered to further reduce air quality impacts. The control practices include 1) submission of an off-road equipment inventory, 2) performance standard to reduce offroad equipment nitrogen oxide (NOx) and particulate matter (PM) emissions by 20 percent and 45 percent, respectively, compared to the statewide fleet average emissions intensity, and 3) ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. The control practices also note that district officials may conduct period site visits.

2020 NEW Mitigation Measures AQ-2c in the draft SEIR requires construction contractors to provide daily construction activity monitoring data for all construction activities. PEIR Mitigation Measure AQ-2b establishes the same NOx and PM performances standards as SMAQMD's control practice. The project would be required to comply with BAAQMD Regulation 6, Rule 1, Particulate Matter, which prohibits from any source for a period or aggregate period of more than three minutes in any

hour an emission equal to or greater than 20% opacity. The project applicant and construction contractors would comply with all site visits by BAAQMD, should the air district elect to visit. Accordingly, the draft SEIR and air quality mitigation are consistent with SMAQMD's enhanced exhaust control practices. No changes are required to the draft SEIR.

Response to Comment 5-123

The comment does not raise a specific issue on the substance of the draft SEIR.

Letter 6— Golden Gate Audubon Society

Response to Comment 6-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 6-2

The comment states that the draft SEIR should incorporate the most current monitoring results and other studies and evaluate the impacts accordingly. This is precisely the approach taken in the draft SEIR analysis, as described on pages 3.4-61—3.4-64 and pages 5-6—5-9 of the draft SEIR.

Response to Comment 6-3

The comment correctly summarizes the draft SEIR's assessment of land cover on the project site, as summarized in Section 3.4, *Biological Resources*, of the draft SEIR.

Response to Comment 6-4

The statements made in the comment are consistent with the description of the environmental setting in Section 3.4, *Biological Resources*, of the draft SEIR. The draft SEIR evaluates impacts on wetlands and prescribes mitigation (Impact BIO-16).

Response to Comment 6-5

The commenter states that the SEIR does not discuss operational impacts on birds and bats. Operational impacts are analyzed in the draft SEIR under Impact BIO-11 and under Impact BIO-12 in Section 3.4, *Biological Resources*.

The commenter references the PEIR statement that no ground disturbing activities will take place where surveys determine that a special-status species is present in or adjacent to the project area and states that construction impacts to special-status bat and bird species should be analyzed and a plan should be in place to avoid and minimize impacts prior to construction activities. Construction impacts on special-status birds are addressed under Impact BIO-8a (nesting birds), Impact BIO-8b (nesting raptors), Impact BIO-9a (loss of burrowing owl habitat), and Impact 9b (loss of foraging habitat). Mitigation Measures BIO-5c, BIO-8a, BIO-8b, and BIO-9 include surveys to identify the presence of species in and near the construction area, establishment of no-activity zones to avoid impacts to those species, and restoration or compensation of disturbed habitat. While bats are expected to forage in the project area during construction, construction will occur during daylight hours when bats are not foraging and construction will not result in the disturbance of bat roosting habitat; therefore, construction impacts on bats are not anticipated.

Response to Comment 6-6

The commenter references NOP comments from CDFW related to recommended buffers for raptors, burrowing owls, and tricolored blackbirds, and states that the project should establish buffers to avoid disturbance. 2020 Updated PEIR Mitigation Measure BIO-8a and 2020 Updated PEIR Mitigation Measure BIO-8b include a requirement to perform preconstruction nesting bird and raptor surveys to located active nests and establishment of no-activity zones to minimize potential effects on nesting birds and prevent take. The no-activity zone would be large enough to avoid take and would extend 50 feet to 1 mile from the nest, or as otherwise required by USFWS and/or CDFW. A specified buffer distance is only provided for golden eagle and burrowing owl. As stated in 2020 Updated PEIR Mitigation Measure BIO-8a, the extent of the no-activity zone will be based on the distance of the activity to the nest, the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the species, and the dissimilarity of the proposed activity to background activities. Because of the variability in conditions associated with each nest site and sensitivity of the species during different periods within the breeding season, the buffer zones may vary greatly and are better assessed at the time of construction with the goal of providing the most appropriate buffer.

Response to Comment 6-7

The commenter notes that the project should avoid impacts to existing preserves and suggests these areas should receive the highest avoidance levels. The commenter also suggests that a project alternative be considered that excludes the Burrowing Owl Two Sisters Preserve from the project area. As depicted in Figure 3.4-1, the Two Sisters Preserve is surrounded by but is not included within the project area. (As discussed in response to comment 2-3, Figure 3.4-1 has been updated to accurately depict the southern boundary of Jess Ranch.) No direct impact to lands on this preserve are anticipated. Currently, the closest project features are more than 1,000 feet from Lawrence Livermore lands, 1,500 feet from Haera Mitigation Bank, and 3,000 feet from Jess Ranch. While the closest turbine construction area is approximately 500 feet from the Two Sisters Burrowing Owl Preserve, a collector line would need to be installed along the northern boundary of the preserve. Avoidance measures included in the SEIR are aimed at protecting sensitive biological resources on and adjacent to the project area.

Response to Comment 6-8

The commenter states that the SEIR should adequately examine indirect effects to hydrologic features in the project area, including erosion, alteration of drainages, sedimentation, and contaminants. The commenter also references the PEIR requirement to prepare a plan to avoid, minimize, and mitigate water quality degradation. As described under Impact WQ-3 in Section 3.10, *Hydrology and Water Quality*, of the draft SEIR, the project would not substantially alter the existing drainage pattern in the project area because project drainage has been considered in the project design. Appropriate erosion control devices (e.g., earth berm, silt fences, straw bales) would be installed to manage water runoff and diversion ditches would be installed, as necessary, to prevent stormwater from running onto the site from surrounding areas.

SEIR Impact WQ-1 concludes that construction-related earth-disturbing activities associated with the project would introduce the potential for increased erosion and sedimentation, with subsequent effects on drainage and water quality. However, project operation is not anticipated to result in a substantial amount of additional runoff that would degrade surface or groundwater quality. As

described under Mitigation Measure WQ-1, the project will comply with National Pollutant Discharge Elimination System (NPDES) requirements under the construction general permit that require preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) to reduce pollutants in stormwater and other nonpoint-source runoff. Specific water quality BMPs are provided under PEIR Mitigation Measure WQ-1. Preparation of the SWPPP and implementation of this mitigation measure would satisfy the PEIR requirements related to water quality degradation.

The commenter references requirements in the PEIR to conduct work during the dry season and avoiding work during significant rain events. These are addressed under PEIR Mitigation Measure BIO-3b and 2020 Updated PEIR Mitigation Measure BIO-5a, which are included in the draft SEIR.

The commenter also references a PEIR requirement that utility collection be installed across perennial creeks using boring methods and where impacts cannot be avoided or minimized, compensatory mitigation will be required. The project area does not support any perennial creeks; however, hydraulic directional drilling (HDD) methods may be used to avoid surface disturbance of some aquatic habitats in the project area, where feasible. Because final design of the project is not complete, the exact locations where HDD may be used are not currently known. Compensatory mitigation for impacts to aquatic habitats are identified under SEIR Mitigation Measures BIO-3b, BIO-5b, BIO-16 and BIO-18.

The commenter recommends that the SEIR should more thoroughly analyze and provide detailed plans for avoiding and minimizing impacts to aquatic habitats in the project area. The SEIR analyzes project effects on aquatic resources, providing a worst-case scenario for permanent and temporary impacts (Table 3.4-6). The project has been designed with the goal of avoiding and minimizing impact on aquatic habitats. Overall, the project's impacts on aquatic resources are generally small (0.75 acre temporary and 0.06 permanent) and mitigation is proposed in the SEIR to restore and/or compensate for these impacts, as referenced above. See also response to comment 5-3.

Response to Comment 6-9

The commenter requests annual surveys for all special-status wildlife species in the project site, as well as red-tailed hawk and burrowing owl. The commenter presents no rationale for this request, and none is evident. The draft SEIR presents an analysis of potential special-status species presence, summarized in Table 3.4-3 (final SEIR pages 3.4-38 to 3.4-50), assuming that any species with habitat in the project area is potentially present and evaluating potential impacts accordingly. Since the SEIR's analysis already assumes species presence, surveys would provide no information to further inform the SEIR analysis or its conclusions. There is particularly no apparent utility to surveys performed after the SEIR process, since the commenter does not indicate how the results of such surveys could alter the impacts disclosed in the draft SEIR. It is true that if surveys could demonstrate the absence of a species, then impacts would be reduced compared to the draft SEIR's conclusions, but this would not alter the need to implement mitigation required by the draft SEIR and, again, would serve no purpose. The commenter references PEIR Mitigation Measure BIO-8a and states that the SEIR should analyze how the mitigation would be applied in the project. This mitigation measure is included in the draft SEIR (page 3.4-87) and the SEIR specifies how and when it should be implemented as it relates to construction, i.e., prior to construction activities, during the nesting season, within a certain distance from construction, etc.

Response to Comment 6-10

The commenter refers to "higher than expected fatalities of Golden Eagles in the Altamont" but provides no evidence or reference. The commenter's references to the PEIR are accurate and consistent with the draft SEIR analysis.

