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ALTAMONT WINDS INC.

86 MW Altamont Wind Farms *Final Supplemental Environmental Impact Report* *2018 CUP Extension*



PROJECT NUMBER:

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*Final Supplemental Environmental Impact Report
2018 CUP Extension*

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ACRONYMS AND ABBREVIATIONS

2013 FEIR	Final Environmental Impact Report: Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (State Clearinghouse No. 2012062060), July 2013 (incorporating the DEIR document)
2013 DEIR	References to the Draft Environmental Impact Report: Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (State Clearinghouse No. 2012062060), March 2013 (submitted for public review)
APNs	Assessor’s Parcel Numbers
APWRA	Altamont Pass Wind Resource Area
AWI	WindWorks Inc. and Altamont Winds Inc
BGEPA	Bald and Golden Eagle Protection Act
CAISO	California Independent System Operator
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulation
CNPS	California Native Plant Society
County	County of Alameda
County CDA	County of Alameda Community Development Agency
CUP	Conditional Use Permit
CWA	Clean Water Act
DSEIR	Draft Supplemental Environmental Impact Report
EACCS	East Alameda County Conservation Strategy
EBZA	East County Board of Zoning Adjustments
EIR	Environmental Impact Report
ESA	Endangered Species Act
FR	Federal Register
FSEIR	Final Supplemental EIR
HRT	High Risk Turbines
I-580	Interstate 580
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Reporting Program
M-Team	Monitoring Team
MW	megawatt
NOC	Notice of Completion
NOP	Notice of Preparation
PEIR	Program EIR
PCBs	Polychlorinated Biphenyls
PG&E	Pacific Gas and Electric
SEIR	Supplemental EIR
SRC	Scientific Review Committee
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

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EXECUTIVE SUMMARY

Introduction

The County of Alameda Community Development Agency (County CDA) has prepared this Final Supplemental Environmental Impact Report (FSEIR) for proposed modifications to 16 existing Conditional Use Permits (CUPs), for turbines owned and operated by Altamont Winds Inc. in the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). Altamont Winds Inc. (the Applicant, together with its operating subsidiary WindWorks Inc., and collectively, AWI) has submitted an application requesting that these CUPs, set to expire on October 31, 2015 under modifications approved in 2013, be extended through October 31, 2018 under specified conditions, for operation of its estimated 828 turbines, which have a rated capacity of approximately 85.8 megawatts (MW).

This FSEIR is intended to supplement the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits- Altamont Winds Inc.* (2013 FEIR) (State Clearinghouse No. 2012062060). The 2013 FEIR evaluated the application made by AWI in 2011 to modify these same CUPs as they had been approved in September of 2005. Although the current proposal for operations through 2018 was evaluated in the 2013 FEIR as an alternative (Alternative 3), it was only at a limited level of analysis, as provided for in the California Environmental Quality Act (CEQA) Guidelines (*Section 15126.6(d)*), to provide “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” The County CDA made the following finding regarding this alternative in 2013 when it certified the FEIR: “Alternative 3 would better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible.” For these reasons, among others, it is necessary to provide additional information, which this FSEIR is intended to provide, together with the same kind of notice and public review as provided for a draft EIR under *Section 15087* of the *CEQA Guidelines*. This FSEIR, including comments on the FSEIR and responses to such comments, form the complete project SEIR, and supplement the 2013 FEIR with additional analysis beyond that included in the 2013 FEIR Alternatives analysis.

The SEIR will be used by the East County Board of Zoning Adjustments (EBZA) in its consideration of approval of the proposed CUP modifications to permit operations through October 31, 2018.

Summary Description of the Proposed Project

The proposed project consists of operational modifications to AWI's existing CUPs, as amended in July 2013, for continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018.

The project facilities consist of 828 existing, operating wind turbines on concrete foundations, plus support facilities, occupying approximately 155 acres within a 14, 196-acre area. The turbines have a nameplate capacity of 85.8 MW and rest on lattice and tubular towers that range in height from 60 to 82 feet, generally sited in strings along ridgelines. Support facilities include existing gated, graveled access roads, a power collection and transmission interconnection system, meteorological towers ranging from 60 to 100 feet in height, communication systems, maintenance equipment areas, and offsite facilities including AWI's wind farm main service yard (located near Tracy), and the main wind farm control center, shared with other wind farm operators (located in Livermore). The power collection and transmission interconnection system consists of pad-mount transformers, underground cables, overhead conductors on poles, circuit breakers and switches, electrical metering/protection

devices, and the existing Dyer, Frick, Ralph, and Midway substations. Electrical power is collected from the turbines and transmitted to the substations, where its voltage is increased for interconnection with Pacific Gas and Electric's (PG&E) transmission lines.

The existing project operations consist of 828 turbines and ancillary facilities, with a maximum combined generation capacity of 85.8 MW, currently approved for operation through October 31, 2015. After this point in time as proposed by AWI, operations would be extended for three additional years (applies to existing turbines), through October 31, 2018, on the condition that AWI has diligently pursued development of a repowered wind farm on the project site, and can demonstrate that circumstances beyond AWI's control have delayed completion of the repowered project.

Asset Exchange

The applicant is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. These 300 turbines represent about 35 percent of AWI's assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations and as such the potential geographical changes are analyzed in the SEIR.

Major Conclusions of the Environmental Analysis

Impacts

The 2013 FEIR provided a full discussion of the prior project's potential environmental effects on the following resource areas: Air Quality and Greenhouse Gases (GHGs); Biological Resources; Noise; and Hazards and Hazardous Materials. The County CDA does not anticipate that major revisions to the 2013 FEIR are necessary to identify new environmental impacts that were not previously disclosed in the 2013 FEIR for an extension of AWI's operations for three additional years through October 31, 2018. Although there have been some changed circumstances since 2013, the County CDA does find an increase in the severity of previously identified impacts in the 2013 FEIR. No new information of substantial importance shows that the CUP extension to 2018 and associated asset exchange would have significant impacts not discussed in the prior FEIR. However, to the extent new information has become available since the prior FEIR, the County CDA has incorporated that information into the FSEIR.

Biological Resources

Estimated Project Impacts on Focal Species

The 2013 FEIR's analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. The 2013 DEIR analysis, on pages 4-4 and 4-16 through 4-20 of the 2013 DEIR, and summarized most clearly in Table 3.2-3a in the 2013 FEIR (page 4-16), indicated that the installed capacity of the 86 MW wind farm for an operating term through 2018 would be 311 MW (Table 3-2 of this FSEIR), and all avian fatality estimates were derived based on this operating term. Estimated avian fatalities figures for the February 15, 2016-October 31, 2018 operating schedule are also presented in Tables ES-1 through ES-3 and Tables 3-3 through 3-5 in Chapter 3 of this FSEIR. Tables ES-3 and 3-5 provide a comparison of the scenarios.

TABLE ES-1 ESTIMATED AVIAN FATALITIES (FOCAL RAPTOR SPECIES) AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2008-2010 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	26.9	80.8	137.8
Burrowing Owl	25.8	77.5	132.2
Golden Eagle	3.7	11.1	19
Red-Tailed Hawk	17.4	52.2	88.9
Total Focal Species	73.8	221.6	377.9

Source: POWER Engineers, 2014

TABLE ES-2 ESTIMATED AVIAN FATALITIES (FOCAL RAPTOR SPECIES) AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2005-2011 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	35.9	107.6	183.5
Burrowing Owl	47.4	142.3	242.6
Golden Eagle	4.7	14.6	24.9
Red-Tailed Hawk	26.8	80.3	136.8
Total Focal	114.8	344.8	587.8

Source: POWER Engineers, 2014

TABLE ES-3 COMPARISON OF ADJUSTED SPECIES FATALITY TOTALS OF FOUR FOCAL SPECIES, BASED ON AN AVERAGE FATALITY RATE (FATALITIES PER MEGAWATT PER YEAR)

SPECIES	AVERAGE FATALITIES PER MW (2005–2010/ 2008–2010/ 2005-2011/ 2005-2012)	PROJECTED NUMBER OF FATALITIES UNDER THE 2013 FEIR PROPOSED PROJECT	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR BASELINE CONDITIONS	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR ALTERNATIVE 3	PROJECTED NUMBER OF FATALITIES FOR YEARS 2016-2018
American Kestrel	0.496/0.443/0.59/0.577	85.5–113.9	51.6–68.7	137.8–183.5	80.8–107.6
Burrowing Owl	0.721/0.425/0.78/0.70	82.1–150.6	49.5–90.9	132.2–242.6	77.5–142.3
Golden Eagle	0.085/0.061/0.08/0.081	11.7–16.4	7.1–9.9	19–26.4	11.1–15.5
Red-Tailed Hawk	0.449/0.286/0.44/0.411	55.2–86.7	33.3–52.3	88.9–139.6	52.2–81.9

Source: POWER Engineers, 2014

Reduction in High Risk Turbines

The number of County-designated High Risk Turbines (HRT), which are those turbines identified by the SRC as posing the greatest collision risk to birds (ranked from 1 to 10, with 10 representing the highest risk), will be reduced by the proposed asset exchange. Applying the 2013 FEIR APWRA-wide fatality rate methodology to an asset exchange, as proposed under this project, would result in no greater impact on avian mortality when reviewing the proposed wind turbines received in an

exchange for the wind turbines given up. Therefore, on a statistical level, the asset exchange would have no effect on the impacts caused by the project (i.e., no difference whether the asset exchange does or does not occur).

Reduction in Operating Capacity

As a result of the asset exchange under this project, it is likely that the applicant's operating capacity will be reduced through the exchange, because as part of the exchange, AWI will exchange its twenty 250 kW wind turbines for twenty 100 kW wind turbines. Again considering the per-MW method of fatality calculations utilized by the SRC and the M-TEAM, aggregate project capacity will be reduced by 5.3 MW over three years, which is equivalent to removing twenty-five 100 kW wind turbines for the duration of the three-year project. For these reasons, the asset exchange would not increase the risk to birds over and above the impacts associated with the project generally. An asset exchange is nonetheless anticipated to decrease somewhat the impact on avian species, due to the reduction in the number of high-risk turbines in operation and the anticipated reduction in operating capacity for years 2016-2018.

Hazards and Hazardous Materials

The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. However, an area resident submitted a comment during the NOP comment period reported the appearance of oil being dispersed along the turbine blades from leaking turbine generators as a form of environmental pollution.

A review of maintenance practices by the applicant of its turbines indicates that AWI maintains and operates its turbines in accordance with industry standards. Wind turbines are monitored through a centralized control system 24 hours per day alerting technical maintenance crews to promptly address any equipment malfunction or failures. Visual monitoring to inspect turbines and determine when turbines require maintenance occurs on a regular basis, and malfunctioning turbines are temporarily removed from service and/or repaired, as needed. A preventative maintenance program is implemented each winter during the off-season to minimize the possibility of malfunction during the summer wind season.

While an issue of leaking oil from the applicant's assets had been raised during the scoping period, the dark discoloration streaks running along turbine blades originating from the central turbine hubs are primarily caused from staining from rust and mineral deposits emanating from steel casting of the hub and blade insert component. In addition, upon further review, a leaking step-up transformer on the ridge overlooking residences along Dyer Road contains a non-toxic, non-petroleum-based mineral oil with no polychlorinated biphenyls (PCBs). This transformer is scheduled for repair during the upcoming off-season. As there is no substantial concentration of oil in any one location and there are no sensitive receptors located within 0.25 mile of the proposed project (the nearest school is approximately 2 miles east of project facilities) this issue raised during the NOP scoping period is not sufficient to be of major concern. As such, no new hazard to the public or the environment through a reasonably foreseeable accidental release of hazardous materials into the environment is expected to occur with the CUP extension to 2018 and associated asset exchange. This potential impact is considered less than significant.

Mitigation

Table ES-4, at the end of this Executive Summary, summarizes the environmental impacts of the proposed permit modifications, the level of significance of each impact before implementation of mitigation, recommended mitigation measures, and the level of significance of each impact after

mitigation. Even after implementation of any of these mitigation measures, the impacts on avian species would remain **significant and unavoidable**.

Biological Resources

Mitigation for impacts resulting from operation of the project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 FEIR. The 2013 FEIR included as mitigation measures, seasonal shutdowns (Mitigation Measure BIO-16) and retrofitting off-site electric utility power poles within 140 miles of the project site (Mitigation Measure BIO-17) to reduce the risk to birds of electrocution. The County CDA has also provided, in this FSEIR, a suite of alternative or supplemental mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Final Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

Mitigation Measure BIO-16

In order to reduce the potential impacts of the proposed project on avian species (to include raptors and special status species), AWI will implement seasonal shutdowns on all turbines for the remaining operational period. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify County CDA each year when turbines have been shut down, and again when they have resumed operating.

Mitigation Measure BIO-17

Citing the 2012 Draft Eagle Conservation Guidelines released by U.S. Fish and Wildlife Service (USFWS) and associated technical appendices updates, the 2013 FEIR also indicated that retrofitting 29 power poles off-site within the defined habitat area (Mitigation Measure BIO-17) would be sufficient mitigation for each golden eagle fatality projected to result from turbine rotor blade collisions. These retrofits would similarly benefit other large raptors as well. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Use of power poles for the mitigation of all estimated golden eagle fatalities projected to result from the current proposal to operate through 2018 – a range of 19.0 to 26.4 such fatalities between 2013 and 2018 [2013 FEIR, Table 4-2, *Adjusted Species Fatality Rates for Each Alternative, Based on an Average Fatality Rate (Fatalities per Megawatt per Year)*] – would require the retrofitting of between 551 and 722 power poles, including at least 322 poles during the proposed three-year CUP extension. AWI will therefore retrofit 322 utility poles as mitigation for the expected level of eagle fatality from the currently proposed project.

To be in compliance with the mitigation requirements of the existing CUPs, AWI must either contract directly with a utility to complete such retrofits or contribute the cost of retrofits to a third-party mitigation account. The USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute \$2,415,000 ($\$7,500 \times 322$ poles) to a third party mitigation account (approved by the County CDA) instead of contracting directly with a utility. Based on recent AWI discussions with PG&E, the cost per retrofit is more likely to actually be between \$1,000 and \$4,000 per pole, depending on the type and condition of the pole to be retrofitted. At these lower costs, the range of expenditure would range between \$322,000 and \$1,288,000. Due to the large number of power pole retrofits required, it is reasonably expected that approximately 108 power pole retrofits, or one third of the total required retrofits, will be completed per year of the extended three-year CUP term of the project. This annual retrofit schedule also takes into consideration that repowering (the replacement

of older turbines with substantially fewer but larger turbines with the same overall output) could occur prior to the end of the three-year extended permit term (i.e., prior to October 31, 2018). To date, AWI has retrofitted five power poles.

Mitigation Measure BIO-17a

The County CDA has also provided, in this FSEIR, a suite of alternative mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These alternative mitigation measures include: obtaining a programmatic eagle take permit (ETP) and carrying out measures outlined in an approved Eagle Conservation Plan (ECP) and Bird and Bat Conservation Strategy; ; or contribution to regional conservation of raptor habitat using a Resource Equivalency Analysis (REA). These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014. These measures are optional and voluntary, but may be accepted in lieu of some or all of the required power pole retrofits required by Mitigation Measure BIO-17, if the applicant chooses to implement Mitigation Measure BIO-17a. The option of obtaining an ETP would require the applicant to receive USFWS approval of its ECP, not merely applying for the ETP.

Hazards and Hazardous Materials

As no new hazard to the public or the environment through a reasonably foreseeable accidental release of hazardous materials into the environment is expected to occur with the CUP extension to 2018 and associated asset exchange, no mitigation measures for Hazards and Hazardous Materials are required.

Alternatives Analysis

CEQA requires that an Environmental Impact Report analyze a No Project Alternative. The No Project analysis discusses the existing conditions at the time the NOP was published, as well as conditions that would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. Under the No Project Alternative, AWI would continue to operate pursuant to the conditions of the existing CUPs. The existing CUPs require AWI to permanently shut down all wind turbines by October 31, 2015, with decommissioning of wind farm facilities, including equipment removal and site restoration, to occur following that date. One remaining seasonal shutdown of all wind turbines would occur between November 1, 2014 and February 15, 2015, prior to permanent shut down in October 2015.

The environmental impacts of AWI's current operating conditions were described and analyzed in the 2013 FEIR as Alternative 1. Alternative 1 was identical to the 2013 FEIR proposed project but included continued implementation of the winter seasonal shutdowns that were begun in 2005 and expanded to their current schedule of 3.5 months in 2009-2010 (November 1 to February 15.). As the No Project Alternative was previously analyzed in the 2013 FEIR, it will not be discussed further in this FSEIR document.

Public Involvement

The DSEIR was made available for review to the public, interested organizations and public agencies for 55 days, between November 17, 2014 and January 12, 2015. The original 45-day public review period end date of January 2, 2015 was extended ten (10) days to January 12, 2015 in recognition of the winter holiday period. The public review period was conducted to elicit comments on the

“sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (Section 15204 of the State CEQA Guidelines). The Notice of Availability (NOA) of the DSEIR was filed with the Alameda County Clerk on November 17, 2014, (per CEQA Guidelines Section 15087). The NOA announced the commencement of the public review of the DSEIR and public meeting (December 18, 2014). The NOA was mailed to agencies, organizations, property owners and interested individuals. The public meeting was also advertised on the County CDA website, where the DSEIR was also available.

The County CDA held one public meeting during the comment period on December 18, 2014, at which time the County CDA accepted oral comments from the public, stakeholders, and reviewing agencies on the DSEIR (as well as written comments). In addition, written comments from the public, stakeholders, and reviewing agencies were accepted throughout the public comment period that ended on January 12, 2015.

After considering the comments, the County CDA has prepared written responses to comments on the DSEIR’s analysis of the significant environmental impacts of the proposed project, in this FSEIR that describe the disposition of any significant environmental issues raised in the comments on the DSEIR. The FSEIR, containing those comments and written responses to each comment, must be provided to those public agencies and persons who submitted comments at least 10 days before the FSEIR can be certified. Following this 10-day period, the EBZA will hold a hearing to consider certifying that the FSEIR has been prepared in compliance with CEQA, and will rely on the certified FSEIR when considering project approval (i.e., approval of the proposed permit modifications) or denial. In accordance with the requirements of CEQA, if the EBZA decides to approve the proposed permit modifications analyzed in this DSEIR (or as modified in the FSEIR), it will make written findings with respect to each significant environmental effect identified in the FSEIR. In addition, if the EBZA decides to approve the proposed permit modifications but determines that they would have significant and unavoidable environmental effects, the EBZA will adopt a Statement of Overriding Considerations that explains why the benefits of the proposed modifications would outweigh the significant effects on the environment, based on information in the FSEIR and the entire administrative record.

If the proposed modifications are approved, the EBZA must adopt a Mitigation Monitoring and Reporting Program for those measures that it has adopted and incorporated into the project to mitigate or avoid significant effects on the environment. Following FSEIR certification and project approval, a Notice of Determination will be issued, documenting the decision.

TABLE ES-4 SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Biological Resources		
Impact BIO-1: Potential to cause a substantial adverse effect, either directly or through habitat modifications, on a special-status species.	Mitigation Measure BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities (to include raptors and special status species).	
	Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors, and Special Status Avian Species by Retrofitting Electrical Facilities	Significant; Significant and Unavoidable for Avian Species
	Mitigation Measure BIO-17a: Compensate for the loss of special-status species, including golden eagles, by contributing to conservation efforts (as an optional supplement to or in lieu of BIO-17)	
Hazards and Hazardous Materials		
Impact HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	No Mitigation Required.	Less than Significant

Source: POWER Engineers, 2014

1.0 INTRODUCTION

1.1 Project Under Review

This Final Supplemental Environmental Impact Report (DSEIR) supplements the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits-Altamont Winds Inc.* (2013 FEIR) (State Clearinghouse No. 2012062060) (ICF International 2013). This FSEIR has been prepared by the County of Alameda Community Development Agency, (County CDA) to evaluate the environmental effects of the proposed modifications to the existing conditional use permits (CUPs), as amended in July 2013, related to applicant, WindWorks Inc. and Altamont Winds Inc. (collectively, AWI). The proposed modifications would include a three-year extension (applies to existing turbines) of the current CUPs, thus permitting AWI to continue to operate and maintain its existing wind turbines (85.8 megawatts of nameplate capacity) in the Alameda County (County) portion of the Altamont Pass Wind Resource Area (APWRA) through October 31, 2018 (proposed project).

1.2 Lead Agency

The project is based on AWI's application submitted to the County CDA to amend the County CDA-issued CUPs under which AWI operates. As the agency responsible for evaluating and approving or denying the project, the County CDA will serve as the Lead Agency for the SEIR. The SEIR will be prepared pursuant to the California Environmental Quality Act (CEQA, 1970, as amended) and in accordance with relevant federal, state and local regulations.

1.3 The Supplemental Environmental Impact Report

1.3.1 Intended Use

This FSEIR has been prepared by the County CDA to provide the public and responsible and trustee agencies information about the potential effects on the local and regional environment associated with the proposed three-year extension of 16 CUPs for wind farms located throughout the APWRA in unincorporated eastern Alameda County. The environmental effects of AWI's existing operations were evaluated in the 2013 FEIR; it is not the intention of the FSEIR to re-evaluate existing operations. This FSEIR is intended to evaluate only the additional environmental effects attributable to the additional three years of operations proposed by AWI.

This FSEIR will not evaluate a repowering project, but will evaluate the environmental impacts of the requested change to the scheduled expiration of the CUPs under which AWI's turbines are operated. A separate California Environmental Quality Act (CEQA) document [such as an Addendum or Supplemental EIR (SEIR)] 'tiered' from the Altamont Pass Wind Resource Area Repowering Program Environmental Impact Report (EIR) that is currently in the form of a Draft Program EIR, will address the repowering proposal by AWI.

The SEIR will be used by the Alameda County East County Board of Zoning Adjustments (EBZA) in its consideration of approval of the proposed CUP modifications.

1.3.2 Type of EIR

As the lead agency, the County CDA has determined that a Supplemental EIR is required to evaluate the three-year CUP extension requested by AWI (*Public Resources Code Section 21166; CEQA Guidelines Sections 15162 and 15163*). A Supplemental EIR augments the EIR prepared for an existing project to address any project changes, new information of substantial importance that was not known or could have been known without the exercise of reasonable diligence or changed circumstances occurring since the time the prior document was certified. In the case of changes to a

previously approved project, as is the case here, the purpose of an SEIR is to provide only the additional analysis necessary to make the previous EIR adequately apply to the project as modified. Accordingly, the SEIR need contain only the analysis necessary to respond to the proposed change in the project that triggered the need for additional environmental review [*CEQA Guidelines Section 15163(b)*]. The SEIR is given the same kind of notice and public review as is given a draft EIR under *CEQA Guidelines Section 15087*. *CEQA (Code California Public Resources Code 21000 et seq.)*, *Section 21166* and *CEQA Guidelines (14 California Code of Regulations 15000 et seq.)*, *Section 15162*, state (in part, and as continued further below):

When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*

The proposed CUP extension to 2018 represents a substantial change to the project evaluated in the 2013 FEIR, which was focused on the effects of moving forward the expiration date of the CUPs from 2018 to 2015. Adoption and implementation of the extension to 2018 will substantially alter that component of the previously-evaluated project, and will result in an increase in the severity of significant effects previously identified in the 2013 FEIR. Of particular importance is the anticipated increase in the net volume of avian mortality due to the three additional years of operation of wind turbines with well-documented patterns of bird collisions.

In addition, based on new information about the condition of the turbines related to potential soil contamination from leaking turbine oils or lubricants, the extension may be expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant. Accordingly, the changes in the project could require important revisions of the 2013 FEIR. Because the 2013 FEIR provided a thorough analysis of the environmental impacts of AWI's current operations and included a limited analysis of operations through October 2018, as Alternative 3, the necessary revisions will be made by providing this supplement to the 2013 FEIR.

- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*

There are no substantial changes to the circumstances under which the project would be undertaken that would result in new or more severe significant effects. However, as discussed in the remainder of this FSEIR, there are some important changes to the circumstances and a certain degree of new information that, while not requiring the preparation of a Subsequent EIR, would require preparation of a Supplemental EIR.

- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:*
 - a) The project will have one or more significant effects not discussed in the previous EIR;*
 - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*

- c) *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
- d) *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.” (CEQA Guidelines Section 15162(a)).*

There is no new information available that would result in any of the above determinations (3.a through 3.d).

1.3.3 Decision to Prepare a Supplemental Environmental Impact Report

The County CDA is preparing a FSEIR rather than a subsequent EIR based on its determination, pursuant to *CEQA Guidelines Section 15163*, that only minor additions and changes are necessary to make the previous EIR adequate to apply to the project for the changes proposed by the applicant. An Addendum to an EIR may be prepared where some changes or additions to an EIR are necessary to make the document adequate and the changes made by the addendum do not raise important new issues about the significant effects on the environment. An Addendum to an EIR may be prepared if none of the conditions calling for preparation of a Subsequent EIR or Supplemental EIR have occurred (*CEQA Guidelines Sections 15162-15164*). Because the County CDA finds that the conditions for performing a Supplemental EIR have been met, an Addendum is not being prepared.

CEQA Guidelines, Section 15163(a), states that *the lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:*

- 1) *Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR.*
- 2) *Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.*

Further, *CEQA Guidelines, Section 15163*, states:

- b) *The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.*
- c) *A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.*
- d) *A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.*
- e) *When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.*

1.4 Environmental Review Process

1.4.1 Notice of Preparation

A Notice of Preparation (NOP) was prepared and circulated to all responsible agencies and interested parties on September 17, 2014 for a period of 30 days. The NOP was distributed to responsible agencies and interested parties as required by CEQA and the County CDA CEQA procedures. A copy

of the NOP, the NOP distribution list, and written comments received by the County CDA on the NOP are included in Appendix D of this FSEIR.

1.4.2 Public Involvement and Review

The DSEIR was circulated to local, state and federal agencies, and to interested organizations and individuals who wished to review and comment on the document. The DSEIR will also be made available for review at the County CDA Planning Permit Center (Public Works Building, 399 Elmhurst Ave., Hayward, California 94544) and at the Livermore Public Library. The DSEIR was also made available on the County CDA's Planning Department website, at <http://www.acgov.org/cda/planning>, following the links from "Pending Land Use Projects" to "Current Development Projects" and finding "Wind Turbine Projects" under the heading "Ongoing Land Use Projects" – see Altamont Winds Inc., Application PLN2014-28.

Publication of the DSEIR on November 17, 2014 marked the beginning of a 45-day public review period during which written comments were directed to the County CDA at the address below. The comment period was extended an additional ten (10) days beyond the original comment period end date of January 2, 2015, to January 12, 2015. The County CDA has prepared responses to the comments received and has included those responses in the FSEIR prepared prior to the County CDA taking action on AWI's CUP extension request.

Ms. Sandra Rivera, Assistant Planning Director
ATTN: AWI Permit Modification Supplemental EIR
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 111
Hayward, CA 94544

Comments were also allowed to be received via email with the subject line "AWI Permit Modification Supplemental EIR" sent to: sandra.rivera@acgov.org. Commenters were directed to include a return address and contact name with written comments.

Anyone reviewing the document could submit written comments to the County during the comment period. Comments on the DSEIR were to be limited in scope to those areas discussed in the DSEIR. In accordance with *Section 15162 and 15163 of the CEQA Guidelines*, the DSEIR only discusses: a) areas of the 2013 FEIR where there has been a significant change to the project; b) where the project's circumstances have substantially changed; and c) new information that would not have been known at the time of the 2013 FEIR that has become available. Likewise, comments to the DSEIR were to be limited to the content of the DSEIR insofar as it augments the 2013 FEIR and evaluates the current project to an extent not discussed in the 2013 FEIR. Comments are most helpful when they suggest additional mitigation measures or alternatives that would provide better ways to avoid or mitigate significant environmental impacts. Reviewers should explain the basis for their comments and, whenever possible, should submit data or references in support of their comments.

1.4.3 Draft Supplemental Environmental Impact Report

Circulation of the DSEIR began when a Notice of Completion (NOC) was filed with the State Office of Planning and Research (State Clearinghouse). Filing the NOC started the 45-day review period for the DSEIR. Concurrent with the filing of the NOC, the lead agency will also provide a Notice of Availability of the DSEIR to all organizations and individuals that have previously requested such notice or are located in proximity to the project site. The notice briefly described the proposed project; identified the date when comments were to be received and where they were to be sent; and provides locations where copies of the DSEIR could be reviewed (*CEQA Guidelines Section 15085*

through *Section 15087*). In conjunction with the preparation of the FSEIR, a revised Mitigation Monitoring and Reporting Program (MMRP) has been prepared (*CEQA Guidelines Section 21081.6*) to incorporate necessary changes to the MMRP adopted with the 2013 FEIR. The MMRP will contain the mitigation measures along with the action that must be taken to implement them and the method that would be used to document or verify fulfillment of the measure. A procedure for determining and recording compliance will be outlined for each action that must be implemented by the project applicant to mitigate impacts as identified in the FSEIR and adopted when the project is approved. This procedure identifies what action would be taken and when, designates who would be responsible for implementing the action, and to whom and when compliance would be reported.

1.4.4 Final Supplemental Environmental Impact Report

At the end of the public review period, written comments on the project were compiled and responses generated in conjunction with the preparation of the FSEIR. The FSEIR consists of a list of all persons, organizations, and public agencies commenting on the DSEIR, copies of the comments received on the DSEIR, responses to comments (Appendix A); any other pertinent information or analyses added by the lead agency, a strike-out-underline version containing any revisions made by the lead agency to the DSEIR (Appendix C), which may be based on considerations of comments on the DSEIR, and the revised MMRP (*CEQA Guidelines Section 15132*). The FSEIR will serve as the CEQA compliance document for the County CDA and any other agencies that may be responsible for review of the proposed project and issuance of required permits.

As per CEQA Guidelines Section 15132, a Final EIR must include the following elements:

- The Draft EIR or a revision of that draft
- Comments and recommendations received on the Draft EIR, either verbatim or in summary form
- A list of persons, organizations, and public agencies that commented on the Draft EIR
- The response of the lead agency to significant environmental points raised in the review and consultation process
- Any other information added by the lead agency

This FSEIR includes the following sections:

Executive Summary provides an overview of the FSEIR, the proposed Project environmental review process, and a summary of the proposed Project as well as a Summary of Impacts, Mitigation Measures, and Levels of Significance (Table 1.1).

Appendix A provides a list of comments received on the DSEIR, copies of the written comments (numerically coded for reference), and the lead agency's responses to the comments. Requirements for the preparation and disposition of the response to comments are provided for in PRC, Division 13, Section 21092.5 and Section 15088 of the CEQA Guidelines.

Section 15088 of the CEQA Guidelines states:

- (a) *The lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.*
- (b) *The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.*

- (c) *The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.*
- (d) *The response to comments may take the form of a revision to the Draft EIR or may be a separate section in the Final EIR. Where the response to comments makes important changes in the information contained in the text of the Draft EIR, the Lead Agency should either: (1) Revise the text in the body of the EIR, or (2) Include marginal notes showing that the information is revised in the response to comments.*

Appendix F includes the Mitigation Monitoring and Reporting Program (MMRP) required by CEQA Guidelines Section 15097.

1.5 Organization of the Supplemental Environmental Impact Report

This FSEIR is organized into the following chapters:

Executive Summary - Summarizes the proposed project, areas of controversy, issues to be resolved, any new potential environmental effects that may result from the implementation of the proposed project, that were not addressed in the 2013 FEIR, the mitigation measures identified to reduce or eliminate significant effects, and a summary of the “No Project” Alternative.

Chapter 1.0 - Introduction: Provides an introduction and overview that describes the intended use of the document and the lead agency authority under CEQA. This chapter also provides a review of the environmental review process and organization of the FSEIR. Also provides a list of acronyms and a glossary of terms used to describe and evaluate the project.

Chapter 2.0 - Project Description: Provides a detailed description of conditions on the project site and vicinity and the various components of the proposed project. This chapter includes a statement of project objectives and provides background data on the project and project site.

Chapter 3.0 - Environmental Impacts Analysis and Mitigation Measures: Describes the existing environmental conditions on the site and in the vicinity of the project site, and the regulatory environment. Describes the project's characteristics related to each of the topical environmental issues addressed for the FSEIR, and states the significance criteria used to evaluate potentially significant effects of the proposed project. Evaluates the potential environmental effects not addressed in the 2013 FEIR, evaluates significant changes in environmental effects addressed in the 2013 FEIR, identifies mitigation measures to reduce or eliminate effects found to be significant, and determines the level of significance of the effect after measures have been implemented.

Chapter 4.0 – List of Preparers and Others Consulted: Includes a list of lead agency staff members who participated in the preparation of the FSEIR, consultants who prepared the FSEIR under the direction of the lead agency and any other organization or agency staff consulted.

Chapter 5.0 – References: Includes a list of documents and resources used in the preparation of the FSEIR.

1.5.1 Scope and Focus of the FSEIR, Compared to the 2013 FEIR

The 2013 FEIR broadly distinguished impacts as resulting from either operational activities (i.e., the use of wind turbines to generate electricity) and decommissioning (i.e., the removal of wind turbine equipment from the project area and the subsequent restoration of the underlying land). Decommissioning activities, including the number of daily crews working and the intensity of daily activity associated with decommissioning, are identical regardless of whether the facilities are decommissioned after 2015 or 2018, as noted in the 2013 FEIR. Therefore, for purposes of this FSEIR, impacts resulting solely from decommissioning activities are not discussed, and the County CDA will instead rely entirely on the analyses and mitigation measures as described in the 2013 FEIR for operational impacts, and not any decommissioning-related impacts.

Regarding operational impacts, the 2013 FEIR environmental impacts analysis examined the impacts resulting from operation of an 85.8 MW facility that operates for 8.5 to 12 months out of each year, depending on the scenario (or alternative) being examined. This analysis was structured such that impacts were scalable based on the size of the project (in megawatts) and the term of operation (in months). Using this scaling method, the County CDA evaluated the impacts of multiple operating scenarios (i.e., project alternatives), including the impacts of operating the wind farm through 2018, as presently proposed. However, these alternatives were evaluated at a limited level of analysis, as provided for in the *CEQA Guidelines, Section 15126.6(d)*, to provide “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” This FSEIR will augment the analysis of the 2013 FEIR, including Alternative 3, to provide the level and scope of analysis necessary to respond to the proposed change in the project.

1.6 Incorporated by Reference

As permitted by *Section 15150* of the *CEQA Guidelines*, this FSEIR has referenced several technical studies, analyses, and reports, which are included in the technical appendices of the FSEIR. Information from documents incorporated by reference has been summarized in the appropriate FSEIR section(s) that follow.

2.0 PROJECT DESCRIPTION

The proposed project consists of operational modifications to those CUPs for existing wind turbines owned by AWI. Specifically, AWI proposes to extend the CUPs, currently set to expire on October 31, 2015, through October 31, 2018. This section provides a brief review of the project location and background, along with a description of the proposed operational modifications and the conditions under which those modifications would take place.

2.1 Project Background

On November 13, 2003 and on January 29, 2004, EBZA approved CUPs for the continued maintenance and operation of wind turbines (or “wind farms”) by four different operating companies, including AWI, in the APWRA within Alameda County. Those permits were approved by the EBZA with a determination that they were categorically exempt from CEQA as the continued operation of existing facilities. The Center for Biological Diversity, Californians for Renewable Energy, and Golden Gate Audubon Society appealed these approvals to the County Board of Supervisors, primarily on the grounds that the CUPs were not exempt from CEQA, due to special circumstances represented by high levels of avian mortality.

The Board of Supervisors adopted a final resolution on September 22, 2005 (No. R-2005-463), which upheld the EBZA’s decision but imposed a number of operational restrictions on wind farm operations. Under the 2005 CUPs, the operating companies (AWI/WindWorks Inc., NextEra/ Green Ridge Power LLC/Florida Power & Light, EDF/EnXco and Seawest/AES Seawest) were required to permanently cease operations and remove a predetermined percentage of turbines on a specified, phased schedule in order to enable repowering of their wind energy assets. The first phase of decommissioning took place in 2009, at which time AWI was required to remove 10 percent of its 920 turbines. An additional 25 percent of the original 920 turbines (for a cumulative total of 35 percent) were to be permanently removed by September 30, 2013, followed by 50 percent of the original turbine number (for a cumulative total of 85 percent) by September 30, 2015, and the remaining 15 percent of turbines by September 30, 2018. In addition to the phased decommissioning, AWI was required to shut down its wind turbines during winter months. The CUPs also required that the CUP permittee companies jointly sponsor the preparation of an EIR to evaluate the environmental impacts of a repowering program, as well as continued operation of existing turbine facilities, and their progressive removal or phased decommissioning.

In July 2011, AWI applied to the County CDA to modify the 2005 CUPs to:

1. *Remove the requirement for phased decommissioning.*
2. *Remove winter seasonal shutdown requirements.*
3. *Provide for 100 percent of AWI’s turbines be decommissioned by the end of 2015.*

The 2013 FEIR was prepared to evaluate the environmental effects of such modifications and to identify mitigation measures to reduce any significant environmental effects identified. It also met the 2005 CUP requirement that an EIR be prepared to evaluate existing operations and phased decommissioning, and identified numerous mitigation measures to reduce and avoid the impacts of turbine removal in advance of repowering, although no specific repowering project had been proposed at that time.

The 2013 FEIR also proposed and analyzed a range of feasible project alternatives, as required by CEQA. In addition to the required No Project Alternative, the 2013 FEIR evaluated three other alternatives, including the project as proposed but with retention of the winter seasonal shutdown requirements (Alternative 1), a one-year extension (through 2016) of the project as proposed with seasonal shutdowns (Alternative 2), and a three-year extension (through 2018) of the project as

proposed, also with seasonal shutdowns (Alternative 3). Project Alternative 3, therefore, represented the operation of AWI's existing wind farms through October 31, 2018 (as currently proposed), and the 2013 FEIR provided a limited analysis of its potential impacts. Alternative 3 was chosen for inclusion in the 2013 FEIR because it would reduce air quality impacts related to GHG emissions and like the other alternatives, helped represent a broad range of scenarios.

On July 18, 2013, the EBZA certified the 2013 FEIR and granted AWI's request for modification of the 2005 CUP but included as mitigation (Mitigation Measure BIO-16 in the 2013 FEIR) the continued implementation of seasonal winter shutdown requirements, due to the substantial increase in avian mortality which was projected to have resulted from the request for operations without the winter shutdown – a roughly 60% increase in total avian fatalities compared to the baseline in avian years 2013 to 2018. In effect, the EBZA chose to approve Alternative 1, which was deemed the environmentally superior alternative in the 2013 FEIR, and denied AWI's request to remove the seasonal shutdown requirement. To further address the increased avian mortality that would result from the modifications, specifically on golden eagle mortality, the 2013 FEIR included as mitigation a requirement to retrofit electrical power poles within 140 miles of the project in an area with eagles at risk from electrocutions. Other mitigation measures that were adopted addressed the impacts of ground disturbance associated with decommissioning, which is outside the scope of this FSEIR.

Development of new wind farms, comprised of larger, modern wind turbines that are expected to replace the existing APWRA wind farms in the coming years, is underway, a process known as "repowering." A separate Program EIR (PEIR) which evaluated repowering was certified on November 12, 2014. The PEIR simultaneously analyzed two specific projects for repowering proposed by other wind companies, and AWI is preparing a separate project-specific EIR intended to "tier off" the PEIR. However, AWI has reported that its progress in developing a repowering program for its turbines is constrained by ongoing commercial and regulatory difficulties.

2.2 Project Location

The project location containing AWI's existing wind turbines falls within an approximately 14,196-acre portion of the 50,000-acre APWRA, located in eastern Alameda County, California, as shown in Figure 1. The project site is bisected by Interstate 580 (I-580). The lands are currently under permit by AWI or its affiliates either solely or as a shared arrangement with other wind farm operators.

In preparation for repowering, AWI is in discussions with another wind farm operator in the APWRA regarding a wind turbine exchange, whereby AWI would exchange some of its wind turbines for an equal number of wind turbines owned and operated by another wind farm operator that shares common infrastructure with AWI, as shown in Figure 2. Under no circumstances, however, will any such exchange increase the capacity or quantity of AWI's operating turbines (828).

Those land parcels on which the project is located would also change as a result of the turbine exchange. Following a wind turbine exchange, AWI would no longer operate wind turbines on 31 parcels of land on which AWI's wind turbines are presently located. However, AWI would receive turbines through the exchange on a small number of parcels on which AWI does not presently operate turbines. Table 2-1 presents existing CUPs, landowners, Assessor's Parcel Numbers (APNs), and approximate acreage for the lands that may be included either in whole or in part in the project, including lands on which AWI may operate following an exchange scenario as described above.

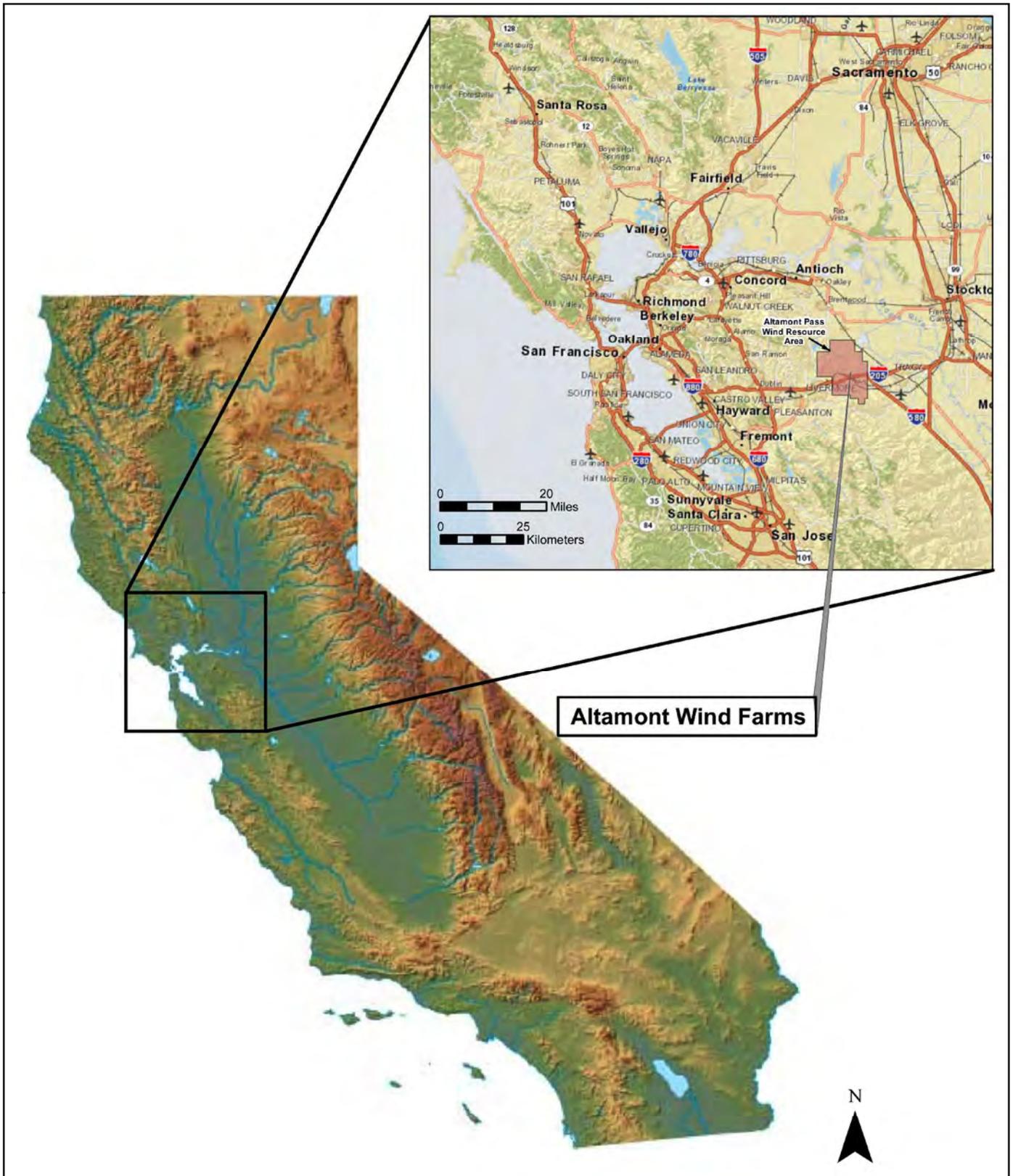
TABLE 2-1 LIST OF CUPS, LANDOWNERS AND APNS

CUP NO.	LANDOWNER	ASSESSOR'S PARCEL NUMBERS	APPROXIMATE ACRES
C-8036	Frick/Costa	99B-5680-15	207.12
C-8037	Pombo	99B-6300-2-1, 99B-6300-2-2, 99B-6425-1-6, 99B-6325-2-4 and 99B-6400-1-7	224.26
C-8134	Rooney	99B-6125-2	160.21
C-8137	Mulqueeney	99B-7900-1-5, 99B-7900-1-7, 99B-7890-2-4, 99B-7890-2-5, 99B-7890-2-6, 99B-7925-2-4, 99B-7925-2-1, 99B-7925-2-5, 99B-7950-2, 99B-7975-1, 99B-7980-1, 99B-7985-1-6, 99B-7985-1-4, 99B-7985-1-3, 99B-7985-1-5, 99A-1800-2-4, 99A-1800-2-3 and 99B-8050-1	4,447.50
C-8191	Mulqueeney	99B-7910-1-1	592.84
C-8243	ACWMA	99A-1780-1-4, 99A-1770-2-1, 99A-1770-2-2, 99A-1770-2-3, 99A-1810-1 and 99A-1790-3	1,324.83
C-8216	ACWMA	99A-1810-1	240.81 (parcel acreage included in C-8243)
C-8231*	Altamont Landfill	99B-6225-1, 99B-6250-1, 99B-6275-1-1	1,547.80
C-8232	Egan	99B-6125-3	160.47
C-8233	Elliott	99B-6125-4	157.54
C-8235	Corbett	99B-5650-1-4 and 99A-1785-1-14	284.96
C-8236	Dunton	99B-5680-1	330.46
C-8237	Valhalla (Devincenzi)	99B-5610-1 and 99B-6075-3	665.98
C-8238	Ralph (north)	99B-7300-1-5 and 99B-7375-1-7	766.57
C-8239*	Jackson	99B-6125-5	325.59
C-8241	Walker	99B-6100-2-10, 99B-6100-2-11, 99B-6100-2-12, 99B-6100-3-10, 99B-6100-3-15, 99B-6100-3-11	1,314.55
C-8242	Gomes (north)	99B-6150-4-10, 99B-6150-3 and 99B-6150-2-7	635.48
C-8244	Gomes (south)	99B-6425-2-3, 99A-1790-2 and 99A-1795-1	1,049.48
TOTAL ACREAGE			14,195.64

Source: AWI, 2014

Notes:

1. The above table includes those parcels and CUPs on which AWI currently has installed wind turbines, as well as those parcels and CUPs on which turbines owned by other wind companies are presently installed and whose wind turbines may be obtained in exchange on a turbine-for-turbine basis with turbines currently owned by AWI.
2. Many of the wind farms in the APWRA overlap, with different wind energy facility operating companies on a single parcel of land. Therefore, other wind companies beside AWI currently operate wind farms within the project area described above.
3. Two additional CUPs, C-8231 and C-8239 (landowners Waste Management Inc. and Jackson, respectively), apply to turbines proposed to be acquired by AWI or its affiliates in a proposed asset exchange, and would contain turbines subject to the proposed modifications.

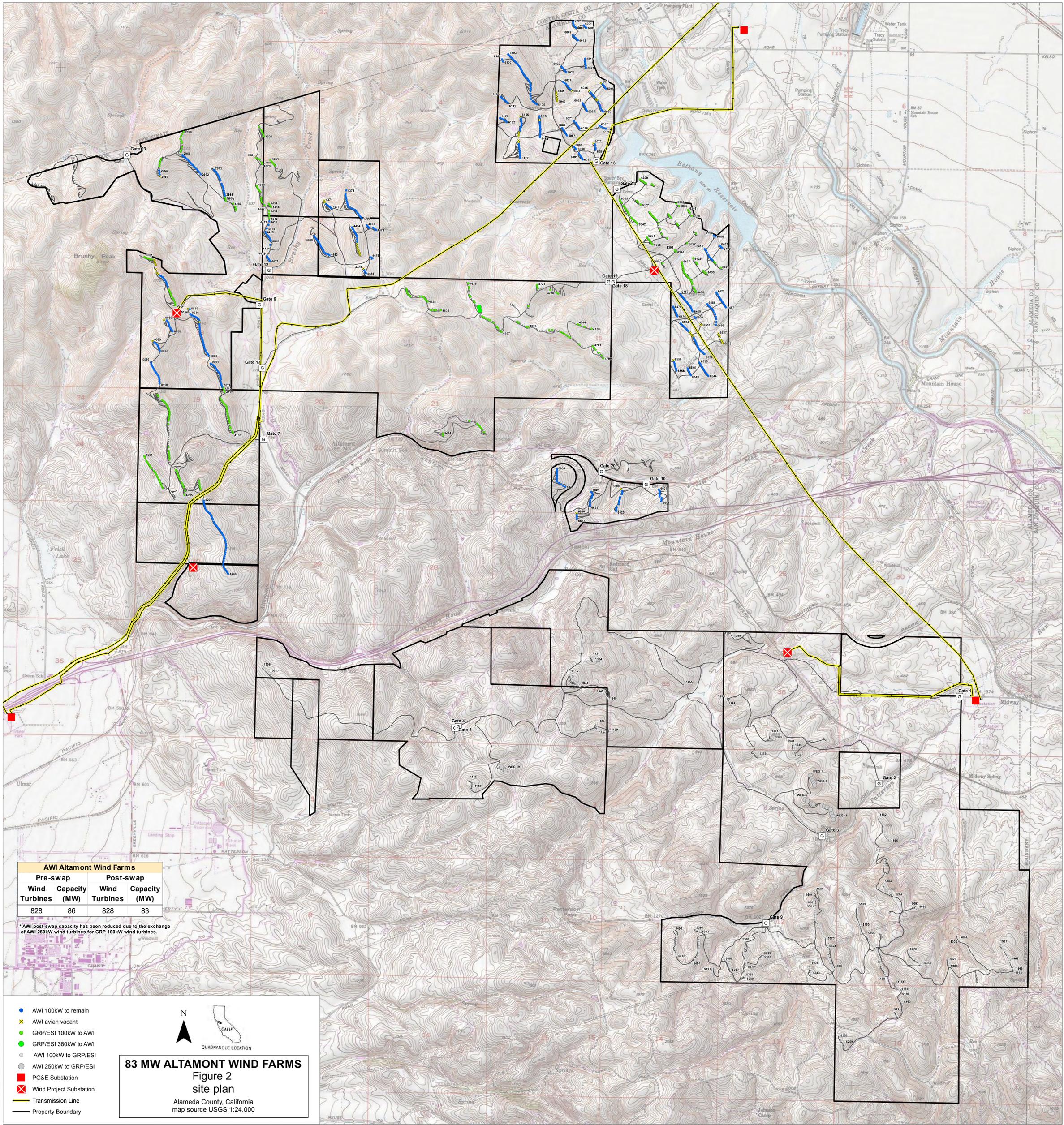


Altamont Wind Farms

FIGURE 1
PROJECT LOCATION

ALTAMONT WINDS LLC
PROPOSED SUMMIT WIND
REPOWER PROJECT
ALAMEDA COUNTY, CA

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AWI Altamont Wind Farms			
Pre-swap		Post-swap	
Wind Turbines	Capacity (MW)	Wind Turbines	Capacity (MW)
828	86	828	83

*AWI post-swap capacity has been reduced due to the exchange of AWI 250kW wind turbines for GRP 100kW wind turbines.