Response to Comment 6-11

The draft SEIR includes project-specific impact analyses for tricolored blackbird and Swainson's hawk. See draft SEIR pages 3.4-24-25,27, 50, 62-64, 86-88, 91, 98-99, and 105-106. A cumulative impacts analysis is included on page 5-12 of the draft SEIR.

Response to Comment 6-12

The commenter implies that the "Two Sister Preserve" mitigation bank is in the project area. It is not, although the project site adjoins it. The commenter also remarks on burrowing owl population status. See the responses to comments 1-9 and 1-10 for a detailed discussion of this matter.

Response to Comment 6-13

Please see draft SEIR Appendix D for the requested detailed information on American kestrel and red-tailed hawk.

Response to Comment 6-14

The commenter requests a cumulative impact analysis for existing turbine projects. Existing turbine projects, both at APWRA and the MHWRA, are addressed in the cumulative impacts analysis, draft SEIR pages 5-5 to 5-16.

The commenter asserts that "hilly terrain and multiple attractive wetland habitats" will "make this site particularly hazardous for turbine operations and standard avoidance measures will likely be inadequate," but the commenter's reasoning is unclear and the commenter presents no evidence supporting their opinion. Similarly, the commenter alleges "cumulative impacts from the proposed project will likely show substantial evidence of more severe and additional environmental direct and indirect effects" but this also is unclear and unsupported.

Response to Comment 6-15

The commenter asserts the project will cause nesting failures and other impacts, but presents no rationale or evidence supporting these speculative statements.

Response to Comment 6-16

The comment states that an alternative that eliminates preserves from the project area should have been evaluated in the draft SEIR. There are no preserves within the project site, as shown in draft SEIR Figure 3.4-1. See response to comment 6-12.

Response to Comment 6-17

The commenter calls for "additional or different mitigation measures than were analyzed in the PEIR." The draft SEIR describes several such measures. They are named "2020 Revised Mitigation Measure" and address a number of different forms of new and updated mitigation.

Response to Comment 6-18

See response to comment 2-16.

Response to Comment 6-19

The commenter requests turbine curtailment during bat migrations. This is already part of the project proposal; see draft SEIR pages 3.4-126-127. As discussed in response to comment 1-14, a seasonal spring cut-in speed increase and potentially a "smart curtailment" strategy has been incorporated in the adaptive management provisions of PEIR Mitigation Measure BIO-14d (final SEIR p. 3.4-136).

The commenter refers to turbine curtailment recommendations included in CDFW's comment letter on the draft SEIR. As discussed in response to comment 1-8, the text of 2020 Updated PEIR Mitigation Measure BIO-11i has been revised to encourage the TAC to evaluate the merits of curtailment near raptor nests, including burrowing owl colonies See also response to comment 1-14.

Response to Comment 6-20

The commenter asks when the Avian and Bat Protection Plan will be available. The Avian and Bat Protection Plan, which is required under PEIR Mitigation Measure BIO-11s, will be developed prior to project operation, and will be subject to TAC review and approval.

Response to Comment 6-21

The commenter requests compensatory mitigation requirements to "cover the costs of recovery and restoration of biological resources in our current economy." This request is outside the scope of the draft SEIR analysis. The applicant is required to cover those costs in full, at the time they are incurred, as determined by the agency with authority over the resource.

Response to Comment 6-22

The commenter refers to the Golden Hills and Golden Hills North monitoring reports. These are discussed and cited at length throughout Section 3.4, *Biological Resources*, of the draft SEIR. There is one Golden Hills North report that is not cited because it was released at the end of 2020, subsequent to publication of the draft SEIR, as a draft report (although it is dated "January 2020") (Great Basin Bird Observatory and H. T. Harvey & Associates 2020). It does not indicate any substantial departure from the results of earlier Golden Hills reports and will not be reported as it has not yet received review by technical authorities.

Response to Comment 6-23

Commenter alleges "that recent studies by U.S. Geologic Survey biologists indicate that golden eagles occupy and use the APWRA at rates not anticipated in the PEIR" but provides no references or citations. The draft SEIR contains extensive discussion of recent USGS reports on the Diablo Range

golden eagle population; see draft SEIR pages 3.4-52 to 3.4-55. The commenter also calls for "new adaptive management measures;" these are included in the draft SEIR, pages 3.4-125-126. See also response to comment 1-8 and response to comment 1-14.

Response to Comment 6-24

The commenter incorrectly states that the proposed project used a qualitative micro-siting analysis and that (unspecified) other micro-siting reports were based on quantitative analysis. In fact, all micro-siting reports completed in the Altamont Pass area have been based on a combination of quantitative and qualitative analysis. See response to comment 3-2 regarding the merits of different micro-siting models.

The commenter proposes "detailed and frequent monitoring of the proposed 11 Moderate High risk turbines during high avian use and occupancy periods". The draft SEIR places strong emphasis on frequent monitoring of all proposed turbines; for details see pages 3.4-116-117 of the draft SEIR.

Response to Comment 6-25

The commenter requests removal of two high-risk turbines. See response to comment 2-16 regarding disposition of the high-risk turbine sites.

Response to Comment 6-26

The commenter requests further data about focal raptor species. Please see draft SEIR Appendix D for detailed information on these birds.

Response to Comment 6-27

The comment summarizes previous comments, to which responses are provided above.

Letter 7— California Department of Justice

Response to Comment 7-1

The comment provides an introduction and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 7-2

The comment recommends that the County include a reduced megawatt alternative in the final SEIR that avoids certain high-risk and sensitive areas of the project site, and which incorporates strengthened and improved mitigation measures. The comment also reiterates CEQA requirements regarding project approval in light of feasible alternatives and mitigation measures.

With respect to the suggestion to include a reduced megawatt alternative, the CEQA Guidelines and relevant case law support the notion that an EIR need not discuss every alternative to a project. Instead, an EIR should present "a reasonable range of potentially feasible alternatives." CEQA grants the lead agency discretion to determine what constitutes a reasonable range of alternatives that accomplish most or all of a project's objectives. The alternatives discussion is governed by a rule of reason, with the ultimate objective being to foster informed decision-making and an informed public (Save Our Residential Environment v. City of West Hollywood [1992] 9 Cal.App.4th 1745; CEQA

Guidelines Section 15126.6[a]). Case law also holds that an EIR need not include multiple variations on the alternatives it does consider, when the relative advantages and disadvantages of other, similar alternatives can be assessed from a review of the alternatives presented in the EIR (Mira Mar Mobile Community v. City of Oceanside [2004] 119 Cal.App.4th 477).

In determining the range of alternatives that are carried forward for full analysis in an EIR, the lead agency must consider the feasibility of potential project alternatives in terms of whether such alternatives are "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" (State CEQA Guidelines Section 15364). Here, the fundamental objective of the Project is to install new wind turbines that will produce and deliver 80 megawatts (MW) of commercially viable wind energy to the electrical grid through a long-term power purchase agreement with a local community choice aggregator. Thus, a reduced megawatt alternative would not achieve the fundamental objective of the project.

The County has identified a reasonable range of alternatives that it considers feasible in the draft SEIR, and screened out other alternatives, including a No New Roads alternative and an 80 MW Solar Alternative, as described in Chapter 4, *Alternatives*, of the draft SEIR. A No New Roads alternative would not require the construction of access roads, roadway widening, or other related improvements. An 80 MW Solar Alternative, on the other hand, would result in no rotor-swept area and would correspondingly reduce avian and bat fatality impacts. While it would not reduce the permitted generating capacity of the project, the Reduced Project Alternative proposes substantial alterations and reductions compared to the proposed project through the elimination of one-third of the proposed turbines, reduction in the number of high-risk turbines from 11 down to 2, and an increase in cut-in speeds during the fall bat migration.

In light of the above, the County has found that the range of alternatives evaluated in the draft SEIR satisfies the requirements of CEQA. However, for clarification, Chapter 4, *Alternatives*, has been revised to note that the Reduced Megawatt Alternative was not screened for evaluation in the alternatives analysis due to its inability to meet the primary project objective.

Detailed responses to the suggestion of micro-siting measures to avoid high-risk and sensitive areas and improved mitigation measures are provided in the responses to comments 7-22 through 7-30.

Response to Comment 7-3

The comment provides a table of contents for the comment letter and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 7-4

The comment provides project background information and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 7-5

The commenter accurately summarizes statements in the draft SEIR. The County has addressed all of the proposed project's significant impacts by including all feasible mitigation measures and feasible alternatives that were known at the time of publication of the draft SEIR, and thereby disputes the commenter's contention that significant issues remain unaddressed.

Response to Comment 7-6

The commenter incorrectly states that the Reduced Project Alternative would increase project capacity; as stated on draft SEIR page 4-6, the Reduced Project Alternative would have a permitted capacity of 80 MW, the same as the other action alternatives. The commenter correctly summarizes the risk ratings of turbines and their proximity to active golden eagle and Swainson's hawk nests. Such risk factors will be considered by a group of experts convened for the TAC to evaluate the micro-siting study for consistency with the requirements of PER Mitigation Measure BIO-11b. The TAC then makes recommendations regarding the results of the micro-siting study, which the County planning director will consider in making a decision on whether to require the recommendations. See response to comment 7-24 regarding the commenter's assertion that a lower turbine blade height would increase the risk to avian species.

Response to Comment 7-7

Commenter summarizes concerns regarding the inclusion of a reduced project alternative (see response to comment 7-6), the project description (see response to comment 7-16), statement of project objectives (see response to comment 7-16), environmental baseline (see responses to comments 7-17 through 7-20), impact analysis and mitigation measures (addressed in the remainder of this response).

With respect to the summary of concerns regarding the impact analysis and mitigation measures, the commenter cites Appendix D, an applicant-prepared survey document, with regard to golden eagle usage. The draft SEIR makes no claim that the project area is a lower use area for golden eagles, except to the extent that survey data indicate such a condition (see response to comment 7-34) and provides information on the 7 activity centers and/or nests in the vicinity. The commenter's assertion that "the DSEIR does not adequately evaluate the impact of Project operation on these nests and activity centers" is not supported by evidence. The commenter also raises concerns with turbine impacts on tricolored blackbirds, burrowing owls, "possible bat roosts", and water features. The draft SEIR does include an analysis of turbine-caused mortality relative to tricolored blackbirds and burrowing owls (Impact BIO-11, draft SEIR pages 3.4-101-102,106, and cumulative impacts draft SEIR pages 5-10 and 5-12). Specific bat roosts have not been identified in the study area (see response to comment 7-39) and no mechanism for turbine siting to impact water features has been identified.

Response to Comment 7-8

The commenter states that the draft SEIR does not analyze the effects from construction of turbine pads and roads on site topography and potential for increased sheet flow and sedimentation into nearby water features. Turbine pads and access roads were sited to utilize the existing site topography and no turbines would be constructed in areas that would disturb existing drainage. As stated on page 2-12 of Chapter 2, *Project Description*, of the draft SEIR, the existing onsite drainage pattern would be maintained and drainage would sheet flow along the sides of roads and drain to culverts at existing drainage crossings. Impact WQ-3 in Section 3.10, *Hydrology and Water Quality*, of the draft SEIR concludes that the project would not substantially alter the existing drainage pattern in the area (draft SEIR pages 3.10-11 and 3.10-12).

Response to Comment 7-9

The commenter states that the draft SEIR needs additional mitigation but provides no specific recommendations.

Response to Comment 7-10

The commenter recommends that another alternative be considered that reduces the production capacity of the project (as measured in megawatts), that such an alternative avoid all high-risk turbine sites, avoid or curtail operations of all moderately-high risk turbine sites, include construction and operational setbacks, and include nighttime seasonal shutdowns or curtailment during spring and fall bat migration seasons. As described in the response to comment 7-2, the County has considered a reasonable range of potentially feasible alternatives to the proposed project, including alternatives that would reduce some of the significant impacts of the proposed project. A reduced megawatt alternative would not meet the project objectives, and therefore was not considered. Response to comment 7-6 addresses the commenter's suggestion to consider an alternative that avoids high-risk turbine sites. Response to comment 1-8 addresses the commenter's suggestion to avoid or curtail operations of all moderately-high risk sites within one mile of raptor nesting or roosting sites.

With respect to the suggestion for construction and operational setbacks, the project was designed to avoid and minimize impacts to sensitive habitats within and adjacent to the project area to the extent possible while meeting the objectives of the project. Mitigation measures proposed in the draft SEIR include conducting preconstruction surveys to identify the location of active bird nests to ensure that appropriate buffers are implemented to avoid and minimize construction related effects. Operational setbacks from sensitive habitats on or adjacent to the project site are not proposed, and the commenter, USFWS, and CDFW present no evidence of the efficacy of setbacks, so there is no basis to conclude that these measures would effectively reduce turbine-caused mortality and thereby effectively reduce project impacts.

The commenter's suggestion regarding nighttime seasonal shutdowns or curtailment during spring and fall bat migration seasons is addressed in the response to comment 1-14.

Response to Comment 7-11

The commenter identifies relevant federal and state laws pertaining to the protection and take of state and federally listed species, and notes that significant new scientific information has become available since the PEIR was certified in 2014. The County agrees with the commenter regarding new information that has become available since the PEIR was certified, and has incorporated such information into the draft SEIR to the extent it is relevant to the APWRA and the proposed project.

Response to Comment 7-12

The County concurs that there is a great deal of documentation of wind energy impacts on avian and bat resources of Altamont Pass, clearly establishing the severity of those impacts. This information has been incorporated into the draft SEIR to the extent it is relevant to the APWRA and the proposed project.

Response to Comment 7-13

The County concurs with the commenter, CDFW, and USFWS in establishing the substantial adverse effects on golden eagles from wind energy development in the APWRA. The commenter also correctly notes that some sites have recorded, in some years, elevated eagle mortalities; this is a statistical inevitability. The commenter does not appear to dispute or request any changes to the text in the draft SEIR.

Response to Comment 7-14

The commenter appears to concur with draft SEIR findings regarding impacts on bats, and references studies that are cited in the draft SEIR. The commenter does not appear to dispute or request any changes to the text in the draft SEIR.

Response to Comment 7-15

The commenter appears to concur with the draft SEIR determination that substantial mitigation measures, not previously required for any APWRA wind project, are warranted at this time. The County has addressed specific measures suggested later in the comment letter in responses to comments 7-47 through 7-54.

Response to Comment 7-16

With respect to the commenter's statement that the project objectives are impermissibly narrow, the project objectives provided in the draft SEIR are derived directly from the 2014 PEIR; that document identified future repowering of the Mulqueeney Ranch site (the subject site of the proposed project) at a nameplate capacity of 80 MW. That same capacity is now proposed for the project, and as such was included as part of a fundamental objective of the proposed project. Including a specific capacity of 80MW in a fundamental project objective is appropriate given that this project is tiered from the 2014 PEIR and which was evaluated in that document as repowered at this capacity under Alternative 2: 450 MW. The County also notes that there is no requirement under CEQA regarding the specific mechanisms through which potentially feasible alternatives must reduce impacts; thus, the commenter's suggestion that a reduced MW alternative must be considered is erroneous' as other alternatives were considered which could reduce impacts through other means (i.e., no roads, solar energy).

The commenter speculates on undefined impacts resulting from the range of turbine sizes considered in the proposed project, but provides no evidence for such impacts. In fact, the PEIR considered a range of turbine sizes and, as discussed on draft SEIR page 3.4-63, the variation in turbine sizes evaluated at wind projects at the APWRA has historically been accommodated by evaluating fatality rates in units of "per MW"; the same discussion (draft SEIR page 3.4-61) also presents a rationale for evaluating fatality rates in units of "per ha. RSA". No studies of fatality rates in the APWRA have attached much importance to the small differences in turbine size that the commenter describes, i.e. from 2.2 to 4.2 MW. As the commenter notes, there is some evidence that larger turbines pose a greater threat to bats, but there is no quantitative basis for this idea, and thus no evidence that the difference has a measurable influence in terms of overall fatalities, particularly when considering that a smaller number of the larger turbines is needed to achieve design capacity. Since the commenter has no argument showing a potential for a substantive difference in impacts depending upon the size of turbines used, there is also no evidence that such information would substantively affect the outcome of the draft SEIR analysis.

Response to Comment 7-17

The commenter presents CEQA Guidelines and case law pertaining to the environmental conditions that are used as a baseline against which to assess the degree of significance of a project's effects. Responses to comments 7-18 through 7-20 address specific questions presented by the commenter regarding the CEQA baseline.

Response to Comment 7-18

The County agrees with the commenter's assertion that evaluating a project's environmental effects with an appropriate baseline is required under CEQA. As such, the County has employed an approach to determining the baseline for the SEIR analysis that reflects the predominant baseline conditions on the project site rather than a misleading baseline condition defined by a snapshot in time that is not reflective of decades of consistent wind generation operations on the project site. Further, the SEIR baseline is aligned with that of the PEIR, which assumed that existing turbine facilities in the APWRA would continue to be operated consistent with Conditional Use Permits approved by the County for the project site until such time as each site is repowered or decommissioned.

In accordance with Section 15152 of the CEQA Guidelines, the existing physical environmental conditions as they exist at the time the notice of preparation (NOP) is published, or at the time environmental analysis is commenced, generally constitute the baseline for the environmental impact analysis. However, neither CEQA nor the CEQA Guidelines "mandates" a uniform, inflexible rule for defining the existing conditions baseline. Rather, an agency has the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence." See *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 328.

In exercising its discretion to select the appropriate environmental baseline, it is often appropriate for an agency to consider historic operations, not just a snapshot of existing conditions. Under the CEQA Guidelines, and as acknowledged by the commenter, "where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions" (CEQA Guidelines Section 15125(a)(1)). It is particularly appropriate to rely on historic conditions where "[a] temporary lull or spike in operations … happens to occur at the time environmental review for a new project begins," instead of allowing that spike or lull misleadingly to "depress or elevate the baseline." See *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 328. California courts have regularly approved baselines relying on historic conditions. See *North County Advocates v. City of Carlsbad* (2015) 241 Cal.App.4th 94 (upholding baseline based on historic occupancy rates even though building in question had been vacant for years); *San Francisco Baykeeper, Inc. v. State Lands Comm'n* (2015) 242 Cal.App.4th 202 (upholding baseline premised on historical sand mining operations where amount of sand mined varied from year to year); *Cherry Valley Pass Acres & Neighbors v. City of Beaumont*, 190 Cal.App.4th 316, 336-40 (approving baseline for water use measured by historic operations rather than operations at time of initiation of environmental review).