- AWI 100kW to remain
- ✕ AWI avian vacant
- GRP/ESI 100kW to AWI
- GRP/ESI 360kW to AWI
- AWI 100kW to GRP/ESI
- AWI 250kW to GRP/ESI
- PG&E Substation
- ✕ Wind Project Substation
- Transmission Line
- Property Boundary

83 MW ALTAMONT WIND FARMS
 Figure 2
 site plan
 Alameda County, California
 map source USGS 1:24,000

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2.3 Project Need and Objectives

Like the project defined in the 2013 FEIR, the current project is needed to meet the ever-increasing demand of society and consumers for electricity from clean, renewable, and economically viable power sources. Specifically, the project will assist California in meeting its legislated Renewable Portfolio Standard criteria for the generation of renewable energy in the state. This standard requires electric utilities and providers to procure 33 percent of their supply of electricity from renewable energy sources, such as wind, by 2020. In addition, this project will assist California in meeting its legislated global warming solutions criteria requiring reductions in carbon dioxide and other GHG emissions to 1990 levels by 2020.

As also indicated in the 2013 FEIR, AWI proposes to continue operating existing wind turbines and delivering clean, renewable wind-generated electrical energy to the Pacific Gas & Electric Company (PG&E) through existing transmission infrastructure as productively as possible in the short term.

AWI's proposed extension/permit modification (the project) would continue operations (as described in the 2013 FEIR) three additional years; as such, the specific project objectives identified by the applicant would remain as follows:

- Continue to operate the existing AWI project using existing turbines, transmission lines, and other infrastructure to meet regional energy needs in an efficient, reliable, and environmentally-sound manner.
- Continue to provide clean, renewable energy in the most cost-effective way.
- Operate existing wind power facilities more productively in the short term (four years).
- Provide for continued operations until repowering of the turbine assets is timely and economically viable.
- Contribute to domestic energy security and California's Renewable Energy Resources Program, which requires that all retail electricity providers serve 33 percent of their load with renewable sources by 2020, by continuing to reduce California's reliance on fossil fuels through utilization of APWRA's renewable wind resources.
- Provide significant benefits to human health, wildlife, and climate by reducing climate change/global warming-causing pollutants, reducing water usage, and by displacing toxic emissions produced by fossil fuel-fired power plants.
- Continue to contribute substantially to Alameda County's economy by preserving long-term skilled employment to operate and maintain the project and through expenditures on materials, tools, supplies, and equipment purchases.

Additional objectives for the project considered essential by the County CDA include the following:

- Maintain wind energy uses in the Alameda County portion of the APWRA in the long term in a manner that represents sound stewardship of the area's wildlife and natural habitats, both generally and to support the obligations of state and federal resource agencies to protect the unique and special-status avian species that occupy the area.
- Continue to implement its adopted General Plan policies to promote wind energy development and energy production in the APWRA while minimizing impacts on avian species, and to coordinate with local, state and federal resource-protection agencies to establish feasible means of mitigating avian collisions with wind turbines.

2.4 Major Project Components

The project facilities consist of 828 existing wind turbines on concrete foundations, plus support facilities, occupying approximately 155 acres within a 14,196-acre area. The turbines have a nameplate capacity of 85.8 MW and rest on lattice and tubular towers that range in height from 60 to 82 feet, sited in strings along ridgelines. Support facilities include existing gated, graveled access roads, a power collection and transmission interconnection system, meteorological towers ranging from 60 to 100 feet in height, communication systems, maintenance equipment areas, and offsite facilities including AWI's wind farm main service yard (located near Tracy), and the main wind farm control center, shared with other wind farm operators (located in Livermore). The power collection and transmission interconnection system consists of pad-mount transformers, underground cables, overhead cables on poles, circuit breakers and switches, electrical metering/protection devices, and the existing Dyer, Frick, Ralph, and Midway substations. Electrical power is collected from the turbines and transmitted to the substations, where its voltage is increased for interconnection with PG&E transmission lines.

2.4.1 Asset Exchange

AWI is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. These 300 turbines represent about 35 percent of AWI's assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations and as such the potential geographical changes are analyzed in the SEIR. It should be noted that at the same time the proposed AWI permit modifications/extension could come into effect on October 31, 2015, major changes in the operating landscape of the APWRA will take place following the 2015 wind season, which concludes on October 31, 2015. At that time, approximately 1,000 old generation wind turbines owned by Green Ridge Power LLC will be permanently shut down and will be removed; thus, reducing overall turbine quantities and densities in the project area.

2.4.2 Repowering Development Milestones

The current CUPs allow for operations of 828 turbines and ancillary facilities, through October 31, 2015. Under the proposed permit modifications, after this point in time, operations would be extended for up to three additional years, through October 31, 2018, on the condition that AWI has demonstrated that it has diligently pursued development of a repowered wind farm on the project site, but that circumstances beyond AWI's control, as defined below, have delayed completion of the repowered project.

Specifically, under the proposed permit modifications, AWI will be required to cease operations of the existing wind farm on October 31, 2015 unless (1) AWI has diligently pursued development of a repowered wind farm on the project site, as defined and enumerated below; and (2) circumstances beyond AWI's control delay repowering beyond October 31, 2015. To assess AWI's diligent pursuit of repowering, the CUPs will include several repowering development milestones which must be met as conditions of continuing operation beyond October 31, 2015. These development milestones would be conditions of approval, and failure to achieve these milestones by the dates set forth would constitute noncompliance with the CUPs. These milestones proposed by AWI include:

- AWI submitted a project-specific repowering application to the County CDA on March 31, 2014, including an affidavit affirming site control for the proposed repowered wind farm.
- AWI shall begin preparation of a project-specific EIR or other appropriate environmental document tiered from the Program EIR for the repowering project no later than December 31, 2014.
- Continuous preparation of AWI's project-specific repowering EIR or comparable document through to completion, with a Draft for public review available by April 15, 2015, and a Final available by June 30, 2015.

2.4.3 Circumstances Outside AWI's Control

AWI asserts that in order for it continue operation of the wind facility beyond October 31, 2015, in addition to diligently pursuing repowering, a repowered project may be delayed beyond that date due to circumstances beyond AWI's control. Such circumstances considered outside of AWI's control, which AWI proposes as conditions of approval that would allow it to operate beyond October 31, 2015, could include:

- Delay in completion of an interconnection transmission study, despite AWI's initiation of that study, or refusal by the California Independent System Operator (CAISO) and/or PG&E to grant transmission or interconnection rights following such related study.
- The inability to secure an economic power purchase agreement for the repower project, despite commercially reasonable efforts to do so.
- Failure by Congress to renew the federal renewable energy production tax credit beyond 2015, which expired on December 31, 2013.
- Land owner site control for repowering is unilaterally withdrawn by any landowner(s) or is otherwise terminated due to no fault of AWI.
- Repower permits are delayed or not issued by County CDA.
- A Final CEQA document is not certified by July 22, 2015
- Procurement of wind turbines and related wind project equipment for repowered facilities is delayed due to market supply constraints.
- The separation and/or exchange of existing Altamont wind power assets (such as land leases, substations, permits, etc.) necessary to repower the site, is delayed by parties unrelated to AWI.

3.0 ENVIRONMENTAL IMPACTS ANALYSIS AND MITIGATION MEASURES

3.1 Approach to the Environmental Analysis

The County CDA anticipates that the proposed extension will lead to an increase in the severity of impacts previously identified in the 2013 FEIR. As previously described, the 2013 FEIR provided a full discussion of the prior project's potential environmental effects on the following resource areas: Air Quality and GHGs; Biological Resources; Noise; and Hazards and Hazardous Materials. The County CDA does not anticipate that major revisions to the 2013 FEIR are necessary to identify new environmental impacts that were not previously disclosed in the 2013 FEIR for an extension of AWI's operations for three additional years through October 31, 2018. However, to the extent new information has become available since the prior FEIR, the County CDA has incorporated that information into the FSEIR.

As described in the Executive Summary of the 2013 DEIR, due to the types of activities associated with the proposed CUP modifications, the County determined that some topics do not require in-depth technical analysis. The following resources were dismissed from further consideration in the 2013 FEIR: aesthetics; agriculture and forest resources; cultural resources; geology and soils; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; transportation; and utilities.

The 2013 FEIR broadly distinguished impacts as resulting from either operational activities (i.e., the use of wind turbines to generate electricity) and decommissioning (i.e., the removal of wind turbine equipment from the project area and the subsequent restoration of the underlying land). Decommissioning activities, including the number of daily crews working and the intensity of daily activity associated with decommissioning, are identical regardless of whether the facilities are decommissioned after 2015 or 2018, as noted in the 2013 FEIR. Therefore, for purposes of this FSEIR, impacts resulting solely from decommissioning activities are not discussed, and the County CDA will instead rely entirely on the analyses and mitigation measures as described in the 2013 FEIR for operational impacts, and not any decommissioning-related impacts.

In the 2013 FEIR, the County CDA evaluated the impacts of multiple operating scenarios (i.e., project alternatives), including the impacts of operating the wind farm through 2018, as presently proposed. However, these alternatives were evaluated at a limited level of analysis, as provided for in the *CEQA Guidelines, Section 15126.6(d)*, to provide "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." The impact analysis below will augment the analysis of the 2013 FEIR, including Alternative 3, to provide the level and scope of analysis necessary to respond to the proposed change in the project.

3.1.1 Noise

As described in the 2013 FEIR operations under Alternative 3 (this project) would increase compared to the prior project. Exposure of residences to increased turbine noise under Alternative 3, including the potential for increased wind turbine noise as a result of aging turbines or lack of maintenance, would be greater under Alternative 3 than under the proposed project because more turbines would be running through 2018. This is considered a significant impact. However, implementing Mitigation Measure NOISE-1, as described in the 2013 FEIR, would reduce this impact to a less-than-significant level. Although there have been some changed circumstances since 2013, the County CDA does not find that there are substantially changed circumstances as part of this project that would result in new or substantially different significant impacts with respect to noise impacts that were not previously identified in the 2013 FEIR. Furthermore, no new information of substantial importance shows that

the CUP extension to 2018 and associated asset exchange would have significant impacts with respects to noise not discussed in the prior FEIR.

3.1.2 Air Quality and Greenhouse Gases

As also described in the 2013 FEIR, Alternative 3 (this project) would result in the most electricity production and GHGs offset. Although some GHG emissions would result from decommissioning activities, the GHGs offset by the turbine operations under Alternative 3 are multiple orders of magnitude greater than those resulting from decommissioning activities. The net result of Alternative 3 would be a substantial reduction in GHGs. The County CDA does not find that there are substantially changed circumstances as part of this project that would result in new or substantially different significant impacts with respect to air quality and GHGs that were not previously identified in the 2013 FEIR. Furthermore, no new information of substantial importance shows that the CUP extension to 2018 and associated asset exchange would have significant impacts with respects to air quality and GHGs not discussed in the prior FEIR.

3.1.3 Biological Resources

As described in the 2013 FEIR, project impacts on biological resources could occur as a result of operational changes (for avian species) and during decommissioning activities (terrestrial impacts) in cases where special status species and/or sensitive habitats occur within the decommissioning work areas. This FSEIR does not analyze impacts related to decommissioning, as the proposed extension is not anticipated to result in any changes to those impacts. These potential impacts resulting from project decommissioning would not be changed in any way by the proposed extension of the CUPs except that they would be delayed for up to three additional years. In all other respects, impacts resulting from decommissioning activities under the currently proposed CUP modifications would be identical to the impacts identified in the 2013 FEIR. As a result, the impact analysis sections of the 2013 FEIR related to decommissioning are herein incorporated by reference and are not discussed further in this FSEIR. This analysis does, however, focus on the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange of which terrestrial impacts associated with ground disturbing activities are not anticipated. The biological resources analysis in Section 3.2 of this FSEIR only focuses on wildlife (with an emphasis on avian species). The anticipated impacts on other wildlife (primarily terrestrial species and their habitat), waters of the United States (including wetlands), and waters of the state due to decommissioning are described in detail in the 2013 FEIR.

As described in the 2013 FEIR, an analysis of the potential avian impacts under Alternative 3 indicates that operational impacts would be substantially greater than those associated with the proposed project (2013 FEIR, Table 4-2), and more than 2.5 times the level expected under the No Project Alternative (the avian baseline condition). Although the estimates are based on APWRA-wide per-MW mortality estimates, they provide a comparison of the expected impacts under each alternative. The 2013 FEIR's brief analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. For example, Table 4-2 in the 2013 FEIR provided a projection that there would be 19.0–26.5 golden eagle fatalities under Alternative 3 through 2018, compared to a baseline (No Project conditions) of 7.1–9.9 golden eagle fatalities through 2018. These additional impacts and related mitigation measures are analyzed in this FSEIR document.

3.1.4 Hazards and Hazardous Materials

The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. As previously described, an issue raised by an area resident during the NOP comment period reported the appearance of oil being dispersed along the turbine blades from leaking turbine generators as a form of environmental pollution. This issue would fall into the environmental category of Hazards and Hazardous Materials. Based on new information about the condition of the turbines related to potentially widespread soil contamination from leaking turbine oils or lubricants, the extension may be expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant. This issue is further analyzed in Section 3.3 of this FSEIR.

3.2 Biological Resources

Potential biological resource related to wildlife avian impacts associated with the project components are analyzed in this section or incorporated by reference to the 2013 FEIR. Potential impacts associated with each of these project components are summarized at a qualitative level in Section 3.2.3, Environmental Impacts. This section also identifies specific and detailed measures from the East Alameda County Conservation Strategy (EACCS) to avoid, minimize, or compensate for potentially significant impacts on biological resources, where necessary as described in the 2013 FEIR. In addition, the County CDA has also provided a suite of alternative mitigation measures that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the June 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) (draft).

3.2.1 Regulatory setting

A listing of the laws and regulations that influence the management of biological resources in the study area is summarized below and provided in full detail within the 2013 FEIR. These laws and regulations are relevant for the analysis provided in this FSEIR; as such, the reader is referenced back to Section 3.2.1 of the 2013 FEIR for further details.

3.2.1.1 Federal

- Federal Endangered Species Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Clean Water Act

3.2.1.2 State

- California Environmental Quality Act
- California Department of Fish and Wildlife Code

3.2.1.3 Local

- East Alameda County Conservation Strategy

3.2.2 Environmental Setting

Section 3.2.2 of the 2013 FEIR summarizes the existing conditions related to biological resources in the study area and references the detail of the existing conditions. These conditions are relevant for

the analysis provided in this FSEIR; as such, the reader is referenced back to the 2013 FEIR for further details regarding the Biological Resources environmental setting.

3.2.3 Environmental Impacts

3.2.3.1 Method

This biological impact analysis is based on professional standards and information cited throughout the section and incorporates by reference the details discussed in the 2013 FEIR. The key effects were identified and evaluated qualitatively and quantitatively based on the environmental characteristics of the study area and the magnitude, intensity, and duration of activities related to operation and decommissioning activities associated with the proposed project (2013 EIR).

Avian impacts and the resulting significance conclusions are determined on the basis of the No Project Alternative as defined in the 2013 FEIR as the baseline. For operational changes associated with the proposed project, the avian impact analysis is based on the most recent published results of avian fatality studies in the 2013 FEIR and a three-year average from 2008-2010 (2013 FEIR), June 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) (draft) and the resulting per-MW avian impact estimates.

The method chosen in the 2013 FEIR to estimate the number of avian fatalities considers two variables: (1) the estimated fatality rate and (2) the installed capacity (MW), multiplied together to yield an estimate of fatalities at the wind farm, as follows:

$$\text{fatality rate} \times \text{installed capacity} = \text{estimated fatalities/MW}$$

This method for analyzing the effect of the project on avian mortality, and conclusions drawn from this method regarding AWI's proposed project, are discussed below.

3.2.3.2 Thresholds of Significance

Based on professional practice, the County CDA Environmental Checklist, and CEQA Guidelines, Appendix G (14 CCR 15000 et seq.), the analysis that follows serves to reach determinations whether the proposed project would:

- Have a substantial adverse effect, either directly or through habitat modifications, including designated critical habitat, 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, including substantially reducing the number or restricting the range of an endangered, rare, or threatened species.
- Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA, including marsh, vernal pool, and coastal wetlands, through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The thresholds of significance used are also based on professional practice and state and federal guidelines on adverse effects on biological and wildlife resources. As defined by *Section 15064.7* of the *CEQA Guidelines*, such thresholds are “an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.”

3.2.3.3 Impact Assumptions

Impacts on biological resources are based on the following project assumptions:

- Operational changes to the timing and duration of wind turbine operations (three additional years, or up to 25½ additional months of operation, with winter seasonal shutdowns) would result in increased avian fatalities.
- No ground disturbing activities are expected outside what was analyzed in the 2013 FEIR as a result of the requested permit extensions.
- No new access roads would be constructed.
- Existing facilities and proposed work areas are limited to upland habitat; no activities will occur within aquatic habitat.
- No suitable habitat for special-status fish species or designated critical aquatic habitat occurs in the study area. Therefore, potential impacts on these species and critical habitat are not discussed in this impact analysis.
- Avian fatalities are directly proportional to the operational period of wind turbines, calculated as the cumulative installed generation capacity.

3.2.3.4 Impact Mechanism

Biological resources could be directly or indirectly affected during additional operation period during the CUP permit extensions. Impacts on biological resources fall into the three categories: temporary, short-term, and long-term. Some activities that could cause impacts on biological resources are *increasing cumulative turbine operation time, particularly during the three-year extended operation period*. These impact mechanisms were used to assess project-related impacts on biological resources in the project area for this FSEIR.

3.2.3.5 Impacts and Mitigations

The 2013 FEIR’s brief analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. These additional impacts and related mitigation measures are analyzed in this section. The County CDA has also provided, in this FSEIR, a suite of alternative mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

Impact BIO-1: Potential to cause a substantial adverse effect, directly on special-status species (Significant; Significant and unavoidable for avian species)

The extension of the CUP permits under this project would cause direct impacts to avian species, as discussed in the 2013 FEIR. Additional mortality based estimates for the three years of operation are based on the ongoing monitoring at APWRA and they are discussed in more detail below. There are other factors not considered in the July 2013 FEIR that indicate avian mortality may, in fact, be reduced as a result of an asset exchange including a reduction in High Risk Turbines and a reduction in operating capacity as discussed below.

Estimated Project Impacts on Focal Species

Fatality Rates

Studies of avian fatalities in the APWRA have been conducted, in one form or another, since the 1980s. The most recent iteration of the APWRA-wide monitoring program was implemented by the County CDA following the renewal of the CUPs in 2005. To measure progress towards the goal of reducing avian fatalities within the APWRA through the implementation of adaptive management measures and the seasonal shutdown, the monitoring program has focused on identifying annual avian fatality rates in the APWRA. Fatality rates for each species are calculated, and then for multiple years. The monitoring program is managed by a Monitoring Team (M-TEAM), overseen by the Altamont Pass Scientific Review Committee (SRC), which reports to and makes recommendations to the County CDA. The M-TEAM produces an annual report that discloses the avian fatalities observed and presents estimates of annual adjusted species fatality rates on a standardized per-MW-per-year basis for all avian species. These rates are used to determine the effectiveness of ongoing adaptive management measures, as well as progress towards the goal of fatality reduction. The size and scope of the study has been designed to determine fatality rates for the entire APWRA, standardized on a per-MW-per-year basis. The County CDA determined in the 2013 FEIR that the current monitoring program is the best available source of wind turbine-related avian fatality rates in the APWRA.

Table 3-1, derived from Chapter 3.2 of the 2013 FEIR, provides the anticipated avian species impacts under the proposed project, as calculated from the APWRA-wide fatality rate estimates (standardized on a per-MW basis). Average fatality rates are presented for all available monitoring years (2005–2010) as well as for recent monitoring years (2008–2010, and 2005-2012). The rates for recent monitoring years were presented in order to consider years in which more intensive efforts have been made to reduce avian mortality within the APWRA, with an understanding that the omission of data for the years 2005-2007, prior to permanent operational changes aimed at reducing avian mortality, would more accurately represent the impacts of the wind farm for the future term of the project. Also included in Table 3-1 is the 2005-2011 average of the annual fatality rates at non-repowered turbines as provided in the October 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

TABLE 3-1 ADJUSTED APWRA-WIDE AVIAN FATALITY RATES PER MW PER YEAR

SPECIES	AVERAGE FATALITY RATE
BASED ON 2005-2010 MONITORING RESULTS	
Source: FEIR, <i>Modifications to Existing (Year 2005) Conditional Use Permits- AWI</i> (SCH No. 2012062060)	
American Kestrel	0.496
Burrowing Owl	0.721
Golden Eagle	0.085
Red-Tailed Hawk	0.449
Total Focal	1.751
BASED ON 2008-2010 MONITORING RESULTS	
Source: FEIR, <i>Modifications to Existing (year 2005) Conditional Use Permits- AWI</i> (SCH No. 2012062060)	
American Kestrel	0.443
Burrowing Owl	0.425
Golden Eagle	0.061
Red-Tailed Hawk	0.286
Total Focal	1.215
BASED ON 2005-2011 MONITORING RESULTS	
Source: ICF International, <i>APWRA Repowering Draft PEIR</i> , June 2014 (SCH No. 2010082063)	
American Kestrel	0.59
Burrowing Owl	0.78
Golden Eagle	0.08
Red-Tailed Hawk	0.44
Total Focal	1.89
BASED ON 2005-2012 MONITORING RESULTS	
Source: ICF International, <i>APWRA Bird Fatality Study</i> , June 2014	
American Kestrel	0.577
Burrowing Owl	0.70
Golden Eagle	0.081
Red-Tailed Hawk	0.411
Total Focal	1.77

Installed MW Capacity

The other factor considered in the 2013 FEIR analysis of avian impacts resulting from the wind farm is installed MW capacity. Installed capacity, for purposes of the 2013 FEIR avian analysis, is a value derived to represent the operational size of the project over time. More specifically, installed capacity in the 2013 FEIR represents the sum of the nameplate capacity rating of all installed turbines, expressed in MW-years. This value is calculated by (a) determining the number of turbines operating in the year and multiplying that number by the nameplate capacity of each turbine, (b) multiplying the result by the percentage of the year they are expected to operate in that configuration for a given year, then (c) summing the total for each year for the total life of the project.

In months where no turbines operated, such as during the annual Winter Seasonal Shutdown, a period of 3.5 months (from November 1 through February 14 each year) during which the CUPs require 100 percent of turbines to be shut down, the 2013 FEIR assumed zero capacity for such periods. Comments were received arguing against the accuracy of such an approach when comparing project alternatives, some of which included winter operations and others which did not. The present analysis, however, concerns a wind farm that does not operate in the winter. Therefore, the analysis for this FSEIR assumes zero capacity for winter months, just as was assumed in the 2013 FEIR.

The 2013 FEIR’s analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. The 2013 DEIR analysis, on pages 4-4 and 4-16 through 4-20 of the 2013 DEIR, and summarized most clearly in Table 3.2-3a in the 2013 FEIR (page 4-16), indicated that the installed capacity of the 86 MW wind farm for an operating term through 2018 would be 311 MW (Table 3-2 of this FSEIR), and all avian fatality estimates were derived based on this operating term. Estimated avian fatalities figures for the February 15, 2016-October 31, 2018 operating schedule are also presented in Tables ES-1 through ES-3 and Tables 3-3 through 3-5 below. Table 3-5 below provides a comparison of the scenarios.

TABLE 3-2 SUMMARY OF INSTALLED CAPACITY PER MEGAWATT YEAR FOR SCENARIOS

SCENARIO	2013	2014	2015	2016	2017	2018	2019	TOTAL MW - YEARS
2013 FEIR Proposed Project	21.5	85.8	85.5	0.0	0.0	0.0	0.0	193.1
2013 FEIR No Project Alt.	5.2	44.5	32.1	11.9	11.9	10.9	0.0	116.5
2013 FEIR Alternative 1 (Current CUP conditions)	7.2	60.8	60.8	0.00	0.0	0.0	0.0	128.7
2013 FEIR Alternative 3	7.2	60.8	60.8	60.8	60.8	60.8	0.0	311.0
Years 2016 - 2018	-	-	-	60.8	60.8	60.8	0.0	182.4

Source: FEIR, *Modifications to Existing (Year 2005) Conditional Use Permits- AWI* (SCH No. 2012062060)

TABLE 3-3 ESTIMATED AVIAN FATALITIES AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2008-2010 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	26.9	80.8	137.8
Burrowing Owl	25.8	77.5	132.2
Golden Eagle	3.7	11.1	19
Red-Tailed Hawk	17.4	52.2	88.9
Total Focal	73.8	221.6	377.9

Source: POWER Engineers, 2014

TABLE 3-4 ESTIMATED AVIAN FATALITIES AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2005-2011 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	35.9	107.6	183.5
Burrowing Owl	47.4	142.3	242.6
Golden Eagle	4.7	14.6	24.9
Red-Tailed Hawk	26.8	80.3	136.8
Total Focal	114.8	344.8	587.8

Source: POWER Engineers, 2014

TABLE 3-5 COMPARISON OF ADJUSTED SPECIES FATALITY TOTALS OF FOUR FOCAL SPECIES, BASED ON AN AVERAGE FATALITY RATE (FATALITIES PER MEGAWATT PER YEAR)

SPECIES	AVERAGE FATALITIES PER MW (2005–2010/ 2008–2010/ 2005-2011 2005-2012/ 2008-2012)	PROJECTED NUMBER OF FATALITIES UNDER THE 2013 FEIR PROPOSED PROJECT	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR BASELINE CONDITIONS	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR ALTERNATIVE 3	PROJECTED NUMBER OF FATALITIES FOR YEARS 2016-2018
American Kestrel	0.496/0.443/0.590.577/0.571	85.5–113.9	51.6–68.7	137.8–183.5	80.8–107.6
Burrowing Owl	0.721/0.425/0.780.70/0.52	82.1–150.6	49.5–90.9	132.2–242.6	77.5–142.3
Golden Eagle	0.085/0.061/0.080.081/0.75	11.7–16.4	7.1–9.9	19–26.4	11.1–15.5
Red-Tailed Hawk	0.449/0.286/0.44/0.411/0.35	55.2–86.7	33.3–52.3	88.9–139.6	52.2–81.9

Source: POWER Engineers, 2014

Reduction in High Risk Turbines

As discussed previously, AWI is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI’s operating turbines. These 300 turbines represent about 35 percent of AWI’s assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations.

The number of County-designated High Risk Turbines (HRT), which are those turbines identified by the SRC as posing the greatest collision risk to birds, will be reduced coincident to the exchange. Over the years, various wildlife consultants have examined the APWRA and attempted to identify those wind turbines that pose a disproportionate risk to avian species, and several different models have been proposed for identification of high risk wind turbines. The system currently in use, the HRT system, was first adopted in 2007 and later revised in 2010. The HRT classification system ranked wind turbines on a scale of 1 to 10, with 10 presumed to be the most hazardous. At various stages since inception of the system, many of those turbines with the highest ratings, such as, 10, 9.5, 9.0, and 8.5, have been ordered to be removed by the County CDA. To date, Green Ridge Power LLC

has shut down a greater number of HRTs, compared to AWI. This imbalance will result in AWI decreasing its quantity of HRT turbines after the exchange, theoretically reducing avian impacts.

As previously described, Green Ridge Power LLC has permit and legal obligations to permanently cease operations of its entire fleet of existing wind turbines (approximately 1,000 old generation turbines) by October 31, 2015; as such, AWI's fleet of HRT turbines will be decommissioned by that date.

TABLE 3-6 ASSET EXCHANGE EFFECT ON NUMBER OF HRTS IN OPERATION

OWNER/HRT RATING	OPERATING
AWI	
8.5	12
9	9
9.5	0
10	0
Total Turbines Given Up by AWI	21
NEER	
8.5	4
9	0
9.5	2
10	0
Total Turbines Received by AWI	6
HRT Reduction	15

Source: AWI, 2014

The 2013 FEIR methodology, as previously described, utilized the APWRA-wide fatality rate because the project area is large and diversified. Applying the 2013 FEIR APWRA-wide fatality rate methodology to an asset exchange, as proposed under this project, would result in no greater impact on avian mortality when reviewing the proposed wind turbines received in an exchange for the wind turbines given up (Table 3-6). Therefore, on a statistical level, the asset exchange would have no effect on the impacts caused by the project.

Reduction in Operating Capacity

As a result of the asset exchange under this project, it is likely that AWI's operating capacity will be reduced through the exchange, because AWI will exchange its twenty 250 kW wind turbines for twenty 100 kW wind turbines. Again considering the per-MW method of fatality calculations utilized by the SRC and the M-TEAM, aggregate project capacity will be reduced by 5.3 MW over three years, which is equivalent to removing twenty-five 100 kW wind turbines for the duration of the three-year project as illustrated in Table 3-7.

TABLE 3-7 ASSET EXCHANGE EFFECT ON MEGAWATT CAPACITY (2016 – 2018)

RESULTING REDUCTION IN CAPACITY DUE TO ASSET EXCHANGE	MEGAWATTS	
Total Project Capacity without Asset Exchange during years 2016-2018	182.3	
Total Project Capacity with Asset Exchange during years 2016-2018	177.0	
Reduction in AWI Project Capacity Due to Asset Exchange - Over the 3-year life of the Project (2016-2018)	5.3	(equivalent of removing 25 x 100 kW wind turbines for the duration of the 3-year project life)
EQUIVALENT QUANTITY OF WIND TURBINES REMOVED (5.3 MW)		
100 kW Wind Turbine Nameplate Capacity	0.1	
Portion of the year permitted to operate (71%)		
100 kW Wind Turbine Net Capacity	0.071	
Total Reduction in AWI Project Capacity Due to Asset Exchange	5.3	
AWI's Proposed Maximum Project Duration (3 years)		
Annual Reduction in AWI Project Capacity Due to Asset Exchange	1.771	(equivalent to 25 turbines needed to produce annual reduction in project capacity)

Source: AWI, 2014

For these reasons, the asset exchange would not increase the risk to birds over and above the impacts associated with the project generally. An asset exchange is anticipated to decrease the impact on avian species, due to the reduction in the number of high-risk turbines in operation and the anticipated reduction in operating capacity for years 2016-2018.

Mitigation Measure BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities

In order to reduce the potential impacts of the proposed project on avian species (to include raptors and special status species), AWI will implement seasonal shutdowns on all turbines for the remaining operational period. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify County CDA each year when turbines have been shut down, and again when they have resumed operating.

Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors, and Special Status Avian Species by Retrofitting Electrical Facilities

AWI will mitigate for the proposed project's additional contribution to golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. This mitigation measure will also benefit mortality reduction for other raptors and special status avian species. The mitigation must occur within 140 miles of the proposed project, the area typically defined by the USFWS as the "local population." The proposed project, with implementation of mitigation measure BIO-16, (together identified as Alternative 1 in the analysis of project alternatives) is projected to result in the fatality of approximately one eagle

(cumulatively, and statistically, 0.7–1.0) when compared to the existing avian baseline condition (the No Project Alternative) (2013 FEIR Table 3.2-5). Although the baseline fatality rate is higher, this mitigation measure addresses the impacts of the 2013 project proposal (with Mitigation Measure BIO-16), which is approximately one additional eagle fatality. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Whereas the approved 2013 CUP modifications were projected to result in about 8 to 11 eagle fatalities (with seasonal shutdown), these were compared to a baseline in which between 7 and 10 eagle fatalities were anticipated; hence the estimate of only one “net” additional eagle fatality as the impact. In addition, the proposed 2014 CUP modifications, for the period 2016-2018 are also compared to a baseline in which 7 and 10 eagle fatalities from turbine operations are also projected. For this reason, the number of additional eagle fatalities, and in turn the number of power pole retrofits to mitigate for the projected number of eagle fatalities is notably greater – 11.1 eagle fatalities, requiring 322 power pole retrofits.

AWI may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion of the retrofits must be provided to the County CDA. USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute between \$322,000 and \$1,288,000 to a third party mitigation account (approved by the County CDA) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County CDA within one year of approval of the proposed project.

The mitigation method of retrofitting offsite electric utility power poles within 140 miles of the project site, to reduce the risk of electrocution to birds (to include eagles, other raptors, and special status avian species), has been endorsed by the County CDA and was included in the 2013 FEIR. Citing the 2012 Draft Eagle Conservation Guidelines released by USFWS and associated technical appendices updates, it was stated in the CUP as Mitigation Measure BIO-17 that one golden eagle fatality resulting from electrocution would be avoided by retrofitting 29 power poles. This would similarly benefit other raptors and special status avian species as well.

Use of power poles for the mitigation of all estimated golden eagle fatalities over the three-year duration of the requested AWI CUP modification would require the retrofitting of 322 poles. To be in compliance with the mitigation requirements of the existing CUPs, AWI must contribute the cost of retrofits to a third-party mitigation account or, alternatively, contract directly with a utility to complete such retrofits. Based on recent AWI discussions with PG&E, the cost per retrofit is between \$1,000 and \$4,000, per pole depending on the type and condition of the pole to be retrofitted. Table 3-8 presents the number of eagle fatalities to be mitigated through power pole retrofits between 2016 through 2018.

TABLE 3-8 ANNUAL NUMBER OF EAGLES FATALITIES TO BE MITIGATED THROUGH POWER POLE RETROFITS

OPERATING YEAR	POLES RETROFITTED	QUANTITY OF GOLDEN EAGLES MITIGATED PER YEAR	QUANTITY OF GOLDEN EAGLES MITIGATED PER PROJECT
2016	108	3.7	3.7
2017	107	3.7	7.4
2018	107	3.7	11.1
TOTAL	322	3.7	11.1

Source: AWI, 2014

Due to the large number of power pole retrofits required, it is reasonably expected that approximately 108 power pole retrofits, or one third of the total required retrofits, will be completed per year of the extended three- year CUP term of the project. This annual retrofit schedule also takes into consideration that repowering could likely occur prior to the end of the three-year extended permit term (i.e., prior to October 31, 2018), and therefore, installed mitigation would follow the operating/impact period.

Mitigation Measure BIO-17a: Compensate for the loss of special-status species, including golden eagles, by contributing to conservation efforts

The Secretary of the Interior issued Order 3330 on October 31, 2013, outlining a new approach to mitigation policies and practices of the Department of the Interior. This approach recognizes that certain strategies aimed at some species can provide substantial benefit to others and to the ecological landscape as a whole. The landscape-scale approach to mitigation and conservation efforts is now central to the Department's mitigation strategy. Although the Order was intended for use by federal agencies and as such is not directly applicable to the County, it is evident that such an approach would likely have the greatest mitigation benefits, especially when considering ongoing and long-term impacts from wind energy projects.

With these considerations in mind, the County has outlined some options that are currently available to compensate for impacts on raptors including special-status species. The options discussed below are currently considered acceptable approaches to compensation for impacts on raptors, in lieu of or in conjunction with Mitigation Measure 17. Although not every option is appropriate for all species, it is hoped that as time proceeds, a more comprehensive landscape-level approach to mitigation will be adopted to benefit a broader suite of species than might benefit from more species-specific measures. The County recognizes that the science of raptor conservation and the understanding of wind-wildlife impacts are continuing to evolve and that the suite of available compensation options may consequently change over the life of a project.

To promote the conservation of raptors, the project proponent may compensate for special-status species raptor fatalities estimated within their project area. The project proponent shall submit for County approval a Special-Status Species Mitigation Plan outlining the estimated number of special-status species fatalities based on the type or types of compensation options to be implemented. The Project proponent will use the Special-Status Species Mitigation Plan to craft an appropriate strategy using a balanced mix of the options presented below, as well as considering new options suggested by the growing body of knowledge during the course of the project lifespan, as supported by a Resource Equivalency Analysis (REA) or similar type of compensation assessment acceptable to the County that demonstrates the efficacy of proposed mitigation for impacts on special-status species. The REA process and an example are included in Appendix G.

REA is an approach to estimate quantitatively the amount of compensatory mitigation that is needed to mitigate impacts on raptors from windfarm operations. The USFWS would use the REA to evaluate the mitigation requirements for golden eagles (USFWS, 2013), but it may also be useful in evaluating the mitigation needs of other species.

The County Planning Director, in consultation with the TAC, will consider, based on the REA, whether the proposed Special-Status Species Mitigation Plan is adequate, including consideration of whether each Special-Status Species Mitigation Plan incorporates a landscape-scale approach such that the conservation efforts achieve the greatest possible benefits. Compensation measures as detailed in an approved Special-Status Species Mitigation Plan must be implemented within 60 days of the permit approval. Special-Status Species Mitigation Plans may be revised—and will be reviewed by the County.

- **Obtaining a programmatic eagle take permit (ETP) and carrying out measures outlined in an approved Eagle Conservation Plan and Bird and Bat Conservation Strategy.** The Project proponent may elect to apply for programmatic eagle take permits from USFWS. The programmatic eagle take permit process currently involves preparation of an Eagle Conservation Plan (ECP) and a Bird and Bat Conservation Strategy (BBCS). The ECP specifies avoidance and minimization measures, advanced conservation practices, and compensatory mitigation for eagles—conditions that meet USFWS’s criteria for issuance of a permit. The BBCS outlines measures being implemented by the applicant to avoid and minimize impacts on migratory birds, including raptors. If programmatic eagle take permits are obtained by the project proponent, those permit terms, including the measures outlined in the approved ECP and BBCS, may constitute an appropriate conservation measure for estimated take of golden eagles and other raptors, including special-status species, provided such terms are deemed by the County to be comparable to or more protective of raptors than the other options listed herein. These measures are optional and voluntary, but may be accepted in lieu of some or all of the required power pole retrofits required by Mitigation Measure BIO-17, if the applicant chooses to implement Mitigation Measure BIO-17a. The option of obtaining an ETP would require the applicant to receive USFWS approval of its ECP, not merely applying for the ETP.
- **Contribute to regional conservation of raptor habitat.** The project proponent may address regional conservation of raptor habitat by funding the acquisition of conservation easements within the APWRA or on lands in the same eco-region outside the APWRA, subject to County approval, for the purpose of long-term regional conservation of raptor habitat. Lands proposed for conservation must be well-managed grazing lands similar to those on which the projects have been developed. The project proponent will fund the regional conservation and improvement of lands (through habitat enhancement, lead abatement activities, elimination of rodenticides, and/or other measures) using a number of acres equivalent to the conservation benefit, as determined through a project-specific REA. The conservation easements will be held by an organization whose mission is to purchase and/or otherwise conserve lands, such as The Trust for Public Lands, The Nature Conservancy, California Rangeland Trust, or the East Bay Regional Parks District. The project proponent will obtain approval from the County regarding the amount of conserved lands, any enhancements proposed to increase raptor habitat value, and the entity holding the lands and/or conservation easement. The REA must be completed and approved within six (6) months of the CUP approval and acquisition of conservation easements be completed within twelve (12) months of the CUP approval. The REA must be accepted by the USFWS and the County.

3.2.3.6 Level of Significance after Mitigation

As detailed above and in the 2013 FEIR, mitigation options for significant impacts on avian species at an existing wind energy generation facility are limited to either operational modifications (i.e., shutdowns, removals) or off-site mitigation. Incorporation of these mitigation options could reduce, but would not eliminate the effects of the proposed project. Even after implementation of any of these mitigation measures, the impacts on avian species would remain **significant and unavoidable**.

3.3 Hazards and Hazardous Materials

The 2013 FEIR’s analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. An issue raised by an area resident during the NOP comment period noted the dispersal of oil from leaking turbine generators as a form of environmental pollution. This issue would fall into the environmental category of Hazards

and Hazardous Materials. This section further investigates new information about the condition of the turbines related to potentially widespread soil contamination from leaking turbine oils or lubricants and analyzes this potential issue as it relates to the operational modifications to AWI's existing CUPs for continued wind power operation and maintenance activities APWRA through October 31, 2018 and associated asset exchange. This analysis investigates if this potential issue is expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant.

3.3.1 Regulatory setting

A listing of the laws and regulations that influence the oversight of hazards and hazardous materials is provided in full detail within the 2013 FEIR. These laws and regulations are relevant for the analysis provided in this FSEIR; as such, the reader is referenced back to Section 3.4.1 of the 2013 FEIR for further details. Additional local regulations relevant to the issue area being analyzed in this FSEIR are provided below.

3.3.1.1 Local

Alameda County Department of Environmental Health

The Alameda County Department of Environmental Health (ACDEH) is the Certified Unified Program Agency (CUPA) for Alameda County. This certification by the California Secretary of Environmental Protection authorizes the ACDEH to implement the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program specified in *Health and Safety Code Chapter 6.11 of Division 20* (beginning with *Section 25404*). As the CUPA, ACDEH oversees the regulatory programs for Hazardous Materials Business Plans, underground and aboveground storage tanks, onsite treatment of hazardous waste, hazardous waste generators, and California Accidental Release Prevention.

3.3.2 Environmental Setting

The environmental setting was defined in the 2013 FEIR. Of particular relevance, project facilities are not located on a site considered hazardous pursuant to *Government Code Section 65962.5*. There are no public or private K–12 schools within 0.25 mile of the proposed project. The nearest school is approximately 2 miles east of project facilities and it is unlikely that hazardous materials will be emitted or released within 0.25 mile of any schools.

3.3.3 Environmental Impacts

3.3.3.1 Method

Existing conditions were determined from a review of published literature, examination of photographs, and review of department internet sources and other documents that describe the potential for hazards and hazardous materials occurrence in the APWRA. No fieldwork or hazardous materials sites database searches were conducted for the proposed program. The analysis assumes continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018.

3.3.3.2 Thresholds of Significance

For this analysis, an impact relating to hazards and hazardous materials would be considered significant under CEQA if it would result in any of the following environmental effects, which are based on professional practice and State CEQA Guidelines Appendix G (14 CCR 15000 et seq.).

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

3.3.3.3 Impacts and Mitigations

Impact HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Less than significant without mitigation)

Wind Turbine Blades

A review of the project wind turbine blades in their current conditions shows evidence of discoloration and usage over the years of operations. This discoloration is primarily caused from staining from ordinary rust and mineral deposits emanating from the steel casting of the hub and blade insert component. Figure 3 below shows a typical 100 kW blade unit in the Altamont Pass, located on the front/west ridge, north of Interstate 580. As can be seen in the figure, each fiberglass blade is equipped with a metal rod through the diameter of the blade arm (known as an IFD rod). This is a non-galvanized steel rod that is subject to rusting. As seen in Figure 4, rust from rain and condensation can travel down the blade during rotation.

There are two sources of lubricant or oil associated with wind turbines. The first is located in the turbine engine housing and acts as a lubricant as well as a cooling mechanism. The second is located out towards the blades/fins themselves. Grease is used to lubricate bearings located at the center of the blade-hub assembly and, as these blades/fins rotate in a circular motion (depending on the wind direction and wind speed), they can be adjusted in pitch to maximize efficient energy production and minimize potential turbine tower stress. Within this housing structure there is grease/lubricant; the viscosity of which would not allow it to travel much further than as pictured in Figure 3 and Figure 4. This grease/lubricant typically loses its color through ambient sunlight; however, overtime, through wind and dust/grit, it will pick up and regain some sense of color. An excess of approximately 50 gallons of this grease/lubricant (for these facilities) would be required to reach the ground through the blades/fins, which is unlikely since this is well beyond the turbine gearbox capacity. By the nature of physics, gravity would dictate that this lubricant would run down the turbine support structure first rather than migrate out to the blades themselves. However, the high viscosity of the grease used in the wind turbines prevents it from seeping far from the center of the hub, contributing minimally (if any) to the long streaking seen in the figures.

Regular monitoring and maintenance maintains wind turbines in safe operating condition throughout the year. AWI's regular maintenance program is conducted in accordance with industry standards and complies with all relevant best practices to address and prevent hazardous conditions from developing at its turbine sites regardless of a wind turbine age. To manage rust staining and any traces of grease on the blades, blades are washed as needed at an off-site commercial facility. Wind turbines are never washed on site.

AWI's wind turbines are monitored through a centralized control system 24 hours per day. AWI's 100 kW wind turbines are each fitted with a series of alarms that are shown on the main control system display. An alarm will display if any functional problem occurs in a given wind turbine or if the wind velocity is outside the turbine's operating parameters. When triggered, an alarm displays a code specifying the general nature of the malfunction. Any alarm that is generated will also cause the wind turbine to go into a shutdown mode, allowing maintenance crews to visit the turbine and assess the nature of the problem. Wind turbines communicate with the control system every two seconds; as such, technical and maintenance crews are alerted as problems occur.

A visual monitoring system is used to inspect turbines and determine when turbines require maintenance. Crews monitor conditions in and around wind turbines regularly, and malfunctioning turbines are temporarily removed from service and/or repaired as needed.

The applicant also undertakes a preventative maintenance program each winter off-season to minimize the possibility of malfunction during the summer wind season. Preventative maintenance includes, among other activities, rotor blade and pitch sensor calibration, blade shaft rotational torque testing, drive shaft alignment check, pitch actuator brake/clutch functional testing, power factor correction circuit generator circuit insulation testing, and blade repair.

FIGURE 3 CLOSE-UP VIEW OF WIND TURBINE BLADE IFD ROD



FIGURE 4 **CLOSE-UP VIEW OF RUST STAINING EMANATING FROM WIND TURBINE IFD ROD**



Step-Up Transformer

A leaking step-up transformer on the ridge overlooking residences along Dyer Road associated with the project wind facilities currently has a minor leak from one of its cooling fins. The applicant is aware of this issue and has scheduled repair for this unit during the upcoming winter off-season. Oil contained in the transformer consists of a non-toxic, non-petroleum-based mineral oil that does not contain polychlorinated biphenyls (PCBs). Previous soil testing of the soil that was known to have been exposed to mineral oil from a transformer returned a “non-hazardous” determination (Appendix B).

In accordance with Appendix G of the State CEQA Guidelines, the project would be considered to have a significant effect if it would create a significant hazard to the public or the environment through the use or disposal of hazardous materials. The proposed project consists of the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange and does not involve the transport or use of any additional hazardous materials.

As detailed in Chapter 3-4 of the 2013 FEIR, a majority of hazardous materials to be used during operations are of low toxicity and would consist of fuels, oils and lubricants. As these materials are required for operation of construction vehicles and equipment, BMPs (Section 3.4.1.3 of the 2013 FEIR) would be implemented to reduce the potential for or exposure to accidental spills involving the use of hazardous materials. Upon further analysis, the project wind facility conditions in their current state and with the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange is not expected create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. As discussed in the 2013 FEIR, the project would also not expose people to airport-related hazards, or to impair implementation of any adopted emergency response plan or emergency evacuation plan. There are no public or private K-12 schools within 0.25 mile of the proposed project. The nearest school is approximately 2 miles east of project facilities and it is unlikely that hazardous materials will be emitted or released within 0.25 mile of any schools under the proposed project. As such, impacts would be less than significant.

Mitigation

No mitigation measures are required.

3.3.3.4 Level of Significance after Mitigation

Impacts would be less than significant without mitigation.

4.0 LIST OF PREPARERS AND OTHERS CONSULTED

4.1 County of Alameda Community Development Agency

- Sandra Rivera – Assistant Planning Director
- Andrew Young – Project Planner

4.2 POWER Engineers, Inc.

- Chris Knopp – Project Manager, EIR Preparation
- Dave Dean – Biological Resources
- Dr. Joe Platt – Biological Resources
- John Everingham – Senior Technical Review
- Yvonne Ulloa – Editor

5.0 REFERENCES

- ICF International. 2013. Final Environmental Impact Report for Modification to Existing (Year 2005) Conditional Use Permits for Altamont Winds Inc. July. Prepared for County of Alameda (State Clearinghouse No. 2012062060).
- ICF International. 2014. *Program Environmental Impact Report for the Altamont Pass Wind Resource Area*. June. Prepared for County of Alameda. (State Clearinghouse No. 2010082063).
- Shuford, W. D., and Gardali, T., editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1*. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento.
- Williams, D. F. 1986. *Mammalian Species of Concern in California. State of California. The Resources Agency*. California Department of Fish and Game. Sacramento, California.
- U.S. Fish and Wildlife Service. 2012. *Eagle Conservation Plan Guidance: Module 1 – Land-based Wind Energy Technical Appendices*. Draft Under Review. Division of Migratory Bird Management. August.
- Jennings, M. R. and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Rancho Cordova, CA: California Department of Fish and Game, Inland Fisheries Division.

APPENDIX A
COMMENT LETTERS
AND
RESPONSE TO COMMENTS

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APPENDIX A: RESPONSE TO COMMENTS

A.1 Introduction

The 86 MW Altamont Wind Farms Project (project) Draft Supplemental Environmental Impact Report (DSEIR) review period began on November 17, 2014 and concluded on January 12, 2015, including a ten (10) day extension provided at the request of some of the speakers at a Public Hearing held on December 18, 2014]. The original public review period end date of January 2, 2015 was extended ten (10) days to January 12, 2015 in recognition of the Winter holiday period. During this public review period, a total of nine (9) written comments were received.

According to the California Environmental Quality Act (CEQA) Guidelines Section 15088(a), “the lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response.” This chapter of the Final DSEIR contains comment letters received and responses to those comments in Section A.3, Written Comments and Responses; the comment letters are numbered and responses are labeled accordingly, and are presented in the order received. Comments were evaluated, and consistent with CEQA Guidelines, Section 15088, good faith, reasoned responses have been prepared for substantive comments referencing significant environmental issues or issues relating to the adequacy of the EIR, and are presented in this chapter. Those comments that did not address the adequacy of the DSEIR, raise significant environmental issues, or request additional information/analysis did not require a substantive response, but have been numbered for reference purposes.

Numerous comments closely paralleled other submitted comments. In order to reduce redundancy, seven Master Responses have been prepared to address the most prevalent comments. Separate responses to individual comments may refer the reader to one of the Master Responses, or to a previously provided response to a similar comment. Verbal comments received during the Public Comment Meeting on December 18, 2014 are summarized in Table A-4. A total of four (4) speakers provided comments.

A.2 Written Comments

Table A-1 lists all the written comments from agencies, organizations, and interested individuals.