The circumstances here present an example of a situation in which a baseline reflecting historic conditions will provide "the most accurate picture practically possible of the project's impacts," and

in which a snapshot taken shortly after removal of legacy turbines from the project site would be misleading (see 14 CEQA Guidelines Section 15125(a)(1)). As noted above, the project site was home to 518 operational old-generation wind turbines for decades prior to publication of the NOP. While no turbines had existed on the site between 2016 and 2020, when the County issued the NOP for the SEIR, the condition of no turbines on the project site reflected a relatively short-term period of time between the decommissioning of old turbines and the installation of new turbines as part of the proposed project.

The commenter asserts that removal of old-style turbines has resulted in "rebounding raptor populations" and cites Kolar and Wiens (2017, p. 8-9) in support of this assertion. Kolar and Wiens (2017) in fact make no such statement, but they do cite Smallwood and Karas (2009) and ICF International (2016) in support of their statement that "Recent analyses have suggested that removing older turbines has decreased the number of golden eagle collisions in some parts of the APWRA." The County notes that Smallwood and Karas (2009) were writing about the same impacts evaluated in the PEIR and this SEIR, namely, the reduction in fatality rates recorded during the transition from old-generation to new generation turbines; and ICF (2016) was likewise documenting this change.

The commenter further cites information regarding sensitive biological resources located on and adjacent to the project site, including conservation lands established to protect the burrowing owl and other species, as well as critical habitat for the California red-legged frog and Alameda whipsnake. These conditions are reflected in the CEQA baseline, as referenced by the commenter, in the draft SEIR. It should also be noted that the draft SEIR includes a No Project – No Repowering Alternative that provides context for the reader to understand the impacts of the proposed project relative to possible outcomes in the absence of the proposed project. A comparison of this no project alternative to the proposed project is provided in Chapter 4, *Alternatives*, of the draft SEIR.

The commenter further asserts that a current conditions baseline, as opposed to a "historic" conditions baseline "is important to adequately assess the cumulative effects of the project going forward." However, the County disagrees and believes this distinction is of no relevance to a cumulative effects analysis given that cumulative effects include the effects of the proposed project "added to other closely related past, present, and reasonable foreseeable probable future projects" (CEQA Guidelines Section 15355(b)). Because CEQA's definition of the cumulative impacts baseline is temporally indifferent—past, present and reasonably foreseeable projects—it comprehends the full spectrum of synergistic cumulative effects regardless of whether the SEIR's project-specific baseline focuses on present or "historic" conditions. Indeed, the cumulative impacts analysis would be defective if it did not factor in the cumulative effects of decommissioned turbine installations.

Response to Comment 7-19

The comment includes specific questions regarding the historic conditions baseline employed in the draft SEIR. The questions are listed below and addressed individually to the extent available information allows.

1. Where were each of the 518 old-generation turbines located in relation to the proposed new turbine sites?

   The specific location of old turbines relative to proposed new turbines is not the determinant of the significance of the impact on bat and avian species nor can such information be used to further inform the impacts that were presented in the draft SEIR. Avian and bat mortality is

predicted based on the method employed in the PEIR, the megawatt capacity of the proposed project, and, in the case of this SEIR, the rotor-swept-area metric.

2. How many of the 29 parcels that make up the project site were previously used for wind energy production?

   Operational impacts on bat and avian species are primarily a function of the absolute number of turbines installed rather than their precise location (the effects of which are addressed by micro-siting mitigation required by the PEIR). Therefore, the rate of mortality per installed megawatt MW is the relevant metric, not whether the 518 legacy turbines are replaced with new turbines on exactly the same parcels as old generation turbines. This approach, which is embedded in the PEIR impact analysis and, therefore, in the draft SEIR as well, is appropriate in an environment where, as here, there are insufficient data and/or predictive models to quantitatively link precise turbine locations with mortality estimates.

3. What were the models, sizes, and owners/operators of these 518 old-generation turbines and what was the total installed capacity of these turbines?

   The models, sizes, owners and operations of the old-generation turbines is unnecessary for determining the relative avian and bat impacts of the proposed project to old generation turbine conditions, as evidenced by the PEIR itself, which describes first- and second-generation turbine dimensions (PEIR page 2-4) and uses roughly a decade of APWRA avian mortality data to assess such impacts on a per MW basis, regardless of the model, size, owners, or operators of the legacy turbines.

4. Were any of these old turbines rated as very high, high, or moderately high-risk turbines by the former Alameda County Scientific Review Committee?

   These relative values are already embodied by the APWRA-wide mortality data used by the PEIR and the draft SEIR to estimate past and proposed rates avian and bat mortality rates. The more granular, site-specific approach recommended by the commenter would restrict the sample set of impact analysis by limiting data to a much smaller set of turbine-specific results that could be dependent on a variety of factors other than the SRC risk rating of the turbine in question (e.g., climactic conditions, fluctuating prey base, etc.). By applying APRWA-wide data from multiple turbine locations and turbine types, the methodology employed by the PEIR gives a clearer perspective on the possible range of avian and bat impacts that may result from a project.

5. What did the prior monitoring data show for these old turbines?

   The PEIR described several issues confounding the comparison of avian fatality rates between old and new generation turbines. As noted on page 3.4-56 of the PEIR, the fatality rates from nonrepowered turbines were obtained while management actions were being implemented to reduce avian fatalities. These actions included the shutdown of turbines during the winter period, a time when winds are lowest but avian use of the area is highest for the four focal species. The removal of hazardous turbines during the period of data collection further confounded comparison of old and new generation turbines. In addition to these issues, data from prior monitoring was collected and analyzed at the “BLOB” level (base layer of operating group boundaries). Review of the BLOBs and associated analysis in the County’s final monitoring report (ICF 2016) indicates that the BLOBs straddle project areas and/or are split when viewed in comparison with the current Project. Additionally, significant portions of the proposed project did not have monitoring, further complicating a comparison. Consequently, a

direct comparison of the prior monitoring data with the current project area is not possible because the legacy turbine data were altered by shut-down and removal actions and were collected and analyzed at a BLOB level.

The commenter goes on further to state that the SEIR must compare avian and bat impacts of the proposed project to the prior installed capacity of the old generation wind turbines at the project site; this was in fact performed, as described in the following statement provided on page 3.4-95 of the draft SEIR: "The number of fatalities that would have occurred at the non-repowered turbines for the project site, based on an equivalent level of generating capacity (80 MW)."

Lastly, the commenter insists that average annual fatality metrics in the SEIR must be presented as set forth in the PEIR; this is in fact what has been presented in the draft SEIR, shown in the column titled "Not Repowered" of Tables 3.4-4 and 3.4-8a. To provide additional context for the reader, and to incorporate information that has become available since the PEIR was published (namely, from monitoring reports prepared for other repowered projects), average annual fatalities have been presented along with average annual fatalities per MW as calculated utilizing monitoring reports for these other repowered projects.

Response to Comment 7-20

The County has provided an appropriate baseline against which to compare the environmental effects of the proposed project. See responses to comments 7-18 and 7-19.

Response to Comment 7-21

The comment provides CEQA Guidelines and relevant case law with respect to the CEQA requirements on the range of alternatives that must be consisted in an EIR. Detailed responses to the commenters concerns are provided in the responses to comments 7-22 through 7-30.

Response to Comment 7-22

The commenter claims that the "Micro-Sited Alternative" cannot be considered a true alternative under CEQA as the only difference with respect to the proposed project is that it incorporates relocation of some turbines in accordance with the micro-siting mitigation requirements put forth in the PEIR. As noted in the response to comment 7-2, an EIR should present "a reasonable range of potentially feasible alternatives," and CEQA grants the lead agency with discretion to determine what constitutes a reasonable range of alternatives that accomplish most or all of a project's objectives. The Micro-Sited Alternative would accomplish all of the project's objectives and is potentially feasible, meeting CEQA requirements. This alternative would also reduce raptor fatalities, as described on draft SEIR pages 4-14 and 4-15, and therefore achieves the intent of the CEQA Guidelines to evaluate an alternative that is capable of substantially lessening a significant effect of the project, although, notably, the reduction in such fatalities cannot be quantified because the efficacy of such micro-siting layouts is unknown. Lastly, the micro-siting employed as part of this alternative is not anticipated to result in a measurable change in small bird and bat fatalities, and overall avian and bat impacts would remain significant and unavoidable, as with the proposed project. The comparison provided by the Micro-Sited Alternative to the proposed project provides an important piece of information to the reader in that it demonstrates the likelihood of potential reductions in raptor fatalities as a result of an economically feasible micro-sited layout, but also underscoring that such reductions cannot be quantified and that small bird and bat fatalities would remain unchanged.

The commenter notes that the Micro-Sited Alternative retains a number of high- and moderate-risk turbine sites. The commenter makes a variety of convoluted statements about which turbines were changed in the Alternative and why, but the summary result is more clearly stated in the draft SEIR, page 4-15, which states "In total, the micro-siting process has moved from 17 high, 11 moderate-high and 8 moderate risk turbines, to 10 high, 14 moderate-high, and 12 moderate risk turbines, showing a substantial risk reduction."