TABLE A-1 WRITTEN COMMENTS FROM AGENCIES, ORGANIZATIONS, AND INTERESTED INDIVIDUALS

LETTER	COMMENTING AGENCY/ORGANIZATION/INDIVIDUAL	DATE OF COMMENT LETTER
1	U.S. Fish and Wildlife Service	12/10/14
2	Alameda County APWRA Scientific Review Committee	12/12/14
3	Bob Cooper	12/21/14
4	East Bay Regional Park District	12/23/14
5	State of California Department of Justice Attorney General	12/31/14
6	Save Mount Diablo	1/9/15
7	Richard Cimino	1/12/15
8	California Department of Fish and Wildlife	1/12/15
9	Audubon California	1/12/15
Public Meeting		
PM 1	Bob Cooper	12/18/14
PM 2	Doug Bell, for East Bay Regional Park District	12/18/14
PM 3	Michael Lynes, for Audubon California	12/18/14
PM 4	Rick Koebbe, for Altamont Winds, Inc.	12/18/14

A.3 Responses

A.3.1 Master Response 1 – Fatality Calculation and Use of MW-Years

Several commenters stated that it appeared that fatalities were being calculated on the basis of only a portion (0.708) of a “MW-year” as defined in the annual APWRA-wide Monitoring Reports, and that no such “subtraction” should have been applied. As used in the APWRA Monitoring Reports, a MW-year reflects 8-½ months of operation per year based on the 3-½-month winter season shutdown, and therefore the fatality rates account for the seasonal shutdown. Neither the fatality rates nor the MWs associated with the currently proposed project were adjusted to obtain the projected avian fatality results, by 0.708 or any other factor. Consistent with the impact assumptions established in the 2013 FEIR (see page 3.2-16 of the Draft EIR), avian fatalities are directly proportional to the operational period.

The comments state that the evident “subtraction” leads to underestimated fatalities. This comment, which was stated in the Comments of the APWRA Scientific Review Committee on the DSEIR, was repeated by several other commenters in various other forms. Notably, the comment was stated as a repeated comment made regarding the 2013 DEIR on the prior use permit modifications project by SRC member Julie Yee. Related comments on the 2014 DSEIR state that due to such under-representation the mitigation measures should be proportionally increased, by roughly 40 percent.

County staff believes there has been a substantial misunderstanding of the way in which the current proposal and the other alternatives under consideration in the 2013 FEIR were defined, and how the term “MW-years” was used. Firstly, the original comment on the 2013 DEIR (Comment I4-1, page 7 of the SRC Comments) stated with regard to Table 4-1 in the DEIR (showing installed MW capacity for the 2013 project and each of the alternatives) that “Since MW capacity changes over time, with removal of turbines, then MW cannot be summarized by a single value.” While it is correct that MW capacity would be different from the 2013 project and among each of the alternatives, there would be no changes in MW over time, between 2013 and 2018 that were not shown in Table 4-1 in the DEIR. It was not the intent of the 2013 FEIR for the total MWs for the 2013 project and alternatives to be shown as a single value, but to show the *cumulative* total installed capacity for each scenario between 2013 and 2018. The total quantities of MWs proposed to operate between 2013 and 2018 under each scenario were multiplied by the fatality rates to obtain the projections of total fatalities, in both the 2013 FEIR and the 2014 DSEIR.

In retrospect, it should be recognized that “installed capacity” as used in the 2013 FEIR may be a misnomer, and could be better described as “allowed capacity” or in the case of the 2013 project, “proposed capacity”. For example, Alternative 1, which became the approved modification of the CUPs, provided for an “installed capacity” (or allowed capacity) of 128.7 MW between October 1, 2013 and October 31, 2015, based on 60.8 MW of operation in each of the years 2014 and 2015, and one month of full operation of AWI’s total 828-turbine windfarm in 2013 (7.2 MW). The results shown in Table 3.2-5 in the 2013 DEIR for Alternative 1 are the result of multiplying the total allowed capacity over the two years and one month of operations in MWs, i.e., 128.7, times the lower and higher mortality rates, such as for the American kestrel, 0.433 to 0.496 (resulting in the range of 57.0 to 63.8 projected American kestrel fatalities).

Therefore, no such “subtraction” was applied in calculating the projected numbers of fatalities of birds for the 2013 project or alternatives, or in turn, for the 2014 proposed modifications. To reiterate, the 2013 FEIR and the DSEIR simply used the fatality rates identified in the APWRA Monitoring Reports and multiplied the MWs of installed nameplate capacity that would be operated *over the total remaining months and years of each alternative*, beginning with October of 2013. October 1, 2013 was when AWI was originally required to shut down 25 percent of its original 920 turbines and therefore represents a point in time after which each of the alternatives, including the no project alternative, would begin to

deviate from each other in the MWs yielded in their respective time periods. It is recognized that the time periods of the 2013 proposal and alternatives vary in length of time from each other.

The factor of 0.708 was used in the 2013 FEIR (see pages 4-15 and 4-16, discussion of “Calculated Installed Capacity”) only to represent that due to the winter seasonal shutdown, the installed capacity of the turbines operated by AWI – *capable* of operating all 12 months of the year, would only be *permitted* to operate 8½ months of each year under each of the alternatives – with the exception of the 2013 project proposal to operate without a winter seasonal shutdown. Readers are directed to take note of Table 3-2 in the DSEIR, which has been reproduced below as Table A-2 with one supplemental row of data incorporating 2013 FEIR Alternative 1, the current CUP installed capacity scenario through 2019 (and modified the Table title). A closely similar table was included in the 2013 FEIR (3.2-3a, page 4-16).

TABLE A-2 SUMMARY OF INSTALLED OR PERMITTED CAPACITY PER MEGAWATT YEAR AND TOTAL FOR EACH SCENARIO

SCENARIO	2013	2014	2015	2016	2017	2018	2019	TOTAL MW – YEARS
2013 FEIR Proposed Project	21.5	85.8	85.5	0.0	0.0	0.0	0.0	193.1
2013 FEIR No Project Alt.	5.2	44.5	32.1	11.9	11.9	10.9	0.0	116.5
2013 FEIR Alternative 1 (Current CUP conditions)	7.2	60.8	60.8	0.00	0.0	0.0	0.0	128.7
2013 FEIR Alternative 3	7.2	60.8	60.8	60.8	60.8	60.8	0.0	311.0
Years 2016 - 2018	-	-	-	60.8	60.8	60.8	0.0	182.4

Although it could have provided more clarity, Tables 3.2-4, 3.2-5 and 4-2 in the 2013 DEIR, and Tables 3-3 through 3-5 in the Draft SEIR did not include columns that would show the MWs that were being multiplied by the fatality rates to yield the results that were shown in those Tables. Table 3.2-4 in the 2013 Draft EIR, it should be noted, only showed the results of the 2013 proposed project (operations without the winter seasonal shutdown).

The 2013 FEIR acknowledged that the projected mortality results for the 2013 project itself, without the winter seasonal shutdown were biased low, because the rates could not be easily adjusted upwards to reflect both the year-round operation – 85.8 MWs per year – *and* the higher anticipated mortality rates during the winter season, when avian use of the APWRA is heightened (and which is the reason the seasonal shutdowns were established in 2005). However, the current DSEIR does not address any alternative involving operations during the winter season, and therefore no adjustments to the mortality rates (or to the permitted/installed capacity MW totals for each scenario) are required.

The impact analysis in the DSEIR augments the analysis of the 2013 FEIR, including Alternative 3, to provide the level and scope of analysis necessary to respond to the proposed change in the project; as such, to be consistent with the 2013 FEIR, the DSEIR analysis uses the same methodology. As used in the APWRA Monitoring Reports, a MW-year reflects 8-½ months of operation per year and the fatality rates therefore have a built-in accounting for the seasonal shutdown. The number of MWs operating in each year is therefore 60.8 MW annually, for the 85.8 MW wind power plant. Therefore the comparisons among the various scenarios currently under consideration, none of which include operations during the winter season, are consistent with the definition of MW-years.

A.3.2 Master Response 2 – Baseline

Four commenters expressed the opinion that the correct baseline for the DSEIR, from which the impacts of the proposed extension of operations for three years (2016-18) should be compared and defined, should be the conditions that would exist in that period under the existing CUPs, which require that all operations cease on October 31, 2015. A related comment (CA DOJ 5-8) stated that the primary comparison that appeared to have been made for the project analysis was between the current proposal and the original 2013 project proposal that was not approved by the County. Other comments on this theme stated that the fatality rates used were faulty because they should be based on the termination of turbine operations in the extension period of 2016-18.

Because the DSEIR is a *supplement* to the 2013 FEIR, the baseline used in the DSEIR is *primarily* the same baseline as described in the 2013 FEIR, for phased decommissioning of turbine operations between 2013 and 2018 (removal of 25 percent of the original 920 turbines in 2013, and removal of an additional 50 percent in 2015). It is recognized that if the permit extension for three years was being evaluated in a new EIR, separate from the 2013 FEIR, the baseline condition might have been conditions without AWI operations. However, it is the intention of the SEIR to provide a comparison of the proposed CUP extension through 2018 with the project approved in 2013, and revisions reflected in the strike-out-underline version in this FSEIR provides both an updated Table 3-5 (which is the same as Table 1.3-1 above) to show fatality results projected from the current CUPs (Alternative 1 in the 2013 FEIR), and added discussion.

CEQA Guidelines Section 15125 provides direction on the baseline conditions to which a project must be compared in an EIR. In accordance with this direction, baseline often represents conditions at the time of the project's NOP circulation; however, CEQA Guidelines Section 15125 also authorizes the lead agency to choose a baseline that most accurately reflects actual conditions, in cases where choosing the existing physical conditions at a single point in time would be misleading or would misrepresent a proposed project's potential impacts. For the purposes of this document, the County has retained the baseline used in the 2013 FEIR, adding analysis to evaluate the changes in project scope. In other words, for the SEIR the baseline for impacts and the resulting significance conclusions are determined on the basis of the No Project Alternative as defined in the 2013 FEIR (i.e., phased decommissioning) as the baseline.

Perhaps more importantly, as discussed in Master Response 1 above, the baseline is defined not as existing conditions at a single point in time, but as the *cumulative* total of permitted installed capacity (or allowed capacity) over the time period associated with the No Project Alternative. This definition of the baseline provides for the most effective means of comparing the proposed projects (the original 2013 proposal, and its alternatives, including the current project proposal for extension of the CUPs) for their respective impacts, particularly on total avian mortality in each respective or applicable period of time.

A.3.3 Master Response 3 – Asset Exchange and Reduction of HRTs

Several commenters raised questions regarding the role of HRTs in the SEIR analysis. Commenters assert that the DSEIR appears to consider HRT reduction as a way of reducing the environmental impacts of the project or that the asset exchange represents a form of mitigation. One comment stated that although the DSEIR shows which turbines may be exchanged, it does not indicate which turbines are in poor condition and claims there could be an increase in average capacity depending on the ratio of derelict/functional wind turbines exchanged.

The mitigation measures in the DSEIR document have been clearly defined separately to address the estimated avian impacts with an extension of the CUP term to 2018. These Mitigation Measures are separately and clearly defined as BIO-16, BIO-17 and BIO-17a.

As indicated in the DSEIR, as proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. The asset exchange represents a potential change in physical location of the project as proposed by the applicant in order to further the goals of separating intertwined physical assets. The asset exchange was not introduced as a project modification intended as a means of reducing avian impacts for this project, although it is expected to facilitate repowering.

Avian mortality impacts have been analyzed in the DSEIR to estimate the range of potential impacts under an extension of the CUP. As indicated in the DSEIR, the number of HRTs will be reduced by the proposed asset exchange. Applying the 2013 FEIR APWRA-wide fatality rate methodology to the turbines affected by the asset exchange would result in no greater impact on avian mortality than projected fatality results without any asset exchange. As indicated in the DSEIR, on a statistical level the asset exchange would have no effect on the impacts of the project (i.e., no difference whether the asset exchange does or does not occur) (DSEIR, page 32).

It should be noted, the DSEIR does not claim that a reduction in HRTs would directly mitigate estimated avian impacts, rather, should removal of HRTs result in a reduction in avian impacts, the asset exchange would have positive impacts on reducing avian mortality. The reduction in HRTs, or removal of turbines considered by some to have the potential to reduce turbine-related avian fatalities within the APWRA, has been recognized by the Monitoring Team (M-TEAM) and Altamont Pass Scientific Review Committee (SRC) as a primary management action to reduce avian fatalities in the APWRA (Pg. 1-3 of the APWRA Bird Fatality Study, 2014). The APWRA Bird Fatality Study 2014 report provides evidence consistent with the hypothesis that removal of hazardous turbines may result in lower fatality rates for this species.

Also noted, as a result of the asset exchange under this project, it is likely that AWI's operating capacity will be reduced through the exchange, because AWI will exchange its twenty 250 kW wind turbines for twenty 100 kW wind turbines. Considering the per-MW method of fatality calculations utilized by the SRC and the M-TEAM, aggregate project capacity would be reduced by 5.3 MW over three years. This potential reduction in MW is described as an informational item, but is not reflected in the calculations of estimated avian fatalities under the proposed project (Tables 3-2 through 3-5) because the asset exchange remains only a potential change to the project and because there is no proposed change to the total permitted capacity of the windfarm (85.8 MW).

Some commenters stated that although the DSEIR shows which turbines may be exchanged, it does not indicate which turbines are in poor condition and claims there could be an increase in average capacity depending on the ratio of derelict/functional wind turbines exchanged. The SEIR does not claim that the asset exchange would serve to provide any mitigation, and because it is not numbered as such, no further analysis of it for that purpose is required.

A.3.4 Master Response 4 – Inadequacy of Mitigation Measures

Several comments were made questioning the specificity of certain mitigation measures offered in the DSEIR document. The commenters stated that Mitigation Measure BIO-17a lacked any guaranteed obligation that it be implemented by the project proponent. The commenters also asserted that developing a list of general options post-EIR approval would not allow for sufficient analysis of the extent to which mitigation offsets impacts (Comment SRC 2-22). The commenters also requested clarification on the description of the pole retrofit mitigation measure and how the estimation of retrofitted poles was derived.

The DSEIR identifies mitigation measures to address estimated project impacts. These measures will be implemented by the project proponent as detailed within the DSEIR document. The 2013 FEIR mitigation program addresses the impacts identified in the 2013 FEIR document and the FEIR was certified. The

2014 DSEIR was prepared to provide an additional analysis necessary to make the previous 2013 FEIR apply to the project as modified; as such, the mitigation measures as detailed in the 2013 FEIR document would also address those relevant impacts raised in the DSEIR document. Mitigation Measures BIO-16, BIO-17 and BIO-17a in the DSEIR address estimated avian impacts which would result from continued operation of the project until 2018. These specific measures include a seasonal shutdown (BIO-16) of wind turbines from November 1 of year of operation until February 15 of the following year, as required by the 2013 FEIR. The seasonal shutdown was listed as one of the primary management actions that have been taken to reduce avian fatalities in the APWRA. (Pg. 1-3 of the APWRA Bird Fatality Study, 2014)

Second, the County required implementation of Mitigation Measure BIO-17 after considering and rejecting a number of other mitigation measures. Retrofitting of power poles is a compensatory mitigation recognized by the U.S. Fish and Wildlife Service (USFWS) Eagle Conservation Plan Guidance (USFWS April 2013 pgs. v, 21) and is the only one currently being used in an incidental take permit for golden eagles.

The mitigation method of retrofitting offsite electric utility power poles within 140 miles of the project site, to reduce the risk of electrocution to birds (to include eagles, other raptors, and special status avian species), was included in the 2013 FEIR. Citing the 2012 Draft Eagle Conservation Guidelines released by USFWS and associated technical appendices updates, Mitigation Measure BIO-17 is based on the expectation that one golden eagle fatality resulting from electrocution would be avoided by retrofitting 29 power poles. This would similarly benefit other raptors and special status avian species as well. The cost of power pole retrofitting may be coordinated between the utilities and the Service. Based on the DSEIR Table 3-3 estimates of 11.1 golden eagle fatalities resulting from operations from 2016 through 2018, a total of 322 additional power pole retrofits would be required (i.e., $29 \times 11.1 = 322$). A small error in Table 3-8 in the DSEIR has been corrected in the FSEIR.

As indicated in the DSEIR in Mitigation Measure BIO-17a, several options to compensate for impacts on raptors are currently available, which were identified in the APWRA Repowering Program EIR. The intention of Mitigation Measure BIO-17a is to expand upon mitigation the applicant is required to implement under Mitigation Measure BIO-17. Measures outlined in BIO-17a can be implemented in lieu of or in conjunction with Mitigation Measure 17. However, Mitigation Measure BIO-17a simply provides the *option* for alternative mitigation strategies that may be accepted as adequate mitigation and/or compensation by the County. Furthermore, BIO-17a provides the option of an Eagle Conservation Plan and Bird and Bat Conservation Strategy or contribution to regional conservation raptor habitat. Some measures are targeted to benefit certain species, but they may also have benefits for other raptor and non-raptor species. Although not every option is appropriate for all species, it is intended that through the completion and approval of a Resource Equivalency Analysis (REA) and subsequent conservation and compensation strategies, are feasible and available means of mitigating avian impacts.

It should be noted that Mitigation Measure BIO-17a has been modified to eliminate the second, third and fifth bulleted paragraphs/options, in response to some comments received on the DSEIR, due to uncertainty regarding effectiveness and feasibility. The DSEIR text has been modified to identify the remaining available mitigation options, and improve implementation of the measures.

If the project proponent chooses to implement Mitigation Measure BIO-17a, it will be required to submit for County approval, within 60 days of an approval of the CUP extension, a Special-Status Species Mitigation Plan outlining the estimated number of special-status species fatalities based on the type or types of compensation options to be implemented. The County Planning Director, in consultation with the Technical Advisory Committee (TAC) for conservation, will consider whether the proposed Special-Status Species Mitigation Plan is adequate, including consideration of whether the Mitigation Plan incorporates a landscape-scale approach such that the conservation efforts achieve the greatest possible

benefits. Compensation measures as detailed in an approved Special-Status Species Mitigation Plan are required be implemented within 60 days of the Mitigation Plan approval.

A.3.5 Master Response 5 – Cumulative Impacts on Avian Populations

Several comments raised issue with the DSEIR document asserting it did not address the effect of the death of avian predators on local or regional breeding, wintering and migratory populations. In addition, commenters noted the DEIR fails to adequately assess cumulative impacts and that the USFWS policy on Golden Eagles allows for approximately 5 percent of local populations to be taken by human activities, but in the Altamont Pass, nearly 12 percent are taken by turbines. Commenters noted that the DSEIR fails to consider this or other cumulative impacts on Golden Eagles and other birds.

The County recognizes that significant, cumulative and unavoidable adverse impacts on the broader ecological character of the APWRA would result from project operations, and the DSEIR provides both Mitigation Measures BIO-17 and BIO-17a to mitigate and compensate for these impacts. Quantifying the specific nature of the ecological issues is extremely challenging; however, it is the intent of Mitigation Measure BIO-17a to provide compensation and conservation strategies, using the REA, that can address the ecology issues on a landscape-scale basis. In addition, the SEIR is intended to supplement and augment the 2013 FEIR, and preparing a new or expanded scope of assessment or methodology to define new impacts would not be consistent with the 2013 FEIR.

The 2013 FEIR included Table 5-1 describing energy-related projects in the vicinity that were anticipated at the time the 2013 DEIR was circulated. The DSEIR is an augmentation of the 2013 FEIR, which was prepared with awareness of these projects. Two of the four energy-related projects listed in Table 5-1 were repowering projects, which were described in the 2013 FEIR as being expected to result in an overall reduction in the impact of wind energy on avian species. The County recognizes that the fatality rates of repowered wind plants, while still being researched as a result of the Program EIR, will likely be substantially lower. However, the determination in the 2013 FEIR that the cumulative impacts of the AWI operations, including the alternatives of extending to 2016 or 2018, would be cumulatively significant and unavoidable. This SEIR does not result in different findings.

A.3.6 Master Response 6 – Current Monitoring Data

Several commenters question why the DSEIR relies on previous versions of Avian Monitoring Reports to estimate APWRA-wide avian fatality rates per MW per year. Commenter suggest that results from the more comprehensive Avian Monitoring report for the years 2005-2012 (ICF international, 2014) be incorporated into these estimates.

The DSEIR uses the 2008-2010 fatality rates because data prior to 2008 is not indicative of the current condition of the APWRA and AWI's wind farms (Altamont-wide wintertime seasonal shutdown of wind turbines was not fully in place until 2008). The 2011 and 2012 monitoring data was not included as it was not available when the 2013 EIR was being prepared. For consistency between the 2013 FEIR and the DSEIR, the 2008-2010 fatality rates should be used as the basis for comparing avian impact analysis. However, data sets utilizing fatality rates from the APWRA Bird Fatality Study, Bird Years 2005-2012 (SRC Document M101) have been included in the strike-out-underline section in Appendix C of this document.

As a revision, the FSEIR document includes data from the Avian Monitoring report for the years 2005-2012 (ICF international, 2014). A comparison of adjusted species fatality totals of the four focal species, based on an average fatality rate (fatalities per year) was included in Table 3-5 in the DSEIR. The average fatality rates, as indicated in the first column of Table 3-5, give a range of fatalities per MW using data

gathered from APWRA-wide avian monitoring results in order to provide a range of estimated fatalities. As can be seen in the strike-out-underline version of this FSEIR document, inclusion of the 2005-2012 adjusted APWRA-wide avian fatality rates Per MW year does not substantially change the estimated fatality range, as the average fatality rate for the 2005-2012 monitoring years falls within the average fatality rates for the previous monitoring years.

A.3.7 Master Response 7 – Overriding Considerations

Some commenters stated that the SEIR does not contain the information necessary to support a Statement of Overriding Considerations, which would need to be prepared in conjunction with any project approval. As such, this comment is directed more toward the project itself and the adequacy of a potential Statement of Overriding Considerations document, than toward the adequacy of the SEIR itself. The purpose of an EIR is to provide information regarding the environmental effects of a project. If an agency approves a project despite the environmental effects described in the EIR, it must adopt a Statement of Overriding Considerations explaining that the project's benefits outweigh, or override, the environmental effects, as described in the EIR. The commenter suggests that the information forming the basis for the project's benefits, which would be described in a separate Statement of Overriding Considerations document, should also be included in the SEIR. The purpose of the SEIR is to supplement the 2013 FEIR with additional information based on the proposed changes to the project. A Statement of Overriding Considerations may be based on information from the 2013 FEIR, SEIR, or other information in the record.

The SEIR evaluates the environmental effects of the project changes proposed by the applicant. The County must comply with CEQA in processing an application for a CUP modification that could result in significant environmental effects. The CUP modification requested by the applicant is substantially similar to Alternative 3 of the 2013 FEIR. As a project alternative in the 2013 FEIR, operation to 2018 without phased decommissioning was considered an infeasible option. Nevertheless, in order for the SEIR to serve as an informational document to inform the County's decision makers and the public about the potential environmental effects of the CUP modification currently proposed by the applicant, the SEIR must accurately describe and analyze the project as proposed. To that end the SEIR analyzes operations through 2018 without phased decommissioning.

Letter 1: U.S. Fish and Wildlife Service

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Southwest Region
Office of Law Enforcement
2800 Cottage Way, Suite W-2928
Sacramento, California 95825

In Response Reply To:
2014802823

December 10, 2014

Ms. Sandra Rivera
County of Alameda
244 W. Winton Avenue, Room 111
Hayward, CA 94544

Dear Ms. Rivera:

The U.S. Fish and Wildlife Service (Service) received Alameda County's *Notice of Availability of a Draft Supplemental EIR for Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI): 2018 CUP Extension*, dated November 17, 2014. Our comments are in the context of our legal mandate and trust responsibility to maintain healthy migratory bird populations for the benefit of the American public pursuant to the Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.; MBTA) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; Eagle Act). This letter supplements our October 15, 2014, and April 19, 2013, comment letters regarding the *Notice of Preparation of a Supplemental EIR for Proposed Modifications to Existing Conditional Use Permits – AWI*, and the *Draft Environmental Impact Report (DEIR) for the Modifications to Existing (Year 2005) Conditional Use Permits (Project) for the Altamont Winds Inc.*, respectively (attached).

1-1

Our records indicate that over the past 10 years, wind turbines owned and operated by AWI in the Altamont Pass Wind Resource Area (APWRA) have been associated with the fatality and/or injury of an estimated sixty (60) Golden eagles, not including at least seven (7) during 2014, totaling sixty-seven (67) eagles. In addition to Golden eagles, the following approximate number of focal species have been recorded as fatalities and/or injuries associated with wind turbines owned and operated by AWI in the APWRA over the past 10 years: eighty (80) American Kestrels; fifty-seven (57) Burrowing Owls; and one hundred and seventy-two (172) Red-tailed Hawks.

1-2

The Service published an eagle permit rule in 2009 authorizing the issuance of eagle take permits for certain otherwise lawful activities where “take is associated with, but not the purpose of the activity, and cannot practicably be avoided.” The Service has met with AWI and encouraged the company to develop an Eagle Conservation Plan and apply for an eagle take permit. On July 1, 2014 my office reminded AWI that since issuance of the eagle take permit regulations in late 2009, approximately thirty-one (31) unpermitted golden eagles have been recorded at AWI facilities in the APWRA. Without an eagle take permit, every eagle death resulting from impacts with wind turbines is a violation of the Eagle Act. Although AWI has indicated they intend to

1-3

apply for an Eagle Take Permit, we have not yet received a permit application from AWI nor been advised that the company is working on an Eagle Conservation Plan. AWI continues to demonstrate reluctance to take substantive action to avoid, minimize or mitigate its significant adverse impacts to species protected under the MBTA and the Eagle Act. And while the Service to date has refrained from taking action under its federal wildlife protection statutes against companies operating in the APWRA who have entered into agreements with interested parties and are actually taking actions to replace old generation turbines, thoughtfully site new turbines, and mitigate unavoidable impacts, AWI is not in this category.

1-3
Cont.

The Service recommends that Alameda County deny AWI's proposed project modifications request to their operational and decommissioning schedule, and enforce AWI's current permit requiring removal of its 828 existing wind turbines by October 31, 2015.

1-4

Sincerely,



Jill Birchell
Special Agent in Charge
Office of Law Enforcement

cc:

Craig Weightman, California Department of Fish and Wildlife, Environmental Program Manager
Eric Davis, U.S. Fish and Wildlife Service, Migratory Birds and State Programs
Tara Mueller, California Attorney General's Office, Deputy Attorney General

Response 1-1

This is an introductory comment.

Response 1-2

The commenter states that their records indicate that over the past 10 years, AWI's turbines have been associated with the fatality and/or injury of estimated avian species as indicated in the letter. While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no response is required.

Response 1-3

The commenter states that the Service encourages AWI to develop an Eagle Conservation Plan (ECP) and apply for an eagle take permit. While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no response is required.

Response 1-4

This comment raises an opinion regarding the merits of the project proposal. While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no response is required.

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Letter 2: Alameda County APWRA Scientific Review Committee

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particularly with regard to potential avian mortality, and thus determined that the proposed modification would be subject to a Supplemental EIR (DSEIR).

2-5
Cont.

The DSEIR proposes an extension of the operational period of all active AWI turbines through 2018, and retains the seasonal shutdown requirement. The effect of this, as analyzed in the DSEIR, is an increase in avian and bat mortality above that anticipated in the approved 2013 FEIR. Alternative 3 in the 2013 FEIR was considered the least environmentally sensitive alternative and was considered infeasible in the 2013 FEIR due to the substantial increase in avian mortality effects. The DSEIR estimates that overall avian mortality would roughly double with an operational extension to 2018, and with additional proposed mitigation considers the avian mortality a significant and unavoidable impact.

2-6

The SRC was asked to address the following questions regarding the DSEIR:

- Are the avian impacts fully identified in the DSEIR?
- Are the mitigation measures appropriate/suitable?

Are the Avian Impacts Fully Identified in the DSEIR?

With this 3-year extension, the total number of fatalities for focal species almost doubles from the estimated level under the proposed project (Alternative 1 with winter shutdown) in the certified FEIR. This increase in fatalities is very concerning.

2-7

Impact on Golden Eagle Fatalities

As stated in the USFWS comment letter, it is the policy of the Service that rates of take for a local eagle population should not exceed 5% annually, whether the impacts of a given project have been offset by compensatory mitigation or not, to ensure sustainable populations. In a recent analysis of impacts for a local windfarm, the current take rate for the APWRA golden eagle local area population was approximately 12% annually. This does not bode well for the local eagle population.

2-8

Recommended Changes to Analysis to Fully Identify Avian Impacts

Population Impact Analysis

The DSEIR uses the fatality data and projected estimates from the 2013 FEIR, which are derived from annual monitoring in the APWRA since 2005. Impacts to avian resources are described solely in terms of the number of fatalities. The magnitude (or significance) of the impact is apparently a function of a change in the number of fatalities. What is not addressed and arguably more important is the effect of this change in fatalities on local or regional breeding, wintering, and migratory populations. Addressing the impact as simply the number of dead birds ignores the many related ecological issues involved with reducing predator populations.

2-9

The analysis uses the mortality monitoring data as the basis for analyzing impacts. Mortality monitoring data, fatality estimates, and mortality projections are extremely useful in efforts to more effectively design, site, and modify wind turbine operations in order to reduce the number of avian and bat fatalities. That has been the purpose of the monitoring effort in the APWRA since 2005. But that is not the extent of what a CEQA analysis is intended to do. Simply estimating the difference in the number of dead birds is an insufficient and incomplete impact analysis. A CEQA analysis should use the fatality data and other local and regional information to identify and at least attempt to analyze the effect of this mortality on local and regional populations and any other biological interrelationships. In this regard, the impact analysis in the DSEIR is incomplete. All we know from the DSEIR is that there will be more dead birds if operations are extended through 2018, and therefore the impact remains significant and unavoidable. This result was already strikingly intuitive.

2-10

The DSEIR estimates the additional mortality that would occur under the proposed project from 2016 to 2018. Other than the discussion of the asset exchange, the effect of which is unclear but likely to be minimal at best, that estimation, which can be generally derived from the 2013 FEIR, appears to be the only analytical difference between it and the 2013 FEIR analysis.

2-11

So, while the mortality estimate indicates that more dead birds would be the result of the proposed change, in our opinion the avian impacts are not fully identified, described, or analyzed in the DSEIR.

2011 Bird Year Data

We do think it is appropriate to use the more recent years of monitoring data (2008 to 2010) to assess impacts. However, why was not 2011 included as it was with some of the data sets (i.e., 2005 to 2011)?

2-12

Recommended Approach to Calculating Fatalities to Avoid Underestimation

Avian impacts are identified consistently with the FEIR. However, we would reiterate a comment made on the 2013 DEIR, which is that, for Alternatives 1 through 3 and the No-Project Alternative, the MW-years for the seasonal shutdown should not have been subtracted from the installed capacity estimates for purposes of projecting fatalities. The projected fatalities are obtained by taking the installed capacity (in MW-years) and multiplying it with fatality rates (fatalities per MW-year) taken from the annual Monitoring Report. A MW-year in the Monitoring Report is 1 MW of installed capacity that is operational for 8.5 months and shutdown for 3.5 months during winter seasonal shutdown. In other words, what the Monitoring Report calls one (1) MW-year, the 2013 FEIR and DSEIR calls a 0.708 MW-year. In order to expand the projected fatalities using the Monitoring Report's rates, then the 2013 FEIR and DSEIR should use the same definition of a MW-year as the Monitoring Report (i.e. no subtraction). Since Alternatives 1 through 3 and the No-Project Alternative provide for 3.5 months of

2-13

winter seasonal shutdowns, like the Monitoring Report rates, then there is no reason to modify the installed capacity by subtracting out the seasonal shutdown months; furthermore, the subtraction leads to underestimated fatalities.

2-13
Cont.

The 2013 FEIR explains the County’s determination not to add the seasonal shutdown months back in, due to biases that would result in the projected fatalities of the 2013 FEIR proposed project (which did not provide for seasonal shutdown), which would also bias the comparisons between the proposed project and the alternatives. We think we understand this argument. However, now that the proposed project did not go into effect, since Alternative 1 currently represents the CUPs, and since Alternative 3 now represents the proposed modification, then it is more important than ever to apply the method of calculation that would have the least bias on the Alternatives estimates. For purposes of comparing Alternatives 1 and 3 (both with seasonal shutdown), then the avian impacts would be better identified using installed capacity based on the full year (i.e. seasonal shutdown months not subtracted).

2-14

Tables 3-1 and 3-2 of the 2013 FEIR (pages 3-32 and 3-33) display the installed capacity and projected fatalities calculated with and without the subtraction. The values are ~40% higher when not subtracted. Based on these calculations, then the installed capacity for 2016-2018 would be a multiplier of 257.4 MW-years instead of 182.4 MW-years.

2-15

Are the Mitigation Measures Appropriate/Suitable?

Mitigation measures in the DSEIR include the two measures from the 2013 FEIR, BIO-16 (seasonal shutdown) and BIO-17 (retrofit power poles). In addition, the DSEIR includes a new mitigation measure (BIO-17a) - borrowed from the 2014 programmatic repowering EIR – which provides a series of options to contribute to raptor conservation and rehabilitation efforts.

2-16

Scale up Intensity of Mitigation Measures

The additional types of mitigation measures are good additions. However, the calculation above results in a higher impact (40% more projected fatalities), so the intensity of the mitigation measures should be scaled up accordingly.

2-17

Additional Mitigation Measures: HRT Removal

Although the removal of additional hazardous turbines was dismissed for being questionably effective in the 2013 FEIR, the DSEIR indicates that the reduction of HRTs via the asset exchange may contribute to offsetting avian mortality impacts (Page 4: “An asset exchange is nonetheless anticipated to decrease somewhat the impact on avian species, due to the reduction in the number of high-risk turbines in operation”). If this is valid, then removing additional HRTs would also be beneficial. We believe the removal of HRTs has been an important factor in reducing Altamont avian mortality.

2-18

Mitigation Measure Bio-17

The number of retrofitted power polls was increased from 29 to 322, which is a great improvement.

2-19

Executive Summary – page 5, Mitigation Bio-17, first paragraph, and Page 35:

There is some confusion in the description of the pole retrofit mitigation measure. The description of the mitigation measure should be clearer, including how the estimate of retrofitted poles is derived.

The last sentence in the Executive Summary states that 29 poles will be retrofitted. However, the discussion above indicates that this should be 29 poles per golden eagle fatality as per the USFWS. With an estimated range of 19 to 26.5 golden eagle fatalities over the three-year extension period, this would total to 551 to 769 poles. It is unclear how the referenced 322 poles is derived or why, based on the last sentence, the mitigation would be limited to just 29 poles. Portions of the paragraph, including the last sentence appear to have been taken from the 2013 FEIR, which estimated that one additional eagle fatality would result with mitigation. How mitigation (seasonal shutdown) influences the fatality estimate is unclear in the DSEIR, and thus how the resulting number of retrofit poles is derived is also unclear.

2-20

Language on Page 35, first paragraph is similarly ambiguous: “AWI will therefore retrofit 29 utility poles as mitigation for the expected level of eagle fatality from the proposed project”. Subsequent language and the information in Table 3-8 indicate that the total mitigation is 322 retrofitted poles. The referenced language above should be modified to provide clarity. 322 poles may be the correct number, but how this number is derived should be clear.

2-21

Mitigation Measure Bio-17a

There is no guarantee of any obligation in this measure. As stated, it appears to be totally voluntary. It is appropriate for a programmatic EIR, like the county’s 2014 programmatic repowering EIR, to include a series of alternative mitigation measures. However, a project-level EIR should provide greater specificity and detail regarding how impacts would be mitigated. Developing mitigation from a list of general options post EIR- approval does not allow for sufficient analysis of the extent to which mitigation offsets the impact. Mitigation measures should be clear and concise in the DSEIR and the relationship or nexus to the impact fully described. Simply cutting and pasting general mitigation concepts from the county’s programmatic repowering EIR does not achieve this.

2-22

In our opinion, the DSEIR should commit to additional specific mitigation measures and then these measures should be clearly addressed in terms of their nexus with the impact, as CEQA requires. In the absence of a more complete and comprehensive impact analysis that goes beyond simply estimating the number of dead birds,

2-23

determining whether or not the mitigation is suitable or appropriate cannot be sufficiently or reasonably addressed.

2-23
Cont.

Conclusion

The DSEIR projects a substantial increase in avian mortality due to the proposed extension of operations through 2018. Mitigation proposed to offset this impact is uncertain and the projected impact has likely been underestimated; therefore the SRC has determined that the proposed extension would substantially increase avian mortality above that identified in the 2013 EIR. Practices that increase avian mortality are inconsistent with efforts over several years to reduce avian mortality in APWRA, and therefore the SRC does not support the application.

2-24

For the Record

The SRC developed the Conclusion paragraph above at its December 11, 2014 conference call meeting. During the call meeting, SRC Member Jim Estep developed a draft paragraph reflecting SRC discussion up to that point during the call, and circulated the draft paragraph via e-mail. The draft paragraph was read out loud on the call, and SRC members further refined the wording, which was memorialized by facilitation staff. For the record, below is the draft paragraph that was circulated by e-mail during the call:

2-25

The SDEIR projects a substantial increase in avian mortality due to the proposed extension of operations through 2018. Mitigation proposed to offset this impact is uncertain and therefore the SRC has determined that the proposed extension would potentially increase avian mortality above that identified in the 2013 EIR. Practices that increase avian mortality is inconsistent with the mission of the SRC and efforts over several years to reduce avian mortality in APWRA, and therefore the SRC recommends that the application not be approved.

Response 2-1

This is an introductory comment.

Responses 2-2 through 2-6

These comments provide background regarding the SRC review of the 2014 AWI DSEIR.

Response 2-7

This comment summarizes concerns regarding increased fatalities with a 3-year extension that the total number of fatalities would almost double. The commenter's concerns are acknowledged. No changes are being made to the SEIR based on this comment.

Response 2-8

The commenter notes the policy of the U.S. Fish and Wildlife Service that rates of take for a local eagle population should not exceed 5 percent annually, whether the impacts of a given project have been offset by compensatory mitigation or not, to ensure sustainable populations. Please refer to **Master Response 5**.

Response 2-9

The commenter states, the DSEIR does not address the effect of the death of avian predators on local or regional breeding, wintering and migratory populations. Please refer to **Master Response 5**.

Response 2-10

The commenter states, that simply estimating the difference in the number of dead birds is an insufficient and incomplete impact analysis. Please refer to **Master Response 5**.

Response 2-11

The commenter states that the information in the DSEIR regarding the asset exchange appears to be the only analytical difference from the 2013 FEIR. The DSEIR is intended to supplement the previously certified 2013 FEIR, which evaluated the application made by AWI in 2011 to modify these same CUPs as they had been approved in September of 2005.

The addition of information in the SEIR regarding the asset exchange, new comparisons between the current project and its alternatives, more recent avian monitoring data, and providing for further public review of the current proposal, together serve both the requirements and purpose of CEQA. Please also refer to **Master Responses 1 and 5**.

Response 2-12

The commenter questions the use of bird year data and asks why more recent years were not used. Please refer to **Master Response 6**.

Response 2-13

The commenter states, for Alternatives 1 through 3 and the No-Project Alternative, the MW-years for the seasonal shutdown should not have been subtracted from the installed capacity estimates for purposes of projecting fatalities. To be consistent with the 2013 FEIR, the DSEIR analysis uses the same methodology as in the 2013 FEIR, which calculates anticipated avian species fatalities based on the APWRA-

wide fatality rate estimates (standardized on a per-MW basis). No subtraction of “MW-years” was employed in the analysis; the original 2013 project and its alternatives, including the current proposal to operate through 2018 were compared on the basis of the cumulative total MW operating (or permitted) capacity through the end of operations as defined for each scenario. This issue is addressed in detail in Master Response 1.

Response 2-14

The commenter states, the analysis in the 2013 FEIR did not “add the seasonal shutdown months back in” due to biases related to fatality rates that did not reflect operations during the seasonal shutdown. Furthermore, the commenter states that it is more important now to use installed capacity based on full years of operation. As indicated in Response 2-13 above, no seasonal shutdown months were subtracted for the analysis in the SEIR. In addition, neither the current project proposal nor any other alternative under consideration in the SEIR involves operations during the winter season shutdown, and therefore, no bias related to operations in that period would affect the analysis. Please refer to **Master Response 1**.

Response 2-15

The commenter states, with respect to Tables 3-2 through 3-5 in the DSEIR, fatality calculations would be about 40% higher if seasonal shutdown is not subtracted when calculating total MW-years (i.e., by dividing 182.4 by the “subtracted” factor 0.708). Based on the commenter’s calculations, the installed capacity for 2016-2018 would be 257.4 MW-years instead of 182.4 MW years, and that the projected avian fatalities reported in Tables 3-3 through 3-5 in the DSEIR would be proportionally about 40 percent greater.

The analysis performed in the DSEIR is an accurate representation of the avian impacts due to the extension of AWI’s CUP’s from 2016-2018, and is based on and consistent with the methodology accepted in the certified 2013 FEIR, which uses *cumulative totals* of installed or permitted MWs for each of the proposed projects and the alternatives. As such, no such factoring should be applied, and the projected avian fatality results in Tables 3-3 through 3-5 are fundamentally correct. Please also refer to **Master Response 1**.

Response 2-16

The commenter restates the mitigation measures found in the DSEIR.

Response 2-17

The commenter states, the intensity of the mitigation measures should be scaled up according to match a fatality calculation without the inclusion of the winter season shutdown. As indicated in Responses 2-13, 2-14 and 2-15 above, no error in the calculations occurred due to subtraction of winter season MWs. The DSEIR document identifies specific mitigation measures that would be implemented by the project proponent if the proposed 2014 project is approved. Please also refer to **Master Responses 1 and 4**.

Response 2-18

The commenter states, if the reduction of HRTs, via the asset exchange, may contribute to offsetting avian mortality impacts, then removing additional HRTs would also be beneficial. The comment is noted. As described in the DSEIR, AWI will be decreasing its quantity of HRTs after the asset exchange. Should removal of HRTs results in a reduction in avian impacts, the asset exchange would have positive impacts on reducing avian mortality. It should be clarified that the DSEIR does not imply that this potential positive impact on reducing avian mortality is mitigation. The mitigation measures BIO-16, BIO-17 and

BIO-17a are clearly defined separately. The County agrees that further elimination of HRTs that will be acquired by AWI under the asset exchange could be beneficial; however, Mitigation Measures BIO-17 and 17a are generally recognized by the County as the most appropriate and feasible measures. Please also refer to **Master Responses 3 and 4.**

Response 2-19

The commenter states the number of retrofitted power polls was increased from 29 to 322. The commenter's opinion is acknowledged.

Response 2-20

The commenter asserts, the last sentence in the Executive Summary states that 29 poles will be retrofitted and that it is unclear how the referenced 322 poles is derived or why the mitigation would be limited to just 29 poles. The DSEIR has been revised to clarify that 322 power poles would be retrofitted, if the applicant chooses to implement only Mitigation Measure BIO-17. Please also refer to **Master Response 4.**

Response 2-21

The commenter asks to clarify the total mitigation of 322 retrofitted poles. As indicated in Response 2-20 above, the DSEIR has been revised to clarify that 322 power poles would be retrofitted under Mitigation measure BIO-17. Please also refer to **Master Response 4.**

Response 2-22

The commenter asserts there is no guarantee of any obligation in measure 17a. The commenter states, a project-level EIR should provide greater specificity and detail regarding how impacts would be mitigated. The DSEIR has been revised to clarify that if the applicant chooses to implement Mitigation Measure BIO-17a, there would be specific milestones and requirements. Please also refer to **Master Response 4.**

Response 2-23

The commenter asserts, the DSEIR should commit to additional specific mitigation measures and then these measures should be clearly addressed in terms of their nexus with the impact. The comment is noted. Please also refer to **Master Response 4.**

Response 2-24

This comment concludes the letter. The commenter's opinion is acknowledged.

Response 2-25

This comment provides a secondary conclusion to the letter.

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Letter 3: Bob Cooper

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To: Sandra Rivera, Planning Department, Hayward, CA
From: Bob Cooper, resident of Dyer Rd. (bobcooperhorse@gmail.com)
Subject: Draft Supplemental EIR for Altamont Winds Inc.
Date: December 21, 2014

I'm Bob Cooper and I live at 4000 Dyer Dr., Livermore, CA. From the back of my five-acre property looking to the west, I can clearly see about 30 of AWI's windmills.

3-1

Altamont Windmills, Inc. (AWI) is requesting a modification of their CUP to run about 1000 windmills for an additional three years, 2016 to 2018. AWI will make a lot of money with this extension and their 25+ year old windmills will kill a lot of raptors, included protected Golden Eagles. All public and private agencies that have so far given input on this extension have asked that it be denied. I too recommend that this CUP extension be denied.

3-2

Two windmill repowering projects south of I-580 and one project along Vasco Rd. set the expectations for what repowering the Altamont should be. These three projects are going to or have already retired many old, inefficient, second or third generation windmills and replaced them with a few modern, efficient, fourth-generation windmills. There is expectation that the modern windmills will minimize avian kills.

3-3

Altamont Windmills, Inc. is not repowering. AWI has talked about infrastructure upgrades and other improvements to their physical operation. But, until they replace old windmills with modern ones, they are not repowering in an acceptable manner.

If AWI is granted the three-year extension to its CUP, they should pay for it. Let's keep the numbers simple and not, as has already happened, talk about the value of one Golden Eagle, Red-tailed hawk, Ferruginous Hawk, Red-shouldered Hawk, Sharp-shinned Hawk, Burrowing Owl, etc. I suggest a price of \$2,000,000 a year. The money should be used to purchase local lands as mitigation, protected by a non-transferrable conservation easement. If the county makes it more costly to operate old windmills, there will be more incentive to replace them with modern windmills.

3-4

In conclusion, I strongly recommend that AWI's request to operate these windmills for another three years be denied.

3-5

Bob Cooper
bobcooperhorse@gmail.com

Response 3-1

This is an introductory comment.

Response 3-2

The commenter states, AWI will profit from the extension and their 25+ year old windmills will result in the deaths of numerous raptors, including protected Golden Eagles and recommends that this CUP extension be denied. This comment raises an opinion regarding the merits of the project proposal, and not the environmental analysis in the DSEIR; therefore, no further response by the County is required. It should be noted that the commenter submitted an additional letter after the close of the comment period, requesting that the original comment letter be withdrawn; the second letter is provided in Appendix B.

Response 3-3

The commenter asserts, AWI is not repowering and until they replace old windmills with modern ones, they are not repowering in an acceptable manner. The commenter states that two windmill repowering projects south of I-580 and one project along Vasco Road set the expectations for what repowering the Altamont should be. While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no response is required.

Response 3-4

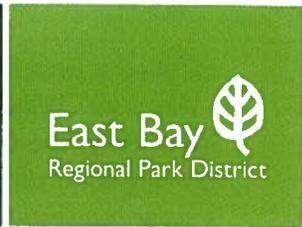
The commenter states, if AWI is granted the three-year extension to its CUP, they should pay \$2,000,000 a year. The comment is noted. Mitigation Measure BIO-17a may require expenditures to be determined by the REA process. See also **Master Response 4**.

Response 3-5

The commenter requests the project be denied. This comment raises an opinion regarding the merits of the project proposal not the environmental analysis in the DSEIR; therefore, the comment does not require further response by the County.

Letter 4: East Bay Regional Park District

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Comment Letter 4

December 23, 2014

Sandra Rivera
Assistant Planning Director
Alameda County Community Development Agency
224 W. Winton, Room 111
Hayward, CA 94544

Sent Via E-Mail to:
Sandra.Rivera@acgov.org
December 23, 2014

RE: NOA of a Draft Supplemental Environmental Impact Report for Modifications to Existing Conditional Use Permits – Altamont Winds, Inc. (AWI): 2018 CUP Extension (PLN2014-00028): Comment letter plus attachment.

Dear Assistant Planning Director Rivera:

The East Bay Regional Park District (“District”) is responding to the County of Alameda’s November 17, 2014 Notice of Availability (NOA) of a Draft Supplemental Environmental Impact Report for Modifications to Existing Conditional Use Permits – Altamont Winds, Inc. (AWI): 2018 CUP Extension (referred to here as 2014 DSEIR), for turbines owned and operated by Altamont Winds, Inc. (AWI) in the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). Specifically, Altamont Winds, Inc., together with its operating subsidiary, Wind Works, Inc. (collectively referred to here as AWI), has submitted an application to the County of Alameda requesting that its CUPs, set to expire on October 31, 2015, be extended to October 31, 2018, and thus allow continued operation of all of its estimated 828 wind turbines with a rated capacity of 85.8 megawatts (MW), with a wintertime Seasonal Shutdown (VSSD), for three additional years.

In 2011, AWI applied to the County to modify its CUPs that had been approved in 2005. The CUPs as approved in 2005 actually applied to all wind farms operating in the Alameda County portion of the APWRA and included stipulations for VSSD and a phased decommissioning of wind turbines with permit expiration by September 15, 2018. The phased wind turbine decommissioning was intended to facilitate repowering of wind farms. The CUP modifications that AWI requested in 2011 included the elimination of phased wind turbine decommissioning with allowance for operation of all existing wind turbines and elimination of the VSSD, with a requirement that all of AWI’s turbines be shut down and decommissioned by the end of 2015.. (See 2014 DSEIR page 14.) In accordance with CEQA requirements, the County produced a *Draft Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits - Altamont Winds, Inc.* (ICF International 2013a) and then

4-1

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certified a *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits - Altamont Winds, Inc.* (ICF International 2013b), collectively referred to here as 2013 FEIR. Specifically, the County approved Alternative 1 in the 2013 FEIR, permitting AWI to operate all of its existing wind turbines up to October 31, 2015, with a VSSD. The Preferred Alternative which AWI is now requesting in the current DSEIR 2014 is Alternative 3 in the 2013 FEIR, that is, as mentioned above, extension of the CUPS from on October 31, 2015, to October 31, 2018 with operation of all existing wind turbines, no phased shutdown, but including a VSSD.

4-1
Cont.

The District owns or manages over 115,000 acres of open space in Alameda and Contra Costa Counties. This includes more than 5,000 acres of open space lands in and around the two-county APWRA. The District remains very concerned about impacts of the existing APWRA infrastructure on birds and bats in the region, as well as other natural, aesthetic, and cultural resource values.

The existing infrastructure of the APWRA continues to have significant impacts on wildlife, especially birds and bats (Smallwood 2013, Smallwood et al. 2010, Smallwood and Thelander 2008). In the FEIR 2013, the County made the finding that Project Alternative 3 "...would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible". It is the opinion of the District that additional information brought forth in the 2014 DSEIR, including proposed mitigation, will not change this finding. Further, the 2014 DSEIR fails to evaluate the project's visual impacts and consistency with the Alameda County General Plan policies that seek to protect prominent ridges, including those neighboring Brushy Peak Regional Preserve, from visual intrusion of wind turbines.

4-2

4-3

The District is therefore opposed to AWI's application to extend the operation of all of its 828 existing, old generation wind turbines for three additional years, from 2015 to 2018, because we feel that the impacts are severe and otherwise would be avoided without the permit extension. Furthermore, we believe the 2014 DSEIR is sorely inadequate and therefore open to legal challenge.

4-4

The 2014 DSEIR reveals several fundamental flaws when comparing estimated impacts to birds, especially the four focal species, American kestrel, burrowing owl, golden eagle and red-tailed hawk, among project alternatives:

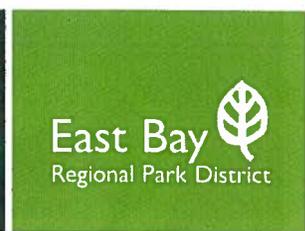
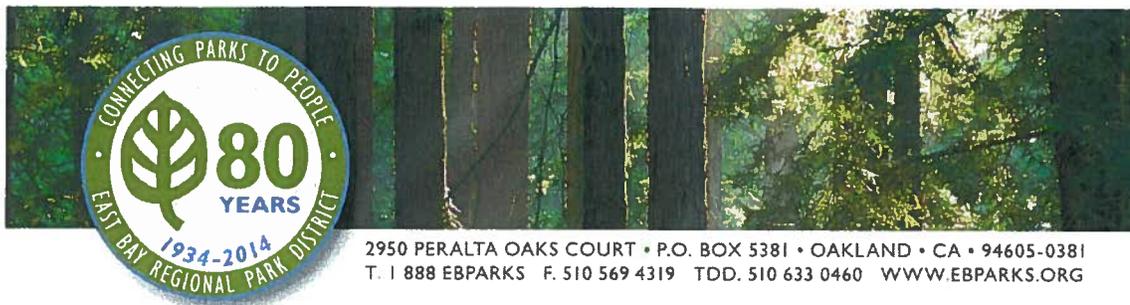
4-5

1. The 2014 DSEIR fails to compare the estimated fatalities of the four focal species resulting from the proposed action, e.g. 2013 FEIR Alternative 3, to the correct baseline, or "No Project" alternative (see Tables ES-1 through ES-3, p. 3, and Table 3-5, p. 32, 2014 DSEIR). The correct "No Project" alternative would be the existing conditions of the current CUPS, as outlined under alternative 1 in the 2013 FEIR. This is important, because the projected avian fatalities resulting from implementation of the project from October 31, 2015 to October 31, 2018, would then be compared to the avian fatality rates resulting from permanent shutdown of the turbines over the same period. Under this comparison, avian fatality rates caused by the project will be much higher than indicated in the 2014 DSEIR. The 2014 DSEIR summarily dismisses consideration of a "No Project" alternative (see p. 6).

4-6

2. It appears that the 2014 DSEIR and the 2013 FEIR deflate estimated fatality rates of the four focal species (and other birds) by multiplying the 1 MW-year values from the annual Avian Monitoring Reports by 0.708 MW-year when calculating the projected fatality rates under the various alternatives. The 1 MW-year values in the annual Avian Monitoring Reports already include the subtraction of the three month shutdown, so the projected fatality rates in the 2013 FEIR and the 2014 DSEIR are seriously underestimated.

4-7



3. The 2014 DSEIR relies on previous versions of the Avian Monitoring Reports to estimate APWRA-wide avian fatality rates per MW per year (see Table 3-1, p. 30). Results from the more comprehensive Avian Monitoring report for the years 2005-2012 (ICF International 2014), should be incorporated into these estimates. 4-8
4. By exchanging twenty 250kW wind turbines for twenty 100 kW wind turbines, the 2014 DSEIR claims that this asset exchange will reduce the aggregate project capacity by 5.3 MW over three years and thus further reduce avian fatalities. Although Fig. 2 in the 2014 DSEIR shows which turbines may be exchanged, the 2014 DSEIR does not indicate which of those turbines are currently derelict, so the 5.3 MW reduction in average capacity is at best, a maximum estimate. In fact, there could be an increase in average capacity depending on the ratio of derelict/functional wind turbines exchanged. 4-9
5. The 2014 DSEIR claims that the asset exchange will result in AWI reducing its quantity of HRT (High Risk Turbines) by taking over wind farm assets where the owner (Green Ridge Power LLC), has made diligent efforts to eliminate its HRT wind turbines, and thereby reduce avian impacts caused by the proposed project. This is a false argument, wherein AWI implies it will theoretically reduce avian impacts via a mitigation action that has already occurred at the expense of another company. This is akin to double-dipping for mitigation credit. 4-10
6. Section 2.4.3 Circumstances Outside AWI's Control, the 2014 DSEIR proposes a list of circumstances outside of AWI's control that may be responsible for delaying its repowering efforts and states that these would be sufficient to allow AWI to continue operating beyond October 31, 2015. The section should be struck from the document. All of the circumstances listed are part of the regulatory and political landscape and using any one of them as an excuse to continue operations beyond October 31, 2015 would impart an unfair competitive advantage over the other wind companies operating in the APWRA. 4-11
7. Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors and Special Status Avian Species by Retrofitting Electrical Facilities. This section need to be reworked, as it is unclear how much funding will be contributed to the mitigation effort. The 2014 DSEIR only states that AWI may contribute \$217,500 to retrofit 29 poles, yet Table 3-8 shows that 322 poles will be retrofitted. It is unclear if the requisite additional monies will be provided for the total number of poles to be retrofitted. 4-12
8. Mitigation Measure BIO-17a: Compensation for the loss of special status species, including golden eagles, by contributing to conservation efforts – contribute to raptor recovery efforts. The 2014 DSEIR states that the average cost to rehabilitate one raptor is \$580, and the Final Programmatic EIR certified by the County also uses this figure. New information has become available that indicates this figure was taken out of context and should never have been used to 4-13

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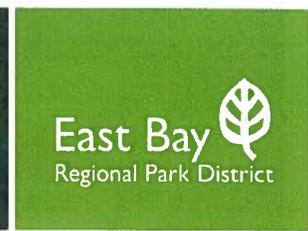
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evaluate costs of raptor rehabilitation (see Attachment, letter dated December 7, 2014, from Dr. Michelle Hawkins, UC Davis). The cost of rehabilitating raptors as mitigation needs to be reassessed.

4-13
Cont.

Additionally, the 2014 DSEIR fails to evaluate visual impacts on protected ridgelines and publically accessible parklands, including Brushy Peak Regional Preserve. Policy 105 of the Alameda County General Plan's East County Area Plan states that the County shall preserve major visually sensitive ridgelines including those surrounding Brushy Peak. The extension of the CUP and further delay of decommissioning will result in the extension of the current visual intrusion and visual impacts on the protected ridgelines identified in the County's General Plan. As stated above, the correct baseline for the project would be the existing conditions of the current CUP's, which require the shut down of all existing turbines by the end of 2015. Extension of the CUP results in new visual impacts above the baseline condition. Previous repowering efforts for these turbines by prior operators recognized the impacts of visual intrusions on the protected ridgelines identified in the Alameda County General Plan. The District entered into an agreement requiring any repowered turbines to be sited 4,000 feet from Brushy Peak Regional Preserve and giving the District an opportunity to review any proposals within 6,000 feet. The extension of the CUP delays the repowering effort and allows the visual condition to remain, despite existing permit conditions requiring decommissioning, thus resulting in new visual impacts, new inconsistencies with General Plan policies, and a circumvention of the agreement to mitigate visual impacts of new turbine siting near Brushy Peak.

4-14

For further comments regarding 2014 DSEIR, including comments relating to mitigation actions, especially for golden eagles, please refer to the EBRPD letter date October 13, 2014, within the 2014 DSEIR.

4-15

Thank you for this opportunity to comment on the NOA of a Supplemental EIR for Modifications to Existing Conditional Use Permits – Altamont Winds Inc.

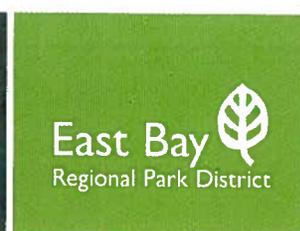
Respectfully,

Brian W. Holt
Senior Planner

- Cc: Bob Nisbet – EBRPD, Asst. General Manager
Matt Graul – EBRPD, Stewardship Manager
Doug Bell, PhD. – EBRPD, Wildlife Program Manager

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References

ICF International. 2014. Draft Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years 2005-2012. SRC Ref No. M101.

http://www.altamontsrc.org/alt_doc/m101_apwra_2005_2012_bird_fatality_report.pdf

ICF International. 2013a. Modifications to Existing (Year 2005) Conditional Use Permits - Altamont Winds Inc. (AWI). Draft Environmental Impact Report. March. (ICF 00277.12) Sacramento, CA. Prepared for County of Alameda, Alameda, CA.

ICF International. 2013b. Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds, Inc. (AWI). July. (ICF 00277.12) Sacramento, CA. Prepared for County of Alameda, Alameda, CA.

Smallwood, K.S. 2013. Long-term trends in fatality rates of birds and bats in the Altamont Pass Wind Resource Area, California. SRC Ref No. R68.

http://www.altamontsrc.org/alt_doc/r68_smallwood_altamont_fatality_rates_longterm.pdf

Smallwood, K. S., and C. G. Thelander. 2008. Bird Mortality in the Altamont Pass Wind Resource Area, California. *Journal of Wildlife Management* 72:215-223.

Smallwood, K.S., Bell, D.A., Snyder, S.A. and J. E. DiDonato. 2010. Novel scavenger removal trials increase wind turbine-caused avian fatality estimates. *J. Wildlife Management* 74:1089-1097.

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Response 4-1

The comment provides background on the proposed project.

Response 4-2

The commenter states, it is the opinion of the District that the additional information brought forth in the DSEIR, including proposed mitigation, will not change the finding that Alternative 3 would very substantially increase avian mortality. The DSEIR recognizes that mitigation options for significant impacts on avian species at an existing wind energy generation facility are limited to either operational modifications (i.e., shutdowns, removals) or off-site mitigation. Incorporation of these mitigation options could reduce, but would not eliminate the effects of the proposed project. Even after implementation of any of these mitigation measures, the impacts on avian species would remain significant and unavoidable. Please refer to **Master Response 7**.

Response 4-3

The commenter states that the DSEIR fails to evaluate the project's visual impacts or account for the visual intrusion of the wind turbines. According to CEQA Section 15087, the supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised. As aesthetic impacts were previously dismissed from discussion in the 2013 FEIR and there would be not changes to aesthetic conditions under the continuation of the CUP term until 2018, an analysis of visual impacts in the DSEIR was not included.

Response 4-4

The commenter states that the District is opposed to AWI's application to extend the operation of all of its 828 existing turbines from 2015 to 2018 because the District feels the impacts are severe and would be avoided without the permit extension. This comment raises an opinion regarding the merits of the project proposal and not the environmental analysis in the DSEIR; therefore, the comment does not require further response.

Response 4-5

The commenter states that the DSEIR reveals several fundamental flaws when comparing estimated impacts as detailed in the letter, and introduces subsequent comments. No further response is required.

Response 4-6

The commenter states, the 2014 DSEIR fails to compare the estimated fatalities of the four focal species resulting from the proposed action, e.g. 2013 FEIR Alternative 3, to the correct baseline, or "No Project" alternative. The commenter asserts that the correct "No Project" alternative would be the existing conditions of the current CUPs, as outlined under alternative 1 in the 2013 FEIR. Please refer to **Master Response 2**.

Response 4-7

The commenter states, the 1 MW-year values in the annual Avian Monitoring Reports already include the subtraction of the three month shutdown, so the projected fatality rates in the 2103 FEIR and the 2014 DSEIR are seriously underestimated. Please refer to **Master Response 1**.

Response 4-8

The commenter asserts results from the more comprehensive Avian Monitoring report for the years 2005-2012 (ICF International, 2014), should be incorporated into the avian fatality estimates. Please refer to **Master Response 7**. Please also note that revisions to the text related to this comment have been made and are detailed in the strike-out-underline version of the FSEIR document (Appendix C).

Response 4-9

The commenter states, although the 2014 DSEIR shows which turbines may be exchanged, it does not indicate which turbines are in poor condition and claims there could be an increase in average capacity depending on the ratio of derelict/functional wind turbines exchanged. Please refer to **Master Response 3**.

Response 4-10

The commenter states, the 2014 DSEIR makes a false claim and ‘double-dipping’ mitigation that the asset exchange will result in AWI reducing its quantity of HRTs by taking over wind farm assets where Green Ridge Power LLC, has made diligent efforts to eliminate its HRT wind turbines, and thereby reduce avian impacts caused by the proposed project. Please refer to **Master Response 6**.

Response 4-11

The commenter states that 2014 DSEIR Section 2.4.3 (Circumstances Outside AWI's Control, page 23 of the DSEIR) should be struck from the document, as all of the circumstances listed are part of the regulatory and political landscape and using anyone of them as an excuse to continue operations and is an unfair competitive advantage over the other wind companies operating in the APWRA. The DSEIR has been clarified that the “Circumstances Outside AWI’s Control” is a list of conditions proposed by the applicant. It should be noted, these conditions are not recognized by the County at this point.

Response 4-12

The commenter states the Mitigation Measure BIO-17 section needs to be revised, as it is unclear how much funding will be contributed to the mitigation effort. Please refer to **Master Response 4**.

Response 4-13

The commenter states that the cost of rehabilitating raptors as mitigation needs to be reassessed. Please refer to **Master Response 4**. Please also refer to the strike-out-underline revisions (Appendix C) and modifications in this FSEIR document. As shown, this option has been removed from Mitigation Measure BIO-17a. As revised, the County has outlined some options that are currently available to compensate for impacts on raptors including special-status species. The options discussed in BIO-17a are currently considered acceptable approaches to compensation for impacts on raptors, in lieu of or in conjunction with Mitigation Measure 17. As also revised, BIO-17a provides the option of an Eagle Conservation Plan and Bird and Bat Conservation Strategy or contribution to regional conservation raptor habitat.

Response 4-14

The commenter states, the 2014 DSEIR fails to evaluate visual impacts on protected ridgelines and publically accessible parklands, including Brushy Peak Regional Preserve. The DSEIR does not address the impacts of new turbine siting. Please also see **Response 4-3**.

Response 4-15

The comment refers to further comments made by the District on October 13, 2014. As these comments were received during the public scoping period, the County has considered these comments during the scoping of the DSEIR document. No further response is required.

Letter 5: State of California Department of Justice Attorney General

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KAMALA D. HARRIS
Attorney General

State of California
DEPARTMENT OF JUSTICE

1515 CLAY STREET, 20TH FLOOR
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December 31, 2014

Sandra Rivera
Assistant Planning Director
Alameda County Community Development Agency
224 West Winton Ave., Room 111
Hayward, California 94544

Scientific Review Committee, c/o Sandra Rivera
Altamont Pass Wind Resource Area
Alameda County Community Development Agency
224 West Winton Ave., Room 111
Hayward, California 94544

RE: Application by Altamont Winds Inc. for Extension of Conditional Use Permits

Dear Assistant Director Rivera and Scientific Review Committee Members:

We submit this letter on the draft supplemental environmental impact report (DSEIR) for Altamont Winds Inc.'s (AWI's) application to extend the terms of its conditional use permits to operate its old generation wind turbines at the Altamont Pass Wind Resource Area (Altamont Pass) for three more years, from 2015 to 2018. This letter supplements our previous comment letter, dated October 10, 2014, on the County of Alameda's (County's) Notice of Preparation of the DSEIR (attached).

5-1

Introduction

As our previous letter states, the Attorney General opposes the issuance of a permit extension to AWI because it will create serious inequities for other turbine operators and will undercut current efforts to repower the old turbines and develop more environmentally-responsible wind energy at Altamont Pass. The new generation turbines are not only more energy efficient and can generate more energy per megawatt of rated turbine capacity, but also result in far fewer annual bird deaths.¹ As the County's Final Program Environmental Impact

5-2

¹ See Resolution No. Z-14-38 of the East County Board of Zoning Adjustments Adopted at the Hearing of Nov. 12, 2014 Certifying the PEIR, p. 1; Staff Report to East County Board of Zoning Adjustments for Altamont Pass Wind Resources Area Repowering, Nov. 12, 2014, pp. 5-
(continued...)

Report for Altamont Pass Wind Resources Area Repowering, dated October 2014 (hereafter “PEIR”) and the resolution certifying that EIR indicate, replacing the old turbines with new turbines is a feasible alternative to continuing to operate the old turbines.²

5-2
Cont.

After reviewing the DSEIR, the Attorney General’s Office reiterates its opposition to continued operation of the old generation AWI turbines. The DSEIR fails to provide substantial evidence to support the statement of overriding considerations that the County must adopt if it determines to approve the permit application. Additionally, the DSEIR is legally inadequate in a number of significant respects.

Statements of Overriding Considerations under CEQA

Under the California Environmental Quality Act (CEQA), a lead agency generally cannot approve a proposed project “if there are feasible alternatives or feasible mitigation measures which would substantially lessen the significant environmental effects of” the project. (Pub. Res. Code § 21002.) However, a lead agency may find that one or more of a project’s significant environmental effects are unavoidable because the mitigation measures or project alternatives identified in the final EIR are infeasible. (Pub. Res. Code §§ 21002, 21002.1(c), 21081(a)(3); 14 Cal. Code Regs. § 15091(a)(3).) In this event, the lead agency may approve the project only if it adopts a “statement of overriding considerations” – supported by substantial evidence in the record – finding that “the specific economic, legal, social technological or other benefits, including region-wide or statewide environmental benefits” of the project “outweigh the unavoidable adverse environmental effects” and that the project is “otherwise permissible under applicable laws and regulations.” (Pub. Res. Code §§ 21002, 21002.1(c), 21081(b); 14 Cal. Code Regs. § 15093(a).) (Pub. Res. Code § 21081.5; 14 Cal. Code Regs. §§ 15021(d), 15091(b), 15093(b).)

5-3

The County Legally Cannot Adopt a Statement of Overriding Considerations for the AWI Permit Extension

The DSEIR concludes that the effects of continued operation of the old generation AWI turbines on avian resources would be significant and unavoidable. (DSEIR, pp. 28-31.) Accordingly, in order to approve the project, the County must adopt a statement of overriding considerations, finding that the benefits of continued operation of the old generation turbines outweigh the significant and unavoidable environmental effects of these turbines. (Pub. Res. Code §§ 21002.1(c), 21081(b); 14 Cal. Code Regs. § 15093(a).) The County legally will not be

(...continued)

6; Public Notice of Availability of a Draft Program Environmental Impact Report: Altamont Pass Wind Resources Area Repowering, p. 1; PEIR, pp. ES-5, ES-6, 2-2.

² See also Resolutions Z-14-39 and Z-14-40, approving the Golden Hills I and Patterson Pass repowering projects, adopted on November 12, 2014.

able to adopt a statement of overriding considerations, however, because there is no substantial evidence in the DSEIR or elsewhere in the record to support it.

Specifically, the County has already made a contradictory finding, when approving the Altamont Pass Repowering Program, that repowering the Altamont Pass with new generation turbines, rather than allowing the continued operation of old generation turbines, would “*best balance* the advancement of wind technology, while also reducing the unavoidable impacts on protected or special-status avian wildlife, species, including golden eagles and other raptors, to the lowest acceptable level.” (Exhibit C to Resolution No. Z-14-38, Nov. 12, 2014, Altamont Pass Wind Resources Area Repowering Statement of Overriding Considerations, p. 4, emphasis added.) In light of this finding, it would be an abuse of discretion for the County now to make a directly contrary finding that the purported benefits of continued operation of the old generation turbines outweigh the significant and unavoidable environmental effects of these turbines. (See *Uphold Our Heritage v. Town of Woodside*, 147 Cal.App.4th 587, 603 (2007) [holding that lead agency abused its discretion in adopting statement of overriding considerations where record did not support the finding that other less damaging alternatives were infeasible].)

In addition, a statement of overriding considerations must be based on an accurate analysis of the full extent of the environmental effects of a project, to enable the lead agency to fairly weigh whether the disadvantages of these adverse environmental effects in fact are outweighed by the project’s other benefits. (Pub. Res. Code § 21081(b); 14 Cal. Code Regs. § 15093(a); see *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 79-80.) Here, the County cannot rely on the analysis in the DSEIR to adopt a statement of overriding considerations because the DSEIR, for the reasons outlined below, does not adequately and completely evaluate the nature and extent of the impacts on avian resources of continuing to operate the old turbines.

Further, a statement of overriding considerations is “necessarily invalid” if an EIR and other evidence in the record does not support the conclusion that other alternatives are infeasible. (*Uphold Our Heritage*, 147 Cal.App.4th at 603.) The DSEIR fails to evaluate any other alternatives besides the No Project Alternative, even though the County has already determined in the PEIR and associated documents that repowering Altamont Pass with new generation turbines is an entirely feasible alternative for meeting all of the project’s stated objectives, including cost-effectively meeting regional energy needs, providing a reliable source of renewable energy, and reducing regional greenhouse gas emissions. (See Resolution No. Z-14-38, p. 1; Staff Report to East County Board of Zoning Adjustments for Altamont Pass Wind Resources Area Repowering, Nov. 12, 2014, pp. 5-6; PEIR, pp. ES-5, ES-6, 2-2; Public Notice of Availability of Draft PEIR, p. 1.) Thus, the County cannot rely on the DSEIR to make the necessary predicate finding that no other alternative, including repowering, is feasible. (Pub. Res. Code §§ 21002, 21081(a)(3); 14 Cal. Code Regs. § 15091(a)(3); *California Native Plant Socy. v. City of Santa Cruz*, 177 Cal.App.4th 957, 982, 1002 (2009) [record must contain

5-3
Cont.

substantial evidence to support a finding that the rejected alternatives and mitigation measures are “truly infeasible”).³

5-3
Cont.

The DSEIR Is Legally Inadequate to Support Project Approval

In addition to failing to support the required findings of overriding consideration, the DSEIR is legally insufficient to support the County’s approval of the project in a number of other significant respects.

5-4

First, the DSEIR’s impact analysis fails to analyze adequately the full scope and extent of the significant and unavoidable environmental effects of allowing the old turbines to continue operating for three more years. Specifically, among other inadequacies, the DSEIR’s impact analysis:

1) Fails properly to calculate avian fatality rates by omitting the most recent data from 2011 and 2012, cherry-picking prior years in which bird deaths were lower than other years, and using artificially low installed capacity figures (see *Altamont Pass Wind Resource Bird Fatality Study, Bird Years 2005-2012*, ICF International, June 2014; cf. DSEIR, pp. 28-32);

5-5

2) Fails adequately to describe the methodology used to determine impacts to birds, including how the effects of the winter seasonal shutdown, proposed turbine asset exchange and removal of high risk turbines were accounted for and how the adjusted fatality rates and total fatalities in the charts were derived (*id.*, pp. 3, 25, 27-32);

5-6

3) Does not identify a proper baseline against which to properly measure the impacts (*id.*, pp. 27, 32);

5-7

4) Understates the project’s impacts by comparing the impacts of the currently proposed project against the impacts of a previously proposed project which the County never approved -- instead of the reduced-impact project that the County actually approved (*id.*, p. 32); and

5-8

5) Fails to address any impacts of ongoing turbine operations on bat species, a major omission.

5-9

³ The County also will need to reverse its previous finding in certifying the previous 2013 AWI EIR that Alternative 3 (which is now the proposed project) was “considered infeasible” for “meeting the project objectives and minimizing significant impacts on special status avian wildlife.” (Ex. A to Resolution No. Z-13-35 of the East County Board of Zoning Adjustments, July 18, 2013, p. 15.)

Second, the DSEIR's mitigation measures are inadequate, unenforceable and uncertain. For example, the DSEIR completely fails to specify which mitigation measures will be employed, beyond the seasonal shutdown, to reduce impacts to other bird species other than golden eagle. (DSEIR, pp. 5-6, 36-37). Even the primary mitigation measure for golden eagle impacts (power pole retrofitting) is vague, unclear and difficult to enforce and apply. (*Id.*, pp. 5-6, 34-35). There also is no evidence that retrofitting power poles will actually mitigate for golden eagle fatalities caused by AWI's old turbines. The DSEIR then provides a menu of additional poorly-defined, inadequate and unenforceable mitigation measures, but does not require AWI to implement any of them. (*Id.*, pp. 36-37).⁴

5-10

Third, the project objectives are inaccurate and misleading. The project objectives purport to allow AWI to continue operating its old turbines only until repowering "is timely and economically viable" and only if it cannot repower them due to "circumstances beyond AWI's control." (DSEIR, pp. 21, 23.) These provisions are vague and open-ended, and provide no guidance for when such repowering will occur. (*Id.*, p. 21). In marked contrast, the agreement between Next Era and the Attorney General requires it to shut down its old turbines by November 1, 2015 and remove such turbines by March 15, 2016. Under the open-ended language in the DSEIR, however, it is virtually guaranteed that AWI will not repower and will continue to operate the old turbines through 2018. Furthermore, given the County's findings in certifying the PEIR discussed above, continued operation of AWI's old turbines for three more years cannot possibly meet the "additional" project objective of maintaining wind energy "in a manner that represents sound stewardship of the area's wildlife and natural habitats . . . to protect the unique and special status avian species that occupy the area." (*Id.*)

5-11

Conclusion

For all the foregoing reasons, and the reasons outlined in our October 10, 2014 letter, the Attorney General's Office strongly urges the County not to certify the SEIR and to deny AWI's application for a permit extension to operate old generation turbines for three more years. We thank the County for its consideration of our comments.

5-12

⁴ For example, we note that recent correspondence from the Director of the University of California, Davis' raptor rehabilitation center indicates that the \$580/raptor figure used to estimate the costs of rehabilitating one raptor is in error. (See DSEIR, p. 37; Letter from Michelle Hawkins, Director, U.C. Davis California Raptor Center, Dec. 7, 2014.)

Ms. Sandra Rivera
SRC Committee Members
December 31, 2014
Page 6

Sincerely,



Tara L. Mueller
Deputy Attorney General
For KAMALA D. HARRIS
Attorney General

cc: Heather Littlejohn, Alameda County Counsel's Office
Ryan McGraw, General Counsel, Altamont Winds

Response 5-1

This is an introductory comment.

Response 5-2

This is an introductory comment.

Response 5-3

The commenter states, that under the CEQA, a lead agency generally cannot approve a proposed project "if there are feasible alternatives or feasible mitigation measures which would substantially lessen the significant environmental effects of' the project. The commenter goes on to state the lead agency may approve the project only if it adopts a "statement of overriding considerations". Please refer to **Master Comment 7**.

Response 5-4

The commenter states, that in order to approve the project, the County must adopt a statement of overriding considerations, finding that the benefits of continued operation of the old generation turbines outweigh the significant and unavoidable environmental effects of these turbines. The commenter goes on to state that the County legally will not be able to adopt a statement of overriding considerations because there is no substantial evidence in the DSEIR or elsewhere in the record to support it. The comment is noted. This comment introduces the section questioning the legal adequacy of the DSEIR to support project approval. Please refer to **Master Comment 7**.

Response 5-5

The commenter states, the DSEIR's impact analysis fails properly to calculate avian fatality rates by omitting the most recent data from 2011 and 2012, "cherry-picking" prior years in which bird deaths were lower than other years, and using artificially low installed capacity figures. See Master Response 6 for discussion.

Response 5-6

The commenter states, the DSEIR's impact analysis fails to describe the methodology used to determine impacts to birds, including how the effects of the winter seasonal shutdown, proposed turbine asset exchange and removal of high risk turbines were accounted for and how the adjusted fatality rates and total fatalities in the charts were derived. The commenter further states that the DSEIR's impact analysis does not identify a proper baseline against which to properly measure the impacts. Please see **Master Response 1**. Section 3.2.3.1 of the DSEIR describes the methodology of the document's biological impact analysis is based on professional standards and information cited throughout the section and incorporates by reference the details discussed in the 2013 FEIR.

Response 5-7

The commenter states that the DSEIR does not identify a proper baseline again which to properly measure the impacts. Please refer to **Master Response 2**.

Response 5-8

The commenter states, the DSEIR's impact analysis understates the project's impacts by comparing the impacts of the currently proposed project against the impacts of a previously proposed project which the

County never approved - instead of the reduced-impact project that the County actually approved. Please refer to **Master Response 1**.

Response 5-9

The commenter states that the DSEIR fails to address any impacts of ongoing turbine operations on bat species. The comment is noted, and the 2013 FEIR briefly noted the mortality of diverse non-raptor species (page 3.2-11 of the Draft EIR), including bats. The 2013 FEIR included a correction to the Draft EIR that reported a rate of 2 to 4 individual bat fatalities per year, with a total of 22 fatalities detected between 2005 and 2010 (7 years, inclusive). The 2013 FEIR indicated that these low numbers did not appear to represent a substantial risk, particularly for older generation turbines in the APWRA.

In data specific to the APWRA, as indicated in Table 3-1 (Annual Fatality Detections in the APWRA by Species, Bird Years 2005-2012) of the 2005-2012 Monitoring Report (ICF international, 2014), a total of 29 bat carcasses have been detected during the course of the study including carcasses found by O&M personnel and incidental finds leading to a low incident rate of all detected species as viewed by the yearly totals in table A-3 below.

TABLE A-3 ANNUAL FATALITY DETECTIONS IN THE APWRA BY SPECIES, BIRD YEARS 2005-2012

SPECIES	2005	2006	2007	2008	2009	2010	2011	2012	TOTAL
Hoary bat	0	2	1	0	3	0	0	1	7
Little brown bat	0	0	0	0	1	1	0	0	2
Mexican free-tailed bat	0	1	2	2	3	0	1	1	9
Western red bat	0	1	2	1	0	0	0	0	4
Unidentified bat	0	2	1	1	0	2	0	0	7
Total bats*	0	6	6	4	7	3	2	2	29

**Includes all bat carcass detections*

Response 5-10

The commenter states the DSEIR's mitigation measures are inadequate, unenforceable and uncertain. Please refer **Master Response 4**.

Response 5-11

The commenter states, that the project objectives are inaccurate and misleading in that the project objectives purport to allow AWI to continue operating its old turbines and that it is virtually guaranteed that AWI will not repower and will continue to operate the old turbines through 2018. The FSEIR has been revised (see Appendix C) to clarify that the “Circumstances Outside AWI’s Control”, Section 2.4.3 is a list of conditions proposed by the applicant. Please refer to previous **Response 4-11**.

Response 5-12

This comment concludes the letter.

Letter 6: Save Mount Diablo

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January 9th, 2015

Comment Letter 6

Sandra Rivera
Assistant Planning Director
Attn: AWI Permit Modification EIR
Alameda County Community Development Agency
224 W. Winton Av., Suite 110
Hayward, CA 94544

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- Doug Knauer
- Sue Ohanian
- Marty Reed
- Malcolm Sproul
Directors

RE: Comments on the Draft Supplemental Environmental Impact Report (dsEIR) for the Proposed Altamont Winds Inc. 2018 CUP Extension

Dear Ms. Rivera,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

6-1

We appreciate the opportunity to comment on the dsEIR for the proposed Altamont Winds Inc. 2018 Conditional Use Permit (CUP) Extension (AWI dsEIR). Our review indicates that the AWI dsEIR is inadequate in several respects, including its underestimation of projected increases in avian mortality, lack of a population impact analysis for golden eagle and uncertainty with respect to the application and nature of mitigation measures.

6-2

A three year extension to current CUPs would also lead to increases in avian mortality, running counter to recent efforts to reduce mortality throughout the Altamont Pass Wind Resource Area. SMD therefore opposes the proposed extension of current CUPs. Our concerns and issues that merit changes in the AWI dsEIR are discussed below.

6-3

Proposed CUP Extension Increases Avian Mortality – Counter to Recent Mortality Reduction Efforts

The AWI dsEIR uses mortality projections from the 2013 final EIR (fEIR) which indicate that a three year extension to current CUPs would nearly double avian mortality rates compared with estimated mortality levels in the proposed project of the fEIR. This substantial increase in avian mortality runs counter to efforts over the past several years to reduce avian mortality in the Altamont, and provides sufficient reason for SMD to oppose this proposed three-year extension of CUPs. However, as described below, avian mortality would likely be even higher than the AWI dsEIR currently estimates.

6-4

Staff Directors

- Ronald Brown
Executive Director
- Seth Adams
Land Conservation Director
- Julie Seelen
Advancement Director
- Monica E. Oei
Finance Director
- Meredith Hendricks
Land Programs Director

Founders

- Arthur Bonwell
- Mary L. Bowerman

Proud Member of

- Land Trust Alliance
- California Council of Land Trusts
- Bay Area Open Space Council



Projected Increases in Avian Mortality Are Underestimated

The AWI dsEIR appears to underestimate projected increases in avian mortality by applying an inappropriate baseline mortality rate. The AWI dsEIR fails to compare projected mortality rates from 2015 through 2018 to a scenario with no AWI wind turbines in operation. However, no AWI turbine operation would accurately reflect the conditions of the current CUPs. The AWI dsEIR as it stands now is inadequate and should be modified to apply this baseline and use it in its comparisons with projected mortality rates under a three year CUP extension scenario.

6-5

The AWI dsEIR also underestimates projected increases in avian mortality and inappropriate Megawatt-year (MW-year). Comment letters on the AWI dsEIR submitted by both the Alameda Scientific Review Committee (SRC) and East Bay Regional Park District (EBRPD) provide further detail on this topic. Use of an inappropriate MW-year metric renders the AWI dsEIR inadequate and it should be changed to reflect the comments from the SRC and EBRPD.

6-6

Effect of Increased Mortality on Golden Eagle Population Remains Unclear

While the AWI dsEIR should and does include data projecting an increase in avian mortality if CUPs are extended as proposed, a description and analysis of the effect this increase in mortality would have on local populations of focal raptor species, particularly golden eagle, are missing.

A CEQA analysis should use available data to determine or at least make an attempt to determine the effect of mortality on local raptor populations. Simply stating numbers of dead birds is insufficient.

The importance of the Altamont Pass region to golden eagle and its unusually high population density there is well documented. There is also evidence that wind turbine collisions are an important element of a decline in the regional population that may jeopardize its long term viability.

6-7

Given that the US Fish and Wildlife Service has stated that the rate of take for a local eagle population should not exceed five percent, and that a recent impact analysis for a local wind farm estimates a current annual rate of take for the local golden eagle population of 12%, it could be that the sustainability of golden eagles in the area is being jeopardized.

This clearly demonstrates the need for a golden eagle population impact analysis in the AWI dsEIR. The dsEIR should be changed to include such an analysis.

Proposed Mitigation is Uncertain

In addition to mitigation measures from the 2013 fEIR, the AWI dsEIR includes BIO-17a, a measure from the 2014 Altamont Pass Wind Resource Area Repowering programmatic EIR. This measure consists of a series of options to contribute to raptor conservation and rehabilitation efforts. However, the AWI dsEIR lacks detail in describing how impacts would be mitigated using this measure, and gives the impression that the measure is voluntary.

6-8

The dsEIR should be modified to clearly describe how the applicant is obligated to apply this measure, what specific actions under what circumstances would be implemented and how these actions will reduce the impact of avian mortality related to wind power operations.

Thank you for the opportunity to provide comments.

Sincerely,
Juan Pablo Galván
Land Use Planner

Responses 6-1 to 6-3

The comments are introductory and reflect the opinion of the commenter that the CUP modification should be denied. While the County has reviewed and considered this information, it does not comment on the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no further response is required.

Response 6-4

The commenter states the proposed CUP extension increase avian mortality counter to recent mortality reduction efforts. The comment is noted. While the County has reviewed and considered this information, it does not comment on the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no further response is required.

Response 6-5

The commenter states projected increases in avian mortality are underestimated and an inappropriate baseline mortality rate is applied. Please refer to **Master Responses 1 and 2**.

Response 6-6

The commenter states that inappropriate calculations of the avian mortality were conducted. See Master Response 1.

Response 6-7

The commenter states the effect of increased mortality on golden eagle population remains unclear, a description and analysis of the effect this increase in mortality would have on local populations of focal raptor species, particularly golden eagle, are missing. Please refer to **Master Response 5**.

Response 6-8

The commenter states the proposed mitigation is uncertain and that the DSEIR should describe how the applicant is obligated to apply Mitigation Measure BIO-17a. Please refer to **Master Response 4**.

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Letter 7: Richard Cimino

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-----Original Message-----

From: richard cimino [<mailto:yellowbilledtours@gmail.com>]

Sent: Monday, January 12, 2015 8:44 AM

To: Rivera, Sandra, CDA

Subject: AWI Permit Modification EIR

Dear Sandra Rivera,

I am opposed to the AWI's application to extend their operation of all of its 828 existing old generation wind turbines for 3 additional years from 2015 to 2018.

It is my feeling, having been part of the APWRA community proceeding, public hearing, stakeholder meeting, Eastern Alameda County Zoning hearings, (on and on) that government just hasn't listen to the facts of the impacts on bird life if an CUP permit extension is approved.

It appears that the County has listen even less by considering the continuing of the AWI operation.

Hasn't the county government learn that there will continue to be severe impacts on the avian life throughout the permit extension?

How do you the county of Alameda and AWI mitigate the impacts to raptors that any extension will cause?

I urge the county staff to not any approve or pass any type of modification to the existing Conditional Use Permits per the Planning Case PLN2014-00028 use permits.

Yours,
Rich Cimino
Pleasanton, California

7-1

Response 7-1

The commenter states that the County has underestimated the impacts on avian mortality and that there would be a continuance of impacts on avian life with the CUP extension. The commenter would like to know how these impacts would be mitigated. Please refer to **Master Response 4**.

Letter 8: State of California Department of Fish and Wildlife

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State of California – The Natural Resources Agency
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EDMUND G. BROWN JR., Governor
 CHARLTON H. BONHAM, Director



Comment Letter 8

January 12, 2015

Ms. Sandra Rivera
 Alameda County Community Development Agency
 244 West Winton Avenue, Room 111
 Hayward, CA 94544
sandra.rivera@acgov.org

Dear Ms. Rivera:

Subject: Modifications to Existing Conditional Use Permits-Altamont Winds, Inc. Project, Draft Supplemental Environmental Impact Report, SCH #2014092057, Alameda County

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Supplemental Environmental Impact Report (SEIR) for the proposed Modifications to Existing Conditional Use Permits-Altamont Winds, Inc. Project (Project). CDFW is submitting comments on the SEIR as a means to inform Alameda County (County), as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project. CDFW previously submitted comments on the Notice of Preparation (NOP) of the SEIR in a letter dated October 16, 2014.

CDFW is a trustee agency pursuant to the California Environmental Quality Act (CEQA) § 15386. Pursuant to Fish and Game Code § 1802, CDFW has jurisdiction over the conservation, protection and management of the fish, wildlife, native plants and the habitat necessary for biologically sustainable populations of such species.

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CDFW has regulatory authority over projects that could result in take of any species listed, or is a candidate for listing by the state as threatened or endangered, pursuant to the California Endangered Species Act (CESA). If the proposed Project could result in take of any state listed species, the Project developer should apply for an Incidental Take Permit (ITP), pursuant to Fish and Game Code § 2080 *et seq.*, for the Project.

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code §§ protecting birds, their eggs and nests include 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Fully Protected Species may not be taken or possessed at any time (Fish and Game Code § 3511).

Project Location, Description and CEQA Background

The proposed Project is located within the Altamont Pass Wind Resource Area (APWRA) in Alameda County. The Project consists of modifications to 16 existing Conditional Use Permits (CUPs) for wind turbines owned and operated by Altamont Winds, Inc. (AWI). AWI has submitted an application to the County requesting that these CUPs, set to expire on

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October 31, 2015, under modifications approved by the County in 2013, be extended through October 31, 2018 under current conditions for operation of its estimated 828 turbines. The turbines have a rated capacity totaling approximately 85.8 mw. The turbines and support facilities occupy approximately 155 acres and are located within an area approximately 14,916 acres in size.

The SEIR is intended to supplement the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits-Altamont Winds, Inc.* (2013 FEIR) (SCH #2012062060). The 2013 FEIR evaluated the application made by AWI in 2011 to modify the CUPs which were approved in 2005.

Although the current proposal for the facility's turbine operations through 2018 was evaluated in the 2013 FEIR as an alternative (Alternative 3), it was only at a limited level of analysis [CEQA Guidelines § 15126.6(d)]. In the 2013 FEIR, the County determined that "Alternative 3 would better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on the special-status species avian wildlife, Alternative 3 is considered infeasible."

The 2013 FEIR included as Alternative 1 a modification of the schedule, previously adopted in 2005, for phased decommissioning of existing turbines prior to repowering. The decommissioning schedule adopted in 2005, which included 10% removal by September 2009, 35% by 2013, 85% by 2015 and 100% by 2018, was changed to eliminate the phasing and allowed for continued turbine operation with winter shutdowns until October 2015 when operations would cease. On July 18, 2013, by Resolution No. 13-36, the East County Board of Zoning Adjustments modified AWI's CUP's consistent with Alternative 1.

Project Description – Asset Exchange

The proposed Project includes a wind turbine exchange ("asset exchange") which involves exchanging approximately 300 turbines, owned by AWI and located south of Interstate 580 (I-580), for an equal number of turbines, owned and operated by another company and located north of I-580. The purpose of the proposed asset exchange is to physically separate certain historically shared project assets within the APWRA to allow for unencumbered and geographically consolidated operations.

The SEIR provides speculative and conflicting statements as to whether or not the asset exchange will reduce the potential impacts of the Project on avian species. Page 2 of the SEIR states that the asset exchange would not increase the capacity or quantity of AWI's operating turbines. Page 3 of the SEIR states that the proposed asset exchange would result in "no greater impact on avian mortality when reviewing the proposed wind turbines received in an exchange for the wind turbines given up." Page 4 of the SEIR states that the Project's operating capacity would be reduced through the exchange of twenty 250 kW turbines for twenty 100 kW turbines, and that the exchange is "anticipated to decrease somewhat the impact on avian species, due to the reduction in the number of high-risk turbines in operation and the anticipated reduction in operating capacity for years 2016-2018." On Page 33, the SEIR states that "on a statistical level, the asset exchange would have no effect on the impacts caused by the [P]roject."

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If the asset exchange is meant to serve as a minimization or mitigation measure, CDFW recommends the SEIR clearly state this intent and provide evidence to show that the substantial evidence based on facts or reasonable assumptions predicated upon facts to support the conclusion.

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Avian Impacts and Proposed Mitigation

The SEIR states that the impacts of the Project on avian species, including focal species [golden eagle (*Aquila chrysaetos*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*) and western burrowing owl (*Athene cunicularia*)], remain significant and unavoidable even after implementation of any of mitigation measures BIO-16, BIO-17, and BIO-17a. These measures include seasonal shutdowns (BIO-16), retrofitting off-site electric utility poles within 140 miles of the Project area (BIO-17), and contributions to conservation efforts to compensate for loss of special-status species (BIO-17a). The SEIR does not indicate if all, none, one, or combination of these mitigation measures will be implemented. If the Project as proposed is approved, CDFW recommends BIO-16, BIO-17, and BIO-17a all be implemented.

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The 2013 FEIR [Table 4-2, *Adjusted Species Fatality Rates for Each Alternative Based on an Average Fatality Rate (Fatalities per Megawatt per Year)*] estimated total golden eagle fatality to be 19.0 to 26.5 individuals under Alternative 3 and estimated fatalities of American kestrel and red-tailed hawk are shown to be higher than those of golden eagles. Under Alternative 1, Table 4-2 indicates total golden eagle fatalities are projected to be 7.9 to 10.9 individuals and the No Project Alternative is projected to be 7.1 to 9.9 golden eagle fatalities.

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Mitigation Measure BIO-17

Based on the United States Fish and Wildlife Service (USFWS) draft guidance (2012), a ratio of 29 utility pole retrofits for each estimated eagle fatality is recommended by USFWS. Mitigation Measure BIO-17 involves retrofitting 29 power poles for each golden eagle fatality projected to result from turbine rotor blade collisions. The fatality projections in Table 4-2 of the 2013 FEIR shows Alternative 3 to have a nearly 2.5 fold increase in golden eagle fatalities from Alternative 1 and an increase of nearly 2.7 times from the No Project Alternative which would result in 16.6 additional golden eagle fatalities when compared to the No Project Alternative and 15.6 additional golden eagle fatalities when compared to Alternative 1.

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The SEIR states for BIO-17 that with implementation of mitigation measure BIO-16 the Project is projected to result in a fatality of approximately one golden eagle when compared to the existing 2005 CUP schedule. This results in proposed mitigation of retrofitting what appears to be a total of 29 utility poles for the expected increase in raptor fatality with implementation of the Project. This mitigation measure is not consistent with the results of Table 4-2 of the 2013 FEIR which projects 16.6 additional golden eagle fatalities when compared to the No Project Alternative and 15.6 additional golden eagle fatalities when compared to Alternative 1. CDFW recommends that the SEIR clearly describe the number of poles that will be retrofitted as mitigation for avian impacts, and how the number of poles was derived.

Mitigation Measure BIO-17a

The SEIR includes "a suite of alternative mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed [P]roject through contributions towards conservation and rehabilitation efforts. These alternative mitigation measures include:

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1-measures outlined in an approved Eagle Conservation Plan and Bird and Bat Conservation Strategy; 2-contributions to raptor recovery efforts; 3-contribution to raptor conservation efforts; 4- contribution to regional conservation of raptor habitat; and/or 5-other conservation measures identified in the future.” The SEIR states that these mitigation measures were derived from those included in the recently-certified (November 2014) *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (SCH #2010082063).

The SEIR does not describe the feasibility of each of the proposed alternative mitigation options. In order for CDFW to assess the adequacy and effectiveness of these options, the SEIR should, at a minimum, include the following: 1) a detailed description of each proposed alternative mitigation measure; 2) a clear association of the proposed mitigation measure to the impact; 3) the specific amount(s) of the mitigation and an explanation of how the amount(s) was/were calculated; and 4) a timeframe for implementing each proposed mitigation measure. CDFW does not recommend that the County defer the formulation and identification of Project-specific mitigation and conservation measures to an undetermined time in the future [CEQA Guidelines [§ 15126.4 (a)(1)(B)]. CDFW recommends that, in addition to the information listed above, the SEIR include performance standards for each proposed measure and a commitment to achieve that standard.

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Incidental Take Authorization

The Project area supports CESA-listed species such as California tiger salamander (*Ambystoma californiense*), San Joaquin kit fox (*Vulpes macrotis mutica*), and Alameda whipsnake (*Masticophis lateralis euryxanthus*), also known as Alameda striped racer (*Coluber lateralis euryxanthus*). As stated in our previous CEQA comment letters for AWI's wind farm (2013 FEIR and 2014 Notice of Preparation), a CESA ITP is warranted if the project has the potential to result in take of species of plants or animals listed under CESA. CDFW believes that decommissioning as well as repowering activities involving ground disturbance (grading, concrete pad removal, vegetation removal, trenching, etc.) are likely to result in take of state-listed species. Decommissioning of turbines and ancillary facilities has already occurred within the Project area. The existing CUPs currently require decommissioning of remaining infrastructure within the AWI wind farm by September 30, 2015 (starting in May 2015).

The SEIR states that the proposed CUP extension would be conditioned on AWI pursuing development of a repowered wind farm on the Project site and demonstrating that circumstances beyond AWI's control have delayed completion of the repowered project. However, the SEIR states that it will not evaluate repowering of AWI's wind farm, and that a separate CEQA document, such as an Addendum or Supplemental EIR will be tiered from the 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area*, will be prepared.

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Although the SEIR states that impacts resulting from decommissioning are not discussed in the current SEIR, CDFW also recommends that the SEIR provide a timeframe for AWI to obtain take authorization for the decommissioning and repowering activities. Issuance of a CESA permit is subject to CEQA, therefore, the EIR supporting the issuance of a CESA ITP needs to specify impacts, mitigation measures, and a mitigation monitoring and reporting program. Information about the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>. The ITP permitting process can be lengthy and

we recommend early consultation during the ITP application process. CDFW Bay Delta Region staff is available to provide guidance during the process. To ensure early consideration of CESA-related issues and permitting, CDFW recommends that the County, as the Lead Agency, require that AWI apply for take authorization under an ITP as a condition of approval in the SEIR.

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Conclusion

CDFW appreciates the opportunity to provide comments to the County on the SEIR for the Project. CDFW supports the development of renewable energy resources for projects which are in compliance with existing state and federal laws and acts, and when measures are implemented which effectively avoid or reduce impacts to native species and their habitats to levels less-than-significant levels. CDFW staff is available to meet with you to ensure that potential impacts to sensitive species are avoided, minimized or mitigated. If you have any questions, please contact Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or brenda.blinn@wildlife.ca.gov; or Mr. Craig Weightman, Environmental Program Manager, at (707) 944-5577 or craig.weightman@wildlife.ca.gov.

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Sincerely,



Scott Wilson
Regional Manager
Bay Delta Region

cc: Ryan Olah, USFWS
Heather Beeler, USFWS

Literature Cited

ICF. 2014. Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years, 2005-2012. Alameda Community Development Agency. M101.

Response 8-1

This is an introductory comment.

Response 8-2

This comment provides a summary of the project location, description and CEQA background.

Response 8-3

This comment provides a summary of the asset exchange.

Response 8-4

The commenter states that the DSEIR has conflicting statements as to whether or not the asset exchange will reduce the potential impacts to avian species and that if the asset exchange is meant to serve as a minimization or mitigation, CDFW recommends the DSEIR state this intent. Please refer to **Master Response 3** and revisions to the text as found in Appendix C of this FSEIR document.

Response 8-5

The comment states that if the asset exchange is meant to serve as a minimization or mitigation measure it should clearly state this intent. Please refer to **Master Response 3**.

Response 8-6

The commenter states that it is unclear if all, none, one, or a combination of the mitigation measures will be implemented. As indicated in the DSEIR, mitigation for impacts resulting from operation of the project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 FEIR. Please refer to **Master Response 4**.

Response 8-7

The commenter describes Table 4-2 in the 2013 FEIR. The comment is noted and does not require a specific response.

Response 8-8

The commenter states that CDFW recommends that the SEIR clearly describe the number of poles that will be retrofitted as mitigation for avian impacts, and how the number of poles was derived. Please refer to **Master Response 4**.

Response 8-9

The commenter states that CDFW recommends that the SEIR include performance standards for each proposed measure and a commitment to achieve those standards. Please refer to **Master Response 4** and to text revisions to the DSEIR document in Appendix C of this FSEIR, which clarify the obligations of the applicant to implement the identified mitigation measures.

Response 8-10

The commenter states CDFW also recommends that the SEIR provide a timeframe for AWI to obtain take authorization for the decommissioning and repowering activities.