The commenter takes issue with the micro-siting analysis, an applicant-submitted document. As described on page 4-14, the project applicant considered the recommendations provided by Estep in the micro-siting study, and evaluated each recommendation for regulatory, economic, and technical feasibility. In some cases, Estep's recommendations were accepted; in others, further analysis by Estep led to a revised recommendation that the project applicant determined to be feasible. In other words, regulatory, economic, and technical feasibility factors precluded relocation of some turbines to fully avoid high and moderate-high risk ratings, and in some cases, such factors triggered a cascading effect of turbine relocations for reasons other than the primary goal of reducing avian fatalities, but by the nature of relocating other turbines within the project site were necessary to avoid wake effect or comply with setback requirements.

The County acknowledges the commenter's statements but notes that the assertion of no raptor nesting, made in the micro-siting analysis, is not referenced in the draft SEIR and is immaterial to the SEIR analysis or conclusions. As the commenter notes, the draft SEIR analysis documents and discusses raptor nesting in the project area. Moreover any statement in the applicant-submitted document that micro-siting does not need to consider the consequences of siting turbines near raptor nests is also immaterial, as the draft SEIR does consider such consequences and provides mitigation in the form of curtailment for turbines near (0.5 miles) active golden eagle nests. However, it is telling that in visiting all of the turbine sites, the applicant's biologist found no raptor nests; in fact none of the proposed turbine locations are near the nests documented in 2020, although it remains possible that in the future, raptors might nest near the proposed turbine sites. The commenter's complaint about the absence of a quantitative metric for improved performance of the Micro-Sited Alternative is specious; as noted in the draft SEIR (page 4-20), there are no studies in the APWRA that allow quantification of the assumed benefits of micro-siting, which is presumably why commenter offers no examples of such a "metric". Commenter also provides no evidence that use of a different approach to micro-siting would provide improved mitigation; see response to Comment 3-2 for a detailed discussion of this matter. See also the response to comment 2-16 regarding the results of the micro-siting analysis and the role of the TAC in review and recommendation to the County.

Response to Comment 7-23

The commenter incorrectly states that the reduced project alternative would increase project capacity; as stated on draft SEIR page 4-6, the reduced project alternative would have a permitted capacity of 80 MW, the same as the other action alternatives. Using the installed MW capacity of a project as the only metric for evaluating impacts is problematic, nevertheless it remains the primary comparison to the PEIR as that document employed per-MW fatality rates as the sole metric of determining avian and bat fatalities, and it is also a widely used metric through which other wind turbine studies provide their data. To help further inform the reader, the County has decided to employ the RSA metric to evaluate impacts from an additional, and different, perspective.

The commenter's statement about use of the RSA metric is noted. As discussed on draft SEIR page 3.4-61, rotor-swept area (RSA) is a widely used metric in evaluation of wind turbine effects. To disregard it as a factor in bird and bat fatality would be to disregard substantial scientific research that has used RSA as a metric, as well as to disregard common sense: nearly all avian and bat mortalities are attributed to contact with rotors, an impact that necessarily occurs within the RSA. Nonetheless, as noted in the draft SEIR (page 3-60), the analysis also considers fatalities per MW capacity because that metric was used as the basis of analysis in the PEIR; it has been used in a large fraction of the relevant scientific literature. The commenter's statement that the draft SEIR assumes MW and RSA metrics are equivalent is incorrect; the commenter is referred to the lengthy discussion on draft SEIR pages 3-60 to 3-64 which not only shows that they are very different metrics, but discusses their differences in detail. The commenter's statement that fatality rates calculated on an RSA basis are higher than rates calculated on an MW basis is noted. This difference is irrelevant to the comparison of RSA between one alternative to another. RSA and MW are different metrics and should not be regarded as identical.

Response to Comment 7-24

The commenter accurately summarizes statements in the draft SEIR. The commenter's assertion that lower height of turbine blades above ground is a "key risk factor" is not supported by evidence; although there is a logical argument why lower blade clearances should be a risk factor, it was not defined as such in the PEIR and to the County's knowledge no evidence has been put forth documenting it as a substantial risk. At this time it must be regarded as a potential but unquantifiable risk. Quantification is essential since, as commenter notes, increasing blade heights will increase risks to bats, thus there is (at least in principle) a trade-off between low blade height risks to birds and high blade height risks to bats. Available data do not support a determination that blade height minimizes total risks to volant wildlife.

Response to Comment 7-25

The commenter alludes to "other risk factors" but names none, except "reduced blade height"; see the response to Comment 7-24 for discussion of that risk factor. The commenter also states that the draft SEIR lacks substantial evidence to demonstrate that a reduction in RSA leads to a corresponding reduction in avian and bat impacts. As described on draft SEIR page 3.4-61, the RSA metric has the advantage of mechanical plausibility, as a larger RSA has a greater probability of intercepting a bird in flight, and the RSA metric could provide for more representative comparisons because of increased MW output per turbine in recent years. Furthermore, the draft SEIR notes that some resource agencies such as the USFWS have adopted specific take estimation models for some species, such as golden eagle, using RSA as one of the primary variables affecting the take estimate (U.S. Fish and Wildlife Service 2013). The analysis in the draft SEIR uses both metrics, fatalities per MW and fatalities per unit RSA, to derive a range of possible fatality rate estimates, as neither metric is perfect.

Response to Comment 7-26

The commenter accurately summarizes the changes in turbine risk achieved under the Reduced Project Alternative. The commenter uses this information to reach the self-contradictory conclusion that "it is unclear that a micro-siting analysis actually informed the decision on where to place the 24 turbines." The commenter is referred to their own comment for evidence to the contrary. See response to comment 7-22 for further discussion regarding the regulatory, economic, and technical

feasibility factors that are considered when adopting micro-siting recommendations. Also, it is important to note that the SEIR does not conclude the micro-siting process; see the response to Comment 2-16 regarding the role of the TAC in further micro-siting decisions, should the proposed project be approved and permitted.

Response to Comment 7-27

The County agrees with commenter and has modified summary descriptions to note the cut-in speed reductions proposed for both bats and golden eagles; this revision is shown on page 4-7 of the final SEIR.

Response to Comment 7-28

For each species noted in the comment, effects are estimated on the basis of the capacity and RSA of the proposed project. The location of turbines in relationship to nests is immaterial since it provides no information permitting any adjustment in the quantitative estimates of the fatality analysis. Effects of the Micro-Sited Alternative on the species are evaluated on draft SEIR pages 4-14 through 4-16 of the draft SEIR. As noted there, potential effects are likely lower than under the preferred alternative, because of the generally-presumed benefits of micro-siting, but there is no basis to assign a quantitative value to the micro-siting process. Therefore, the commenter's suggestion to evaluate the effects of each turbine on each species is equally irrelevant for this alternative. The effects of the Reduced Project Alternative on the species are evaluated on draft SEIR pages 4-19 to 4-22. As noted there, potential effects are lower than under the preferred alternative, primarily because of the reduced number of turbines and reduced RSA, which yield measurable benefits; but also because of the generally-presumed benefits of micro-siting, although there is no basis to assign a quantitative value to the micro-siting process. Therefore, the commenter's suggestion to evaluate the effects of each turbine on each species is equally irrelevant for this alternative.

The commenter's assertion of burrowing owl nesting on the project site is unsupported by data. The commenter is correct that the draft SEIR analysis does not evaluate impacts on burrowing owl nesting at locations that are not within the project area. Such locations are distant from the proposed turbines and it is unlikely that those owls are disproportionately likely to be foraging in the vicinity of turbines; on the contrary, it is more likely that owls nesting within the project site would be affected (such nesting is assumed to occur, as described on draft SEIR page 3.4-102).

Response to Comment 7-29

The commenter is correct that the draft SEIR analysis does not perform a micro-siting analysis for impacts to bats. No other wind project applicant in the APWRA has performed such an analysis, and no methodology has been established to perform such an analysis. The draft SEIR discusses this issue, stating "the micro-siting process only considers risks to raptors; it is not intended to address risks to small birds or to bats" (draft SEIR pages 4-14). The commenter is correct that the analysis does not contain a bat habitat assessment and roost survey per PEIR Mitigation Measure BIO-14a; this is a mitigation measure that has been updated from what was originally presented in the PEIR and is intended to be included as a condition of approval for the proposed project and implemented prior to construction. Furthermore, its relevance to the bat fatality assessment is slight, because the biological analysis identified likely areas of bat habitat on the project site (draft SEIR pages 3.4-27 and 3.4-28), while studies of bat fatalities in the APWRA have uniformly attributed fatalities to movements of migrating bats, and the great majority of collected carcasses have been of species

known to undertake large-scale migratory flights in the area, i.e., the Mexican free-tailed bat and hoary bat; see draft SEIR pages 3.4-55, 3.4-56, 3.4-57, 3.4-66, 3.4-67, and 3.4-120 to 3.4-124 for a detailed discussion of this topic.

Response to Comment 7-30

The County does not agree with the commenter's contention that another alternative is needed to comply with CEQA. See responses to comments 7-18 through 7-29 for a discussion addressing the purported shortcomings of the Micro-Sited and Reduced Project alternatives, response to comment 7-16 for a discussion of why the project objectives are appropriate for the proposed project, and response to comment 7-2 for further discussion why the range of alternatives considered in the draft SEIR complies with CEQA.