As noted in the DSEIR, and as described in the 2013 FEIR, project impacts on biological resources could occur as a result of operational changes (for avian species) and during decommissioning activities (terrestrial impacts) in cases where special status species and/or sensitive habitats occur within the decommissioning work areas. The DSEIR does not analyze impacts related to decommissioning, as the proposed extension is not anticipated to result in any changes to those impacts. These potential impacts resulting from project decommissioning would not be changed in any way by the proposed extension of the CUPs except that they would be delayed. In all other respects, impacts resulting from decommissioning activities under the currently proposed CUP modifications would be identical to the impacts identified in the 2013 FEIR.

While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no further response is required.

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This comment concludes the letter.

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Letter 9: Audubon California

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January 12, 2015

Via Email

Ms. Sandra Rivera
Assistant Planning Director
Alameda county Community Development Agency
224 West Winton Ave., Room
Hayward, California 94544

RE: Draft Environmental Impact Report for the Application to Modify Permits for Altamont Winds, Inc.

Dear Sandra:

Audubon California writes on behalf of its chapters and members regarding the Draft Environmental Impact Report (“DEIR”) for the proposed modification to the Conditional Use Permits (“CUPs”) for Altamont Winds, Inc. Audubon continues to oppose the project because it, will result in unavoidable significant environmental impacts to birds and represents an unfortunate step backward in the Altamont Pass.

As a starting point, Audubon reminds the County that it already considered the project applicant’s request for an extension of 100% of its operations to 2018 as Alternative 3 in the 2013 FEIR. It was rejected outright as “infeasible.” Specifically, the 2013 FEIR stated that extending 100% of AWI’s operations to 2018 would

very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible.

(2013 FEIR, emphasis added) Moreover, the County staff’s urging of the EBZA’s approval of the 2013 modification depended significantly on the added value of a 100% shutdown in 2015, stating:

While the County certain considers every bird fatality to be significant and preferably avoided, it is also the case that prolonging the operation of AWI’s turbines, even just 15 percent (138) of their original power plant for an additional 2 1/2 years would be disadvantageous to repowering that is expected to occur on the same properties and would in fact complicate monitoring efforts in those later years. **Repowering itself would be achieved more quickly and efficiently on the whole were there to be comprehensive removals of the old generations turbines completed in 2016.**

(Alameda County Staff Report, at 14, emphasis added). Therefore, the commitment by AWI to shutdown 100% of its turbines in 2015 was not only central to the County’s approval of the 2013 permit modifications, the alternative to extend those operations to 2018 was wholly unacceptable due to the significant increase in avian mortality and the negative impact on repowering efforts.

While the County’s prior findings should be sufficient grounds to deny AWI’s request to further modify its CUPs, the County now provides a substantively and legally deficient DSEIR to the 2013 FEIR that appears intended to facilitate approval of the project. The DSEIR, like the proposed project, represents a significant step backwards in the Altamont Pass.

First, if approved, the project would be subject to challenge under law interpreting the California Environmental Quality Act (CEQA) because it would constitute “piecemealing”, or splitting a major project into smaller projects in order to reduce the appearance of environmental impact. Here, AWI and the County have presented no new information that was not available in 2013 in order to rationalize this further extension. It appears that the 2013 permit modifications were proposed merely as a “first step” to avoid the September 2013 shutdowns and prepare for the 2014 request for 100% operations until 2018.

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Second, the DSEIR employs inadequate impacts analysis. It incorrectly calculates baseline mortality for birds. It also relies on faulty analysis for estimates of future mortality.

Third, the DEIR fails to propose adequate mitigation measures for impacts to birds and bats. It relies on vaguely defined mitigation measures, defers mitigation, and fails to provide adequate parameters or guidelines to ensure success of mitigation.

Fourth, the DEIR fails to adequately assess cumulative impacts. The USFWS policy on Golden Eagles allows for approximately 5% of local populations to be taken by human activities, but in the Altamont Pass, nearly 12% are taken by turbines. The DSEIR fails to consider this or other cumulative impacts on Golden Eagles and other birds.

Fifth, the DEIR fails to set forth adequate evidence to support the finding of overriding considerations necessary to approve this project. The DSEIR acknowledges that impacts to eagles and other birds constitute significant and unavoidable impacts. But the DSEIR fails to include all feasible mitigation measures and to demonstrate that the added impacts are offset by benefits from the project.

I. BACKGROUND

In 2005, the County approved Conditional Use Permits (CUPs) for AWI to continue operations of its old-generation wind turbines through 2018. (East BZA Planning Staff Report, July 2013, at 3) AWI’s 2005 CUPs included a phased decommissioning of its assets through 2018, including a shutdown of 25% of its fleet in September 2013 and an 85% shutdown in 2015.

As the September 2013 deadline approached, AWI sought and was granted relief from its commitment in the 2005 CUPs, specifically winning approval to forego the phased decommissioning of its turbines and operate 100% of its then-existing fleet until 2015. The County acknowledged that

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the change may result in greater avian mortality, but that the additional losses would be offset because the action would facilitate repowering in the APWRA.

At the time, AWI emphatically stated that the schedule made sense because it allowed for a more consolidated operation through 2015 and would put AWI on the same footing as other turbine operators who had agreed to shut down in 2015 and were working on repowering projects. AWI said—as it has many times over the past eight years—that it was diligently working on a repowering plan, but that it would not be financially possible without the schedule shift.

Audubon and the Attorney General’s Office expressed skepticism regarding AWI’s repowering plans. AWI has often expressed interest in repowering, but it has consistently failed to demonstrate substantial progress. Notably, AWI’s purported repowering project is absent from the County’s programmatic environmental impact report (PEIR) for repowered projects in the APWRA. Audubon and the Attorney General’s Office also expressed concern that if the CUP modifications were granted, AWI would likely come back and seek a further extension from 2015 to 2018, further undermining repowering efforts and granting AWI an unfair competitive advantage over other companies in the APWRA that were diligently working on repowering projects.

The late-2014 proposal and DSEIR now at issue then does not come as a surprise. But aside from demonstrating the project proponent’s desire to continue operating its old-generation turbines without interruption, the DSEIR does not provide any new information in its Project Need or Project Description over what was offered in the 2013 FEIR. (*See* DSIER, at 21-22)

At issue is whether the County will again modify AWI’s CUPs to allow it to continue to kill more birds and bats despite past commitments to decommission and repower. Audubon reminds the County that as it proceeds with this project—regardless of the alternative selected—it is permitting activities that the County knows will kill Golden Eagles and other birds and, therefore, will violate state and federal laws. Knowingly permitting illegal activities constitutes a violation of the law unto itself.

Scrutiny on impacts from renewable energy projects is perhaps higher than at any time in the past. In 2013, Duke Energy pled guilty to violating the Migratory Bird Treaty Act for killing 160 birds, including 14 Golden Eagles, and accepted a \$1 million fine. (*See* Soumya Karlamangla, *Energy company to pay \$1 million in wind turbine eagle deaths*, L.A. Times, November 21, 2013, available at <http://articles.latimes.com/2013/nov/24/nation/la-na-nn-wind-energy-eagle-death-20131123>) Audubon notes that the DSEIR acknowledges that the proposed project will between 11.1-26.5 Golden Eagles (depending on how the calculation is performed), nearly 1.5-2 times as many as Duke Energy acknowledged in its plea agreement.

II. IF APPROVED, THE PROJECT WOULD CONSTITUTE PIECEMEALING UNDER CEQA AND BE SUBJECT TO LEGAL CHALLENGE.

CEQA is intended to provide transparency and clarity as a lead agency considers a project that may have significant impacts on the environment. It defines “project” broadly, to include “the whole of an action, which has a potential for resulting in either a direct physical change in the

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environment, or a reasonably foreseeable indirect physical change in the environment.” (CEQA Guidelines § 15378(a), (c))

Courts consistently hold that CEQA precludes “piecemeal review which results from ‘chopping a large project into many little ones each with a minimal potential impact on the environment which cumulatively may have disastrous consequences.’” (*Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370, quoting *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283-284)

Here, the 2013 permit modifications and those now proposed are truly one in the same and cannot be reasonably seen as separate projects. They deal with the very same permits, wind turbines, and time periods. The 2014 application really just represents another “bite at the apple” for the project proponent in its effort to continue operating old-generation turbines for as long as possible.

In 2013, the County was unwilling to proceed with 100% operation of the old turbines until 2018 because of its impacts on birds and in delaying repowering. It went as far as to conclude the alternative was “infeasible.” In fact, it used the 100% until 2018 alternative as a foil of sorts to support approval of the 2013 permit modification (because it would facilitate repowering) and make it appear more reasonable (because it would have less avian mortality than Alternative 3).

If the County were to approve the current proposal, just a year after rejecting it as infeasible and instead taking the “baby step” of the 2013 permit modifications, it would appear to have been “chopping” the larger project (100% operation of the old turbines until 2018) into two “little ones” to minimize apparent impacts. While both the 2013 FEIR and the DSEIR acknowledge the significant and unavoidable impacts, the impacts seem more incremental when split into two “projects” than if there had been fully analyzed in a single EIR in 2013.

III. THE DEIR IS SUBSTANTIVELY DEFICIENT.

A. The DEIR Fails to Adequately Assess Impacts to Birds.

According to the Altamont Pass Scientific Review Committee (SRC), “[w]ith this 3-year extension, the total number of fatalities for the focal species almost doubles . . .” (SRC (2014) Comments on AWI DSEIR, Document P297 (“SRC 2014 Comments”)) The current rate of take for the Golden Eagle population in the APWRA is 12% annually. (SRC Comments (2014) at 2) This exceeds the USFWS policy that take of local eagles should not exceed 5% annually. (*Id.*) We note that the DSEIR fails to acknowledge this departure from federal policy, which alone constitutes a significant and unavoidable impact.

Audubon concurs with the SRC and the EBRPD that the most recently-available data should be used in the DSEIR’s impacts analysis. (*See* SRC 2014 Comments, at 3; EBRPD 2014 Comments, submitted on Dec. 23, 2014, at 2-4). At a minimum, the DSEIR should be revised to include the 2011 data.

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The DSEIR also relies on an incorrect mortality calculation that underestimates fatalities. (SRC 2014 Comments, at 3-4; EBRPD 2014 Comments, at 2-4). As the SRC notes, “it is more important than ever to apply the method of calculation that would have the least bias on the Alternatives estimates.” (*Id.* at 4) In fact, the SRC estimates that tables 3-1 and 3-2 of the 2013 FEIR show that installed capacity and projected fatalities are approximately 40% higher when not subtracted. (*Id.*) The DSEIR must be revised to account for this gross inaccuracy.

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The DSEIR fails to assess the effect on the change in mortality arising from the project on local or regional breeding, wintering, and migratory populations. (SRC 2014 Comments, at 2). In other words, by merely counting the estimated number of dead birds, the DSEIR fails to fully assess the ecological consequences of the proposed action. (*Id.*)

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B. The DEIR Does Not Propose Adequate Mitigation Measures.

The DSEIR fails to describe all feasible mitigation measures with adequate specificity. “A mitigation measure is feasible if it is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” (*California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 622, quoting CEQA Guidelines § 21061.1) As the SRC notes, because of the significantly higher project fatalities (up to 40% higher), “intensity of the mitigation measures should be scaled up accordingly.” (SRC 2014 Comment, at 4)

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Where the DSEIR offers mitigation measures for impacts to birds, they often suffer from the uncertainty regarding the measures’ effectiveness. For example, it indicates that a reductions in high-risk turbines (“HRTs”) will mitigate impacts, but it dismissed HRT removals in 2013. (DSEIR, at 4; *c.f.*, 2013 FEIR at 3.2-32) It also proposed power pole retrofits, though of unspecified number and location, and without acknowledging the uncertainties regarding the effectiveness of retrofits to benefit the local eagle population. (*See Preserve Wild Santee v. City of Santee*, 210 Cal.App.4th, 260, 279 (2012) (rejecting purported mitigation measures that are not adequately specific in time, place, or manner))

Concern about uncertainty in project impacts and mitigation measures is gaining greater scrutiny in environmental review processes statewide, especially for large, complex projects and complicated environmental impacts. (*See, e.g.*, Delta Independent Science Review Board (2014), Review of the Draft BDCP EIR/EIS and Draft BDCP, at 3, available at <http://deltacouncil.ca.gov/sites/default/files/documents/files/Attachment-1-Final-BDCP-comments.pdf>)¹ As the DSIB found, “[u]naddressed, uncertainties can pose major and significant

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¹ The DISB report’s finding that the BDCP “project is encumbered by uncertainties that are considered inconsistently and incompletely; modeling has not been used effectively to bracket a range of uncertainties or to explore how uncertainties may propagate” could easily apply to the DSEIR. As the SRC notes, the impacts from the higher mortality are not merely just a higher number of total birds killed, but a much broader ecological impact. (SRC 2014 Comments, at 4). Moreover, like the BDCP, the DSEIR suffers from vague, deferred, and uncertain mitigation measures. Unfortunately, unlike the BDCP, the DSEIR fails to provide an adaptive management framework that would adjust mitigation measures as new data are available to ensure the best effectiveness possible.

risks to the project as a whole and lead to false expectations from managers and stakeholders. (*Id.*, at 5) In 2014, the California Department of Water Resources delayed finalization of the EIS/EIR for the Bay-Delta Conservation Plan (BDCP) in part because the draft environmental document were roundly criticized for failing to account for uncertainties in their impacts and mitigation analyses.

As discussed further below, the degree of uncertainty in the DSEIR’s mitigation measures renders the document insufficient. In, *Save Wild Santee*, the appellate court held that “[a]n EIR may not defer the formulation of mitigation measures to a future time, but mitigation measures may specify performance standards which would mitigate the project’s significant effects and may be accomplished in more than one specified way.” (*Save Wild Santee*, 210 Cal.App.4th at 280, citing CEQA Guidelines § 15126(a)(1)(B))

The appellate court also found that while the EIR contained measures to mitigate habitat loss, it did not describe actions anticipated for active management of the mitigation lands. Moreover, it did not specify performance standards or other guidelines for the management. (*Id.* at 281) “The absence of standards or guidelines in the EIR for active management” was problematic, the court concluded, because the EIR failed to specify activities or, where activities were specified, it failed to guarantee they would occur at “any particular time or in any particular manner.” (*Id.*)

At a minimum, the EIR should identify performance standards or guidelines for management or, in the alternative, state why it is infeasible to do so. (*Id.* at 281) Post-approval mitigation measures or plans violate CEQA’s prohibition on deferred mitigation. “The fact that the City and wildlife agencies must ultimately approve the habitat plan does not cure these informational defects.” (*Id.*, citing *San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal.App.4th, at 670). Where an EIR is upheld is where it includes “articulated specific performance criteria (*e.g.*, 80 percent of any transplanted plant species must be established within three years).” (*Id.* at 282, citing *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 941-943))

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1. Removal of high-risk turbines

The 2013 FEIR does not include HRT removal as a mitigation measure and the text strongly implies that evidence of the benefits of HRT removal is circumstantial. (SRC 2014 Comments, at 4; FEIR at 3.2-32). Despite dismissing the mitigation measures in 2013, the County appears to embrace it in the DSEIR as a way of compiling environmental credits for the project. The DSEIR states: “An asset exchange is nonetheless anticipated to decrease somewhat the impact on avian species, due to the reduction in the number of high-risk turbines in operation” (DSEIR, at 4).

At a minimum, the DSEIR should be revised to address the discrepancy with the 2013 FEIR’s findings and, if HRT removal is truly appropriate, suggest specific HRT removals that will reduce impacts to the greatest extent feasible. Moreover, given that the reduction in HRT appears dependent on ongoing negotiations that are by no means certain, it is impossible to assess the

9-10

effectiveness of this potential mitigation. As currently written, the DSEIR is too vague on the subject of HRT removal for it to constitute a valid mitigation measure.

9-10
Cont.

2. Power pole retrofits

Audubon shares the concerns of the SRC and East Bay Regional Park District regarding the DSEIR’s inadequate mitigation proposal for power pole retrofits. The DSEIR states in separate places that only 29 power poles will be retrofit or, alternatively, that 322 poles will be retrofit. (*See* Mitigation Measure BIO-17, DSEIR, at 5, 35). Given that the proposed project will kill 19-26.5 Golden Eagles, the DSEIR should be revised to require the retrofit of 551-769 poles. (*See* SRC 2014 Comments, at 5) Even if the DSEIR’s underestimate of 11.1 Golden Eagles killed between 2016-2018 is accurate, it reflects the low side of the range and not the most environmentally protective approach, as required by CEQA.

Moreover, while Audubon understands that power pole retrofits are being encouraged by USFWS, the DSEIR lacks any evidence demonstrating that this particular mitigation measure will offset impacts to the Altamont Pass regional population of Golden Eagles. Moreover, Audubon is informed that there are different methods for and types of power pole retrofits, but the DSEIR is vague about where the retrofits will occur and what method would be used. Without more information, a reader is unable to gauge the likely effectiveness of this mitigation measures. Finally, the DSEIR indicates that AWI is in negotiations with PG&E over the price of retrofits, which implies that the actual number that will occur is not established with any certainty.

9-11

3. The proposed asset exchange should not be considered as mitigation or as dependent on the proposed project’s approval.

Audubon takes issue with the DSEIR’s statement that “[a]s part of this extension, the applicant is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange” and references to the exchange throughout the DSEIR. (*See* DSEIR, at 8, 22) Audubon is informed and believes that discussions over the asset exchange predate the extension request and do not (or, at least once did not) depend on the extension. It appears that the asset exchange has been included in the DSEIR in attempt to garner “mitigation credits,” or the equivalent, because the exchange may result in AWI operating fewer high-risk turbines (HRTs).

At best, the asset exchange should not be seen as contributing to mitigation because it is not adequately described in the DSEIR. At worst, it appears that inclusion of the asset exchange language is an attempt to hold the exchange—and therefore other repowering efforts—hostage to the outcome of the extension request. Audubon asks that the Staff Report discuss this issue or, at a minimum, that the question of the asset exchange be addressed during oral testimony at the hearing on this matter.

9-12

Moreover, because the proposed asset exchange is speculative at best, it does not qualify as mitigation under CEQA. The DSEIR appears to want it both ways – it asserts that AWI will

control fewer HRTs after the exchange, but it acknowledges that the exchange will have no statistical effect on mortality estimates. (DSEIR, at 3-4) The DSEIR would be improved by either providing more specificity and assurances about the asset exchange or striking reference to it altogether. Finally, to the extent that the asset exchange results in AWI having fewer HRTs or turbines overall, AWI should not get credit for another company’s efforts to mitigate impacts – that is effectively “double-dipping” for CEQA purposes.

9-12
Cont.

4. Mitigation Measure 17a does not provide adequate specificity or assurances to constitute a valid mitigation measure.

Mitigation Measure BIO-17a is inadequate on several fronts. It lists several potential actions, but commits to none.

First, it states that the applicant may apply for Bald and Golden Eagle Protect Act permit. This provides no assurances of mitigation because (1) the applicant may not apply, (2) the USFWS may not approve the application, and (3) the DSEIR lacks any standards or guidelines as to what that permit may contain—it doesn’t even refer to an existing permit as a model or template. Likewise, MM BIO 17-a states that the applicant may apply for a Special-Status Species Mitigation Plan and refers to an avian and bat conservation strategy, though it fails to specify any real information for either “plan”. At best, these are speculative promises and not mitigation measures. “The fact that the City and wildlife agencies must ultimately approve the habitat plan does not cure these informational defects.” (*Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th at 281, citing *San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal.App.4th, at 670).

9-13

Second, the DSEIR proposal to provide \$580 to raptor rehabilitation efforts for certain raptor deaths is based on inaccurate or misrepresented information and is, frankly, insulting to conservation advocates and wildlife reahabilitators. As the letter from the California Raptor Center indicated, the information in the DSEIR was taken out of context. This provision should be stricken from the DSEIR. Moreover, payment for already injured raptors does not in any way mitigate for impacts to the population in the Altamont Pass, so even if an equitable sum were to be determined, it would not constitute a demonstrable mitigation measure for purposes of CEQA.

9-14

Third, MM BIO-17a refers to habitat conservation, but it fails to identify lands or active management measures to benefits affected species. Similar language in the EIR at issue in *Save Wild Santee* led the Court of Appeal to hold the EIR violated CEQA. The DSEIR should be revised to correct this flaw.

9-15

Fourth, the provision that the project proponent may make proposals to the County for other, unspecified mitigation measures in the future should be removed from the DSEIR. Without an adaptive management component—which includes transparency and accountability for the County and project applicant—proposals for unspecified, future mitigation measures cannot be considered to constitute mitigation under CEQA. They are too speculative and uncertain. (*See Preserve Wild Santee v. City of Santee*, 210 Cal.App.4th at 281)

9-16

Finally, the DSEIR refers to other documents, including the 2013 FEIR and the 2014 Programmatic Environmental Impact Report for the APWRA (“PEIR”), but fails to specifically

9-17

identify the information, standards, or guidelines which are incorporated into the DSEIR. As written now, the mitigation measure appears to include a laundry list of “the right words” without saying anything substantive. It would be greatly improved if the information were provided in the DSEIR itself rather than just a unspecific reference to other, more extensive documents.

9-17
Cont.

5. The DSEIR’s proposed “Repowering Milestones” do not constitute mitigation measures.

Section 2.4 of the DSEIR includes several “repowering milestones” to which the project proponent purports to commit to demonstrate a good faith effort to repower. The information was presented at the December 18, 2014 public hearing and is presented in the DSEIR as a kind of implied mitigation measure. In other words, the project *may* have fewer impacts because the project proponent *may* repower before 2018.

9-18

These measures cannot be considered as mitigation and should not play a role in the County’s finding of a statement of overriding considerations, should one be made.

C. The DEIR Fails to Adequately Assess Cumulative Impacts.

A cumulative impacts analysis is necessary “where the project’s incremental effect is cumulative considerable” as defined by the CEQA Guidelines § 15065(a)(3). (*See Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th, 260, 276-277); *see also* CEQA Guidelines, § 15130(a)) Impacts are “cumulatively considerable” when the incremental effects of a project are significant when viewed in connect with the effects of other past, present, or reasonably foreseeable projects. (*Id.* § 15065(a)(3))

The 2013 FEIR offered an extremely weak cumulative effects analysis for biological resources. (*See* 2013 FEIR, at 5-6). The DSEIR offers none at all. Given the additional impacts from operating the old-generation turbines at 100% until 2018 and the likelihood that the continued operation will delay other repowering efforts, the DSEIR should include a cumulative effects analysis. Moreover, for at least Golden Eagles and other long-range migratory birds, the analysis should consider regional and population-level impacts from the proposed project when considered with other factors (development, habitat loss, and climate change) that affect those populations.

9-19

IV. CONCLUSION

Audubon has worked closely with the County and the wind companies over the past 11 years to move the Altamont forward, out of a period where birds were killed without adequate planning or mitigation. While Audubon did not favor the 2013 CUP modifications because it will result in higher mortality to birds, it did not appeal the approvals because we understand that repowering is the best way forward in the Altamont.

9-20

Unfortunately, the current project hinders repowering and kills more birds. If approved, it represents a lapse of judgment by the County and invites the kind of controversy that surrounded the 2004 permit approvals that led to years of litigation and conflict. Audubon urges the County to refocus on repowering the Altamont Pass in a way that generates renewable energy and sustains bird populations without undue impacts.

9-21

Audubon also agrees with the comments provided by the California Attorney General's office regarding the DSEIR's failure to provide substantial evidence on which a finding of overriding considerations could be made. (*See* California Attorney General's letter, submitted December 31, 2014, at 2-5)

9-22

Thank you for your consideration of our comments. Should you wish to discuss them further, please do not hesitate to contact me at (916) 737-5707 ext. 102 or mlynes@audubon.org.

Respectfully submitted,



Michael Lynes
Director of Public Policy

Response 9-1

This is an introductory comment.

Response 9-2

This comment provides background to support the remainder of the comment letter.

Response 9-3

The commenter states that the 2013 permit modifications and those now proposed are truly one in the same and cannot be reasonably seen as separate projects. The County has prepared the SEIR to evaluate the environmental effects of the project changes proposed by the applicant. The County must comply with CEQA in processing an application for a CUP modification that could result in significant environmental effects. The current CUP modification requested by the applicant is substantially similar to Alternative 3 of the 2013 FEIR; the original CUP modification evaluated in the 2013 FEIR was received as a single application and did not involve any phasing or expectation of future changes to the project. The current 2014 CUP modification proposal was received separately and required a new CEQA determination, which led to the preparation of the 2014 DSEIR. The County had no knowledge in 2013 of the 2014 proposal.

Response 9-4

The commenter states that the current rate of take for the Golden Eagle population in the APWRA is 12 percent annually. This exceeds the USFWS policy that take of local eagles should not exceed 5 percent annually. The commenter notes that the DSEIR fails to acknowledge this departure from federal policy, which alone constitutes a significant and unavoidable impact. Please see **Master Responses 5**.

Response 9-5

The comment states that the most recently available data should be used in the DSEIR impacts analysis. Please refer to **Master Response 6**.

Response 9-6

The commenter states that the DSEIR also relies on an incorrect mortality calculation that underestimates fatalities. Please refer to **Master Response 1**.

Response 9-7

The commenter states the DSEIR fails to assess the effect on the change in mortality arising from the project on local or regional breeding, wintering, and migratory populations. Please refer to **Master Response 5**.

Response 9-8

The commenter states that the DSEIR fails to describe all feasible mitigation measures with adequate specificity. Please refer to **Master Response 4**.

Response 9-9

The commenter emphasizes a concern about uncertainty in project impacts and mitigation measures and that the mitigation measures in the DSEIR render the document insufficient. Please refer to **Master Response 4**.

Response 9-10

The commenter states that the 2013 FEIR does not include HRT removal as a mitigation measure and the text strongly implies that evidence of the benefits of HRT removal is circumstantial and that the DSEIR should suggest specific HRT removals that will reduce impacts to the greatest extent feasible. Please refer to **Master Response 3**.

Response 9-11

The commenter states that the DSEIR's inadequate mitigation proposal for power pole retrofits and that the DSEIR should be revised to require the retrofit of 551-769 poles (i.e., 29 times 19.0 to 26.5 eagle fatalities between 2013 and 2018; see Table 4-2). The commenter further states that the DSEIR lacks any evidence demonstrating that the power pole retrofits will offset impacts to the Altamont Pass regional population of Golden Eagles. Please refer to **Master Response 4**.

Response 9-12

The commenter states that the asset exchange should not be considered as mitigation simply by operating fewer high-risk turbines (HRTs). It should be noted the DSEIR does not claim that a reduction in HRTs would directly mitigate estimated avian impacts, rather, should removal of HRTs result in a reduction in avian impacts, the asset exchange would have positive impacts on reducing avian mortality. Please refer to **Master Response 3**.

Response 9-13

The commenter states that Mitigation Measure 17a is inadequate because it provides no assurances that the applicant may apply for a Bald and Golden Eagle Protect Act permit and that references to a Special-Status Species Mitigation Plan are speculative promises and not mitigation measures. Application for a Bald and Golden Eagle Protect Act permit is voluntary by the applicant; however it should be noted that to be recognized as mitigation, such a permit must be approved by USFWS and the County and not merely applied for. Please refer to **Master Response 4** and revised Mitigation Measures BIO-17a as shown in Appendix C.

Response 9-14

The commenter states that Mitigation Measure 17a is inadequate because the DSEIR proposal to provide \$580 to raptor rehabilitation efforts for certain raptor deaths is based on inaccurate or misrepresented information. Please refer to **Master Response 4** and the revised Mitigation Measure BIO-17a, as indicated in the revised text of Appendix C of this document. This referenced option has since been removed from Mitigation Measure BIO-17a.

Response 9-15

The commenter states that Mitigation Measure BIO-17a refers to habitat conservation, but it fails to identify lands or active management measures to benefit affected species. Please refer to **Master Response 4** and the revised Mitigation Measure BIO-17a, as indicated in the revised text of Appendix C of this document.

Response 9-16

The commenter states that Mitigation Measure 17a is inadequate because proposals for unspecified, future mitigation measures cannot be considered to constitute mitigation under CEQA. This referenced option (fifth bullet paragraph, page 37 of the DSEIR) has since been removed from Mitigation Measure BIO-17a as shown in Appendix C.

Response 9-17

The commenter states that Mitigation Measure 17a is inadequate because the DSEIR refers to other documents, including the 2013 FEIR and the 2014 Programmatic Environmental Impact Report for the APWRA, but fails to specifically identify the information, standards, or guidelines which are incorporated into the DSEIR. The DSEIR is a supplement to the 2013 FEIR and as such, necessarily references and builds on that document. The 2014 Program EIR is only cited for general reference to the current conditions of the APWRA, and not for any particular piece of information that could specified further.

Response 9-18

The commenter states that Section 2.4 of the DSEIR includes several “repowering milestones” to which the project proponent purports to commit to demonstrate a good faith effort to repower. The information was presented at the December 18, 2014 public hearing and is presented in the DSEIR as a kind of implied mitigation measure. In other words, the project *may* have fewer impacts because the project proponent *may* repower before 2018. Mitigation Measures BIO-16, BIO-17 and BIO-17a are clearly defined separately in the DSEIR. No other aspects of the project outside of these clearly defined measures are implied as direct mitigation for estimated impacts resulting from the project. Please refer to **Master Response 4** and **Response 4-11**.

Response 9-19

The commenter states that given the additional impacts from operating the old-generation turbines at 100% until 2018 and the likelihood that the continued operation will delay other repowering efforts, the DSEIR should include a cumulative effects analysis. Please refer to Master **Response 5** and response.

Response 9-20

This comment raises an opinion regarding the merits of the project proposal, and not the environmental analysis in the DSEIR; therefore, the comment does not require further response by the County.

Response 9-21

This comment raises an opinion regarding the merits of the project proposal and not the environmental analysis in the DSEIR; therefore, the comment does not require further response by the County.

Response 9-22

This comment raises an opinion regarding the merits of the project proposal, and not the environmental analysis in the DSEIR; therefore, the comment does not require further response by the County. See also **Master Response 7**.

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Summary of Verbal Comments Received at the Public Meetings and Responses

The table below summarizes the verbal comments received during the Draft EIR/EA public meeting held on December 18, 2014. The comments are categorized by speaker and the responses are located in the column to the right.

TABLE A-4 VERBAL COMMENTS FROM THE DRAFT EIR/EA PUBLIC MEETING

COMMENT	RESPONSE
PM 1 Bob Cooper, Area Resident	
<p>The commenter states that the old wind mills should be turned off. He stated that the County needs to determine if these wind mills are polluting, and if they are they should be shut down and not be restarted. When the CUP changes were announced in March/April, the commenter noticed 'marks' on the blades and said it appears to be oil. The speaker said he feels the wind mills are in disrepair.</p>	<p>The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. However, the issue of potential leaking oil was raised by Bob Cooper during the NOP scoping period and; as such, the DSEIR analysis was expanded (please refer to Section 3.3.3) to address Upon further analysis, the project wind facility conditions in their current state and with the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange is not expected create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. As discussed in the 2013 FEIR, the project would also not expose people to airport-related hazards, or to impair implementation of any adopted emergency response plan or emergency evacuation plan. There are no public or private K-12 schools within 0.25 mile of the proposed project. The nearest school is approximately 2 miles east of project facilities and it is unlikely that hazardous materials will be emitted or released within 0.25 mile of any schools under the proposed project. As such, impacts would be less than significant. Please refer to Appendix B.</p>
PM 2 Doug Bell, for East Bay Regional Park District	
<p>The commenter says that the East Bay Regional Park District feels as though the DSEIR is inadequate and therefore open to challenge because: Impacts upon avian species with the CUP extension period were calculated using the wrong baseline condition, whereas the appropriate baseline condition is cessation of the CUP on October 31, 2015; The manner in which the fatality rates were calculated is in error, in that the values in the avian monitoring reports took into account 9 months of operation and 3 months of non-operation, whereas the SEIR reduces the impact by an additional factor, by multiplying these values by approximately 0.7; Among the mitigation efforts, the average cost of rehabilitation of an average raptor is</p>	<p>Please refer to Master Response 2.</p> <p>Please refer to Master Response 1.</p> <p>Please refer to Master Response 4 and Response 9-14.</p> <p>The public review was extended 10 days to January 12, 2015 to accommodate the holiday season as requested during the December 18, 2014 public comment meeting. Please refer to Appendix D.</p>

COMMENT	RESPONSE
<p>not accurate as opposed to the \$580 cost stated in the SEIR; and The effects of the asset exchange on previously recognized conditions between NextEra and other stakeholders will be upheld. The commenter requested extension of the public review period. Please refer to letter submitted by East Bay Regional Park District.</p>	
<p>PM 3 Michael Lynes, for Audubon California</p>	
<p>The commenter states that the Audubon feels the rationale that the County used during AWI's last request to not shutdown 25% of their turbines (as previously required) was that it would assist towards repowering, which would offset impacts. Continued turbine operation would have real impacts resulting in additional mortalities to eagles.</p> <p>The SEIR is inadequate, the mitigation measures are vague.</p> <p>The raptor fee identified was not included in good faith in the SEIR, the costs should be much higher.</p> <p>Nothing in the SEIR holds AWI accountable for repowering.</p> <p>The comment period should be extended by 10 or 15 days. Please refer to letter submitted by California Audubon Society.</p>	<p>The comment is noted. The DSEIR document acknowledges that continuation of operation of the extended CUP term to 2018 would result in increased avian impacts.</p> <p>Please refer to Master Response 4.</p> <p>Please refer to Master Response 4 and Response 9-14.</p> <p>Please refer to Master Response 4-11.</p> <p>The public review was extended 10 days to January 12, 2015 to accommodate the holiday season as requested during the December 18, 2014 public comment meeting. Please refer to Appendix D.</p>
<p>PM 4 Rick Koebbe, for AWI (Applicant)</p>	
<p>The commenter responds to earlier comments made at the hearing regarding oil leakage. AWI has specific instruction to all field workers that any oil leakage is to be cleaned up immediately and removed. Inspections are being done during the off season to look at each turbine for any leakage and should there be any leakage at all it is cleaned up and the soil is taken to a hazardous waste dump. AWI staff has assured the president that there is not a single drop of oil on the ground per his demands. The blades with markings are stained from rust that runs down the blades in the pictures presented and what has been indicated to the president from his staff; however, this does not mean there could be some oil on another blade potentially that they haven't addressed yet. They are currently addressing all issues related to potential oil. With regard to mitigation for continued operation, they have been required to retrofit power poles to mitigate eagle impacts. They are following USFWS guidelines; the only mitigation USFWS has offered at this point. AWI plans to repower and has taken significant steps towards repowering. AWI has made the application for repowering, executed repowering land leases, completed repower project design, filed transmission studies with the California system operator, executed a contract for the wind turbines,</p>	<p>This comment has been evaluated, and consistent with CEQA Guidelines, Section 15088, a response has been prepared for those substantive comments referencing significant environmental issues or issues relating to the adequacy of the EIR. While the County has reviewed and considered this information and the comment, it does not address the sufficiency or accuracy of the Draft SEIR or raise any significant environmental issues of the environmental analysis in the DSEIR; therefore, no response is required.</p>

COMMENT	RESPONSE
<p>performed all the environmental studies, commenced the project level work on the EIR with the County and submitted the scope of work with the County, begun consultation with various agencies and stakeholders, working on turbine swap agreement which is necessary to repowering. A power contract is needed to repower and PG&E doesn't need renewable energy power until 2018 timeframe, so it is not easy to get a power contract; AWI is working towards a power contract which takes time. AWI needs to wait for the next cycle of the tax credit. Commenter explained reason for asset exchange as it relates to repowering.</p>	

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APPENDIX B
BOB COOPER CORRESPONDENCE

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To: Sandra Rivera, Planning Department, Hayward, CA
From: Bob Cooper, resident of Dyer Rd. (bobcooperhorse@gmail.com)
Subject: Draft Supplemental EIR for Altamont Winds Inc.
Date: December 21, 2014 – updated January 20, 2015

I'm Bob Cooper and I live at 4000 Dyer Dr., Livermore, CA. From the back of my five-acre property looking to the west, I can clearly see about 30 of AWI's windmills.

Altamont Windmills, Inc. (AWI) is requesting a modification of their CUP to run about 850 windmills for an additional three years, 2016 to 2018. The three year extension will mean that AWI's windmills will kill many more raptors and other birds than their current CUP would allow. For this reason I oppose the CUP modification.

I attach a photo of a Golden Eagle that was caught off Dyer Rd. It's left wing was broken most like by a windmill blade. It is in a large dog kennel. It was taken to Lindsey Wildlife Museum. Sadly, it could not be save and was euthanized.

Bob Cooper
bobcooperhorse@gmail.com

From: Robert Cooper [<mailto:bobcooperhorse@gmail.com>]

Sent: Tuesday, January 20, 2015 12:49 PM

To: William Damon

Cc: Rivera, Sandra, CDA; Young, Andrew, CDA; Mike Langeloh; Rick Koebbe; Morgan McGovert

Subject: Re: Cooper 111915 site visit invitation

Hi Sandra, et al-

I request that my input to the DSEIR for Altamont Winds Inc. dated January 11, 2015 be removed from the DSEIR document for the reasons stated below. I also request if possible that my input dated December 21, 2014 be replaced with the attached document and picture. If this replacement is not possible, I request it be removed from the DSEIR. I finally request that this email be included in the DSEIR.

Bill Damon and Mike Langeloh gave me a tour of the windmills today. They provided me with much information about AWI's turbine generators, maintenance and general operation. They answered my many questions in full. The information they gave me persuaded me that the dark stains on the windmills that I saw from my house were indeed rust stains, that maintenance of the turbines is being performed adequately, and that there is no evidence of the environmental pollution about which I was concerned.

I thank AWI for the personal tour. In the future I will direct my concerns to AWI staff first. I apologize for the trouble I have caused and I am grateful for the information that addressed my concerns.

Sincerely

-Bob Cooper



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November ~~Febr~~ January 20145

ALTAMONT WINDS INC.

86 MW Altamont Wind Farms

Draft Final Supplemental Environmental Impact Report

2018 CUP Extension



PROJECT NUMBER:
135763

PROJECT CONTACT:
Chris Knopp
EMAIL:
chris.knopp@powereng.com
PHONE:
858-810-5381



FinalDraft Supplemental Environmental Impact Report
2018 CUP Extension

PREPARED FOR: COUNTY OF ALAMEDA COMMUNITY DEVELOPMENT AGENCY,
PLANNING DEPARTMENT

PREPARED BY: POWER ENGINEERS, INC.
858-810-5381
CHRIS.KNOPP@POWERENG.COM

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2013 FEIR	Final Environmental Impact Report: Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (State Clearinghouse No. 2012062060), July 2013 (incorporating the DEIR document)
2013 DEIR	References to the Draft Environmental Impact Report: Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (State Clearinghouse No. 2012062060), March 2013 (submitted for public review)
APNs	Assessor’s Parcel Numbers
APWRA	Altamont Pass Wind Resource Area
AWI	WindWorks Inc. and Altamont Winds Inc
BGEPA	Bald and Golden Eagle Protection Act
CAISO	California Independent System Operator
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulation
CNPS	California Native Plant Society
County	County of Alameda
County CDA	County of Alameda Community Development Agency
CUP	Conditional Use Permit
CWA	Clean Water Act
DSEIR	Draft Supplemental Environmental Impact Report
EACCS	East Alameda County Conservation Strategy
EBZA	East County Board of Zoning Adjustments
EIR	Environmental Impact Report
ESA	Endangered Species Act
FR	Federal Register
FSEIR	Final Supplemental EIR
HRT	High Risk Turbines
I-580	Interstate 580
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Reporting Program
M-Team	Monitoring Team
MW	megawatt
NOC	Notice of Completion
NOP	Notice of Preparation
PEIR	Program EIR
PCBs	Polychlorinated Biphenyls
PG&E	Pacific Gas and Electric
SEIR	Supplemental EIR
SRC	Scientific Review Committee
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

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EXECUTIVE SUMMARY

Introduction

The County of Alameda Community Development Agency (County CDA) has prepared this ~~Draft~~ ~~Final~~ Supplemental Environmental Impact Report (~~FE~~SEIR) for proposed modifications to 16 existing Conditional Use Permits (CUPs), for turbines owned and operated by Altamont Winds Inc. in the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). Altamont Winds Inc. (the Applicant, together with its operating subsidiary WindWorks Inc., and collectively, AWI) has submitted an application requesting that these CUPs, set to expire on October 31, 2015 under modifications approved in 2013, be extended through October 31, 2018 under specified conditions, for operation of its estimated 828 turbines, which have a rated capacity of approximately 85.8 megawatts (MW).

This ~~DSEIR~~FSEIR is intended to supplement the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits- Altamont Winds Inc.* (2013 FEIR) (State Clearinghouse No. 2012062060). The 2013 FEIR evaluated the application made by AWI in 2011 to modify these same CUPs as they had been approved in September of 2005. Although the current proposal for operations through 2018 was evaluated in the 2013 FEIR as an alternative (Alternative 3), it was only at a limited level of analysis, as provided for in the California Environmental Quality Act (CEQA) Guidelines (*Section 15126.6(d)*), to provide “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” The County CDA made the following finding regarding this alternative in 2013 when it certified the FEIR: “Alternative 3 would better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible.” For these reasons, among others, it is necessary to provide additional information, which this ~~DSEIR~~FSEIR is intended to provide, together with the same kind of notice and public review as provided for a draft EIR under *Section 15087* of the *CEQA Guidelines*. This ~~DSEIR~~FSEIR, ~~when combined with a Final SEIR contain~~including comments on the ~~DSEIR~~FSEIR and responses to such comments, ~~will~~ form the ~~overall~~complete project SEIR, and ~~will~~ supplement the 2013 FEIR with additional analysis beyond that included in the 2013 FEIR Alternatives analysis ~~to provide a basis for making the findings required by CEQA.~~

The SEIR will be used by the East County Board of Zoning Adjustments (EBZA) in its consideration of approval of the proposed CUP modifications to permit operations through October 31, 2018.

Summary Description of the Proposed Project

The proposed project consists of operational modifications to AWI's existing CUPs, as amended in July 2013, for continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018.

The project facilities consist of 828 existing, operating wind turbines on concrete foundations, plus support facilities, occupying approximately 155 acres within a 14, 196-acre area. The turbines have a nameplate capacity of 85.8 MW and rest on lattice and tubular towers that range in height from 60 to 82 feet, generally sited in strings along ridgelines. Support facilities include existing gated, graveled access roads, a power collection and transmission interconnection system, meteorological towers ranging from 60 to 100 feet in height, communication systems, maintenance equipment areas, and offsite facilities including AWI's wind farm main service yard (located near Tracy), and the main wind farm control center, shared with other wind farm operators (located in Livermore). The power

collection and transmission interconnection system consists of pad-mount transformers, underground cables, overhead conductors on poles, circuit breakers and switches, electrical metering/protection devices, and the existing Dyer, Frick, Ralph, and Midway substations. Electrical power is collected from the turbines and transmitted to the substations, where its voltage is increased for interconnection with Pacific Gas and Electric's (PG&E) transmission lines.

The existing project operations consist of 828 turbines and ancillary facilities, with a maximum combined generation capacity of 85.8 MW, currently approved for operation through October 31, 2015. After this point in time as proposed by AWI, operations would be extended for three additional years (applies to existing turbines), through October 31, 2018, on the condition that AWI has diligently pursued development of a repowered wind farm on the project site, and can demonstrate that circumstances beyond AWI's control have delayed completion of the repowered project.

Asset Exchange

~~As part of this extension,~~ The applicant is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. These 300 turbines represent about 35 percent of AWI's assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations and as such the potential geographical changes are analyzed in the SEIR.

Major Conclusions of the Environmental Analysis

Impacts

The 2013 FEIR provided a full discussion of the prior project's potential environmental effects on the following resource areas: Air Quality and Greenhouse Gases (GHGs); Biological Resources; Noise; and Hazards and Hazardous Materials. The County CDA does not anticipate that major revisions to the 2013 FEIR are necessary to identify new environmental impacts that were not previously disclosed in the 2013 FEIR for an extension of AWI's operations for three additional years through October 31, 2018. Although there have been some changed circumstances since 2013, the County CDA does find an increase in the severity of previously identified impacts in the 2013 FEIR. No new information of substantial importance shows that the CUP extension to 2018 and associated asset exchange would have significant impacts not discussed in the prior FEIR. However, to the extent new information has become available since the prior FEIR, the County CDA has incorporated that information into the DSEIR/FSEIR.

Biological Resources

Estimated Project Impacts on Focal Species

The 2013 FEIR's analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. The 2013 DEIR analysis, on pages 4-4 and 4-16 through 4-20 of the 2013 DEIR, and summarized most clearly in Table 3.2-3a in the 2013 FEIR (page 4-16), indicated that the installed capacity of the 86 MW wind farm for an operating term through 2018 would be 311 MW (Table 3-2 of this DSEIR/FSEIR), and all avian fatality estimates were derived based on this operating term. Estimated avian fatalities figures for the February 15,

2016-October 31, 2018 operating schedule are also presented in Tables ES-1 through ES-3 and Tables 3-3 through 3-5 in Chapter 3 of this [DSEIR/FSEIR](#). Tables ES-3 and 3-5 provide a comparison of the scenarios.

TABLE ES-1 ESTIMATED AVIAN FATALITIES (FOCAL RAPTOR SPECIES) AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2008-2010 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	26.9	80.8	137.8
Burrowing Owl	25.8	77.5	132.2
Golden Eagle	3.7	11.1	19
Red-Tailed Hawk	17.4	52.2	88.9
Total Focal Species	73.8	221.6	377.9

Source: POWER Engineers, 2014

TABLE ES-2 ESTIMATED AVIAN FATALITIES (FOCAL RAPTOR SPECIES) AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2005-2011 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	35.9	107.6	183.5
Burrowing Owl	47.4	142.3	242.6
Golden Eagle	4.7	14.6	24.9
Red-Tailed Hawk	26.8	80.3	136.8
Total Focal	114.8	344.8	587.8

Source: POWER Engineers, 2014

TABLE ES-3 COMPARISON OF ADJUSTED SPECIES FATALITY TOTALS OF FOUR FOCAL SPECIES, BASED ON AN AVERAGE FATALITY RATE (FATALITIES PER MEGAWATT PER YEAR)

SPECIES	AVERAGE FATALITIES PER MW (2005–2010/ 2008–2010/ 2005-2011/ 2005-2012)	PROJECTED NUMBER OF FATALITIES UNDER THE 2013 FEIR PROPOSED PROJECT	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR BASELINE CONDITIONS	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR ALTERNATIVE 3	PROJECTED NUMBER OF FATALITIES FOR YEARS 2016-2018
American Kestrel	0.496/0.443/0.59/ 0.577	85.5–113.9	51.6–68.7	137.8–183.5	80.8–107.6
Burrowing Owl	0.721/0.425/0.78/ 0.70	82.1–150.6	49.5–90.9	132.2–242.6	77.5–142.3
Golden Eagle	0.085/0.061/0.08/ 0.081	11.7–16.4	7.1–9.9	19–26.4	11.1–15.5
Red-Tailed Hawk	0.449/0.286/0.44/ 0.411	55.2–86.7	33.3–52.3	88.9–139.6	52.2–81.9

Source: POWER Engineers, 2014

Reduction in High Risk Turbines

The number of County-designated High Risk Turbines (HRT), which are those turbines identified by the SRC as posing the greatest collision risk to birds (ranked from 1 to 10, with 10 representing the highest risk), will be reduced by the proposed asset exchange. Applying the 2013 FEIR APWRA-wide fatality rate methodology to an asset exchange, as proposed under this project, would result in no greater impact on avian mortality when reviewing the proposed wind turbines received in an exchange for the wind turbines given up. Therefore, on a statistical level, the asset exchange would have no effect on the impacts caused by the project (i.e., no difference whether the asset exchange does or does not occur).

Reduction in Operating Capacity

As a result of the asset exchange under this project, it is likely that the applicant's operating capacity will be reduced through the exchange, because as part of the exchange, AWI will exchange its twenty 250 kW wind turbines for twenty 100 kW wind turbines. Again considering the per-MW method of fatality calculations utilized by the SRC and the M-TEAM, aggregate project capacity will be reduced by 5.3 MW over three years, which is equivalent to removing twenty-five 100 kW wind turbines for the duration of the three-year project. For these reasons, the asset exchange would not increase the risk to birds over and above the impacts associated with the project generally. An asset exchange is nonetheless anticipated to decrease somewhat the impact on avian species, due to the reduction in the number of high-risk turbines in operation and the anticipated reduction in operating capacity for years 2016-2018.

Hazards and Hazardous Materials

The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. However, an area resident submitted a comment during the NOP comment period reported the appearance of oil being dispersed along the turbine blades from leaking turbine generators as a form of environmental pollution.

A review of maintenance practices by the applicant of its turbines indicates that AWI maintains and operates its turbines in accordance with industry standards. Wind turbines are monitored through a centralized control system 24 hours per day alerting technical maintenance crews to promptly address any equipment malfunction or failures. Visual monitoring to inspect turbines and determine when turbines require maintenance occurs on a regular basis, and malfunctioning turbines are temporarily removed from service and/or repaired, as needed. A preventative maintenance program is implemented each winter during the off-season to minimize the possibility of malfunction during the summer wind season.

While an issue of leaking oil from the applicant's assets had been raised during the scoping period, the dark discoloration streaks running along turbine blades originating from the central turbine hubs are primarily caused from staining from rust and mineral deposits emanating from steel casting of the hub and blade insert component. In addition, upon further review, a leaking step-up transformer on the ridge overlooking residences along Dyer Road contains a non-toxic, non-petroleum-based mineral oil with no polychlorinated biphenyls (PCBs). This transformer is scheduled for repair during the upcoming off-season. As there is no substantial concentration of oil in any one location and there are no sensitive receptors located within 0.25 mile of the proposed project (the nearest school is approximately 2 miles east of project facilities) this issue raised during the NOP scoping period is not sufficient to be of major concern. As such, no new hazard to the public or the environment through a reasonably foreseeable accidental release of hazardous materials into the environment is expected to

occur with the CUP extension to 2018 and associated asset exchange. This potential impact is considered less than significant.

Mitigation

Table ES-4, at the end of this Executive Summary, summarizes the environmental impacts of the proposed permit modifications, the level of significance of each impact before implementation of mitigation, recommended mitigation measures, and the level of significance of each impact after mitigation. Even after implementation of any of these mitigation measures, the impacts on avian species would remain **significant and unavoidable**.

Biological Resources

Mitigation for impacts resulting from operation of the project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 FEIR. The 2013 FEIR included as mitigation measures, seasonal shutdowns (Mitigation Measure BIO-16) and retrofitting off-site electric utility power poles within 140 miles of the project site (Mitigation Measure BIO-17) to reduce the risk to birds of electrocution. The County CDA has also provided, in this [DSEIR/FSEIR](#), a suite of alternative or supplemental mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Final Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

Mitigation Measure BIO-16

In order to reduce the potential impacts of the proposed project on avian species (to include raptors and special status species), AWI will implement seasonal shutdowns on all turbines for the remaining operational period. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify County CDA each year when turbines have been shut down, and again when they have resumed operating.

Mitigation Measure BIO-17

Citing the 2012 Draft Eagle Conservation Guidelines released by U.S. Fish and Wildlife Service (USFWS) and associated technical appendices updates, the 2013 FEIR also indicated that retrofitting 29 power poles off-site within the defined habitat area (Mitigation Measure BIO-17) would be sufficient mitigation for each golden eagle fatality projected to result from turbine rotor blade collisions. These retrofits would similarly benefit other large raptors as well. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Use of power poles for the mitigation of all estimated golden eagle fatalities projected to result from the current proposal to operate through 2018 – a range of 19.0 to 26.4 such fatalities between 2013 and 2018 [2013 FEIR, Table 4-2, *Adjusted Species Fatality Rates for Each Alternative, Based on an Average Fatality Rate (Fatalities per Megawatt per Year) – in the 2013 FEIR estimated 19.0–26.5 golden eagle fatalities*] over the three-year duration of the requested AWI CUP modification would require the retrofitting of between 551 and 76922 power poles, including at least 322 poles during the proposed three-year CUP extension. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. AWI will therefore retrofit 32229 utility poles as mitigation for the expected level of eagle fatality from the currently proposed project.

To be in compliance with the mitigation requirements of the existing CUPs, AWI must either contract directly with a utility to complete such retrofits or contribute the cost of retrofits to a third-party mitigation account. The USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute ~~\$2,415,000~~~~217,500~~ (\$7,500 x ~~3229~~ poles) to a third party mitigation account (approved by the County CDA) instead of contracting directly with a utility. Based on recent AWI discussions with PG&E, the cost per retrofit is more likely to actually be between \$1,000 and \$4,000 per pole, depending on the type and condition of the pole to be retrofitted. At these lower costs, the range of expenditure would range between \$322,000 and \$1,288,000. Due to the large number of power pole retrofits required, it is reasonably expected that approximately 108 power pole retrofits, or one third of the total required retrofits, will be completed per year of the extended three-year CUP term of the project. This annual retrofit schedule also takes into consideration that repowering (the replacement of older turbines with substantially fewer but larger turbines with the same overall output) could occur prior to the end of the three-year extended permit term (i.e., prior to October 31, 2018). To date, AWI has retrofitted five power poles.

Mitigation Measure BIO-17a

The County CDA has also provided, in this [DSEIR/FSEIR](#), a suite of alternative mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These alternative mitigation measures include: obtaining a programmatic eagle take permit (ETP) and carrying out measures outlined in an approved Eagle Conservation Plan (ECP) and Bird and Bat Conservation Strategy; ~~contribution to raptor recovery efforts; contribution to raptor conservation efforts; or~~ contribution to regional conservation of raptor habitat using a Resource Equivalency Analysis (REA); and/or other conservation measures identified in the future. These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014. These measures are optional and voluntary, but may be accepted in lieu of some or all of the required power pole retrofits required by Mitigation Measure BIO-17, if the applicant chooses to implement Mitigation Measure BIO-17a. The option of obtaining an ETP would require the applicant to receive USFWS approval of its ECP, not merely applying for the ETP.

Hazards and Hazardous Materials

As no new hazard to the public or the environment through a reasonably foreseeable accidental release of hazardous materials into the environment is expected to occur with the CUP extension to 2018 and associated asset exchange, no mitigation measures for Hazards and Hazardous Materials are required.

Alternatives Analysis

CEQA requires that an Environmental Impact Report analyze a No Project Alternative. The No Project analysis discusses the existing conditions at the time the NOP was published, as well as conditions that would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. Under the No Project Alternative, AWI would continue to operate pursuant to the conditions of the existing CUPs. The existing CUPs require AWI to permanently shut down all wind turbines by October 31, 2015, with decommissioning of wind farm facilities, including equipment removal and site restoration, to occur following that date. One remaining seasonal shutdown of all wind turbines would occur between November 1, 2014 and February 15, 2015, prior to permanent shut down in October 2015.

The environmental impacts of AWI's current operating conditions were described and analyzed in the 2013 FEIR as Alternative 1. Alternative 1 was identical to the 2013 FEIR proposed project but included continued implementation of the winter seasonal shutdowns that were begun in 2005 and expanded to their current schedule of 3.5 months in 2009-2010 (November 1 to February 15.). As the No Project Alternative was previously analyzed in the 2013 FEIR, it will not be discussed further in this [DSEIR/FSEIR](#) document.

Public Involvement and Next Steps

The DSEIR was made available for review to the public, interested organizations, and public agencies for 55 days, from between November 17, 2014 and concluded on January 12, 2015 [includes the ten (10) day extension]. The original 45-day public review period end date of January 2, 2015 was extended ten (10) days to January 12, 2015 in recognition of the winter holiday period. The public review period was conducted to elicit comments on the "sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (Section 15204 of the State CEQA Guidelines). In accordance with CEQA review requirements, this DSEIR is being distributed for public, stakeholder, and agency review and comment for a 45-day period, beginning on November 17, 2014, and ending on January 2, 2015. The Notice of Availability (NOA) of the DSEIR was filed with the Alameda County Clerk on November 17, 2014, (per CEQA Guidelines Section 15087). The NOA announced the commencement of the public review of the DSEIR and public meeting (December 18, 2014). The NOA was mailed to agencies, organizations, property owners and interested individuals. The public meeting was also advertised on the County CDA website, where the DSEIR was also available.

The County CDA ~~will hold~~ one public meeting during the comment period on December 18, 2014, at which time the County CDA ~~will accept~~ oral comments from the public, stakeholders, and reviewing agencies on the DSEIR (as well as written comments). In addition, written comments from the public, stakeholders, and reviewing agencies ~~will be~~ accepted throughout the public comment period that ends on January 12, 2015.

After considering ~~these~~ the comments, the County CDA ~~will~~ has prepared written responses to comments on the DSEIR's analysis of the significant environmental impacts of the proposed project, ~~and then will prepare in this FSEIR that a Final Supplemental Environmental Impact Report (FSEIR) that will~~ describe the disposition of any significant environmental issues raised in the comments on the DSEIR. The FSEIR, containing those comments and written responses to each comment, must be provided to those public agencies and persons who submitted comments at least 10 days before the FSEIR can be certified. Following this 10-day period, the EBZA will hold a hearing to consider certifying that the FSEIR has been prepared in compliance with CEQA, and will rely on the certified FSEIR when considering project approval (i.e., approval of the proposed permit modifications) or denial. In accordance with the requirements of CEQA, if the EBZA decides to approve the proposed permit modifications analyzed in this DSEIR (or as modified in the FSEIR), it will make written findings with respect to each significant environmental effect identified in the FSEIR. In addition, if the EBZA decides to approve the proposed permit modifications but determines that they would have significant and unavoidable environmental effects, the EBZA will adopt a Statement of Overriding Considerations that explains why the benefits of the proposed modifications would outweigh the significant effects on the environment, based on information in the FSEIR and the entire administrative record.

If the proposed modifications are approved, the EBZA must adopt a Mitigation Monitoring and Reporting Program for those measures that it has adopted and incorporated into the project to mitigate or avoid significant effects on the environment. Following FSEIR certification and project approval, a Notice of Determination will be issued, documenting the decision.

TABLE ES-4 SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Biological Resources		
Impact BIO-1: Potential to cause a substantial adverse effect, either directly or through habitat modifications, on a special-status species.	Mitigation Measure BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities (to include raptors and special status species).	Significant; Significant and Unavoidable for Avian Species
	Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors, and Special Status Avian Species by Retrofitting Electrical Facilities	
	Mitigation Measure BIO-17a: Compensate for the loss of special-status species, including golden eagles, by contributing to conservation efforts <u>(as an optional supplement to or in lieu of BIO-17)</u>	
Hazards and Hazardous Materials		
Impact HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	No Mitigation Required.	Less than Significant

Source: POWER Engineers, 2014

1.0 INTRODUCTION

1.1 Project Under Review

This [Draft-Final](#) Supplemental Environmental Impact Report (DSEIR) supplements the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits- Altamont Winds Inc.* (2013 FEIR) (State Clearinghouse No. 2012062060) (ICF International 2013). This [DSEIRFSEIR](#) has been prepared by the County of Alameda Community Development Agency, (County CDA) to evaluate the environmental effects of the proposed modifications to the existing conditional use permits (CUPs), as amended in July 2013, related to applicant, WindWorks Inc. and Altamont Winds Inc. (collectively, AWI). The proposed modifications would include a three-year extension (applies to existing turbines) of the current CUPs, thus permitting AWI to continue to operate and maintain its existing wind turbines (85.8 megawatts of nameplate capacity) in the Alameda County (County) portion of the Altamont Pass Wind Resource Area (APWRA) through October 31, 2018 (proposed project).

1.2 Lead Agency

The project is based on AWI's application submitted to the County CDA to amend the County CDA-issued CUPs under which AWI operates. As the agency responsible for evaluating and approving or denying the project, the County CDA will serve as the Lead Agency for the SEIR. The SEIR will be prepared pursuant to the California Environmental Quality Act (CEQA, 1970, as amended) and in accordance with relevant federal, state and local regulations.

1.3 The Supplemental Environmental Impact Report

1.3.1 Intended Use

This [DSEIRFSEIR](#) has been prepared by the County CDA to provide the public and responsible and trustee agencies information about the potential effects on the local and regional environment associated with the proposed three-year extension of 16 CUPs for wind farms located throughout the APWRA in unincorporated eastern Alameda County. The environmental effects of AWI's existing operations were evaluated in the 2013 FEIR; it is not the intention of the [DSEIRFSEIR](#) to re-evaluate existing operations. This [DSEIRFSEIR](#) is intended to evaluate only the additional environmental effects attributable to the additional three years of operations proposed by AWI.

This [DSEIRFSEIR](#) will not evaluate a repowering project, but will evaluate the environmental impacts of the requested change to the scheduled expiration of the CUPs under which AWI's turbines are operated. A separate California Environmental Quality Act (CEQA) document [such as an Addendum or Supplemental EIR (SEIR)] 'tiered' from the Altamont Pass Wind Resource Area Repowering Program Environmental Impact Report (EIR) that is currently in the form of a Draft Program EIR, will address the repowering proposal by AWI.

The SEIR will be used by the Alameda County East County Board of Zoning Adjustments (EBZA) in its consideration of approval of the proposed CUP modifications.

1.3.2 Type of EIR

As the lead agency, the County CDA has determined that a Supplemental EIR is required to evaluate the three-year CUP extension requested by AWI (*Public Resources Code Section 21166; CEQA Guidelines Sections 15162 and 15163*). A Supplemental EIR augments the EIR prepared for an existing project to address any project changes, new information of substantial importance that was not known or could have been known without the exercise of reasonable diligence or changed circumstances occurring since the time the prior document was certified. In the case of changes to a

previously approved project, as is the case here, the purpose of an SEIR is to provide only the additional analysis necessary to make the previous EIR adequately apply to the project as modified. Accordingly, the SEIR need contain only the analysis necessary to respond to the proposed change in the project that triggered the need for additional environmental review [*CEQA Guidelines Section 15163(b)*]. The SEIR is given the same kind of notice and public review as is given a draft EIR under *CEQA Guidelines Section 15087*. *CEQA (Code California Public Resources Code 21000 et seq.)*, *Section 21166* and *CEQA Guidelines (14 California Code of Regulations 15000 et seq.)*, *Section 15162*, state (in part, and as continued further below):

When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*

The proposed CUP extension to 2018 represents a substantial change to the project evaluated in the 2013 FEIR, which was focused on the effects of moving forward the expiration date of the CUPs from 2018 to 2015. Adoption and implementation of the extension to 2018 will substantially alter that component of the previously-evaluated project, and will result in an increase in the severity of significant effects previously identified in the 2013 FEIR. Of particular importance is the anticipated increase in the net volume of avian mortality due to the three additional years of operation of wind turbines with well-documented patterns of bird collisions.

In addition, based on new information about the condition of the turbines related to potential soil contamination from leaking turbine oils or lubricants, the extension may be expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant. Accordingly, the changes in the project could require important revisions of the 2013 FEIR. Because the 2013 FEIR provided a thorough analysis of the environmental impacts of AWI's current operations and included a limited analysis of operations through October 2018, as Alternative 3, the necessary revisions will be made by providing this supplement to the 2013 FEIR.

- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*

There are no substantial changes to the circumstances under which the project would be undertaken that would result in new or more severe significant effects. However, as discussed in the remainder of this [DSEIR/SEIR](#), there are some important changes to the circumstances and a certain degree of new information that, while not requiring the preparation of a Subsequent EIR, would require preparation of a Supplemental EIR.

- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:*
 - a) The project will have one or more significant effects not discussed in the previous EIR;*
 - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*

- c) *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
- d) *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.” (CEQA Guidelines Section 15162(a)).*

There is no new information available that would result in any of the above determinations (3.a through 3.d).

1.3.3 Decision to Prepare a Supplemental Environmental Impact Report

The County CDA is preparing a [DSEIR/FSEIR](#) rather than a subsequent EIR based on its determination, pursuant to *CEQA Guidelines Section 15163*, that only minor additions and changes are necessary to make the previous EIR adequate to apply to the project for the changes proposed by the applicant. An Addendum to an EIR may be prepared where some changes or additions to an EIR are necessary to make the document adequate and the changes made by the addendum do not raise important new issues about the significant effects on the environment. An Addendum to an EIR may be prepared if none of the conditions calling for preparation of a Subsequent EIR or Supplemental EIR have occurred (*CEQA Guidelines Sections 15162-15164*). Because the County CDA finds that the conditions for performing a Supplemental EIR have been met, an Addendum is not being prepared.

CEQA Guidelines, Section 15163(a), states that *the lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:*

- 1) *Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR.*
- 2) *Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.*

Further, *CEQA Guidelines, Section 15163*, states:

- b) *The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.*
- c) *A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.*
- d) *A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.*
- e) *When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.*

1.4 Environmental Review Process

1.4.1 Notice of Preparation

A Notice of Preparation (NOP) was prepared and circulated to all responsible agencies and interested parties on September 17, 2014 for a period of 30 days. The NOP was distributed to responsible

agencies and interested parties as required by CEQA and the County CDA CEQA procedures. A copy of the NOP, the NOP distribution list, and written comments received by the County CDA on the NOP are included in Appendix ~~A-D~~ of this ~~DSEIR~~FSEIR.

1.4.2 Public Involvement and Review

~~This The~~ DSEIR ~~will was be~~ circulated to local, state and federal agencies, and to interested organizations and individuals who ~~may wished~~ to review and comment on the document. The DSEIR will also ~~be made~~ available for review at the County CDA Planning Permit Center (Public Works Building, 399 Elmhurst Ave., Hayward, California 94544) and at the Livermore Public Library. The DSEIR ~~may was~~ also ~~be viewed made available~~ on the County CDA's Planning Department website, at <http://www.acgov.org/cda/planning>, following the links from "Pending Land Use Projects" to "Current Development Projects" and finding "Wind Turbine Projects" under the heading "Ongoing Land Use Projects" – see Altamont Winds Inc., Application PLN2014-28.

Publication of ~~this the~~ DSEIR ~~on November 17, 2014 marks marked~~ the beginning of a 45-day public review period during which written comments ~~may were to be~~ directed to the County CDA at the address below. ~~The comment period was extended an additional ten (10) days beyond the original comment period end date of January 2, 2015, to January 12, 2015.~~ The County CDA ~~will has~~ prepared responses to the comments received and ~~will has~~ included those responses in the ~~Final Supplemental EIR (FSEIR) to be~~ prepared prior to the County CDA taking action on AWI's CUP extension request.

~~Comments on the DSEIR may be sent to:~~

Ms. Sandra Rivera, Assistant Planning Director
ATTN: AWI Permit Modification Supplemental EIR
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 111
Hayward, CA 94544

Comments ~~can were~~ also ~~allowed to be sent received~~ via email with the subject line "AWI Permit Modification Supplemental EIR" ~~sent~~ to: sandra.rivera@acgov.org. ~~Commenters were directed to Please~~ include a return address and contact name with ~~your~~ written comments.

Anyone reviewing the document ~~may could~~ submit written comments to the County during the ~~comment is~~ period. Comments on ~~this the~~ DSEIR ~~should were to~~ be limited in scope to those areas discussed in ~~this the~~ DSEIR. In accordance with *Section 15162* and *15163* of the *CEQA Guidelines*, the DSEIR only discusses: a) areas of the 2013 FEIR where there has been a significant change to the project; b) where the project's circumstances have substantially changed; and c) new information that would not have been known at the time of the 2013 FEIR that has become available. Likewise, comments to the DSEIR ~~should were to~~ be limited to the content of the DSEIR insofar as it augments the 2013 FEIR and evaluates the current project to an extent not discussed in the 2013 FEIR. Comments are most helpful when they suggest additional mitigation measures or alternatives that would provide better ways to avoid or mitigate significant environmental impacts. Reviewers should explain the basis for their comments and, whenever possible, should submit data or references in support of their comments.

1.4.3 Draft Supplemental Environmental Impact Report

Circulation of the DSEIR ~~beginns~~ when a Notice of Completion (NOC) ~~is was~~ filed with the State Office of Planning and Research (State Clearinghouse). Filing the NOC ~~starts started~~ the 45-day review period for the DSEIR. Concurrent with the filing of the NOC, the lead agency will also

provide a Notice of Availability of the DSEIR to all organizations and individuals that have previously requested such notice or are located in proximity to the project site. ~~This~~The notice briefly ~~describes~~described the proposed project; identified~~s~~ the date when comments ~~must~~were to be received and where they ~~are~~were to be sent; and provides locations where copies of the DSEIR ~~can~~could be reviewed (*CEQA Guidelines Section 15085 through Section 15087*). In conjunction with the preparation of the FSEIR, a revised Mitigation Monitoring and Reporting Program (MMRP) ~~has~~will ~~been~~ prepared (*CEQA Guidelines Section 21081.6*) to incorporate necessary changes to the MMRP adopted with the 2013 FEIR. The MMRP will contain the mitigation measures along with the action that must be taken to implement them and the method that would be used to document or verify fulfillment of the measure. A procedure for determining and recording compliance will be outlined for each action that must be implemented by the project applicant to mitigate impacts as identified in the ~~F~~DSEIR and adopted when the project is approved. This procedure identifies what action would be taken and when, designates who would be responsible for implementing the action, and to whom and when compliance would be reported.

1.4.4 Final Supplemental Environmental Impact Report

At the end of the public review period, written comments on the project ~~will~~were be compiled and responses generated in conjunction with the preparation of the FSEIR. The FSEIR ~~will~~consists of a list of all persons, organizations, and public agencies commenting on the DSEIR, copies of the comments received on the DSEIR, responses to comments (Appendix A); any other pertinent information or analyses added by the lead agency, a ~~strike-out-underline version~~errata containing any revisions made by the lead agency to the DSEIR (Appendix C), which may be based on considerations of comments on the DSEIR, and the revised MMRP (*CEQA Guidelines Section 15132*). The FSEIR will serve as the CEQA compliance document for the County CDA and any other agencies that may be responsible for review of the proposed project and issuance of required permits.

As per CEQA Guidelines Section 15132, a Final EIR must include the following elements:

- The Draft EIR or a revision of that draft
- Comments and recommendations received on the Draft EIR, either verbatim or in summary form
- A list of persons, organizations, and public agencies that commented on the Draft EIR
- The response of the lead agency to significant environmental points raised in the review and consultation process
- Any other information added by the lead agency

This FSEIR includes the following sections:

Executive Summary provides an overview of the FSEIR, the proposed Project environmental review process, and a summary of the proposed Project as well as a Summary of Impacts, Mitigation Measures, and Levels of Significance (Table 1.1).

Appendix A provides a list of comments received on the DSEIR, copies of the written comments (numerically coded for reference), and the lead agency's responses to the comments. Requirements for the preparation and disposition of the response to comments are provided for in PRC, Division 13, Section 21092.5 and Section 15088 of the CEQA Guidelines.

Section 15088 of the CEQA Guidelines states:

- (a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.
- (b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.
- (c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.
- (d) The response to comments may take the form of a revision to the Draft EIR or may be a separate section in the Final EIR. Where the response to comments makes important changes in the information contained in the text of the Draft EIR, the Lead Agency should either: (1) Revise the text in the body of the EIR, or (2) Include marginal notes showing that the information is revised in the response to comments.

Appendix F includes the Mitigation Monitoring and Reporting Program (MMRP) required by CEQA Guidelines Section 15097.

1.5 Organization of the Supplemental Environmental Impact Report

This ~~FEIR~~ is organized into the following chapters:

Executive Summary - Summarizes the proposed project, areas of controversy, issues to be resolved, any new potential environmental effects that may result from the implementation of the proposed project, that were not addressed in the 2013 FEIR, the mitigation measures identified to reduce or eliminate significant effects, and a summary of the “No Project” Alternative.

Chapter 1.0 - Introduction: Provides an introduction and overview that describes the intended use of the document and the lead agency authority under CEQA. This chapter also provides a review of the environmental review process and organization of the ~~DSEIR~~~~FEIR~~. Also provides a list of acronyms and a glossary of terms used to describe and evaluate the project.

Chapter 2.0 - Project Description: Provides a detailed description of conditions on the project site and vicinity and the various components of the proposed project. This chapter includes a statement of project objectives and provides background data on the project and project site.

Chapter 3.0 - Environmental Impacts Analysis and Mitigation Measures: Describes the existing environmental conditions on the site and in the vicinity of the project site, and the regulatory environment. Describes the project's characteristics related to each of the topical environmental issues addressed for the ~~DSEIR~~~~FEIR~~, and states the significance criteria used to evaluate potentially significant effects of the proposed project. Evaluates the potential environmental effects not addressed in the 2013 FEIR, evaluates significant changes in environmental effects addressed in the 2013 FEIR, identifies mitigation measures to reduce or eliminate effects found to be significant, and determines the level of significance of the effect after measures have been implemented.

Chapter 4.0 – List of Preparers and Others Consulted: Includes a list of lead agency staff members who participated in the preparation of the [DSEIRFSEIR](#), consultants who prepared the [DSEIRFSEIR](#) under the direction of the lead agency and any other organization or agency staff consulted.

Chapter 5.0 – References: Includes a list of documents and resources used in the preparation of the [DSEIRFSEIR](#).

1.5.1 Scope and Focus of the [DSEIRFSEIR](#), Compared to the 2013 FEIR

The 2013 FEIR broadly distinguished impacts as resulting from either operational activities (i.e., the use of wind turbines to generate electricity) and decommissioning (i.e., the removal of wind turbine equipment from the project area and the subsequent restoration of the underlying land). Decommissioning activities, including the number of daily crews working and the intensity of daily activity associated with decommissioning, are identical regardless of whether the facilities are decommissioned after 2015 or 2018, as noted in the 2013 FEIR. Therefore, for purposes of this [DSEIRFSEIR](#), impacts resulting solely from decommissioning activities are not discussed, and the County CDA will instead rely entirely on the analyses and mitigation measures as described in the 2013 FEIR for operational impacts, and not any decommissioning-related impacts.

Regarding operational impacts, the 2013 FEIR environmental impacts analysis examined the impacts resulting from operation of an 85.8 MW facility that operates for 8.5 to 12 months out of each year, depending on the scenario (or alternative) being examined. This analysis was structured such that impacts were scalable based on the size of the project (in megawatts) and the term of operation (in months). Using this scaling method, the County CDA evaluated the impacts of multiple operating scenarios (i.e., project alternatives), including the impacts of operating the wind farm through 2018, as presently proposed. However, these alternatives were evaluated at a limited level of analysis, as provided for in the *CEQA Guidelines, Section 15126.6(d)*, to provide “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” This [DSEIRFSEIR](#) will augment the analysis of the 2013 FEIR, including Alternative 3, to provide the level and scope of analysis necessary to respond to the proposed change in the project.

1.6 Incorporated by Reference

As permitted by *Section 15150* of the *CEQA Guidelines*, this [DSEIRFSEIR](#) has referenced several technical studies, analyses, and reports, which are included in the technical appendices of the [DSEIRFSEIR](#). Information from documents incorporated by reference has been summarized in the appropriate [DSEIRFSEIR](#) section(s) that follow.

2.0 PROJECT DESCRIPTION

The proposed project consists of operational modifications to those CUPs for existing wind turbines owned by AWI. Specifically, AWI proposes to extend the CUPs, currently set to expire on October 31, 2015, through October 31, 2018. This section provides a brief review of the project location and background, along with a description of the proposed operational modifications and the conditions under which those modifications would take place.

2.1 Project Background

On November 13, 2003 and on January 29, 2004, EBZA approved CUPs for the continued maintenance and operation of wind turbines (or “wind farms”) by four different operating companies, including AWI, in the APWRA within Alameda County. Those permits were approved by the EBZA with a determination that they were categorically exempt from CEQA as the continued operation of existing facilities. The Center for Biological Diversity, Californians for Renewable Energy, and Golden Gate Audubon Society appealed these approvals to the County Board of Supervisors, primarily on the grounds that the CUPs were not exempt from CEQA, due to special circumstances represented by high levels of avian mortality.

The Board of Supervisors adopted a final resolution on September 22, 2005 (No. R-2005-463), which upheld the EBZA’s decision but imposed a number of operational restrictions on wind farm operations. Under the 2005 CUPs, the operating companies (AWI/WindWorks Inc., NextEra/ Green Ridge Power LLC/Florida Power & Light, EDF/EnXco and Seawest/AES Seawest) were required to permanently cease operations and remove a predetermined percentage of turbines on a specified, phased schedule in order to enable repowering of their wind energy assets. The first phase of decommissioning took place in 2009, at which time AWI was required to remove 10 percent of its 920 turbines. An additional 25 percent of the original 920 turbines (for a cumulative total of 35 percent) were to be permanently removed by September 30, 2013, followed by 50 percent of the original turbine number (for a cumulative total of 85 percent) by September 30, 2015, and the remaining 15 percent of turbines by September 30, 2018. In addition to the phased decommissioning, AWI was required to shut down its wind turbines during winter months. The CUPs also required that the CUP permittee companies jointly sponsor the preparation of an EIR to evaluate the environmental impacts of a repowering program, as well as continued operation of existing turbine facilities, and their progressive removal or phased decommissioning.

In July 2011, AWI applied to the County CDA to modify the 2005 CUPs to:

1. *Remove the requirement for phased decommissioning.*
2. *Remove winter seasonal shutdown requirements.*
3. *Provide for 100 percent of AWI’s turbines be decommissioned by the end of 2015.*

The 2013 FEIR was prepared to evaluate the environmental effects of such modifications and to identify mitigation measures to reduce any significant environmental effects identified. It also met the 2005 CUP requirement that an EIR be prepared to evaluate existing operations and phased decommissioning, and identified numerous mitigation measures to reduce and avoid the impacts of turbine removal in advance of repowering, although no specific repowering project had been proposed at that time.

The 2013 FEIR also proposed and analyzed a range of feasible project alternatives, as required by CEQA. In addition to the required No Project Alternative, the 2013 FEIR evaluated three other alternatives, including the project as proposed but with retention of the winter seasonal shutdown requirements (Alternative 1), a one-year extension (through 2016) of the project as proposed with seasonal shutdowns (Alternative 2), and a three-year extension (through 2018) of the project as

proposed, also with seasonal shutdowns (Alternative 3). Project Alternative 3, therefore, represented the operation of AWI's existing wind farms through October 31, 2018 (as currently proposed), and the 2013 FEIR provided a limited analysis of its potential impacts. Alternative 3 was chosen for inclusion in the 2013 FEIR because it would reduce air quality impacts related to GHG emissions and like the other alternatives, helped represent a broad range of scenarios.

On July 18, 2013, the EBZA certified the 2013 FEIR and granted AWI's request for modification of the 2005 CUP but included as mitigation (Mitigation Measure BIO-16 in the 2013 FEIR) the continued implementation of seasonal winter shutdown requirements, due to the substantial increase in avian mortality which was projected to have resulted from the request for operations without the winter shutdown – a roughly 60% increase in total avian fatalities compared to the baseline in avian years 2013 to 2018. In effect, the EBZA chose to approve Alternative 1, which was deemed the environmentally superior alternative in the 2013 FEIR, and denied AWI's request to remove the seasonal shutdown requirement. To further address the increased avian mortality that would result from the modifications, specifically on golden eagle mortality, the 2013 FEIR included as mitigation a requirement to retrofit electrical power poles within 140 miles of the project in an area with eagles at risk from electrocutions. Other mitigation measures that were adopted addressed the impacts of ground disturbance associated with decommissioning, which is outside the scope of this [DSEIR/FSEIR](#).

Development of new wind farms, comprised of larger, modern wind turbines that are expected to replace the existing APWRA wind farms in the coming years, is underway, a process known as "repowering." A separate Program EIR (PEIR) which evaluated repowering was certified on November 12, 2014. The PEIR simultaneously analyzed two specific projects for repowering proposed by other wind companies, and AWI is preparing a separate project-specific EIR intended to "tier off" the PEIR. However, AWI has reported that its progress in developing a repowering program for its turbines is constrained by ongoing commercial and regulatory difficulties.

2.2 Project Location

The project location containing AWI's existing wind turbines falls within an approximately 14,196-acre portion of the 50,000-acre APWRA, located in eastern Alameda County, California, as shown in Figure 1. The project site is bisected by Interstate 580 (I-580). The lands are currently under permit by AWI or its affiliates either solely or as a shared arrangement with other wind farm operators.

In preparation for repowering, AWI is in discussions with another wind farm operator in the APWRA regarding a wind turbine exchange, whereby AWI would exchange some of its wind turbines for an equal number of wind turbines owned and operated by another wind farm operator that shares common infrastructure with AWI, as shown in Figure 2. Under no circumstances, however, will any such exchange increase the capacity or quantity of AWI's operating turbines (828).

Those land parcels on which the project is located would also change as a result of the turbine exchange. Following a wind turbine exchange, AWI would no longer operate wind turbines on 31 parcels of land on which AWI's wind turbines are presently located. However, AWI would receive turbines through the exchange on a small number of parcels on which AWI does not presently operate turbines. Table 2-1 presents existing CUPs, landowners, Assessor's Parcel Numbers (APNs), and approximate acreage for the lands that may be included either in whole or in part in the project, including lands on which AWI may operate following an exchange scenario as described above.

TABLE 2-1 LIST OF CUPS, LANDOWNERS AND APNS

CUP NO.	LANDOWNER	ASSESSOR'S PARCEL NUMBERS	APPROXIMATE ACRES
C-8036	Frick/Costa	99B-5680-15	207.12
C-8037	Pombo	99B-6300-2-1, 99B-6300-2-2, 99B-6425-1-6, 99B-6325-2-4 and 99B-6400-1-7	224.26
C-8134	Rooney	99B-6125-2	160.21
C-8137	Mulqueeney	99B-7900-1-5, 99B-7900-1-7, 99B-7890-2-4, 99B-7890-2-5, 99B-7890-2-6, 99B-7925-2-4, 99B-7925-2-1, 99B-7925-2-5, 99B-7950-2, 99B-7975-1, 99B-7980-1, 99B-7985-1-6, 99B-7985-1-4, 99B-7985-1-3, 99B-7985-1-5, 99A-1800-2-4, 99A-1800-2-3 and 99B-8050-1	4,447.50
C-8191	Mulqueeney	99B-7910-1-1	592.84
C-8243	ACWMA	99A-1780-1-4, 99A-1770-2-1, 99A-1770-2-2, 99A-1770-2-3, 99A-1810-1 and 99A-1790-3	1,324.83
C-8216	ACWMA	99A-1810-1	240.81 (parcel acreage included in C-8243)
C-8231*	Altamont Landfill	99B-6225-1, 99B-6250-1, 99B-6275-1-1	1,547.80
C-8232	Egan	99B-6125-3	160.47
C-8233	Elliott	99B-6125-4	157.54
C-8235	Corbett	99B-5650-1-4 and 99A-1785-1-14	284.96
C-8236	Dunton	99B-5680-1	330.46
C-8237	Valhalla (Devincenzi)	99B-5610-1 and 99B-6075-3	665.98
C-8238	Ralph (north)	99B-7300-1-5 and 99B-7375-1-7	766.57
C-8239*	Jackson	99B-6125-5	325.59
C-8241	Walker	99B-6100-2-10, 99B-6100-2-11, 99B-6100-2-12, 99B-6100-3-10, 99B-6100-3-15, 99B-6100-3-11	1,314.55
C-8242	Gomes (north)	99B-6150-4-10, 99B-6150-3 and 99B-6150-2-7	635.48
C-8244	Gomes (south)	99B-6425-2-3, 99A-1790-2 and 99A-1795-1	1,049.48
TOTAL ACREAGE			14,195.64

Source: AWI, 2014

Notes:

1. The above table includes those parcels and CUPs on which AWI currently has installed wind turbines, as well as those parcels and CUPs on which turbines owned by other wind companies are presently installed and whose wind turbines may be obtained in exchange on a turbine-for-turbine basis with turbines currently owned by AWI.
2. Many of the wind farms in the APWRA overlap, with different wind energy facility operating companies on a single parcel of land. Therefore, other wind companies beside AWI currently operate wind farms within the project area described above.
3. Two additional CUPs, C-8231 and C-8239 (landowners Waste Management Inc. and Jackson, respectively), apply to turbines proposed to be acquired by AWI or its affiliates in a proposed asset exchange, and would contain turbines subject to the proposed modifications.

FIGURE 1 LOCATION MAP

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FIGURE 2 PROJECT FACILITY EXCHANGE MAP – SEE MAP POCKET IN THE BACK OF THE DOCUMENT

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2.3 Project Need and Objectives

Like the project defined in the 2013 FEIR, the current project is needed to meet the ever-increasing demand of society and consumers for electricity from clean, renewable, and economically viable power sources. Specifically, the project will assist California in meeting its legislated Renewable Portfolio Standard criteria for the generation of renewable energy in the state. This standard requires electric utilities and providers to procure 33 percent of their supply of electricity from renewable energy sources, such as wind, by 2020. In addition, this project will assist California in meeting its legislated global warming solutions criteria requiring reductions in carbon dioxide and other GHG emissions to 1990 levels by 2020.

As also indicated in the 2013 FEIR, AWI proposes to continue operating existing wind turbines and delivering clean, renewable wind-generated electrical energy to the Pacific Gas & Electric Company (PG&E) through existing transmission infrastructure as productively as possible in the short term.

AWI's proposed extension/permit modification (the project) would continue operations (as described in the 2013 FEIR) three additional years; as such, the specific project objectives identified by the applicant would remain as follows:

- Continue to operate the existing AWI project using existing turbines, transmission lines, and other infrastructure to meet regional energy needs in an efficient, reliable, and environmentally-sound manner.
- Continue to provide clean, renewable energy in the most cost-effective way.
- Operate existing wind power facilities more productively in the short term (four years).
- Provide for continued operations until repowering of the turbine assets is timely and economically viable.
- Contribute to domestic energy security and California's Renewable Energy Resources Program, which requires that all retail electricity providers serve 33 percent of their load with renewable sources by 2020, by continuing to reduce California's reliance on fossil fuels through utilization of APWRA's renewable wind resources.
- Provide significant benefits to human health, wildlife, and climate by reducing climate change/global warming-causing pollutants, reducing water usage, and by displacing toxic emissions produced by fossil fuel-fired power plants.
- Continue to contribute substantially to Alameda County's economy by preserving long-term skilled employment to operate and maintain the project and through expenditures on materials, tools, supplies, and equipment purchases.

Additional objectives for the project considered essential by the County CDA include the following:

- Maintain wind energy uses in the Alameda County portion of the APWRA in the long term in a manner that represents sound stewardship of the area's wildlife and natural habitats, both generally and to support the obligations of state and federal resource agencies to protect the unique and special-status avian species that occupy the area.
- Continue to implement its adopted General Plan policies to promote wind energy development and energy production in the APWRA while minimizing impacts on avian species, and to coordinate with local, state and federal resource-protection agencies to establish feasible means of mitigating avian collisions with wind turbines.

2.4 Major Project Components

The project facilities consist of 828 existing wind turbines on concrete foundations, plus support facilities, occupying approximately 155 acres within a 14,196-acre area. The turbines have a nameplate capacity of 85.8 MW and rest on lattice and tubular towers that range in height from 60 to 82 feet, sited in strings along ridgelines. Support facilities include existing gated, graveled access roads, a power collection and transmission interconnection system, meteorological towers ranging from 60 to 100 feet in height, communication systems, maintenance equipment areas, and offsite facilities including AWI's wind farm main service yard (located near Tracy), and the main wind farm control center, shared with other wind farm operators (located in Livermore). The power collection and transmission interconnection system consists of pad-mount transformers, underground cables, overhead cables on poles, circuit breakers and switches, electrical metering/protection devices, and the existing Dyer, Frick, Ralph, and Midway substations. Electrical power is collected from the turbines and transmitted to the substations, where its voltage is increased for interconnection with PG&E transmission lines.

2.4.1 Asset Exchange

~~As part of this extension,~~ AWI is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. These 300 turbines represent about 35 percent of AWI's assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations and as such the potential geographical changes are analyzed in the SEIR. It should be noted that at the same time the proposed AWI permit modifications/extension could come into effect on October 31, 2015, major changes in the operating landscape of the APWRA will take place following the 2015 wind season, which concludes on October 31, 2015. At that time, approximately 1,000 old generation wind turbines owned by Green Ridge Power LLC will be permanently shut down and will be removed; thus, reducing overall turbine quantities and densities in the project area.

2.4.2 Repowering Development Milestones

The current CUPs allow for operations of 828 turbines and ancillary facilities, through October 31, 2015. Under the proposed permit modifications, after this point in time, operations would be extended for up to three additional years, through October 31, 2018, on the condition that AWI has demonstrated that it has diligently pursued development of a repowered wind farm on the project site, but that circumstances beyond AWI's control, as defined below, have delayed completion of the repowered project.

Specifically, under the proposed permit modifications, AWI will be required to cease operations of the existing wind farm on October 31, 2015 unless (1) AWI has diligently pursued development of a repowered wind farm on the project site, as defined and enumerated below; and (2) circumstances beyond AWI's control delay repowering beyond October 31, 2015. To assess AWI's diligent pursuit of repowering, the CUPs will include several repowering development milestones which must be met as conditions of continuing operation beyond October 31, 2015. These development milestones would be conditions of approval, and failure to achieve these milestones by the dates set forth would constitute noncompliance with the CUPs. These milestones proposed by AWI include:

- AWI submitted a project-specific repowering application to the County CDA on March 31, 2014, including an affidavit affirming site control for the proposed repowered wind farm.
- AWI shall begin preparation of a project-specific EIR or other appropriate environmental document tiered from the Program EIR for the repowering project no later than December 31, 2014.
- Continuous preparation of AWI's project-specific repowering EIR or comparable document through to completion, with a Draft for public review available by April 15, 2015, and a Final available by June 30, 2015.

2.4.3 Circumstances Outside AWI's Control

AWI asserts that in order for it to continue operation of the wind facility beyond October 31, 2015, in addition to diligently pursuing repowering, AWI's repowered project may be delayed beyond that date due to circumstances beyond AWI's control. Such circumstances considered outside of AWI's control, which ~~would allow~~ AWI proposes as conditions of approval that would allow it to operate beyond October 31, 2015, could include:

- Delay in completion of an interconnection transmission study, despite AWI's initiation of that study, or refusal by the California Independent System Operator (CAISO) and/or PG&E to grant transmission or interconnection rights following such related study.
- The inability to secure an economic power purchase agreement for the repower project, despite commercially reasonable efforts to do so.
- Failure by Congress to renew the federal renewable energy production tax credit beyond 2015, which expired on December 31, 2013.
- Land owner site control for repowering is unilaterally withdrawn by any landowner(s) or is otherwise terminated due to no fault of AWI.
- Repower permits are delayed or not issued by County CDA.
- A Final CEQA document is not certified by July 22, 2015
- Procurement of wind turbines and related wind project equipment for repowered facilities is delayed due to market supply constraints.
- The separation and/or exchange of existing Altamont wind power assets (such as land leases, substations, permits, etc.) necessary to repower the site, is delayed by parties unrelated to AWI.

3.0 ENVIRONMENTAL IMPACTS ANALYSIS AND MITIGATION MEASURES

3.1 Approach to the Environmental Analysis

The County CDA anticipates that the proposed extension will lead to an increase in the severity of impacts previously identified in the 2013 FEIR. As previously described, the 2013 FEIR provided a full discussion of the prior project's potential environmental effects on the following resource areas: Air Quality and GHGs; Biological Resources; Noise; and Hazards and Hazardous Materials. The County CDA does not anticipate that major revisions to the 2013 FEIR are necessary to identify new environmental impacts that were not previously disclosed in the 2013 FEIR for an extension of AWI's operations for three additional years through October 31, 2018. However, to the extent new information has become available since the prior FEIR, the County CDA has incorporated that information into the [DSEIR/FEIR](#).

As indicated in detail described in the Executive Summary Chapter 3 of the 2013 FDEIR, due to the types of activities associated with the proposed CUP modifications, the County determined that some topics do not require in-depth technical analysis. The following resources were dismissed from further consideration in the 2013 FEIR: aesthetics; agriculture and forest resources; cultural resources; geology and soils; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; transportation; and utilities.

The 2013 FEIR broadly distinguished impacts as resulting from either operational activities (i.e., the use of wind turbines to generate electricity) and decommissioning (i.e., the removal of wind turbine equipment from the project area and the subsequent restoration of the underlying land). Decommissioning activities, including the number of daily crews working and the intensity of daily activity associated with decommissioning, are identical regardless of whether the facilities are decommissioned after 2015 or 2018, as noted in the 2013 FEIR. Therefore, for purposes of this [DSEIR/FEIR](#), impacts resulting solely from decommissioning activities are not discussed, and the County CDA will instead rely entirely on the analyses and mitigation measures as described in the 2013 FEIR for operational impacts, and not any decommissioning-related impacts.

In the 2013 FEIR, the County CDA evaluated the impacts of multiple operating scenarios (i.e., project alternatives), including the impacts of operating the wind farm through 2018, as presently proposed. However, these alternatives were evaluated at a limited level of analysis, as provided for in the *CEQA Guidelines, Section 15126.6(d)*, to provide "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." The impact analysis below will augment the analysis of the 2013 FEIR, including Alternative 3, to provide the level and scope of analysis necessary to respond to the proposed change in the project.

3.1.1 Noise

As described in the 2013 FEIR operations under Alternative 3 (this project) would increase compared to the prior project. Exposure of residences to increased turbine noise under Alternative 3, including the potential for increased wind turbine noise as a result of aging turbines or lack of maintenance, would be greater under Alternative 3 than under the proposed project because more turbines would be running through 2018. This is considered a significant impact. However, implementing Mitigation Measure NOISE-1, as described in the 2013 FEIR, would reduce this impact to a less-than-significant level. Although there have been some changed circumstances since 2013, the County CDA does not find that there are substantially changed circumstances as part of this project that would result in new or substantially different significant impacts with respect to noise impacts that were not previously identified in the 2013 FEIR. Furthermore, no new information of substantial importance shows that

the CUP extension to 2018 and associated asset exchange would have significant impacts with respects to noise not discussed in the prior FEIR.

3.1.2 Air Quality and Greenhouse Gases

As also described in the 2013 FEIR, Alternative 3 (this project) would result in the most electricity production and GHGs offset. Although some GHG emissions would result from decommissioning activities, the GHGs offset by the turbine operations under Alternative 3 are multiple orders of magnitude greater than those resulting from decommissioning activities. The net result of Alternative 3 would be a substantial reduction in GHGs. The County CDA does not find that there are substantially changed circumstances as part of this project that would result in new or substantially different significant impacts with respect to air quality and GHGs that were not previously identified in the 2013 FEIR. Furthermore, no new information of substantial importance shows that the CUP extension to 2018 and associated asset exchange would have significant impacts with respects to air quality and GHGs not discussed in the prior FEIR.

3.1.3 Biological Resources

As described in the 2013 FEIR, project impacts on biological resources could occur as a result of operational changes (for avian species) and during decommissioning activities (terrestrial impacts) in cases where special status species and/or sensitive habitats occur within the decommissioning work areas. This [DSEIR/FEIR](#) does not analyze impacts related to decommissioning, as the proposed extension is not anticipated to result in any changes to those impacts. These potential impacts resulting from project decommissioning would not be changed in any way by the proposed extension of the CUPs except that they would be delayed for up to three additional years. In all other respects, impacts resulting from decommissioning activities under the currently proposed CUP modifications would be identical to the impacts identified in the 2013 FEIR. As a result, the impact analysis sections of the 2013 FEIR related to decommissioning are herein incorporated by reference and are not discussed further in this [DSEIR/FEIR](#). This analysis does, however, focus on the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange of which terrestrial impacts associated with ground disturbing activities are not anticipated. The biological resources analysis in Section 3.2 of this [DSEIR/FEIR](#) only focuses on wildlife (with an emphasis on avian species). The anticipated impacts on other wildlife (primarily terrestrial species and their habitat), waters of the United States (including wetlands), and waters of the state due to decommissioning are described in detail in the 2013 FEIR.

As described in the 2013 FEIR, an analysis of the potential avian impacts under Alternative 3 indicates that operational impacts would be substantially greater than those associated with the proposed project (2013 FEIR, Table 4-2), and more than 2.5 times the level expected under the No Project Alternative (the avian baseline condition). Although the estimates are based on APWRA-wide per-MW mortality estimates, they provide a comparison of the expected impacts under each alternative. The 2013 FEIR's brief analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. For example, Table 4-2 in the 2013 FEIR provided a projection that there would be 19.0–26.5 golden eagle fatalities under Alternative 3 through 2018, compared to a baseline (No Project conditions) of 7.1–9.9 golden eagle fatalities through 2018. These additional impacts and related mitigation measures are analyzed in this [DSEIR/FEIR](#) document.

3.1.4 Hazards and Hazardous Materials

The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. As previously described, an issue raised by an area resident during the NOP comment period reported the appearance of oil being dispersed along the turbine blades from leaking turbine generators as a form of environmental pollution. This issue would fall into the environmental category of Hazards and Hazardous Materials. Based on new information about the condition of the turbines related to potentially widespread soil contamination from leaking turbine oils or lubricants, the extension may be expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant. This issue is further analyzed in Section 3.3 of this [DSEIR/FEIR](#).

3.2 Biological Resources

Potential biological resource related to wildlife avian impacts associated with the project components are analyzed in this section or incorporated by reference to the 2013 FEIR. Potential impacts associated with each of these project components are summarized at a qualitative level in Section 3.2.3, Environmental Impacts. This section also identifies specific and detailed measures from the East Alameda County Conservation Strategy (EACCS) to avoid, minimize, or compensate for potentially significant impacts on biological resources, where necessary as described in the 2013 FEIR. In addition, the County CDA has also provided a suite of alternative mitigation measures that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the June 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) (draft).

3.2.1 Regulatory setting

A listing of the laws and regulations that influence the management of biological resources in the study area is summarized below and provided in full detail within the 2013 FEIR. These laws and regulations are relevant for the analysis provided in this [DSEIR/FEIR](#); as such, the reader is referenced back to Section 3.2.1 of the 2013 FEIR for further details.

3.2.1.1 Federal

- Federal Endangered Species Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Clean Water Act

3.2.1.2 State

- California Environmental Quality Act
- California Department of Fish and Wildlife Code

3.2.1.3 Local

- East Alameda County Conservation Strategy

3.2.2 Environmental Setting

Section 3.2.2 of the 2013 FEIR summarizes the existing conditions related to biological resources in the study area and references the detail of the existing conditions. These conditions are relevant for

the analysis provided in this [DSEIR/FSEIR](#); as such, the reader is referenced back to the 2013 FEIR for further details regarding the Biological Resources environmental setting.

3.2.3 Environmental Impacts

3.2.3.1 Method

This biological impact analysis is based on professional standards and information cited throughout the section and incorporates by reference the details discussed in the 2013 FEIR. The key effects were identified and evaluated qualitatively and quantitatively based on the environmental characteristics of the study area and the magnitude, intensity, and duration of activities related to operation and decommissioning activities associated with the proposed project (2013 EIR).

Avian impacts and the resulting significance conclusions are determined on the basis of the No Project Alternative as defined in the 2013 FEIR as the baseline. For operational changes associated with the proposed project, the avian impact analysis is based on the most recent published results of avian fatality studies in the 2013 FEIR and a three-year average from 2008-2010 (2013 FEIR), June 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) (draft) and the resulting per-MW avian impact estimates.

The method chosen in the 2013 FEIR to estimate the number of avian fatalities considers two variables: (1) the estimated fatality rate and (2) the installed capacity (MW), multiplied together to yield an estimate of fatalities at the wind farm, as follows:

$$\text{fatality rate} \times \text{installed capacity} = \text{estimated fatalities/MW}$$

This method for analyzing the effect of the project on avian mortality, and conclusions drawn from this method regarding AWI's proposed project, are discussed below.

3.2.3.2 Thresholds of Significance

Based on professional practice, the County CDA Environmental Checklist, and CEQA Guidelines, Appendix G (14 CCR 15000 et seq.), the analysis that follows serves to reach determinations whether the proposed project would:

- Have a substantial adverse effect, either directly or through habitat modifications, including designated critical habitat, 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, including substantially reducing the number or restricting the range of an endangered, rare, or threatened species.
- Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA, including marsh, vernal pool, and coastal wetlands, through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The thresholds of significance used are also based on professional practice and state and federal guidelines on adverse effects on biological and wildlife resources. As defined by *Section 15064.7* of the *CEQA Guidelines*, such thresholds are “an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.”

3.2.3.3 Impact Assumptions

Impacts on biological resources are based on the following project assumptions:

- Operational changes to the timing and duration of wind turbine operations (three additional years, or up to 25½ additional months of operation, with winter seasonal shutdowns) would result in increased avian fatalities.
- No ground disturbing activities are expected outside what was analyzed in the 2013 FEIR as a result of the requested permit extensions.
- No new access roads would be constructed.
- Existing facilities and proposed work areas are limited to upland habitat; no activities will occur within aquatic habitat.
- No suitable habitat for special-status fish species or designated critical aquatic habitat occurs in the study area. Therefore, potential impacts on these species and critical habitat are not discussed in this impact analysis.
- Avian fatalities are directly proportional to the operational period of wind turbines, calculated as the cumulative installed generation capacity.

3.2.3.4 Impact Mechanism

Biological resources could be directly or indirectly affected during additional operation period during the CUP permit extensions. Impacts on biological resources fall into the three categories: temporary, short-term, and long-term. Some activities that could cause impacts on biological resources are *increasing cumulative turbine operation time, particularly during the three-year extended operation period*. These impact mechanisms were used to assess project-related impacts on biological resources in the project area for this [DSEIR/FSEIR](#).