Response to Comment 7-31

The comment provides CEQA Guidelines and case law information and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 7-32

The commenter asserts that the project should assess a 47% increase in total installed capacity for the project site, which corresponds with an increase in the prior capacity of wind turbines on the project site (with a capacity of 55 MW), up to the currently proposed 80 MW. However, the PEIR identified future repowering of the Mulqueeney Ranch site (the subject site of the proposed project) at a nameplate capacity of 80 MW. This is the same capacity now proposed for the project, and is therefore consistent with the repowering of the project site described in the PEIR. Thus, the analysis of impacts as presented in the draft SEIR, which evaluates the potential impacts of the repowered project site at a capacity of 80 MW, is appropriate.

The commenter asserts that "characteristics of larger turbines can result in greater impacts on birds and bats." The commenter neglects to mention that they can also result in reduced impacts. The commenter correctly notes that the PEIR assessed turbines that were, in some cases, smaller than those proposed in the draft SEIR – certainly smaller than the turbines proposed in the Reduced Project Alternative. The consequences of this difference are fully disclosed in the draft SEIR on pages 4-19 to 4-21. The commenter presents no information calling for further analysis. With regard to rotor height and blade-to-ground clearance, see the response to comment 7-24.

With respect to the commenter's assertion that increased grading activities for larger turbines may enhance wildlife collision risk by altering the terrain and subsequent use patterns by local wildlife, bringing them into conflict with the turbines, the County notes that its practice for micro-siting studies supporting recent projects is to consider the impacts of grading in the context of the micro-siting studies. The County has added this requirement to mitigation measure BIO-11b in the final SEIR, page 3.4-116 and 117, to solidify this expectation as a requirement of future micro-siting studies, including for the proposed project. The commenter's concerns about use of RSA vs. MW metrics, and concerns regarding decreased rotor-to-ground clearance, are addressed in the responses to comments 7-23 and 7-24, respectively.

Response to Comment 7-33

The commenter refers to "conservation lands" adjoining the Project site, but also admits that these lands were set aside to "provide compensatory mitigation credits." In other words, they are mitigation banks that were knowingly sited adjacent to an area of operational wind turbines. To this extent, the County has described potential impacts on avian and bat species in the draft SEIR, and these estimates are not altered by proximity of nearby conservation lands given use of the wind resource area by these species. The adjacent conservation lands will still be suitable nesting and foraging habitat, though some of the conservation benefits of these lands may be reduced if species conserved on those sites die in the project area. This assumption is based on the fact that wind turbines have been at the Project site since the 1980s, and as noted in the PEIR, the region has long been identified as suitable for wind projects and wind project repowering. The CDFW NOP comment letter did request a setback from conservation lands, however operational setbacks from sensitive habitats on or adjacent to the project site are not proposed, and the commenter and CDFW present no evidence of the efficacy of setbacks so there is no basis to conclude that these measures would effectively reduce turbine-caused mortality and thereby effectively reduce project impacts.

Response to Comment 7-34

Final SEIR page 3.4-27 has been revised for consistency with the analysis on draft SEIR page 3.4-54 regarding potential impacts to 7 golden eagle pair activity centers. The commenter incorrectly states "USGS discovered one active nest on site in 2020, but oddly ICF says it did not discover this nest in 2020. (Id., p. 3.4-25.)" The redacted map, which was included in an appendix prepared and submitted by the permit applicant (thus conclusions and inferences appearing in the appendix should not be interpreted as analysis for the purposes of CEQA), was removed at USGS' request, as it revealed the locations of active nests for this protected species.

The commenter's assertion that "the DSEIR's conclusion that the Project site is less frequently utilized by golden eagles than elsewhere in the Altamont Pass (DSEIR, pp. 3.4-50, 3.4-54…" is inaccurate. More precisely, draft SEIR page 3.4-50 does not address golden eagle use rates, and page 3.4-54 indicates that documented observations of golden eagles were at half the use rate recorded for the APWRA as a whole. This is a data-based observation not subject to revision. More importantly, the issue of "how abundant eagles are in this part of the APWRA" has no bearing on the draft SEIR's conclusions regarding the severity of impacts to golden eagles, which assume that the proposed project would cause fatality rates proportional to its turbine capacity, not its location within the APWRA. It is not clear how tracking data for eagles at Altamont Pass could be used to verify eagle observations performed at the project site; neither is it clear how additional applicant-performed surveys for golden eagle would be superior to the existing survey results, or to the results of independent surveys performed by USGS, which are the basis for estimates of project proximity to golden eagle nests and activity centers.

The commenter incorrectly asserts that "the DSEIR inappropriately attempts to dismiss the significance of new project fatality monitoring data, discounting the most recent data for the Golden Hills Project as atypical." On the contrary, the draft SEIR accurately notes that the Golden Hills monitoring report "observed that all of its golden eagle mortality rates may be overstated as a consequence of bias attributable to the presence of old turbines near the Golden Hills site that provided perching and nesting opportunities for raptors" but does not use this information to conclude in any way a reduction in likely fatality rates relative to those that would be predicted based on the results of fatality rates recorded at all repowered sites. The Golden Hills data are

included without modification in the fatality rate estimates presented in Tables 3.4-4 and 3.4-5 (draft SEIR pages 3.4-62 to 3.4-64).

The commenter excludes some projects from consideration because their repowering was not performed pursuant to the PEIR. The County finds such an approach scientifically indefensible. There have only been five repowered projects in the APWRA that have produced fatality rate data usable in estimating the potential impacts of another such project. Discarding two of those five projects because they preceded release of the PEIR would discard a large fraction of the available data, an approach that would clearly not comply with requirements to use "best available science" in the analysis. The commenter's "cherry picking" approach to the data is shown by their discovery that fatality rates at some sites have exceeded those at others (in fact, nearly half of reported fatality rates are above average). The commenter's assertion that these older projects should be excluded because their turbine capacities were a few percent lower than the turbines proposed in the Mulqueeney project is indefensible; these repowered sites used turbines that were hundreds of percent larger than turbines used at non-repowered sites. Comparatively, repowered turbines are quite similar to each other in size.

The commenter incorrectly asserts "the DSEIR does not clearly identify the average annual fatalities per MW for golden eagles (or any other focal species) for each repowered project." See draft SEIR Table 3.4-4., Annual Adjusted Fatality Rates per MW for Non-Repowered and Repowered APWRA Turbines, pages 3.4-62 and 3.4-63. The commenter discusses a different table, Table 3.4-8, which estimates numbers of fatalities, using the rates given in Table 3.4-4, extrapolated to the MW capacity of the proposed project. The information provided in the aforementioned tables provides precisely what the commenter has requested.

Response to Comment 7-35

The commenter incorrectly states that the draft SEIR concludes that no additional mitigation is needed for this project. The draft SEIR in fact requires implementation of 2020 Updated PEIR Mitigation Measures BIO-11g through BIO-11i along with PEIR Mitigation Measures BIO-11a through BIO-11f (draft SEIR page 3.4-105). The measures referenced were derived from the PEIR, and 2020 Updated PEIR Mitigation Measures BIO-11g through BIO-11i were modified to reflect new information that has become available since the PEIR was certified. Together these measures constitute the extent of feasible mitigation that the County has identified to address the significant environmental effects of the proposed project with respect to American kestrel.

Commenter's speculative statement that "the PEIR's maximum estimated program-wide levels of take for repowering will soon be exceeded for golden eagles" is noted. The analysis in the draft SEIR does not reach that conclusion and the commenter cites no support for this statement, except to the extent that similar statements appear in comment 7-34; see the response to that comment.

Response to Comment 7-36

The commenter's statement that the draft SEIR "minimizes the presence of CESA-threatened Swainson's hawks" is unclear, particularly since the commenter cites the discussion of that species in the comment. The commenter states, "it is not clear whether protocol-level surveys were done for Swainson's hawks" but, in fact, nowhere does it state that such surveys were performed. Such surveys are neither required nor appropriate, given that Swainson's hawk presence is assumed in either case, and is furthermore proven by the presence of a currently-active nest at the project site (as noted by the commenter). The commenter is incorrect in stating "ICF biologists then dismiss this

nest site as failed and "inactive," despite the fact that Swainson's hawk nest sites are considered active if they are used once during the past five years. (See DSEIR, pp. 3.4-24 to 25"; in fact no such statement appears in the draft SEIR, and the commenter misrepresents the text on pages 3.4-24 to 25 by failing to note that the text documents progressive deterioration of the nest and its abandonment, as observed during multiple field visits throughout the summer. An abandoned nest that has been observed to have fallen apart is not an active nest, contrary to the commenter's opinion. The County finds the observations during the surveys cited in the text referenced by the commenter to constitute substantial information on which to base conclusions regarding potential for construction to impact Swainson's hawk on the project site.

Response to Comment 7-37

The commenter states "it is not clear whether any protocol-level surveys were conducted for tricolored blackbirds" but, in fact, nowhere does it state that such surveys were performed. Such surveys are neither required nor appropriate, given that tricolored blackbird presence is assumed in either case, and is furthermore proven by the presence of tricolored blackbirds at the project site (as noted by commenter; draft SEIR page 3.4-27). The commenter incorrectly states "Each of these three colonies contained at least *fifty* birds during the nesting season" and cites text that says the colonies were approximately 50 individuals, which typically is taken to mean a number between 40 and 60; moreover two, not three colonies were observed, as stated on draft SEIR page 3.4-27. Two colonies were seen offsite, and there was one onsite observation of a tricolored blackbird – not a colony of birds. The commenter is thus also incorrect in claiming the draft SEIR description is inaccurate; it is precisely accurate, and commenter incorrectly contests the statement that no "nest colonies have been previously found on the project site" (page 3.4-86 of the draft SEIR, misquoted by commenter).