3.2.3.5 Impacts and Mitigations

The 2013 FEIR’s brief analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. These additional impacts and related mitigation measures are analyzed in this section. The County CDA has also provided, in this [DSEIR/FSEIR](#), a suite of alternative mitigation measures (Mitigation Measure BIO-17a) that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These mitigation measures are derived from and align with mitigation measures found in the October 2014 *Program Environmental Impact Report for the*

Altamont Pass Wind Resource Area (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

Impact BIO-1: Potential to cause a substantial adverse effect, directly on special-status species (Significant; Significant and unavoidable for avian species)

The extension of the CUP permits under this project would cause direct impacts to avian species, as discussed in the 2013 FEIR. Additional mortality based estimates for the three years of operation are based on the ongoing monitoring at APWRA and they are discussed in more detail below. There are other factors not considered in the July 2013 FEIR that indicate avian mortality may, in fact, be reduced as a result of an asset exchange including a reduction in High Risk Turbines and a reduction in operating capacity as discussed below.

Estimated Project Impacts on Focal Species

Fatality Rates

Studies of avian fatalities in the APWRA have been conducted, in one form or another, since the 1980s. The most recent iteration of the APWRA-wide monitoring program was implemented by the County CDA following the renewal of the CUPs in 2005. To measure progress towards the goal of reducing avian fatalities within the APWRA through the implementation of adaptive management measures and the seasonal shutdown, the monitoring program has focused on identifying annual avian fatality rates in the APWRA. Fatality rates for each species are calculated, and then for multiple years. The monitoring program is managed by a Monitoring Team (M-TEAM), overseen by the Altamont Pass Scientific Review Committee (SRC), which reports to and makes recommendations to the County CDA. The M-TEAM produces an annual report that discloses the avian fatalities observed and presents estimates of annual adjusted species fatality rates on a standardized per-MW-per-year basis for all avian species. These rates are used to determine the effectiveness of ongoing adaptive management measures, as well as progress towards the goal of fatality reduction. The size and scope of the study has been designed to determine fatality rates for the entire APWRA, standardized on a per-MW-per-year basis. The County CDA determined in the 2013 FEIR that the current monitoring program is the best available source of wind turbine-related avian fatality rates in the APWRA.

Table 3-1, derived from Chapter 3.2 of the 2013 FEIR, provides the anticipated avian species impacts under the proposed project, as calculated from the APWRA-wide fatality rate estimates (standardized on a per-MW basis). Average fatality rates are presented for all available monitoring years (2005–2010) as well as for recent monitoring years (2008–2010, [and 2005-2012](#)). The rates for recent monitoring years were presented in order to consider years in which more intensive efforts have been made to reduce avian mortality within the APWRA, with an understanding that the omission of data for the years 2005-2007, prior to permanent operational changes aimed at reducing avian mortality, would more accurately represent the impacts of the wind farm for the future term of the project. Also included in Table 3-1 is the 2005-2011 average of the annual fatality rates at non-repowered turbines as provided in the October 2014 *Program Environmental Impact Report for the Altamont Pass Wind Resource Area* (State Clearinghouse No. 2010082063) that was certified on November 12, 2014.

TABLE 3-1 ADJUSTED APWRA-WIDE AVIAN FATALITY RATES PER MW PER YEAR

SPECIES	AVERAGE FATALITY RATE
BASED ON 2005-2010 MONITORING RESULTS	
Source: FEIR, <i>Modifications to Existing (Year 2005) Conditional Use Permits- AWI</i> (SCH No. 2012062060)	
American Kestrel	0.496
Burrowing Owl	0.721
Golden Eagle	0.085
Red-Tailed Hawk	0.449
Total Focal	1.751
BASED ON 2008-2010 MONITORING RESULTS	
Source: FEIR, <i>Modifications to Existing (Year 2005) Conditional Use Permits- AWI</i> (SCH No. 2012062060)	
American Kestrel	0.443
Burrowing Owl	0.425
Golden Eagle	0.061
Red-Tailed Hawk	0.286
Total Focal	1.215
BASED ON 2005-2011 MONITORING RESULTS	
Source: ICF International, APWRA Repowering Draft PEIR, June 2014 (SCH No. 2010082063)	
American Kestrel	0.59
Burrowing Owl	0.78
Golden Eagle	0.08
Red-Tailed Hawk	0.44
Total Focal	1.89
BASED ON 2005-2012 MONITORING RESULTS	
Source: ICF International, APWRA Bird Fatality Study, June 2014	
American Kestrel	0.577
Burrowing Owl	0.70
Golden Eagle	0.081
Red-Tailed Hawk	0.411
Total Focal	1.77
Source: FEIR, <i>Modifications to Existing (Year 2005) Conditional Use Permits- AWI</i> (SCH No. 2012062060)	

Installed MW Capacity

The other factor considered in the 2013 FEIR analysis of avian impacts resulting from the wind farm is installed MW capacity. Installed capacity, for purposes of the 2013 FEIR avian analysis, is a value derived to represent the operational size of the project over time. More specifically, installed capacity in the 2013 FEIR represents the sum of the nameplate capacity rating of all installed turbines, expressed in MW-years. This value is calculated by (a) determining the number of turbines operating in the year and multiplying that number by the nameplate capacity of each turbine, (b) multiplying the

result by the percentage of the year they are expected to operate in that configuration for a given year, then (c) summing the total for each year for the total life of the project.

In months where no turbines operated, such as during the annual Winter Seasonal Shutdown, a period of 3.5 months (from November 1 through February 14 each year) during which the CUPs require 100 percent of turbines to be shut down, the 2013 FEIR assumed zero capacity for such periods.

Comments were received arguing against the accuracy of such an approach when comparing project alternatives, some of which included winter operations and others which did not. The present analysis, however, concerns a wind farm that does not operate in the winter. Therefore, the analysis for this [DSEIR/FEIR](#) assumes zero capacity for winter months, just as was assumed in the 2013 FEIR.

The 2013 FEIR's analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. The 2013 DEIR analysis, on pages 4-4 and 4-16 through 4-20 of the 2013 DEIR, and summarized most clearly in Table 3.2-3a in the 2013 FEIR (page 4-16), indicated that the installed capacity of the 86 MW wind farm for an operating term through 2018 would be 311 MW (Table 3-2 of this [DSEIR/FEIR](#)), and all avian fatality estimates were derived based on this operating term. Estimated avian fatalities figures for the February 15, 2016-October 31, 2018 operating schedule are also presented in Tables ES-1 through ES-3 and Tables 3-3 through 3-5 below. Table 3-5 below provides a comparison of the scenarios.

TABLE 3-2 SUMMARY OF INSTALLED CAPACITY PER MEGAWATT YEAR FOR SCENARIOS

SCENARIO	2013	2014	2015	2016	2017	2018	2019	TOTAL MW - YEARS
2013 FEIR Proposed Project	21.5	85.8	85.5	0.0	0.0	0.0	0.0	193.1
2013 FEIR No Project Alt.	5.2	44.5	32.1	11.9	11.9	10.9	0.0	116.5
2013 FEIR Alternative 1 (Current CUP conditions)	7.2	60.8	60.8	0.00	0.0	0.0	0.0	128.7
2013 FEIR Alternative 3	7.2	60.8	60.8	60.8	60.8	60.8	0.0	311.0
Years 2016 - 2018	-	-	-	60.8	60.8	60.8	0.0	182.4

Source: FEIR, *Modifications to Existing (Year 2005) Conditional Use Permits- AWI* (SCH No. 2012062060)

TABLE 3-3 ESTIMATED AVIAN FATALITIES AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2008-2010 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 - 2018	ESTIMATED FATALITIES 2013 - 2018
American Kestrel	26.9	80.8	137.8
Burrowing Owl	25.8	77.5	132.2
Golden Eagle	3.7	11.1	19
Red-Tailed Hawk	17.4	52.2	88.9
Total Focal	73.8	221.6	377.9

Source: POWER Engineers, 2014

TABLE 3-4 ESTIMATED AVIAN FATALITIES AT FULL PROJECT CAPACITY (85.8 MW) BASED ON 2005-2011 BIRD YEAR ADJUSTED FATALITY RATES

SPECIES	ANNUAL ESTIMATED FATALITIES	ESTIMATED FATALITIES 2016 – 2018	ESTIMATED FATALITIES 2013 – 2018
American Kestrel	35.9	107.6	183.5
Burrowing Owl	47.4	142.3	242.6
Golden Eagle	4.7	14.6	24.9
Red-Tailed Hawk	26.8	80.3	136.8
Total Focal	114.8	344.8	587.8

Source: POWER Engineers, 2014

TABLE 3-5 COMPARISON OF ADJUSTED SPECIES FATALITY TOTALS OF FOUR FOCAL SPECIES, BASED ON AN AVERAGE FATALITY RATE (FATALITIES PER MEGAWATT PER YEAR)

SPECIES	AVERAGE FATALITIES PER MW (2005–2010/ 2008–2010/ 2005-2011) <u>2005-2012/ 2008-2012</u>	PROJECTED NUMBER OF FATALITIES UNDER THE 2013 FEIR PROPOSED PROJECT	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR BASELINE CONDITIONS	PROJECTED NUMBER OF FATALITIES UNDER 2013 FEIR ALTERNATIVE 3	PROJECTED NUMBER OF FATALITIES FOR YEARS 2016-2018
American Kestrel	0.496/0.443/0.590 <u>0.577/0.571</u>	85.5–113.9	51.6–68.7	137.8–183.5	80.8–107.6
Burrowing Owl	0.721/0.425/0.780 <u>0.70/0.52</u>	82.1–150.6	49.5–90.9	132.2–242.6	77.5–142.3
Golden Eagle	0.085/0.061/0.080 <u>0.081/0.75</u>	11.7–16.4	7.1–9.9	19–26.4	11.1–15.5
Red-Tailed Hawk	0.449/0.286/0.440 <u>0.411/0.35</u>	55.2–86.7	33.3–52.3	88.9–139.6	52.2–81.9

Source: POWER Engineers, 2014

Reduction in High Risk Turbines

As discussed previously, AWI is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI’s operating turbines. These 300 turbines represent about 35 percent of AWI’s assets in MW capacity. The purpose of the proposed asset exchange is to physically separate certain historically shared (or common) project assets within the APWRA to allow for unencumbered and geographically consolidated operations.

The number of County-designated High Risk Turbines (HRT), which are those turbines identified by the SRC as posing the greatest collision risk to birds, will be reduced coincident to the exchange. Over the years, various wildlife consultants have examined the APWRA and attempted to identify those wind turbines that pose a disproportionate risk to avian species, and several different models have been proposed for identification of high risk wind turbines. The system currently in use, the HRT system, was first adopted in 2007 and later revised in 2010. The HRT classification system ranked wind turbines on a scale of 1 to 10, with 10 presumed to be the most hazardous. At various stages since inception of the system, many of those turbines with the highest ratings, such as, 10, 9.5, 9.0, and 8.5, have been ordered to be removed by the County CDA. To date, Green Ridge Power LLC

has shut down a greater number of HRTs, compared to AWI. This imbalance will result in AWI decreasing its quantity of HRT turbines after the exchange, theoretically reducing avian impacts.

As previously described, Green Ridge Power LLC has permit and legal obligations to permanently cease operations of its entire fleet of existing wind turbines (approximately 1,000 old generation turbines) by October 31, 2015; as such, AWI's fleet of HRT turbines will be decommissioned by that date.

TABLE 3-6 ASSET EXCHANGE EFFECT ON NUMBER OF HRTS IN OPERATION

OWNER/HRT RATING	OPERATING
AWI	
8.5	12
9	9
9.5	0
10	0
Total Turbines Given Up by AWI	21
NEER	
8.5	4
9	0
9.5	2
10	0
Total Turbines Received by AWI	6
HRT Reduction	15

Source: AWI, 2014

The 2013 FEIR methodology, as previously described, utilized the APWRA-wide fatality rate because the project area is large and diversified. Applying the 2013 FEIR APWRA-wide fatality rate methodology to an asset exchange, as proposed under this project, would result in no greater impact on avian mortality when reviewing the proposed wind turbines received in an exchange for the wind turbines given up (Table 3-6). Therefore, on a statistical level, the asset exchange would have no effect on the impacts caused by the project.

Reduction in Operating Capacity

As a result of the asset exchange under this project, it is likely that AWI's operating capacity will be reduced through the exchange, because AWI will exchange its twenty 250 kW wind turbines for twenty 100 kW wind turbines. Again considering the per-MW method of fatality calculations utilized by the SRC and the M-TEAM, aggregate project capacity will be reduced by 5.3 MW over three years, which is equivalent to removing twenty-five 100 kW wind turbines for the duration of the three-year project as illustrated in Table 3-7.

TABLE 3-7 ASSET EXCHANGE EFFECT ON MEGAWATT CAPACITY (2016 – 2018)

RESULTING REDUCTION IN CAPACITY DUE TO ASSET EXCHANGE	MEGAWATTS	
Total Project Capacity without Asset Exchange during years 2016-2018	182.3	
Total Project Capacity with Asset Exchange during years 2016-2018	177.0	
Reduction in AWI Project Capacity Due to Asset Exchange - Over the 3-year life of the Project (2016-2018)	5.3	(equivalent of removing 25 x 100 kW wind turbines for the duration of the 3-year project life)
EQUIVALENT QUANTITY OF WIND TURBINES REMOVED (5.3 MW)		
100 kW Wind Turbine Nameplate Capacity	0.1	
Portion of the year permitted to operate (71%)		
100 kW Wind Turbine Net Capacity	0.071	
Total Reduction in AWI Project Capacity Due to Asset Exchange	5.3	
AWI's Proposed Maximum Project Duration (3 years)		
Annual Reduction in AWI Project Capacity Due to Asset Exchange	1.771	(equivalent to 25 turbines needed to produce annual reduction in project capacity)

Source: AWI, 2014

For these reasons, the asset exchange would not increase the risk to birds over and above the impacts associated with the project generally. An asset exchange is anticipated to decrease the impact on avian species, due to the reduction in the number of high-risk turbines in operation and the anticipated reduction in operating capacity for years 2016-2018.

Mitigation Measure BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities

In order to reduce the potential impacts of the proposed project on avian species (to include raptors and special status species), AWI will implement seasonal shutdowns on all turbines for the remaining operational period. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify County CDA each year when turbines have been shut down, and again when they have resumed operating.

Mitigation Measure BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors, and Special Status Avian Species by Retrofitting Electrical Facilities

AWI will mitigate for the proposed project’s additional contribution to golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. This mitigation measure will also benefit mortality reduction for other raptors and special status avian species. The mitigation must occur within 140 miles of the proposed project, the area typically defined by the USFWS as the “local population.” The proposed project, with implementation of mitigation measure BIO-16, (together identified as Alternative 1 in the analysis of project alternatives) is projected to result in the fatality of approximately one eagle

(cumulatively, and statistically, 0.7–1.0) when compared to the existing avian baseline condition (the No Project Alternative) (2013 FEIR Table 3.2-5). Although the baseline fatality rate is higher, this mitigation measure addresses the impacts of the ~~proposed-2013~~ project proposal (with ~~m~~Mitigation Measure BIO-16), which is approximately one additional eagle fatality. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Whereas the approved 2013 CUP modifications were projected to result in about 8 to 11 eagle fatalities (with seasonal shutdown), these were compared to a baseline in which between 7 and 10 eagle fatalities were anticipated; hence the estimate of only one “net” additional eagle fatality as the impact. In addition, the proposed 2014 CUP modifications, for the period 2016-2018 are also compared to a baseline in which 7 and 10 eagle fatalities from turbine operations are also projected. For this reason, the number of additional eagle fatalities, and in turn the number of power pole retrofits to mitigate for the projected number of eagle fatalities is notably greater – 11.1 eagle fatalities, requiring 322 power pole retrofits.

~~AWI will therefore retrofit 29 utility poles as mitigation for the expected level of eagle fatality from the proposed project.~~ AWI may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion of the retrofits must be provided to the County CDA. USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute ~~between \$322,000 and \$1,288,000~~\$217,500 (~~(\$7,500 x 29 poles)~~) to a third party mitigation account (approved by the County CDA) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County CDA within one year of approval of the proposed project.

The mitigation method of retrofitting offsite electric utility power poles within 140 miles of the project site, to reduce the risk of electrocution to birds (to include eagles, other raptors, and special status avian species), has been endorsed by the County CDA and was included in the 2013 FEIR. Citing the 2012 Draft Eagle Conservation Guidelines released by USFWS and associated technical appendices updates, it was stated in the CUP as Mitigation Measure BIO-17 that one golden eagle fatality resulting from electrocution would be avoided by retrofitting 29 power poles. This would similarly benefit other raptors and special status avian species as well.

Use of power poles for the mitigation of all estimated golden eagle fatalities over the three-year duration of the requested AWI CUP modification would require the retrofitting of 322 poles. To be in compliance with the mitigation requirements of the existing CUPs, AWI must contribute the cost of retrofits to a third-party mitigation account or, alternatively, contract directly with a utility to complete such retrofits. Based on recent AWI discussions with PG&E, the cost per retrofit is between \$1,000 and \$4,000, per pole depending on the type and condition of the pole to be retrofitted. Table 3-8 presents the number of eagle fatalities to be mitigated through power pole retrofits between 2016 through 2018.

TABLE 3-8 ANNUAL NUMBER OF EAGLES FATALITIES TO BE MITIGATED THROUGH POWER POLE RETROFITS

OPERATING YEAR	POLES RETROFITTED	QUANTITY OF GOLDEN EAGLES SAVED MITIGATED PER YEAR	QUANTITY OF GOLDEN EAGLES MITIGATED SAVED PER PROJECT
2016	108	3.7	3.7
2017	107	3.7	7.4
2018	107	3.7	11.1
TOTAL	322	<u>11.137</u>	<u>22.211.1</u>

Source: AWI, 2014

Due to the large number of power pole retrofits required, it is reasonably expected that approximately 108 power pole retrofits, or one third of the total required retrofits, will be completed per year of the extended three- year CUP term of the project. This annual retrofit schedule also takes into consideration that repowering could likely occur prior to the end of the three-year extended permit term (i.e., prior to October 31, 2018), and therefore, installed mitigation would follow the operating/impact period.

Mitigation Measure BIO-17a: Compensate for the loss of special-status species, including golden eagles, by contributing to conservation efforts

The Secretary of the Interior issued Order 3330 on October 31, 2013, outlining a new approach to mitigation policies and practices of the Department of the Interior. This approach recognizes that certain strategies aimed at some species can provide substantial benefit to others and to the ecological landscape as a whole. The landscape-scale approach to mitigation and conservation efforts is now central to the Department's mitigation strategy. Although the Order was intended for use by federal agencies and as such is not directly applicable to the County, it is evident that such an approach would likely have the greatest mitigation benefits, especially when considering ongoing and long-term impacts from wind energy projects.

With these considerations in mind, the County has outlined ~~several~~ some options that are currently available to compensate for impacts on raptors including special-status species. The options discussed below are currently considered acceptable approaches to compensation for impacts on raptors, in lieu of or in conjunction with Mitigation Measure 17. Although not every option is appropriate for all species, it is hoped that as time proceeds, a more comprehensive landscape-level approach to mitigation will be adopted to benefit a broader suite of species than might benefit from more species-specific measures. The County recognizes that the science of raptor conservation and the understanding of wind-wildlife impacts are continuing to evolve and that the suite of available compensation options may consequently change over the life of a project.

To promote the conservation of raptors, the project proponent may compensate for special-status species raptor fatalities estimated within their project area. The project proponent ~~may~~ shall submit for County approval a Special-Status Species Mitigation Plan outlining the estimated number of special-status species fatalities based on the type or types of compensation options to be implemented. The Project proponent will use the Special-Status Species Mitigation Plan to craft an appropriate strategy using a balanced mix of the options presented below, as well as considering new options suggested by the growing body of knowledge during the course of the project lifespan, as supported by a Resource Equivalency Analysis (REA) or similar type of compensation assessment acceptable to the County that demonstrates the efficacy of proposed mitigation for impacts on special-status species. The REA process and an example are included in Appendix G.

REA is an approach to estimate quantitatively the amount of compensatory mitigation that is needed to mitigate impacts on raptors from windfarm operations. The USFWS would use the REA to evaluate the mitigation requirements for golden eagles (USFWS, 2013), but it may also be useful in evaluating the mitigation needs of other species.

The County Planning Director, in consultation with the TAC, will consider, based on the REA, whether the proposed Special-Status Species Mitigation Plan is adequate, including consideration of whether each Special-Status Species Mitigation Plan incorporates a landscape-scale approach such that the conservation efforts achieve the greatest possible benefits. Compensation measures as detailed in an approved Special-Status Species Mitigation Plan must be implemented within 60 days

of the permit approval. Special-Status Species Mitigation Plans may be revised—and will be reviewed by the County.

- **Obtaining a programmatic eagle take permit (ETP) and carrying out measures outlined in an approved Eagle Conservation Plan and Bird and Bat Conservation Strategy.** The Project proponent may elect to apply for programmatic eagle take permits from USFWS. The programmatic eagle take permit process currently involves preparation of an Eagle Conservation Plan (ECP) and a Bird and Bat Conservation Strategy (BBCS). The ECP specifies avoidance and minimization measures, advanced conservation practices, and compensatory mitigation for eagles—conditions that meet USFWS’s criteria for issuance of a permit. The BBCS outlines measures being implemented by the applicant to avoid and minimize impacts on migratory birds, including raptors. If programmatic eagle take permits are obtained by the project proponent, those permit terms, including the measures outlined in the approved ECP and BBCS, may constitute an appropriate conservation measure for estimated take of golden eagles and other raptors, including special-status species, provided such terms are deemed by the County to be comparable to or more protective of raptors than the other options listed herein. These measures are optional and voluntary, but may be accepted in lieu of some or all of the required power pole retrofits required by Mitigation Measure BIO-17, if the applicant chooses to implement Mitigation Measure BIO-17a. The option of obtaining an ETP would require the applicant to receive USFWS approval of its ECP, not merely applying for the ETP.
- ~~**Contribute to raptor recovery efforts.** The Project proponent may elect to contribute funds to raptor recovery centers such as the California Raptor Center (Center). The Center is affiliated with the UC Davis School of Veterinary Medicine, and its programs focus on raptor education, raptor health care and rehabilitation, and raptor research. The average cost to rehabilitate one raptor is approximately \$580 (Stedman pers. comm.). The Center receives more than 200 injured or ill raptors annually. Approximately 60–65% are rehabilitated and returned to the wild. In a typical year, the four raptor species most commonly brought in for care are barn owl (96 admissions in 2006), American kestrel (20 admissions), red-tailed hawk (19 admissions), and Swainson’s hawk (15 admissions) (California Raptor Center 2011). The Center relies on donations of time and resources to provide resident raptor care and feeding, underwrite education programs, provide rehabilitation medical supplies and medication, and maintain its facilities. The first contributions for the project will be based on the estimated number of raptor fatalities as described above in this measure.~~
- ~~**Contribute to raptor conservation efforts.** The project proponent may contribute funds, equivalent to raptor recovery efforts above (i.e., \$580/raptor), to other local and/or regional conservation efforts designed to protect, recover, and manage lands for raptors, or to conduct research involving methods to reduce raptor fatalities or increase raptor productivity. These funds will be contributed to an entity or entities engaged in these activities including, but not necessarily limited to, the East Bay Regional Park District and the Livermore Area Regional Park District. Conservation efforts may include constructing and installing nest boxes and perches, conducting an awareness campaign to reduce the use of rodenticide, and conducting research to benefit raptors. The specific conservation effort to be pursued will be submitted to the County for approval as part of the Special-Status Species Mitigation Plan review process.~~
- **Contribute to regional conservation of raptor habitat.** The project proponent may address regional conservation of raptor habitat by funding the acquisition of conservation easements within the APWRA or on lands in the same eco-region outside the APWRA, subject to County approval, for the purpose of long-term regional conservation of raptor habitat. Lands proposed for conservation must be well-managed grazing lands similar to those on which the

projects have been developed. The project proponent will fund the regional conservation and improvement of lands (through habitat enhancement, lead abatement activities, elimination of rodenticides, and/or other measures) using a number of acres equivalent to the conservation benefit ~~of the raptor recovery and conservation efforts described above, or~~ as determined through a project-specific REA. The conservation easements will be held by an organization whose mission is to purchase and/or otherwise conserve lands, such as The Trust for Public Lands, The Nature Conservancy, California Rangeland Trust, or the East Bay Regional Parks District. The project proponent will obtain approval from the County regarding the amount of conserved lands, any enhancements proposed to increase raptor habitat value, and the entity holding the lands and/or conservation easement. The REA must be completed and approved within six (6) months of the CUP approval and acquisition of conservation easements be completed within twelve (12) months of the CUP approval. The REA must be accepted by the USFWS and the County.

- ~~• **Other Conservation Measures Identified in the Future.** As noted above, additional conservation measures for special status species may become available in the future. Conservation measures for raptors are currently being developed by USFWS and nongovernmental organizations (e.g., American Wind Wildlife Institute) for example, activities serving to reduce such fatalities elsewhere, and enhancing foraging and nesting habitat. Under this option, the project proponent may make alternative proposals to the County for conservation measures based on an REA or similar compensation assessment that the County may accept as mitigation if they are deemed by the County to be comparable to or more protective of special status species than the other options described herein.~~

3.2.3.6 Level of Significance after Mitigation

As detailed above and in the 2013 FEIR, mitigation options for significant impacts on avian species at an existing wind energy generation facility are limited to either operational modifications (i.e., shutdowns, removals) or off-site mitigation. Incorporation of these mitigation options could reduce, but would not eliminate the effects of the proposed project. Even after implementation of any of these mitigation measures, the impacts on avian species would remain **significant and unavoidable**.

3.3 Hazards and Hazardous Materials

The 2013 FEIR's analysis of Hazards and Hazardous Materials (Section 3.4) concluded that the project is not expected to create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. An issue raised by an area resident during the NOP comment period noted the dispersal of oil from leaking turbine generators as a form of environmental pollution. This issue would fall into the environmental category of Hazards and Hazardous Materials. This section further investigates new information about the condition of the turbines related to potentially widespread soil contamination from leaking turbine oils or lubricants and analyzes this potential issue as it relates to the operational modifications to AWI's existing CUPs for continued wind power operation and maintenance activities APWRA through October 31, 2018 and associated asset exchange. This analysis investigates if this potential issue is expected to increase the severity of impacts (hazards and hazardous materials) previously considered insignificant.

3.3.1 Regulatory setting

A listing of the laws and regulations that influence the oversight of hazards and hazardous materials is provided in full detail within the 2013 FEIR. These laws and regulations are relevant for the analysis provided in this ~~DSEIR~~FSEIR; as such, the reader is referenced back to Section 3.4.1 of the 2013 FEIR for further details. Additional local regulations relevant to the issue area being analyzed in this ~~DSEIR~~FSEIR are provided below.

3.3.1.1 Local

Alameda County Department of Environmental Health

The Alameda County Department of Environmental Health (ACDEH) is the Certified Unified Program Agency (CUPA) for Alameda County. This certification by the California Secretary of Environmental Protection authorizes the ACDEH to implement the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program specified in *Health and Safety Code Chapter 6.11 of Division 20* (beginning with *Section 25404*). As the CUPA, ACDEH oversees the regulatory programs for Hazardous Materials Business Plans, underground and aboveground storage tanks, onsite treatment of hazardous waste, hazardous waste generators, and California Accidental Release Prevention.

3.3.2 Environmental Setting

The environmental setting was defined in the 2013 FEIR. Of particular relevance, project facilities are not located on a site considered hazardous pursuant to *Government Code Section 65962.5*. There are no public or private K–12 schools within 0.25 mile of the proposed project. The nearest school is approximately 2 miles east of project facilities and it is unlikely that hazardous materials will be emitted or released within 0.25 mile of any schools.

3.3.3 Environmental Impacts

3.3.3.1 Method

Existing conditions were determined from a review of published literature, examination of photographs, and review of department internet sources and other documents that describe the potential for hazards and hazardous materials occurrence in the APWRA. No fieldwork or hazardous materials sites database searches were conducted for the proposed program. The analysis assumes continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018.

3.3.3.2 Thresholds of Significance

For this analysis, an impact relating to hazards and hazardous materials would be considered significant under CEQA if it would result in any of the following environmental effects, which are based on professional practice and State CEQA Guidelines Appendix G (14 CCR 15000 et seq.).

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

3.3.3.3 Impacts and Mitigations

Impact HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Less than significant without mitigation)

Wind Turbine Blades

A review of the project wind turbine blades in their current conditions shows evidence of discoloration and usage over the years of operations. This discoloration is primarily caused from staining from ordinary rust and mineral deposits emanating from the steel casting of the hub and blade insert component. Figure 3 below shows a typical 100 kW blade unit in the Altamont Pass, located on the front/west ridge, north of Interstate 580. As can be seen in the figure, each fiberglass blade is equipped with a metal rod through the diameter of the blade arm (known as an IFD rod). This

is a non-galvanized steel rod that is subject to rusting. As seen in Figure 4, rust from rain and condensation can travel down the blade during rotation.

There are two sources of lubricant or oil associated with wind turbines. The first is located in the turbine engine housing and acts as a lubricant as well as a cooling mechanism. The second is located out towards the blades/fins themselves. Grease is used to lubricate bearings located at the center of the blade-hub assembly and, as these blades/fins rotate in a circular motion (depending on the wind direction and wind speed), they can be adjusted in pitch to maximize efficient energy production and minimize potential turbine tower stress. Within this housing structure there is grease/lubricant; the viscosity of which would not allow it to travel much further than as pictured in Figure 3 and Figure 4. This grease/lubricant typically loses its color through ambient sunlight; however, overtime, through wind and dust/grit, it will pick up and regain some sense of color. An excess of approximately 50 gallons of this grease/lubricant (for these facilities) would be required to reach the ground through the blades/fins, which is unlikely since this is well beyond the turbine gearbox capacity. By the nature of physics, gravity would dictate that this lubricant would run down the turbine support structure first rather than migrate out to the blades themselves. However, the high viscosity of the grease used in the wind turbines prevents it from seeping far from the center of the hub, contributing minimally (if any) to the long streaking seen in the figures.

Regular monitoring and maintenance maintains wind turbines in safe operating condition throughout the year. AWI's regular maintenance program is conducted in accordance with industry standards and complies with all relevant best practices to address and prevent hazardous conditions from developing at its turbine sites regardless of a wind turbine age. To manage rust staining and any traces of grease on the blades, blades are washed as needed at an off-site commercial facility. Wind turbines are never washed on site.

AWI's wind turbines are monitored through a centralized control system 24 hours per day. AWI's 100 kW wind turbines are each fitted with a series of alarms that are shown on the main control system display. An alarm will display if any functional problem occurs in a given wind turbine or if the wind velocity is outside the turbine's operating parameters. When triggered, an alarm displays a code specifying the general nature of the malfunction. Any alarm that is generated will also cause the wind turbine to go into a shutdown mode, allowing maintenance crews to visit the turbine and assess the nature of the problem. Wind turbines communicate with the control system every two seconds; as such, technical and maintenance crews are alerted as problems occur.

A visual monitoring system is used to inspect turbines and determine when turbines require maintenance. Crews monitor conditions in and around wind turbines regularly, and malfunctioning turbines are temporarily removed from service and/or repaired as needed.

The applicant also undertakes a preventative maintenance program each winter off-season to minimize the possibility of malfunction during the summer wind season. Preventative maintenance includes, among other activities, rotor blade and pitch sensor calibration, blade shaft rotational torque testing, drive shaft alignment check, pitch actuator brake/clutch functional testing, power factor correction circuit generator circuit insulation testing, and blade repair.

FIGURE 3 CLOSE-UP VIEW OF WIND TURBINE BLADE IFD ROD



FIGURE 4 **CLOSE-UP VIEW OF RUST STAINING EMANATING FROM WIND TURBINE IFD ROD**



Step-Up Transformer

A leaking step-up transformer on the ridge overlooking residences along Dyer Road associated with the project wind facilities currently has a minor leak from one of its cooling fins. The applicant is aware of this issue and has scheduled repair for this unit during the upcoming winter off-season. Oil contained in the transformer consists of a non-toxic, non-petroleum-based mineral oil that does not contain polychlorinated biphenyls (PCBs). Previous soil testing of the soil that was known to have been exposed to mineral oil from a transformer returned a “non-hazardous” determination (Appendix B).

In accordance with Appendix G of the State CEQA Guidelines, the project would be considered to have a significant effect if it would create a significant hazard to the public or the environment through the use or disposal of hazardous materials. The proposed project consists of the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange and does not involve the transport or use of any additional hazardous materials.

As detailed in Chapter 3-4 of the 2013 FEIR, a majority of hazardous materials to be used during operations are of low toxicity and would consist of fuels, oils and lubricants. As these materials are required for operation of construction vehicles and equipment, BMPs (Section 3.4.1.3 of the 2013 FEIR) would be implemented to reduce the potential for or exposure to accidental spills involving the use of hazardous materials. Upon further analysis, the project wind facility conditions in their current state and with the continued wind power operation and maintenance activities within the County portion of the APWRA through October 31, 2018 and associated asset exchange is not expected create any new hazard to the public or the environment through reasonably foreseeable accidental release of hazardous materials into the environment. As discussed in the 2013 FEIR, the project would also not expose people to airport-related hazards, or to impair implementation of any adopted emergency response plan or emergency evacuation plan. There are no public or private K-12 schools within 0.25 mile of the proposed project. The nearest school is approximately 2 miles east of project facilities and it is unlikely that hazardous materials will be emitted or released within 0.25 mile of any schools under the proposed project. As such, impacts would be less than significant.

Mitigation

No mitigation measures are required.

3.3.3.4 Level of Significance after Mitigation

Impacts would be less than significant without mitigation.

4.0 LIST OF PREPARERS AND OTHERS CONSULTED

4.1 County of Alameda Community Development Agency

- Sandra Rivera – Assistant Planning Director
- Andrew Young – Project Planner

4.2 POWER Engineers, Inc.

- Chris Knopp – Project Manager, EIR Preparation
- Dave Dean – Biological Resources
- Dr. Joe Platt – Biological Resources
- John Everingham – Senior Technical Review
- Yvonne Ulloa – Editor

5.0 REFERENCES

- ICF International. 2013. Final Environmental Impact Report for Modification to Existing (Year 2005) Conditional Use Permits for Altamont Winds Inc. July. Prepared for County of Alameda (State Clearinghouse No. 2012062060).
- ICF International. 2014. *Program Environmental Impact Report for the Altamont Pass Wind Resource Area*. June. Prepared for County of Alameda. (State Clearinghouse No. 2010082063).
- Shuford, W. D., and Gardali, T., editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1*. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento.
- Williams, D. F. 1986. *Mammalian Species of Concern in California. State of California. The Resources Agency*. California Department of Fish and Game. Sacramento, California.
- U.S. Fish and Wildlife Service. 2012. *Eagle Conservation Plan Guidance: Module 1 – Land-based Wind Energy Technical Appendices*. Draft Under Review. Division of Migratory Bird Management. August.
- Jennings, M. R. and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Rancho Cordova, CA: California Department of Fish and Game, Inland Fisheries Division.

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APPENDIX A NOP, DISTRIBUTION LIST, WRITTEN COMMENTS

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APPENDIX B STEP-UP TRANSFORMER SOILS TESTING

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APPENDIX D

NOTICES AND RELATED DOCUMENTATION

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**NOTICE OF AVAILABILITY OF THE
FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
FOR MODIFICATIONS TO EXISTING CONDITIONAL USE PERMITS –
ALTAMONT WINDS INC. (AWI): 2018 CUP EXTENSION
and
NOTICE OF PUBLIC HEARING ON
CERTIFICATION OF FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT
REPORT
FOR MODIFICATIONS TO EXISTING CONDITIONAL USE PERMITS –
ALTAMONT WINDS INC. (AWI): 2018 CUP EXTENSION PLN2014-00028**

Notice is hereby given that the County of Alameda has completed the Final Supplemental Environmental Impact Report (FSEIR) pursuant to the California Environmental Quality Act (CEQA, 1970, as amended) on the proposed modifications to 16 existing Conditional Use Permits (CUPs), for turbines owned and operated by Altamont Winds Inc. in the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). Altamont Winds Inc. (the Applicant, together with its operating subsidiary WindWorks Inc., and collectively, AWI) has submitted an application requesting that these CUPs, set to expire on October 31, 2015 under modifications approved in 2013, be extended through October 31, 2018 under specified conditions, for operation of its estimated 828 turbines, which have a rated capacity of approximately 85.8 megawatts (MW). The FSEIR supplements the previously certified *Final Environmental Impact Report, Modifications to Existing (Year 2005) Conditional Use Permits- Altamont Winds Inc.* (2013 FEIR) (State Clearinghouse No. 2012062060).

The Final SEIR is available for review at the Planning Department office in Hayward, and at the Department's website (www.acgov.org/cda/planning – see Pending Land Use Projects, Current Development Projects, Wind Turbine Projects and *Altamont Winds Inc. 86 MW Altamont Wind Farms Final Supplemental Environmental Impact Report – 2018 CUP Extension*). The FSEIR contains the DSEIR, comments received during a 45-day comment period that ended on January 12, 2015, and responses to those comments. The FSEIR is proposed to be certified by the East County Board of Zoning Adjustments (EBZA) and used for the purpose of CEQA in its consideration of CUPs **PLN2014-00028**. For more information, please contact Andrew Young at 510-670-5400 or andrew.young@acgov.org.

The EBZA will hold a public hearing to consider certifying the FSEIR and to take action on the subject application, on **Monday, February 2, 2015, 1:30 p.m.**, at the City of Pleasanton Council Chambers, 200 Old Bernal Avenue, Pleasanton, California. All persons interested in the matter may appear and be heard at this meeting.

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2014092057

Project Title: Modifications to Existing Conditional Use Permits - Altamont Winds Inc.Lead Agency: County of Alameda Community Development AgencyContact Person: Sandra RiveraMailing Address: 224 West Winton Ave., Rm. 111Phone: 510-670-5400City: HaywardZip: 94544County: Alameda**Project Location:** County: AlamedaCity/Nearest Community: LivermoreCross Streets: Project is bisected by Interstate I-580,

Zip Code: _____

Longitude/Latitude (degrees, minutes and seconds): _____ " N / _____ " W Total Acres: 14,196Assessor's Parcel No.: See attached list

Section: _____

Twp.: _____

Range: _____

Base: _____

Within 2 Miles: State Hwy #: Interstate I-580 bisects site

Waterways: _____

Airports: _____

Railways: _____

Schools: _____

Document Type:CEQA: NOP Draft EIRNEPA: NOIOther: Joint Document Early Cons Supplement/Subsequent EIR EA Final Document Neg Dec

(Prior SCH No.) _____

 Draft EIS Other: _____ Mit Neg Dec

Other: _____

 FONSI**Local Action Type:** General Plan Update Specific Plan Rezone Annexation General Plan Amendment Master Plan Prezone Redevelopment General Plan Element Planned Unit Development Use Permit Coastal Permit Community Plan Site Plan Land Division (Subdivision, etc.) Other: _____**Development Type:** Residential: Units _____

Acres _____

 Office: Sq.ft. _____

Acres _____

Employees _____

 Transportation: Type _____ Commercial: Sq.ft. _____

Acres _____

Employees _____

 Mining: Mineral _____ Industrial: Sq.ft. _____

Acres _____

Employees _____

 Power: Type Wind MW 85.8 Educational: _____ Waste Treatment: Type _____ MGD _____ Recreational: _____ Hazardous Waste: Type _____ Water Facilities: Type _____

MGD _____

 Other: _____**Project Issues Discussed in Document:** Aesthetic/Visual Fiscal Recreation/Parks Vegetation Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement Coastal Zone Noise Solid Waste Land Use Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____**Present Land Use/Zoning/General Plan Designation:**Large Parcel Agriculture**Project Description:** (please use a separate page if necessary)

The proposed project consists of modifications to AWI's existing CUPs, as amended in July 2013, for continued wind power operation and maintenance activities within the Alameda County portion of the APWRA through October 31, 2018. As amended in 2013, the wind power operations were scheduled to terminate on October 31, 2015, subject to new and revised conditions. A Notice of Preparation was previously circulated with details and background information on the proposed changes. Comments on the Draft Supplemental EIR will be accepted between November 17, 2014 and January 2, 2015. Copies of the Draft Supplemental EIR will be available for review at the Permit Center of the County Planning Department, 399 Elmhurst Avenue, Hayward, CA 94544 and the Livermore Public Library, 1188 S. Livermore Ave, Livermore, CA 94550.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".
If you have already sent your document to the agency please denote that with an "S".

<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Historic Preservation
<input type="checkbox"/> Boating & Waterways, Department of	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> California Emergency Management Agency	<input type="checkbox"/> Parks & Recreation, Department of
<input type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans District # _____	<input type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Division of Aeronautics	<input type="checkbox"/> Regional WQCB # _____
<input type="checkbox"/> Caltrans Planning	<input type="checkbox"/> Resources Agency
<input type="checkbox"/> Central Valley Flood Protection Board	<input type="checkbox"/> Resources Recycling and Recovery, Department of
<input type="checkbox"/> Coachella Valley Mtns. Conservancy	<input type="checkbox"/> S.F. Bay Conservation & Development Comm.
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> San Joaquin River Conservancy
<input type="checkbox"/> Conservation, Department of	<input type="checkbox"/> Santa Monica Mtns. Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Water Rights
<input type="checkbox"/> Fish & Game Region # _____	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> Forestry and Fire Protection, Department of	<input type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> General Services, Department of	
<input type="checkbox"/> Health Services, Department of	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Housing & Community Development	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Native American Heritage Commission	

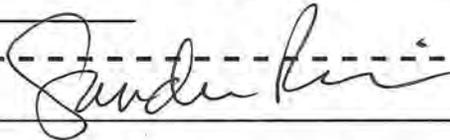
Local Public Review Period (to be filled in by lead agency)

Starting Date November 17, 2014 Ending Date January 2, 2015

Lead Agency (Complete if applicable):

Consulting Firm: <u>Power Engineers, Inc.</u>	Applicant: <u>Altamont Winds, Inc.</u>
Address: <u>731 East Ball Road, Suite 100</u>	Address: <u>15850P Jess Ranch Road</u>
City/State/Zip: <u>Anaheim, CA 92805</u>	City/State/Zip: <u>Tracy, CA 95377</u>
Contact: <u>Chris Knopp</u>	Phone: <u>925-724-0175</u>
Phone: <u>858-810-5381</u>	

Signature of Lead Agency Representative: _____



Date: 11/14/14

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

ATTACHMENT: Assessor Parcel Numbers

SCH# 2014092057

LIST OF CUPS, LANDOWNERS AND APNS

CUP NO.	LANDOWNER	ASSESSOR'S PARCEL NUMBERS	APPROXIMATE ACRES
C-8036	Frick/Costa	99B-5680-15	207.12
C-8037	Pombo	99B-6300-2-1, 99B-6300-2-2, 99B-6425-1-6, 99B-6325-2-4 and 99B-6400-1-7	224.26
C-8134	Rooney	99B-6125-2	160.21
C-8137	Mulqueoney	99B-7900-1-5, 99B-7900-1-7, 99B-7890-2-4, 99B-7890-2-5, 99B-7890-2-6, 99B-7925-2-4, 99B-7925-2-1, 99B-7925-2-5, 99B-7950-2, 99B-7975-1, 99B-7980-1, 99B-7985-1-6, 99B-7985-1-4, 99B-7985-1-3, 99B-7985-1-5, 99A-1800-2-4, 99A-1800-2-3 and 99B-8050-1	4,447.50
C-8191	Mulqueoney	99B-7910-1-1	592.84
C-8243	ACWMA	99A-1780-1-4, 99A-1770-2-1, 99A-1770-2-2, 99A-1770-2-3, 99A-1810-1 and 99A-1790-3	1,324.83
C-8216	ACWMA	99A-1810-1	240.81 (parcel acreage included in C-8243)
C-8231*	Altamont Landfill	99B-6225-1, 99B-6250-1, 99B-6275-1-1	1,547.80
C-8232	Egan	99B-6125-3	160.47
C-8233	Elliott	99B-6125-4	157.54
C-8235	Corbett	99B-5650-1-4 and 99A-1785-1-14	284.96
C-8236	Dunton	99B-5680-1	330.46
C-8237	Valhalla (Devincenzi)	99B-5610-1 and 99B-6075-3	665.98
C-8238	Ralph (north)	99B-7300-1-5 and 99B-7375-1-7	766.57
C-8239*	Jackson	99B-6125-5	325.59
C-8241	Walker	99B-6100-2-10, 99B-6100-2-11, 99B-6100-2-12, 99B-6100-3-10, 99B-6100-3-15, 99B-6100-3-11	1,314.55
C-8242	Gomes (north)	99B-6150-4-10, 99B-6150-3 and 99B-6150-2-7	635.48
C-8244	Gomes (south)	99B-6425-2-3, 99A-1790-2 and 99A-1795-1	1,049.48
TOTAL ACREAGE			14,195.64

Source: AWI, 2014

Notes:

1. The above table includes those parcels and CUPs on which AWI currently has installed wind turbines, as well as those parcels and CUPs on which turbines owned by other wind companies are presently installed and whose wind turbines may be obtained in exchange on a turbine-for-turbine basis with turbines currently owned by AWI.
2. Many of the wind farms in the APWRA overlap, with different wind energy facility operating companies on a single parcel of land. Therefore, other wind companies beside AWI currently operate wind farms within the project area described above.
3. Two additional CUPs, C-8231 and C-8239 (landowners Waste Management Inc. and Jackson, respectively), apply to turbines proposed to be acquired by AWI or its affiliates in a proposed asset exchange, and would contain turbines subject to the proposed modifications

**AMENDED Notice of Availability of a
SEIR for Modifications to Existing CUPs
– AWI Jan 12, 2015 – Mailing List**

A-Interested Parties

John Howe
Ogin, Inc.
Altamont Operation
14740 Altamont Pass Road
Tracy, CA 95391

John Kopchick
Contra Costa County
Dept of Conservation & Development
30 Muir Road
Martinez, CA 94553

Kim Delfino
Defenders of Wildlife
1303 J Street, Suite 270
Sacramento, CA 95814

Leslie Koenig
Alameda County Resource
Conservation District
3585 Greenville Road, #2
Livermore, CA 94550

Matt Vander Sluis
The Planning & Conservation League
1107 – 9th Street, Suite 901
Sacramento, CA 95814

Nancy Rader
CA Wind Energy Association
2560 Ninth Street, Suite 213-A
Berkeley, CA 94710

Patterson Pass Wind Farm LLC
PO Box 581043
N. Palm Springs, CA 92258-1043

Barbara Salzman
Marin Audubon Chapter
PO Box 599
Mill Valley, CA 94942

Jack Barclay
1414 Soquel Avenue, No. 205
Santa Cruz, CA 95062

Jeff Miller
Alameda Creek Alliance
PO Box 2626
Niles, CA 94536

Renee Culver
NexEra Energy Resources
6185 Industrial Way
Livermore, CA 94550

Ken Lewis
Waste Management
Altamont Landfill & Resource Recovery
Facility
10840 Altamont Pass Road
Livermore, CA 94550

Kristopher Davis
Drinker Biddle & Reath LLP
1800 Century Park East, Suite 1400
Los Angeles, CA 90067

Mildred Egan
710 McLeod Street
Livermore, CA 94550

Michael Boyd
CA for Renewable Energy Inc.,
5439 Soquel Drive
Soquel, CA 95073

Nanette Leuschel
291 Athol Avenue
Oakland, CA 94606-1398

Peter Colby
Contra Costa Water District
Real Property & Watershed & Lands Mgr
PO Box H20
Concord, CA 94524

Jeff Miller
CBD
351 California Street, Suite 600
San Francisco, CA 94104

Jackson Land & Cattle LP
6835 N. Vasco Road
Livermore, CA 94551

Lawrence Livermore National Lab
Environmental Stewardship & Planning
Environmental Protection Dept
7000 East Avenue, L-627
Livermore, CA 94550

Joe Didonato
2624 Eagle Avenue
Alameda, CA 94501

L.G. and V.R. Strieff
1084 Bolinger Canyon Road
Moraga, CA 94556

Laurie Jodziewicz
AWEA
1501 M Street, NW, Ste 1000
Washington, DC 20005

Michael Leason
CA Energy Commission
Integrated Energy & Climate Change Unit
Renewal Energy Office
1516 Ninth St, MS 45
Sacramento, CA 95814

Oakland Scavenger Company
PO Box 1450
Chicago, IL 60690-1450

Anthony & Phyllis Castello
2681A Mountain House Road
Tracy, CA 95391

Bernice & Michael Rooney
2593 – 4th Street
Livermore, CA 94550

	<p>Bob Power Santa Clara Valley Audubon Society McLellan Ranch 22221 McLellan Road Cupertino, CA 95014</p>	<p>Brad Olson EBRPD PO Box 5381 Oakland, CA 94605</p>
<p>Doug Bell EBRPD PO Box 5381 Oakland, CA 94605</p>	<p>Brian Mathews Alameda County Waste Mgmt Authority StopWaste.Org 1537 Webster Street Oakland, CA 94612</p>	<p>Chris Dreiman EnXco Service Corporation 17298 Commerce Way Tracy, CA 95377</p>
<p>Greenbelt Alliance 1601 N. Main Street, #105 Walnut Creek, CA 94596</p>	<p>CJ & Susan Dunton 5179 Saddle Brook Drive Oakland, CA 94619</p>	<p>Craig Weightman CA Dept of Fish & Wildlife Bay Delta Region – Habitat Conservation Planning Branch 7329 Silverado Trail Napa, CA 94558</p>
<p>Dan Olstein The Nature Conservancy 201 Mission St, 4th Floor San Francisco, CA 94105</p>	<p>Dave Mehl CA Air Resources Board PO Box 2815 Sacramento, CA 95812</p>	<p>Diane Dugan 9169 Rosewood Drive Sacramento, CA 95826</p>
<p>Diane Ross-Leach PG&E Mail Code B24A 77 Beale Street San Francisco, CA 94105</p>	<p>Don Haines Silicon Valley Power 1500 Warburton Avenue Santa Clara, CA 95050</p>	<p>Dr. Allen Fish Golden Gate Raptor Observatory Bldg 201, Fort Mason San Francisco, CA 94123</p>
<p>Brenda Johnson CA Dept of Fish & Game Conservation Planning & Recovery 1416 – 9th St, 12th Floor Sacramento, CA 95814</p>	<p>Emily Drennen Bay Area Air Quality Mgmt District 939 Ellis Street San Francisco, CA 94109</p>	<p>Glenn Kirby 30520 Hoylake Street Hayward, CA 94544</p>
<p>Griffith Family Properties LLC 20044 Midway Road Tracy, CA 95377</p>	<p>Heath Bartosh California Native Plant Society 832 Escobar Street Martinez, CA 94553</p>	<p>Tara Mueller Office of the Attorney General 1515 Clay Street Oakland, CA 94612</p>
<p>Richard Cimino Ohlone Audubon Society 1281 Ridgewood Road Pleasanton, CA 94566</p>	<p>Rick Koebbe Altamont Winds, Inc., 15850P Jess Ranch Road Tracy, CA 95377</p>	<p>Scott Wilson CA Dept of Fish & Wildlife 7329 Silverado Trail Napa, CA 94558</p>
<p>Seth Adams Save Mount Diablo 1901 Olympic Blvd, Suite 320 Walnut Creek, CA 94596</p>	<p>Tri-Valley Conservancy 1457 First Street Livermore, CA 94566</p>	<p>Thom Kato Lawrence Livermore National Lab 7000 East Avenue Livermore, CA 94550</p>
<p>Tim Koopman AC RCD Boardmember SFPUC P.O. Box 177 Sunol CA 94586-0177</p>	<p>Zach Walton SSL Lawfirm LLP 575 Market St, Suite 2700 San Francisco, CA 94105</p>	