The commenter's references to CDFW's NOP comments are noted. These comments were considered in the preparation of the draft SEIR.

The commenter requests more information on the location of turbines relative to tricolored blackbird occurrences. That information is provided in draft SEIR Appendix C, which presents site maps and discusses the location of the blackbird colonies; briefly they are offsite, which puts them distant from the proposed turbines. The commenter incorrectly states that the draft SEIR found operations impacts on tricolored blackbirds to be mitigated to insignificance. The draft SEIR concludes that such impacts are significant and unavoidable, as stated on page 3.4-106, and in various other parts of the document as well.

Response to Comment 7-38

Please see the response to comment 1-10 for a detailed response regarding impacts to burrowing owls. The commenter quotes the assertions in the draft SEIR showing that burrowing owls are likely present on the project site as well as on adjacent mitigation banks (as discussed in the response to comment 7-33).

The commenter asserts that the draft SEIR makes an unsupported assumption that temporary disturbance of grassland habitat is not significant. While the draft SEIR acknowledges that compacted areas, such as existing roads, do not provide burrowing owl habitat, the SEIR states that implementation of Mitigation Measure BIO-5c will restore areas temporarily disturbed during construction. Additional description and analysis of temporary grassland impacts related to burrowing owl have been added to the final SEIR on pages 3.4-94, but the significance determination has not changed because Mitigation Measures BIO-5c is deemed adequate to mitigate for the

temporary disturbance. Mitigation Measure BIO-5c includes measures that require gravel to be removed from areas proposed for grassland restoration and reclaimed roads to be restored in such a way as to permanently prevent vehicular travel.

The commenter also asserts that the draft SEIR does not adequately analyze the effect that extensive grading and soil compaction could have on the ability for restored areas to be revegetated and recolonized by burrowing owl. The degree to which construction disturbance would inhibit the restoration potential of an area is not possible to predict with any certainty, which is why this mitigation measure includes up to 3 years of monitoring to ensure that the restored areas meet the success criteria. The measure also requires that remedial actions be undertaken and additional monitoring as needed to meet the success criteria. The grassland restoration plan must be reviewed and approved by CDFW to meet the needs of special-status species.

The commenter's opinion that "that there is every indication of a high concentration of burrowing owls on this Project site" is noted. This subject is discussed on draft SEIR page 3.4-26 which includes the statement "Based on numerous studies conducted throughout the larger APWRA, there is an abundant population of burrowing owls within the APWRA and their distribution is considered to be dynamic and clustered." In other words, the County does not find evidence that the burrowing owls on the project site are exceptionally abundant in the context of the APWRA as a whole. It is thus reasonable to expect that the data for other repowering sites used to estimate fatality rates at the project site represent an appropriate estimator of project-related mortality. It is also reasonable to expect that there will be high variability in fatalities for this species, across space and over time, as discussed in the impact analysis (draft SEIR pages 3.4-95, 3.4-96, 3.4-101 and 3.4-102).

The County considers it reasonable to expect that average burrowing owl fatalities would fall between the maximum and minimum observed rates. Please review the discussion of methodology for the avian fatality analysis, presented on draft SEIR pages 3.4-60 to 3.4-65.

Response to Comment 7-39

The commenter summarizes draft SEIR statements about bat roosting at the project site. The commenter's summary appears accurate. The commenter also references CDFW's NOP comments. Those comments have been responded to in response to comment 7-29 and the commenter provides no new information here.

Response to Comment 7-40

The Commenter asserts that the SEIR does not adequately analyze the impacts of project construction on water features and hydrology that provide important habitat for tricolored blackbirds and other species. Potential water quality and hydrology effects on aquatic resources from project construction are analyzed under Impact BIO-3 for vernal pool branchiopods, Impact BIO-5 for California red-legged frog and California tiger salamander, Impact BIO-16 for riparian habitat, and Impact BIO-18 for wetlands and streams. Impacts on overall project hydrology and water quality are also analyzed in Chapter 3.10, *Hydrology and Water Quality*, of the draft SEIR under Impact WQ-1 (water quality) and Impacts WQ-3 (hydrology). Furthermore, Figure 3.4-2a in the draft SEIR depicts various aquatic feature landcover types and special-status species observed during field surveys in relationship to all proposed project features and work areas, including access road improvements and turbines. The aforementioned impact discussions provide detailed analysis of the potential impacts pertaining to each topic, including the amounts and types of habitats potentially affected and the mechanisms of impact as reflected in Figure 3.4-2a. Furthermore, as

stated under Impact WQ-3 on page 3.10-11 of the draft SEIR, the project drainage has been considered during design and the project would not substantially alter the existing drainage pattern in the area.

Mitigation Measures BIO-3b, BIO-5a, and WQ-1 include measures to avoid and minimize effects through the implementation of timing restrictions to avoid wet season work and construction BMPs to water quality. For additional clarity, references to Mitigation Measure WQ-1 and its corresponding avoidance of indirect impacts on aquatic habitat were added to Impact BIO-3, Impact BIO-5, Impact BIO-16, and Impact BIO-18 on final SEIR pages 3.4-77, 3.4-84, 3.4-86, 3.4-138, 3.4-140, and 3.4-141 respectively. This mitigation measure, which was originally identified in the PEIR and included in the draft SEIR to address potential construction-related impacts to surface and groundwater quality, provides further assurances that potential indirect impacts on species habitats that could otherwise occur through degradation of surface water resources will be avoided.

Response to Comment 7-41

It is presumed that the commenter is referring to the discussion of Wiens et al. (2018) regarding topographic preferences, inferring that the Mulqueeney site has topography indicative of an exceptional golden eagle abundance relative to the APWRA as a whole. The referenced discussion does not support that assertion when read in context, finding "that occupancy was positively associated with rugged and open grasslands," a statement that applies to nearly the entire APWRA, and certainly to those portions where repowered wind turbines have been sited. The point is more clearly demonstrated with reference to model outputs showing predicted probability of occupancy for golden eagles in the Diablo Range (Wiens et al. 2018, p. 117, Figure 5a). That map shows highest predictions of occupancy in the western and northwestern APWRA, i.e., not within the project site. A more accurate interpretation of Wiens et al. (2018) in predicting golden eagle abundance in the project vicinity is that it is lower than average for the APWRA. However, the County does not regard these data as adequate to support such a statement with high confidence, and instead regards eagle abundance at the project site as comparable to abundance at other repowered sites in the APWRA.

The commenter's reference to CDFW's NOP comments are noted. Those comments have previously been addressed in the response to comment 7-32, and the commenter provides no new information here.

Response to Comment 7-42

Comment noted. See responses to comments 7-31 through 7-41.

Response to Comment 7-43

The comment provides CEQA Guidelines and case law information and does not raise a specific issue on the substance of the draft SEIR.

Response to Comment 7-44

The two mitigation measures noted by commenter are required for the proposed project, thus the project applicant must implement these measures in order to operate the project in a lawful manner. The project applicant has committed to implement these measures. The County regards the following statements regarding impacts of the Reduced Project Alternatives, with the incorporation of the additional mitigation measures referenced in the comment, as sufficiently clear: "the effects

on terrestrial biological resources would be less than the project, but would still be less than significant with mitigation." (draft SEIR page 4-19); and "Impacts would still be significant and unavoidable, as there is no feasible way to entirely avoid bird and bat collisions with new wind turbines." (draft SEIR page 4-19).

Response to Comment 7-45

The commenter's reference to NOP comments by CDFW and USFWS is noted. Responses to those comments are provided in the responses to comment letters 2 and 1, respectively.

The commenter incorrectly cites Allison et al. (2019, page 15), which actually states, "For example, curtailing blade rotation when wind speeds are below 5.0-6.5 meters per second (m/s) reduced bat fatalities by 50% or more." However, the commenter is correct and may have been trying to cite draft SEIR page 3.4-127, which states "Work at a site in Wisconsin has shown that a site-specific, real-time curtailment algorithm using wind speed and bat activity information can yield 74-92% fatality reductions at a 3.2% cost in revenue from the turbines (Hayes et al. 2019)." The commenter neglects to note that none of the referenced work has been done in the APWRA. It is thus speculative to conclude that any given cut-in speed will achieve any given fatality reduction at a wind project in the APWRA. For this reason 2020 Updated PEIR Mitigation Measure BIO-14d calls for TAC review of the effectiveness of the proposed cut-in speed limit, with further adjustments possible within an adaptive management context. Such a process is necessary in order to determine an optimum protocol for cut-in speed curtailment to minimize bat fatalities at the proposed project.

The commenter seems to regard the "significant and unavoidable" determination regarding avian and bat fatalities as being justified by the continuing uncertainties surrounding scientific understanding of this issue. The draft SEIR makes no such intimations, nor does the County regard it as a correct perspective. Mitigation measures proposed in the draft SEIR represent most known and available technologies for mitigation, excluding only some approaches that remain highly experimental and are not yet suitable for application at commercial scale. The commenter proposes "broad implementation of operational mitigation at wind farms," and this is what the draft SEIR proposes for the proposed project.

The commenter quotes extensively from draft SEIR conclusions regarding impacts to birds and bats. The County agrees with these statements. The commenter is incorrect, however, in saying that the draft SEIR makes no substantive changes to the PEIR's mitigation measures, except for the changes made pursuant to the 2020 application for the Sand Hill wind farm. In fact, the proposed project goes beyond the Sand Hill authorization in proposing cut-in speed limits to reduce golden eagle fatalities, cut-in speed limits to reduce bat fatalities, and provisions for adaptive management that could lead to further or more sophisticated curtailment algorithms, with potential for highly beneficial outcomes. The bat cut-in speed measure alone could reduce bat mortality by 50% relative to a project lacking such a measure. These are very substantive measures, but they do not eliminate the likelihood of incidental take of sensitive species; thus, the draft SEIR appropriately concludes that avian and bat fatality impacts would be significant and unavoidable after mitigation.

Response to Comment 7-46

The commenter appears to incorrectly cite Allison et al. (2019), which contains a discussion on pages 14-16 of "strategies to avoid and minimize adverse impacts." The commenter makes no intimations regarding which strategies are missing from the draft SEIR. The County's review indicates that Allison et al. (2019) proposes only one mitigation strategy that is not included in the

proposed project, which is use of acoustic deterrents. Allison et al. (2019) note that the use of such deterrents for both birds and bats is still experimental, with uncertain application and effectiveness, which is why the County does not require acoustic deterrents as mitigation. Notwithstanding, as discussed in response to comment 1-14, 2020 Updated PEIR Mitigation Measure BIO-14d has been revised to incorporate acoustic mitigation as ADMM-8: Acoustic Mitigation, which is subject to oversight by the TAC (page 3.4-137 of the final SEIR). The County also notes that the use of acoustic deterrents was identified in this mitigation measure of the draft SEIR as an emerging technology warranting further investigation (draft SEIR page 3.4-128); the change in the final SEIR provides more specificity regarding the design and timing of evaluation of such a deterrent.

The commenter does not provide citations in the comment. The County is not familiar with "Smallwood and Bell 2020a". It is assumed that the commenter is referring to either Smallwood, K. S., and D. A. Bell, 2020, *Relating bat passage rates to wind turbine fatalities*, Diversity 12(84); doi:10.3390/d12020084, or Smallwood, K. S., and D. A. Bell, 2020, *Effects of wind turbine curtailment on bird and bat fatalities*, Journal of Wildlife Management 84:684-696, DOI: 10.1002/jwmg.21844, both of which are relevant to the subject of mitigation for impacts to bats. The article in *Diversity* makes the case, already well-established in prior publications, that surveys for bat fatalities are far more effective if trained dogs and frequent search intervals are employed. This is consistent with the draft SEIR analysis and mitigation requirements on final SEIR page 3.4-130, and does not constitute substantial new information. The article in the *Journal of Wildlife Management* makes the case, already well-established in prior publications, that seasonal curtailment is an effective means of reducing bat fatalities. This is consistent with the draft SEIR analysis and mitigation requirements on final SEIR page 3.4-136 and 137, and does not constitute substantial new information.

The commenter's reference to NOP comments by CDFW and USFWS is noted. Responses to those comments are provided in the responses to comment letters 2 and 1, respectively.

Response to Comment 7-47

See response to comment 7-6 regarding further selection of micro-sited turbine locations as a TAC responsibility. It is important to recognize that micro-siting as required by the PEIR is not completed until the TAC has performed its review and made its recommendations.

The commenter does not present evidence that curtailment of turbines near raptor nests would reduce fatalities. Although it is a plausible concept, the absence of evidence means that any resulting benefits cannot be quantified, and may not be substantial. Nonetheless, as discussed in response to comment 1-8, 2020 Updated PEIR Mitigation Measure BIO-11i has been revised to specifically direct the TAC to evaluate the potential use of curtailment near raptor nests as a part of that mitigation measure (final SEIR page 3.4-125).

Response to Comment 7-48

See response to comment 6-6 regarding the commenter's request to avoid turbine construction within 0.5 mile of an active golden eagle or Swainson's hawk nest or roost. See response to comment 2-15 regarding the commenter's request to conduct protocol-level surveys on an annual basis and to implement curtailment upon discovery of nests. With respect to the commenter's suggestion to implement curtailment of turbines within one mile of nesting eagles, as discussed in response to comment 1-8, the text of 2020 Updated PEIR Mitigation Measure BIO-11i has been revised to encourage the TAC to evaluate the merits of curtailment near raptor nests (see page 3.4-125 in the final SEIR).

Response to Comment 7-49

The commenter proposes repeating the micro-siting analysis using a different methodology. See response to comment 3-2 and response to comment 7-6. The commenter also suggests that the micro-siting analysis consider blade-to-ground clearance and RSA. See response to comment 7-24 regarding blade-to-ground clearance and response to comment 7-23 regarding RSA.

Response to Comment 7-50

The commenter proposes buffer distances between turbines and conservation lands, burrowing owl colonies, or tricolored blackbird colonies. The commenter offers no rationale for this proposal, simply citing prior comments. The County notes, however, that all evaluated action alternatives appear to comply with the buffer distances recommended by commenter.

Response to Comment 7-51

The commenter proposes curtailment during "spring and fall bat migration seasons." This issue is addressed in detail in the draft SEIR (pages 3.4-55 to 57 and 3.4-124 to 127). As stated therein, there is no "bat migration season." Instead, the draft SEIR requires night curtailment during August and September each year, a timeframe that covers the majority of bat passage through the Golden Hills project, which currently provides the best available data for prediction of bat passage through the APWRA; moreover the Golden Hills site partially adjoins the project site. Also, note that spring migration curtailment will be investigated through the adaptive management process (PEIR Mitigation Measure BIO-14d, final SEIR pages 3.4-135 through 3.4-137), in the form of a seasonal spring cut-in speed increase and potentially a "smart curtailment" strategy; such mitigation is subject to oversight by the TAC.

Response to Comment 7-52

Mitigation Measure BIO-11h has been revised to include a financial contribution for the benefit of eagles and other raptors, consistent with the 2010 Settlement Agreement between NextEra Energy Resources and the California Attorney General (final SEIR page 3.4-124). The amount will be equal to $12,500/MW of installed capacity, which was determined from the base contribution of $10,500 per MW of installed capacity established under the 2010 Settlement Agreement and adjusted for inflation. These funds will be used to support efforts that USFWS accepts as mitigation for an eagle take permit for the proposed project. The stipulations provided in this mitigation measure, along with all others, will be made a condition of project approval and thus are enforceable by the County and other responsible parties as described in each respective measure. The County declines to reduce the re-assessment of mitigation funds from the current 10 years in order to maintain consistency with all prior projects that have been approved under the PEIR.

The funding of ongoing scientific research on the effects of wind turbines on birds and bats in the APRWA cannot be required of prior project proponents retroactively, and thus it would be impossible to effectively share this effort across multiple wind operators in the APRWA. As such, the County declines to include this as a mitigation requirement. However, it should be noted that the project applicant has voluntarily funded golden eagle research through USGS in both 2020 and 2021.

The request for financial contributions for the rehabilitation of bats is already addressed under PEIR Mitigation Measure BIO-14e, Compensate for expenses incurred by rehabilitating injured bats. Lastly, the County declines to adjust or add mitigation specific to the request for funding of third-

party bat fatality and bat roosting locations. 2020 Updated PEIR Mitigation Measure BIO-14b, Implement postconstruction bat fatality monitoring program for all repowering projects, will require the project proponent to conduct a robust, scientifically defensible bat fatality monitoring program; this measure also includes provisions to implement additional measures if bat fatality estimates are exceeded.

Response to Comment 7-53

Adaptive management is an experimental approach, thus it cannot "require significant reductions in bird and bat fatalities." If there was a known method to achieve significant reductions, adaptive management would be unnecessary. However, the proposed project already includes required adaptive management through Mitigation Measure BIO-11i (for birds) and BIO-14d (for bats). Both measures have been updated for the proposed project from what was presented in the PEIR, and both measures have been refined in the final SEIR to incorporate refinements and suggestions provided by commenters on the draft SEIR. The described adaptive management measures are largely compliant with the program requested by commenter, although they are described in greater detail and do not presume to know the outcomes of the adaptive management experiments.

Response to Comment 7-54

Adaptive management is not performed as commenter suggests. The TAC will not meet and immediately implement "scientifically appropriate adaptive management measures." Due to the need to design and implement studies, analyze the results, and perform TAC review, adaptive management measures are seldom implemented within a timeframe of less than some months. Besides, the situation suggested by commenter is not a suitable trigger for adaptive management. Proximity to raptor nest or roost areas will generally be known or, if not known, will be subject to appropriate mitigation requirements when they are located. It is not foreseeable that adaptive management would be triggered simply by finding a new site or roost.

Response to Comment 7-55

The commenter notes that the project applicant should be required to obtain an incidental take permit for covered species under both California Endangered Species Act and the federal Bald and Golden Eagle Protection Act. The project proponent will be required to consult with CDFW and USFWS and obtain all necessary permits prior to construction and operation of the proposed project.

Response to Comment 7-56

The comment provides a closing remark and does not raise a specific issue on the substance of the draft SEIR.

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