B-Property Owners

	County of Alameda 1221 Oak Street, Room 536 Oakland CA 94612	State of California PO Box 23440 Oakland, CA 94623
Doris House PO Box 1212 Livermore, CA 94551	PG&E Company PO Box 770000 San Francisco, CA 94177	Darrel & Karen Sweet 12233 N. Flynn Road Livermore, CA 94550
Richard & Pamela Corbett Trs PO Box 2299 Livermore, CA 94551	City of Santa Clara 1500 Warburton Avenue Santa Clara, CA 95050	Jymiece & Scullion Donald Silva 1681 – 5 th Street Livermore, CA 94550
Ralph & Onita Pombo Trs 32919 S. Tracy Blvd Tracy, CA 95377	W.P. Company 843-1-25A-4 1416 Dodge Street Omaha NE 68179	Santucci Properties, LLC 3940 Mines Road Livermore, CA 94550
Bill & Elree Langford 17950 Midway Road Tracy, CA 95377	Wildlands Inc., 3855 Atherton Road Rocklin, CA 95765	Grass Lands Property LLC 1268 Hartman Road Livermore, CA 94551
Waste Management of Alameda County Inc., PO Box 1450 Chicago, IL 60690	Jackson Land & Cattle LLC and Jackson A M TR SU Etal 6835 N. Vasco Road Livermore, CA 94551	Ralph Properties II 2443 Fair Oaks Blvd, #311 Sacramento, CA 95825
Midway Power LLC PO Boc 770000 San Francisco, CA 94177	Trustees of Brethren Church of Altamont 10501 Altamont Pass Road Livermore, CA 94551	Robert Vieux TR 10501 Altamont Pass Road Livermore, CA 94551
Dunton & Susan TRS 5179 Saddle Brook Dr Oakland, CA 94619	Matin Moghadam & Jeanne M 10 Wanflete Ct Orinda, CA 94563	Contreras Rigoberto & Nelly Trs 9290 S. Flynn Road Livermore, CA 94550
Bjarne Hansen L Trust 9782 S. Flynn Road Livermore, CA 94550	Mulqueeney Ranch Properties PO Box 2053 Livermore, CA 94551	Tzenwen & Lin Bihwan Guo 30030 Mission Blvd, #216 Hayward, CA 94544
Union Pacific Railroad Co 1700 Farnam Street, 10 th Floor Omaha, NE 68102	Virginia & Conover Miner Woodrow 2 nd 4008 Dyer Road Livermore, CA 94551	Humphrey Cornelius & Kathleen Rooney Trs Etal 1276 Blossom Circle Livermore, CA 94550

Alice Elliott & Joanne Elliott TR Etal
86 Cardinal Way
Santa Rosa, CA 95409

Alameda County Flood Control
Public Works Agency
399 Elmhurst Street
Hayward

Abbas & Sophia Humayun Etal
3113 Jolie Pre Circle
Modesto, CA 95356

Annette & Roy Warner
10620 Flynn Road S
Livermore, CA 94550

Paul & Sheila Fagliano
4435 – 1st Street, #341
Livermore, CA 94551

Joseph Sr & Connie L Jess Trs
15850 Jess Ranch Rd A
Tracy, CA 95377

Pacific Satellite Connection Inc.,
1629 S Street
Sacramento, CA 95811

Doris House & Beverly Brooks
PO Box 1212
Livermore, CA 94551

Marina Martinez
4950 Kenlar Drive
San Jose, CA 95124

Samuel & Jacqueline Stewart Trs
& Casey Robert
PO Box 19
Clayton, CA 94517

Samuel & Jacqueline Stewart Trs
PO Box 19
Clayton, CA 94517

Unocal CA Pipeline Company
PO Box 1539
Paso Robles, CA 93447

Duane Rooney TR
1275 Dunbar Dr.
Washoe Valley, NV 89704-9202

State of California
1416 – 9th Street, #425
Sacramento, CA 95814

Dolores Kuhn Etal
2681A Mountain House Rd
Tracy, CA 95391

Vieira Ranch Investments
1131 W. Bowman Road
French Camp, CA 95231

Karan John & Uzra H
3075 Ashbourne Cir
San Ramon, CA 94583

Wang NMH Inc.,
550 N. Canyon Pkwy
Livermore, CA 94551

Paula Flessatti & Schenone L M
2903 Chateau Way
Livermore, CA 94550

Nancy & Dominic Devincenzi & BA Etal
2730 Camino Diablo
Walnut Creek, CA 94597

Livermore Area Recreation & Park District
4444 East Avenue
Livermore, CA 94550

Vivian McCarthy TR
5259 Chandler Rd
Quincy, CA 95971-9654

Robert Cooper & French Charlotte TRS
4000 Dyer Road
Livermore, CA 94551

Henry Baily
3988 Dyer Road
Livermore, CA 94551

William & Christine Munson Trs
3316 Dyer Rd
Livermore, CA 94551

Kim & Steve Schuster
3300 Dyer Rd
Livermore, CA 94551

Darryl Mueller
3290 Dyer Rd
Livermore, CA 94551

Brendan & Jill Alchorn Trs
4006 Dyer Road
Livermore, CA 94551

Alan & Lauralee Ragsdale
3932 Dyer Road
Livermore, CA 94551

HSBC Bank USA Tr
3232 Newmark Drive
Miamisburg, OH 45342

Jason & Heidi Preece Trs
10366 Flynn Road S
Livermore, CA 94550

John & Donna Soares
4004 Dyer Road
Livermore, CA 94551

Strieff L G & V R Trs & McCabe & MP Trs
PO Box B
Villa Grande, CA 95486

Golden Gate Audubon Society
2530 San Pablo Ave
Berkeley, CA 94702

Altamont Winds, Inc.,
15850-P Jess Ranch Road
Tracy, CA 95377

Peter Pawlowski
Ogin, Inc.,
14740 Altamont Pass Road
Tracy, CA 95391

Michael Lynes, Executive Director
Audubon California
P.O. Box 160694
Sacramento, CA 95816-0694

Michael Lynes, Executive Director
Audubon California
220 Montgomery St., Ste. 1000
San Francisco, CA 95104-3402

Matt Vander Sluis
The Planning & Conservation League
1107 – 9th Street, Suite 901
Sacramento, CA 95814



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

Memorandum

Date: December 30, 2014
To: All Reviewing Agencies
From: Scott Morgan, Director
Re: SCH # 2014092057

**Modifications to Existing Conditional Use Permits – Altamont Winds
Inc.**

Pursuant to the attached letter, the Lead Agency has *extended* the review period for the above referenced project to **January 12, 2015** to accommodate the review process. All other project information remains the same.

cc: Sandra Rivera
County of Alameda Comm. Dev. Agency
244 West Winton Avenue, Room 11
Hayward CA 94544



ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

December 30, 2014

Chris Bazar
Agency Director

Albert Lopez
Planning Director

224
West Winton Ave
Room 111

Hayward
California
94544

phone
510.670.5400
fax
510.785.8793

www.acgov.org/cda

**AMENDED* Notice of Availability of a
Draft Supplemental Environmental Impact Report for
Modifications to Existing Conditional Use Permits –
Altamont Winds Inc. (AWI): 2018 CUP Extension
Amended Notice to Extend the Comment Period
Planning Case PLN2014-00028 / SCH# 2014092057**

SUMMARY:

Notice is hereby given by the County of Alameda, Community Development Agency, Planning Department, as the lead agency pursuant to the California Environmental Quality Act (CEQA), that the above-named Draft Supplemental Environmental Impact Report (DSEIR) is available for public review and comment. Comments on the DSEIR will be received for a 45-day period, **plus an additional 10 (ten) days** between ~~November 18, 2014 and~~ January 2, 2015 **and January 12, 2015**, after which a Final SEIR will be prepared containing comments and responses to comments, that together with the DSEIR will form the Final SEIR. The Final SEIR will be used by the East County Board of Zoning Adjustments in its consideration of approval of the proposed CUP modifications, described below.

PROJECT LOCATION:

Within the approximately 14,436-acre Alameda County portion of the Altamont Pass Wind Resource Area (APWRA), in the eastern portion of Alameda County, bisected by Interstate I-580. The subject Conditional Use Permits (CUPs) apply to 828 existing wind turbines and supporting infrastructure owned by Altamont Winds, Inc. (AWI, Applicant), and which have a total footprint of approximately 233 acres distributed across the Alameda County portion of the APWRA. The AWI facilities are intermixed with other wind turbines and facilities not owned by AWI, as well as with ongoing ranching and other land uses.

As part of this extension, AWI is in discussions with another wind farm operator in the APWRA that shares common infrastructure with AWI, regarding a contemplated wind turbine exchange. In such a scenario, AWI would exchange approximately 300 wind turbines it presently owns south of I-580 for an equal number of wind turbines owned and operated by another company, Green Ridge Power LLC, north of I-580. As proposed, and under assurances from both companies, such an exchange will not increase the capacity or quantity of AWI's operating turbines. The result would be that after such an exchange AWI would no longer own or operate any wind turbine energy assets south of I-580.

PROJECT DESCRIPTION:

AWI has applied to Alameda County to modify its CUPs, specifically related to operational and decommissioning schedules for its 828 existing wind turbines, which have a nameplate generating capacity of 85.8 MW. The AWI application requests that the existing CUPs, set to expire on October 31, 2015 under modifications approved in July 2013, be extended for three (3) years, through October 31, 2018 under specified conditions, for operation of its estimated 828 turbines.

* Amendments to the Notice are shown in **bold underline** and ~~strike out~~. Please note that some additional information is provided separate from the extension of the comment period.

Notice of Availability of a Draft Supplemental Environmental Impact Report for the Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI)
~~November 17, 2014~~ December 30, 2014, Amended Notice to Extend the Comment Period
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The SEIR is intended to supplement an Environmental Impact Report (EIR), certified in July 2013, that evaluated the application made by AWI in 2011 to modify these same CUPs as they had been approved in September of 2005. The 2013 FEIR is available on the County Planning Department website at <http://www.acgov.org/cda/planning/landuseprojects/awipermit-pln2011-102.htm>.

The prior 2013 EIR evaluated AWI's application to replace the schedule adopted in 2005 for phased decommissioning (shut down and removal) of existing turbines in steps in 2009, 2013, 2015 and 2018, in anticipation of repowering (replacement with current generation turbines), with full operation through October 2015 only, and without any partial or phased decommissioning. The 2013 EIR included as Alternative 3 the potential full operation of the turbines through October 2018, at a limited level of analysis, as provided for in the CEQA Guidelines (Section 15126.6(d)), to provide "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."

The County determined that a Supplement to the 2013 EIR should be prepared in order to address the environmental impact of AWI's proposed project modification because, among other reasons, the 3-year extension requested by AWI is a substantial change to the project, which will cause a substantial increase in the severity of previously-identified significant environmental impacts. The Supplemental EIR is the appropriate mechanism to make the required revisions to the 2013 EIR; the consideration of operations through 2018 as one of four project alternatives in the 2013 EIR does not adequately address the scope and detail of revisions necessary to evaluate the changed project scope.

When the County certified the EIR in July 2013 for the modifications that provided for full operations through 2015, a finding was made regarding this alternative that: "Alternative 3 would better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible." On the basis of this determination, the County has determined it is necessary to provide additional information, which this SEIR is intended to provide, together with the same kind of notice and public review as provided for a draft EIR under Section 15087 of the CEQA Guidelines. The SEIR supplements the prior EIR with additional analysis beyond that included in the Alternatives analysis to provide a basis for making the findings required by CEQA. In addition, although the County has determined that there are no new substantial changes to the project that were not evaluated in the prior 2013 EIR that require preparation of a subsequent EIR, but rather that only relatively minor additional information and changes are required for the 2013 EIR to adequately apply to the current proposal. However, to the extent new information has become available since the prior FEIR, the County CDA has incorporated that information into the DSEIR. As such, the SEIR is intended to comply with the standards established in the CEQA Guidelines for supplemental EIRs (Section 15163).

The SEIR does not address repowering. At the time that AWI proposes repowering, a separate project EIR will be required, which may 'tier' from the separate Program EIR that was recently completed and certified (November 2014) and which evaluated overall repowering of the Alameda County portion of the APWRA on a program level, as well as serving as the project EIR for two repowering projects south of I-580, which were also approved at that time.

The 2013 FEIR provided a full discussion of the prior project's potential environmental effects on the following resource areas: Air Quality and Greenhouse Gases (GHGs); Biological Resources; Noise; and Hazards and Hazardous Materials. Impacts were distinguished as those resulting from continued operations of the turbines through 2015 (and as alternatives, through 2016 and 2018), and from planned decommissioning activities to shut down and remove the turbines. Because the current project is limited in

Notice of Availability of a Draft Supplemental Environmental Impact Report for the Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI)
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scope to changes in the operational schedule – the three-year extension to 2018 – and would have no effect on decommissioning activities, which will remain subject to the findings and mitigation monitoring and reporting program of the 2013 EIR, impacts resulting solely from decommissioning activities are not discussed, and the County CDA will instead rely entirely on the analyses and mitigation measures as described in the 2013 FEIR for operational impacts, and not any decommissioning-related impacts.

ANTICIPATED SIGNIFICANT ENVIRONMENTAL EFFECTS:

The 2013 FEIR’s analysis of biological resources indicated that extending the term of the CUPs through October 31, 2018 would have significant and unavoidable adverse impacts on both common and special-status avian species (Impact BIO-1), including the four focal raptor species: American kestrel, burrowing owl, golden eagle, and red-tailed hawk. The 2014 DSEIR’s analysis of current project impacts identifies the following impact on biological resources to be *significant and unavoidable*:

- Impact BIO-1: Potential to cause a substantial adverse effect, either directly or through habitat modifications, on a special-status species.

With respect to an issue raised during the scoping period following the Notice of Preparation, of potential releases of lubricant oil into the environment from the extended operation of existing turbines, the DSEIR determined there would be *no impact* on the following:

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

PUBLIC REVIEW:

One of the purposes of CEQA itself is in large part to inform the public of the likely environmental consequences of public and private projects such as the proposed modifications to the CUPs. The purpose of this Notice, consistent with Sections 15086 and 15087 of the CEQA Guidelines, is to consult with and request comments on the DSEIR from responsible agencies, organizations, Native American tribes, and interested parties as to its environmental analyses.

The DSEIR is available for review during normal business hours (8:30 a.m. to 5:00 p.m.), Monday through Friday, at the Alameda County Community Development Agency, Planning Department, at 224 West Winton Avenue, Room 111, Hayward, California, 94544. It is also available at the Livermore Public Library, Civic Center Branch, 1188 South Livermore Ave, Livermore, CA 94550-9315, 10:00 a.m. to 9:00 p.m. Monday to Thursday; 10:00 a.m. to 6:00 p.m. Friday 10:00 a.m. to 5:00 p.m. Saturday and 10:00 a.m. to 5:00 p.m., Sunday. The DSEIR may also be viewed or downloaded at the Alameda County website: (<http://www.acgov.org/cda/planning/landuseprojects/awipermit.htm>, or select Pending Land Use Projects – Current Development Projects – Wind Turbine Projects - Altamont Winds, Inc. Permit Modification – Application No. PLN2014-28, at <http://www.acgov.org/cda/planning>. Comments on the DSEIR may be submitted to:

Sandra Rivera, Assistant Planning Director
ATTN: AWI Permit Modification EIR
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 110
Hayward, CA 94544

Please include a return address and contact name with your written comments. Comments can also be sent via email with subject line “AWI Permit Modification EIR” to: sandra.rivera@acgov.org.

Notice of Availability of a Draft Supplemental Environmental Impact Report for the Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI)
November 17, 2014 December 30, 2014, Amended Notice to Extend the Comment Period
Page 4

Although CEQA does not require formal hearings at any stage of the environmental review process (State CEQA Guidelines Section 15202[a]), it does encourage “wide public involvement, formal and informal... in order to receive and evaluate public reactions to environmental issues” (State CEQA Guidelines Section 15201) and requires the lead agency to provide the public with the opportunity to provide comments. The County, as lead agency, circulated an NOP of a SEIR (SCH # 2014092057) for the proposed project on September 16, 2014. The NOP was distributed for a 30-day comment period that ended on October 15, 2014. Comments received on the NOP were considered in the preparation of the DSEIR. Appendix A of the DSEIR contains the NOP and written comments received on the NOP.

The DSEIR incorporates public and agency responses to the NOP. Like the NOP, the DSEIR is being circulated for review and comment by appropriate agencies, as well as organizations and individuals who have requested notification. In accordance with Section 15205(d) of the CEQA Guidelines, the County has scheduled a 45-day public review period for the DSEIR, **now expanded to a 55-day review period** beginning on November 17, 2014 and ending on ~~January 2, 2015~~ **January 12, 2015**, at 5:00 p.m., **allowing an additional 10 (ten) days for comments in recognition of the Winter holiday period.** Within ~~that~~ **the original** 45-day period, the County ~~will hold~~ **has held** one public hearing to request verbal comments on the DSEIR, at the following time and place:

Thursday, December 18, 2014, 1:30 p.m.
Meeting of the East County Board of Zoning Adjustments
City of Pleasanton Council Chambers,
200 Old Bernal Avenue, Pleasanton

~~The m~~Meeting facilities ~~will be~~ **are** accessible to persons with disabilities. If special translation or signing services or other special accommodations are needed, please contact Nilma Singh at 510-670-5400 or nilma.singh@acgov.org at least 48 hours before the meeting.

Following the close of the public review period for the DSEIR, the County will prepare a Final EIR, incorporating all comments received during the public comment period, for consideration **of its certification** by the East County Board of Zoning Adjustments (EBZA), tentatively scheduled for ~~Thursday~~ **Tuesday, January 22, 2015, February 3, 2015**. As required by CEQA (Section 21092.5), the Final EIR, including written responses to the comments submitted by public agencies, will be available at least 10 days prior to certification.

Notice of Availability of a Draft Supplemental Environmental Impact Report for the Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI)
November 17, 2014 December 30, 2014, Amended Notice to Extend the Comment Period
Page 5

**ATTACHMENT: Assessor Parcel Numbers
SCH# 2014092057**

LIST OF CUPS, LANDOWNERS AND APNS

CUP NO.	LANDOWNER	ASSESSOR'S PARCEL NUMBERS	APPROXIMATE ACRES
C-8036	Frick/Costa	99B-5680-15	207.12
C-8037	Pombo	99B-6300-2-1, 99B-6300-2-2, 99B-6425-1-6, 99B-6325-2-4 and 99B-6400-1-7	224.26
C-8134	Rooney	99B-6125-2	160.21
C-8137	Mulqueeny	99B-7900-1-5, 99B-7900-1-7, 99B-7890-2-4, 99B-7890-2-5, 99B-7890-2-6, 99B-7925-2-4, 99B-7925-2-1, 99B-7925-2-5, 99B-7950-2, 99B-7975-1, 99B-7980-1, 99B-7985-1-6, 99B-7985-1-4, 99B-7985-1-3, 99B-7985-1-5, 99A-1800-2-4, 99A-1800-2-3 and 99B-8050-1	4,447.50
C-8191	Mulqueeny	99B-7910-1-1	592.84
C-8243	ACWMA	99A-1780-1-4, 99A-1770-2-1, 99A-1770-2-2, 99A-1770-2-3, 99A-1810-1 and 99A-1790-3	1,324.83
C-8216	ACWMA	99A-1810-1	240.81 (parcel acreage included in C-8243)
C-8231*	Altamont Landfill	99B-6225-1, 99B-6250-1, 99B-6275-1-1	1,547.80
C-8232	Egan	99B-6125-3	160.47
C-8233	Elliott	99B-6125-4	157.54
C-8235	Corbett	99B-5650-1-4 and 99A-1785-1-14	284.96
C-8236	Dunton	99B-5680-1	330.46
C-8237	Valhalla (Devincenzi)	99B-5610-1 and 99B-6075-3	665.98
C-8238	Ralph (north)	99B-7300-1-5 and 99B-7375-1-7	766.57
C-8239*	Jackson	99B-6125-5	325.59
C-8241	Walker	99B-6100-2-10, 99B-6100-2-11, 99B-6100-2-12, 99B-6100-3-10, 99B-6100-3-15, 99B-6100-3-11	1,314.55
C-8242	Gomes (north)	99B-6150-4-10, 99B-6150-3 and 99B-6150-2-7	635.48
C-8244	Gomes (south)	99B-6425-2-3, 99A-1790-2 and 99A-1795-1	1,049.48
TOTAL ACREAGE			14,195.64

Source: AWI, 2014

Notes:

1. The above table includes those parcels and CUPs on which AWI currently has installed wind turbines, as well as those parcels and CUPs on which turbines owned by other wind companies are presently installed and whose wind turbines may be obtained in exchange on a turbine-for-turbine basis with turbines currently owned by AWI.
2. Many of the wind farms in the APWRA overlap, with different wind energy facility operating companies on a single parcel of land. Therefore, other wind companies beside AWI currently operate wind farms within the project area described above.
3. Two additional CUPs, C-8231 and C-8239 (landowners Waste Management Inc. and Jackson, respectively), apply to turbines proposed to be acquired by AWI or its affiliates in a proposed asset exchange, and would contain turbines subject to the proposed modifications.

Notice of Completion & Environmental Document Transmittal

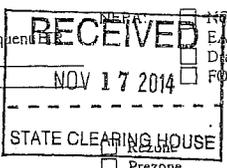
Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2014092057

Project Title: Modifications to Existing Conditional Use Permits - Altamont Winds Inc.
Lead Agency: County of Alameda Community Development Agency Contact Person: Sandra Rivera
Mailing Address: 224 West Winton Ave., Rm. 111 Phone: 510-670-5400
City: Hayward Zip: 94544 County: Alameda

Project Location: County: Alameda City/Nearest Community: Livermore
Cross Streets: Project is bisected by Interstate I-580, Zip Code: _____
Longitude/Latitude (degrees, minutes and seconds): _____ N / _____ W Total Acres: 14,196
Assessor's Parcel No.: 97B-5080-15 (97B-620-21) Section: _____ Twp.: _____ Range: _____ Base: _____
Within 2 Miles: State Hwy #: Interstate I-580 bisects site Waterways: _____
Airports: _____ Railways: _____ Schools: _____

Document Type:
CEQA: NOP Draft EIR Other: Joint Document
 Early Cons Supplement/Subsequent EIR Final Document
 Neg Dec (Prior SCH No.) Draft EIS Other: _____
 Mit Neg Dec Other: _____



Local Action Type:
 General Plan Update Specific Plan Annexation
 General Plan Amendment Master Plan Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other: _____

Development Type:
 Residential: Units _____ Acres _____
 Office: Sq.ft. _____ Acres _____ Employees _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____
 Educational: _____
 Recreational: _____
 Water Facilities: Type _____ MGD _____
 Transportation: Type _____
 Mining: Mineral _____
 Power: Type Wind MW 85.8
 Waste Treatment: Type _____ MGD _____
 Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:
 Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____

Present Land Use/Zoning/General Plan Designation:
Large Parcel Agriculture
Project Description: *(please use a separate page if necessary)*
The proposed project consists of modifications to AWI's existing CUPs, as amended in July 2013, for continued wind power operation and maintenance activities within the Alameda County portion of the APWRA through October 31, 2018. As amended in 2013, the wind power operations were scheduled to terminate on October 31, 2015, subject to new and revised conditions. A Notice of Preparation was previously circulated with details and background information on the proposed changes. Comments on the Draft Supplemental EIR will be accepted between November 17, 2014 and January 2, 2015. Copies of the Draft Supplemental EIR will be available for review at the Permit Center of the County Planning Department, 399 Elmhurst Avenue, Hayward, CA 94544 and the Livermore Public Library, 1188 S. Livermore Ave, Livermore, CA 94550.

State Clearinghouse Contact: (916) 445-0613
State Review Began: 11-17-2014
SCH COMPLIANCE 1-12-15
12-31-2014

Extend Review

Please note State Clearinghouse Number (SCH#) on all Comments
SCH#: 2014092057
Please forward late comments directly to the Lead Agency

AQMD/APCD 2
(Resources: 11 / 22)

- Project Sent to the following State Agencies
- | | |
|------------------------------------------------------------|-------------------------------------------------------------|
| <input checked="" type="checkbox"/> Resources | <input type="checkbox"/> State/Consumer Svcs |
| <input type="checkbox"/> Boating & Waterways | <input type="checkbox"/> General Services |
| <input type="checkbox"/> Coastal Comm | <input type="checkbox"/> Cal EPA |
| <input type="checkbox"/> Colorado Rvr Bd | <input checked="" type="checkbox"/> ARB: ALL Other Projects |
| <input checked="" type="checkbox"/> Conservation | <input type="checkbox"/> ARB: Transportation Projects |
| <input checked="" type="checkbox"/> CDFW # <u>3</u> | <input type="checkbox"/> ARB: Major Industrial/Energy |
| <input type="checkbox"/> Delta Protection Comm | <input type="checkbox"/> SWRCB: Div. of Drinking Water |
| <input type="checkbox"/> Cal Fire | <input type="checkbox"/> SWRCB: Div. Financial Assist. |
| <input type="checkbox"/> Historic Preservation | <input type="checkbox"/> SWRCB: Wtr Quality |
| <input checked="" type="checkbox"/> Parks & Rec | <input type="checkbox"/> SWRCB: Wtr Rights |
| <input type="checkbox"/> Central Valley Flood Prot. | <input checked="" type="checkbox"/> Reg. WQCB # <u>3</u> |
| <input type="checkbox"/> Bay Cons & Dev Comm. | <input type="checkbox"/> Toxic Sub Ctrl-CTC |
| <input type="checkbox"/> DWR | <input type="checkbox"/> Yth/Adlt Corrections |
| <input type="checkbox"/> OES | <input type="checkbox"/> Corrections |
| <input type="checkbox"/> Resources, Recycling and Recovery | |
| <input type="checkbox"/> CalSTA | <input type="checkbox"/> Independent Comm |
| <input type="checkbox"/> Aeronautics | <input checked="" type="checkbox"/> Energy Commission |
| <input checked="" type="checkbox"/> CHP | <input checked="" type="checkbox"/> NAHC |
| <input checked="" type="checkbox"/> Caltrans # <u>4</u> | <input checked="" type="checkbox"/> Public Utilities Comm |
| <input type="checkbox"/> Trans Planning | <input type="checkbox"/> State Lands Comm |
| <input type="checkbox"/> Other | <input type="checkbox"/> Tahoe Rgl Plan Agency |
| <input type="checkbox"/> HCD | |
| <input type="checkbox"/> Food & Agriculture | <input type="checkbox"/> Conservancy |
| | <input type="checkbox"/> Other: _____ |



ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

Chris Bazar
Agency Director

Albert Lopez
Planning Director

224
West Winton Ave
Room 111

Hayward
California
94544

phone
510.670.5400
fax
510.785.8793

www.acgov.org/cda

September 15, 2014

FROM: Sandra Rivera, Assistant Planning Director
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 110
Hayward, CA, 94544

SUBJECT: Notice of Preparation (Notice) of a Supplemental Environmental Impact Report for Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI) (PLN2014-00028)

SUMMARY

The County of Alameda (County) is issuing this Notice of Preparation to inform agencies and interested parties that the County will prepare a Supplemental Environmental Impact Report (SEIR) for proposed modifications to 16 existing Conditional Use Permits (CUPs), for turbines owned and operated by Altamont Winds Inc. in the Alameda County portion of the Altamont Pass Wind Resource Area (AC/APWRA). Altamont Winds Inc. (the Applicant, together with its operating subsidiary WindWorks Inc., and collectively, AWI) has submitted an application requesting that these CUPs, set to expire on October 31, 2015 under modifications approved in 2013, be extended through October 31, 2018 under specified conditions, for operation of its estimated 828 turbines, which have a rated capacity of approximately 85.8 MW.

The SEIR is intended to supplement an Environmental Impact Report (EIR), certified in July 2013, that evaluated the application made by AWI in 2011 to modify these same CUPs as they had been approved in September of 2005. Although the current proposal for operations through 2018 was evaluated in the prior EIR as an alternative (Alternative 3), it was only at a limited level of analysis, as provided for in the CEQA Guidelines (Section 15126.6(d)), to provide “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” The County made the following finding in 2013 when it certified the EIR regarding this alternative: “Alternative 3 would better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible.” On the basis of this determination, it is necessary to provide additional information, which this SEIR is intended to provide, together with the same kind of notice and public review as provided for a draft EIR under Section 15087 of the CEQA Guidelines. The SEIR will supplement the prior EIR with additional analysis beyond that included in the Alternatives analysis to provide a basis for making the findings required by CEQA.

The 2011 application sought to replace the schedule adopted in 2005 for phased decommissioning (shut down and removal) of existing turbines in anticipation of repowering (replacement with current generation turbines), beginning with 10% removal by September 2009, 35% by 2013, 85% by 2015, and 100% by the end of the CUP term in 2018. The schedule proposed in 2011 and approved in 2013, eliminated the phased decommissioning and provided for operation of the wind farm through October 2015, subject to new and revised conditions. Other changes were also requested by AWI, such as cessation of the winter seasonal shutdown imposed by the County through the administration of the CUPs, but these changes were not approved by the County.

The CUPs as approved in 2005 required that an EIR be prepared to evaluate ongoing operations, proposed decommissioning and repowering. The EIR certified in 2013 served this purpose in part by evaluating the environmental impacts of ongoing operations and anticipated decommissioning, but did not evaluate any repowering project. The SEIR that is the subject of this Notice will not evaluate a repowering project, but will evaluate the environmental impacts of the requested change to the scheduled expiration of the CUPs under which AWI's turbines are operated. A separate CEQA document (an Addendum or Supplemental EIR) 'tiered' from the Altamont Pass Wind Resource Area Repowering Program EIR that is currently in the form of a Draft Program EIR, will address the repowering proposal by AWI.

The County will serve as the Lead Agency for the SEIR, which will be prepared pursuant to the California Environmental Quality Act (CEQA, 1970, as amended) and in accordance with relevant federal, state and local regulations. The County has determined that a Supplemental EIR is required to evaluate the three-year CUP extension requested by AWI, which is a substantial change to the Project compared to the Project as evaluated in the prior EIR. Although the three-year extension was evaluated in the prior EIR as an Alternative, the adoption and implementation of the extension will result in a substantial increase in the severity of previously identified significant effects and will require important revisions of that EIR, pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162. The County is preparing a Supplemental EIR, rather than a Subsequent EIR, based on its determination, pursuant to CEQA Guidelines Section 15163, that only minor additions and changes are necessary to make the previous EIR adequate to apply to the Project for the changes proposed by the applicant.

Based on the substantial evidence contained in the prior EIR, which included the currently-proposed extension of the CUPs through 2018 as an Alternative, and the evidence represented by the current application, in light of the whole record, the County considers the changes to the Project, from how it was defined for the prior EIR (operations through 2015, with conditions and required mitigation measures) to the current definition of operations through 2018 (with anticipated additional conditions and similar mitigation measures), would increase the severity of previously identified significant effects. For example, full operations (i.e., without phased decommissioning, although with seasonal shutdowns) for an additional three years will increase the total projected number of avian fatalities due to Project operations.

The County does not anticipate that major revisions to the EIR are necessary to identify new environmental impacts that were not disclosed in the prior EIR. Additionally, although there have been some changed circumstances since 2013, the County does not find that there are substantially changed circumstances that would result in new or substantially different significant impacts on the environment. Furthermore, no new information of substantial importance shows that the CUP extension to 2018 would have significant impacts not discussed in the prior EIR. However, to the extent new information has become available since the prior EIR, the County intends to incorporate that information into the SEIR.

The SEIR will be used by the East County Board of Zoning Adjustments in its consideration of approval of the proposed CUP modifications. The County is soliciting the views of agencies, organizations and interested parties as to the scope and content of the environmental resources and topics to be evaluated in the SEIR. In accordance with CEQA, agencies are requested to review the content of this NOP and provide comments on any environmental issues related to the statutory responsibilities of the agency.

CEQA sets the review and comment period for an NOP to end 30 days after publication. The County therefore requests comments on this NOP be received no later than the close of business on Wednesday, October 15, 2014. Provide a name for a contact person in your agency. Send written comments to:

Sandra Rivera, Assistant Planning Director
ATTN: AWI Permit Modification Supplemental EIR
Alameda County Community Development Agency
224 W. Winton Avenue, Suite 110
Hayward, CA, 94544

Comments can also be sent via e-mail with subject line "AWI Permit Modification Supplemental EIR" to sandra.rivera@acgov.org. Please include a return address and contact name with your written comments.

Project Location

The proposed project would extend numerous CUPs for 828 existing wind turbines that are widely distributed within an approximately 14,000-acre portion of the 50,000-acre Altamont Pass Wind Resource Area (APWRA) in eastern Alameda County, California (**Figure 1**). The project site is bisected by Interstate 580. The portion of the site lying southerly of I-580 constitutes approximately 7,700 acres, with the remainder lying northerly of I-580. The lands are currently under permit by AWI or its affiliates either solely or as a shared arrangement with other wind farm operators. In preparation for repowering, AWI is in discussions with another wind farm operator in the APWRA regarding a contemplated wind turbine exchange, whereby AWI would exchange some of its wind turbines for an equal number of wind turbines owned and operated by another wind farm operator. Such an exchange would result in AWI operating wind turbines on different parcels of land than those on which it presently operates (**Figure 2**). Under no circumstances, however, will any such exchange increase the capacity or quantity of AWI’s operating turbines. **Table 1** below outlines existing CUPs, landowners, Assessor’s Parcel Numbers (APNs), and approximate acreage for the lands that may be included either in whole or in part in the project, including lands on which AWI may operate following an exchange scenario as contemplated above. Partial inclusion of some parcels is necessary because AWI does not have control of all turbines on all parcels.

Table 1. Existing Conditional Use Permits (As of the time of this Notice)

CUP No.	Landowner	Assessor’s Parcel Numbers	Approximate Acres
C-8036	Costa (was Frick)	99B-5680-15	207.12
C-8037	Pombo	99B-6300-2-1, 99B-6300-2-2, 99B-6425-1-6, 99B-6325-2-4 and 99B-6400-1-7	224.26
C-8134	Rooney	99B-6125-2	160.21
C-8137	Mulqueeney	99B-7900-1-5, 99B-7900-1-7, 99B-7890-2-4, 99B-7890-2-5, 99B-7890-2-6, 99B-7925-2-4, 99B-7925-2-1, 99B-7925-2-5, 99B-7950-2, 99B-7975-1, 99B-7980-1, 99B-7985-1-6, 99B-7985-1-4, 99B-7985-1-3, 99B-7985-1-5, 99A-1800-2-4, 99A-1800-2-3 and 99B-8050-1	4,447.50
C-8191	Mulqueeney	99B-7910-1-1	592.84
C-8243	ACWMA	99A-1780-1-4, 99A-1770-2-1, 99A-1770-2-2, 99A-1770-2-3, 99A-1810-1 and 99A-1790-3	1,324.83
C-8216	ACWMA	99A-1810-1 (parcel acreage included in C-8243)	240.81
C-8232	Egan	99B-6125-3	160.47
C-8233	Elliott	99B-6125-4	157.54
C-8235	Corbett	99B-5650-1-4 and 99A-1785-1-14	284.96
C-8236	Dunton	99B-5680-1	330.46
C-8237	DeVincenzi (was Valhalla)	99B-5610-1 and 99B-6075-3	665.98
C-8238	Ralph (north)	99B-7300-1-5 and 99B-7375-1-7	766.57
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C-8242	Gomes (north)	99B-6150-4-10, 99B-6150-3 and 99B-6150-2-7	635.48
C-8244	Gomes (south)	99B-6425-2-3, 99A-1790-2 and 99A-1795-1	1,049.48
TOTAL ACREAGE			14,195.64

Notes:

1. The above table includes those parcels and CUPs on which AWI currently has installed wind turbines, as well as those parcels and CUPs on which turbines owned by other wind companies are presently installed and whose wind turbines may be obtained in exchange on a turbine-for-turbine basis with turbines currently owned by AWI.
2. Many of the wind farms in the APWRA overlap, with different wind energy facility operating companies on a single parcel of land. Therefore, other wind companies beside AWI currently operate wind farms within the project area described above.
3. Two CUPs, C-8231 and C-8239, that previously applied to turbines owned by AWI or its affiliates, are no longer operated by AWI or its affiliates.

Proposed Project

The proposed project consists of operational modifications to AWI's existing CUPs, as amended in July 2013, for continued wind power operation and maintenance activities within the Alameda County portion of the APWRA through October 31, 2018.

The project facilities consist of 828 existing, operating wind turbines on concrete foundations, plus support facilities, occupying approximately 155 acres within a 14,196-acre area. The turbines have a nameplate capacity of 85.8 MW and rest on lattice and tubular towers that range in height from 60 to 82 feet, generally sited in strings along ridgelines. Support facilities include existing gated, graveled access roads, a power collection and transmission interconnection system, meteorological towers ranging from 60 to 100 feet in height, communication systems, maintenance equipment areas, and offsite facilities including AWI's wind farm main service yard (located near Tracy), and the main wind farm control center, shared with other wind farm operators (located in Livermore). The power collection and transmission interconnection system consists of pad-mount transformers, underground cables, overhead conductors on poles, circuit breakers and switches, electrical metering/protection devices, and the existing Dyer, Frick, Ralph, and Midway substations. Electrical power is collected from the turbines and transmitted to the substations, where its voltage is increased for interconnection with Pacific Gas and Electric's (PG&E) transmission lines.

The existing project operations consists of 828 turbines and ancillary facilities, with a maximum combined generation capacity of 85.8 MW, through October 31, 2015. After this point, operations would be extended for three additional years, through October 31, 2018, on the condition that AWI has diligently pursued development of a repowered wind farm on the project site, but where circumstances beyond AWI's control have delayed completion of the repowered project. Mitigation for impacts resulting from operation of the project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 EIR.

Probable Environmental Effects

In accordance with CEQA Guidelines Section 15161, the AWI Permit Modification SEIR will examine the environmental impacts of the requested CUP modifications, focusing primarily on the changes in the environment that would result from the proposed extension of the wind farm's operational schedule.

Based on the project description and the County's understanding of the environmental issues associated with the project, the Draft SEIR will evaluate the impacts the proposed CUP modifications may have on biological resources, paying particular attention to impacts to avian species associated with the project's proposed extended operation of wind turbines.

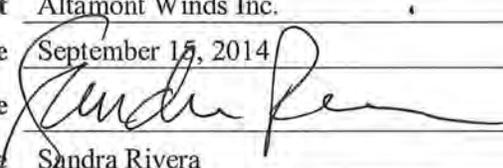
Project Title Modifications to Existing Conditional Use Permits
Project Applicant Altamont Winds Inc.
Date September 15, 2014
Signature 
Name Sandra Rivera
Title Assistant Planning Director
Telephone/e-mail 510-670-5400 / sandra.rivera@acgov.org

FIGURE 1
Project Location Map

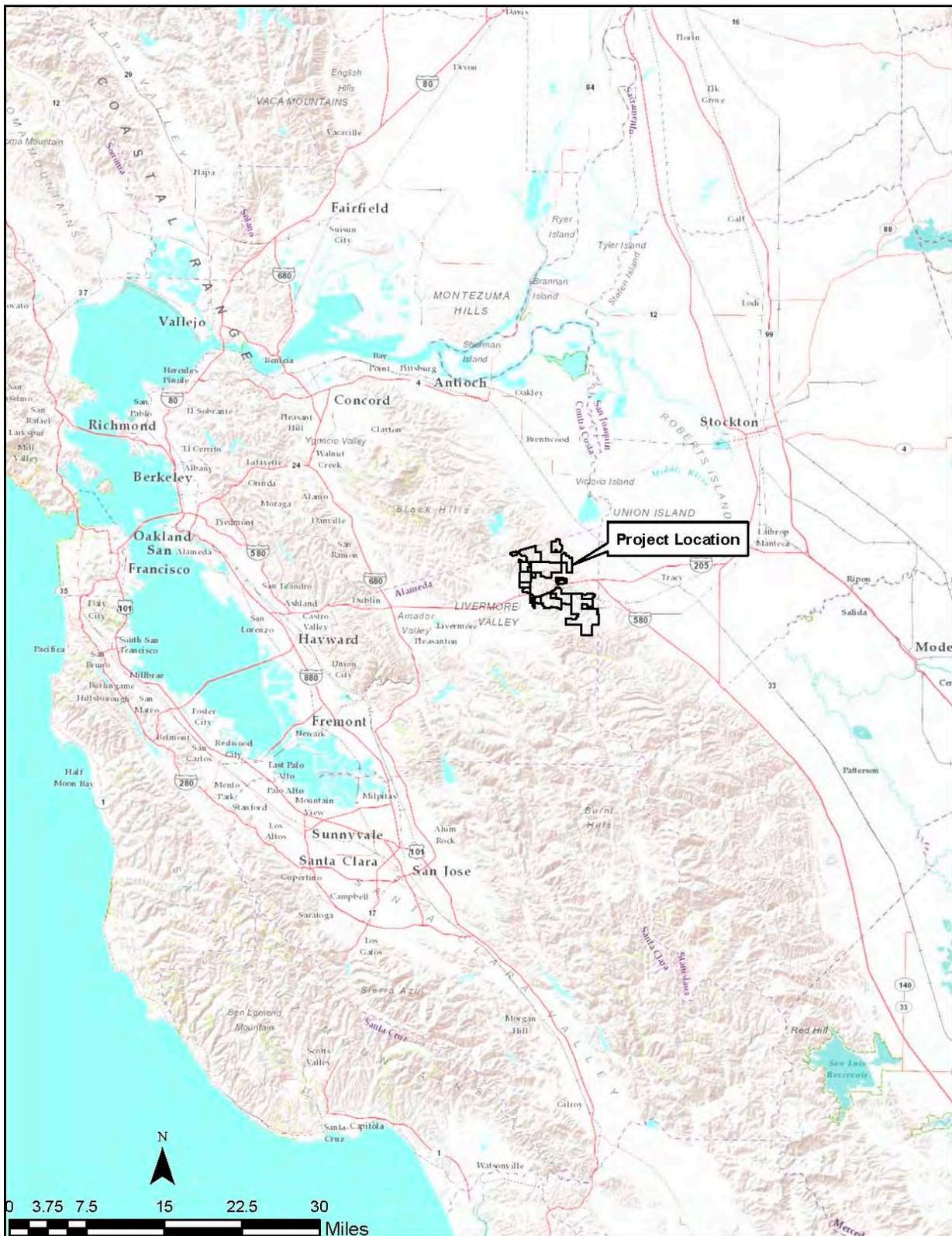
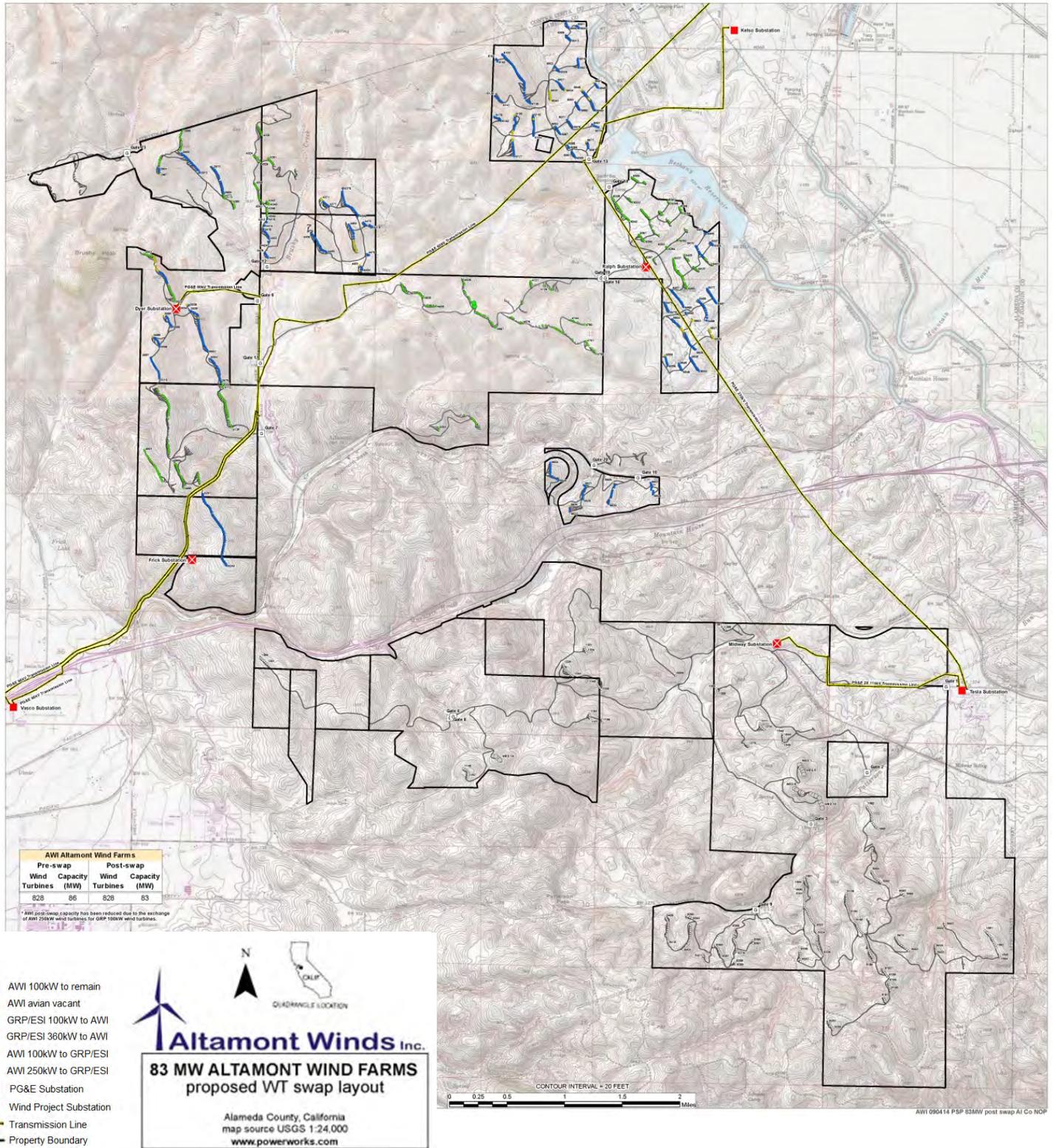


FIGURE 2
Project Site Plan, Including Parcels Subject to Potential Asset Exchange



**Notice of Preparation of an EIR for
Modifications to Existing CUPs – AWI
2013 – Mailing List**

A-Interested Parties

Jean Stice
18089 Wolf Creek Road
Grass Valley, CA 95949

John Howe
Ogin, Inc.
Altamont Operation
14740 Altamont Pass Road
Tracy, CA 95391

John Kopchick
Contra Costa County
Dept of Conservation & Development
30 Muir Road
Martinez, CA 94553

Kim Delfino
Defenders of Wildlife
1303 J Street, Suite 270
Sacramento, CA 95814

Leslie Koenig
Alameda County Resource
Conservation District
3585 Greenville Road, #2
Livermore, CA 94550

Matt Vander Sluis
The Planning & Conservation League
1107 – 9th Street, Suite 360
Sacramento, CA 95814

Nancy Rader
CA Wind Energy Association
2560 Ninth Street, Suite 213-A
Berkeley, CA 94710

Patterson Pass Wind Farm LLC
PO Box 581043
N. Palm Springs, CA 92258-1043

Barbara Salzman
Marin Audubon Chapter
PO Box 599
Mill Valley, CA 94942

Jack Barclay
1414 Soquel Avenue, No. 205
Santa Cruz, CA 95062

Jeff Miller
Alameda Creek Alliance
PO Box 2626
Niles, CA 94536

Renee Culver
NexEra Energy Resources
6185 Industrial Way
Livermore, CA 94550

Ken Lewis
Waste Management
Altamont Landfill & Resource Recovery
Facility
10840 Altamont Pass Road
Livermore, CA 94550

Kristopher Davis
Drinker Biddle & Reath LLP
1800 Century Park East, Suite 1400
Los Angeles, CA 90067

Mildred Egan
710 McLeod Street
Livermore, CA 94550

Michael Boyd
CA for Renewable Energy Inc.,
5439 Soquel Drive
Soquel, CA 95073

Nanette Leuschel
354 – 24th Avenue, #2
San Francisco, CA 94121

Peter Colby
Contra Costa Water District
Real Property & Watershed & Lands Mgr
PO Box H20
Concord, CA 94524

Jeff Miller
CBD
351 California Street, Suite 600
San Francisco, CA 94104

Jackson Land & Cattle LP
6835 N. Vasco Road
Livermore, CA 94551

Jessie Coty
Lawrence Livermore National Lab
Environmental Stewardship & Planning
Environmental Protection Dept
7000 East Avenue, L-627
Livermore, CA 94550

Joe Didonato
2624 Eagle Avenue
Alameda, CA 94501

L.G. and V.R. Strieff
1084 Bolinger Canyon Road
Moraga, CA 94556

Laurie Jodziewicz
AWEA
1501 M Street, NW, Ste 1000
Washington, DC 20005

Mary Ericsson
PO Box 2999
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Doris House PO Box 1212 Livermore, CA 94551	PG&E Company PO Box 770000 San Francisco, CA 94177	Darrel & Karen Sweet 12233 N. Flynn Road Livermore, CA 94550
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San Joaquin County Planning
Community Development
Department
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Stockton, CA 95205



October 15, 2014

Via Email & US Mail

Ms. Sandra Rivera
Assistant Planning Director
Alameda county Community Development Agency
224 West Winton Ave., Room
Hayward, California 94544

RE: Notice of Preparation of a Supplemental Environmental Impact Report for Modifications to Existing Conditional Use Permits – Altamont Winds Inc. (AWI) (PLN2014-00028)

Dear Ms. Rivera:

Audubon California and the Golden Gate Audubon Society (collectively, “Audubon”) write to express its strong opposition to Altamont Winds Inc.’s (AWI) application to Alameda County to extend operations of currently-operating turbines in the Altamont Pass Wind Resource Area (APWRA) for three additional years, from 2015 to 2018. If granted, this change will result in the unnecessary deaths of more birds in the APWRA, slow repowering efforts, and grant AWI an unfair competitive advantage over other companies that are actively repowering their assets.

While wind is an important part of California’s renewable energy portfolio, recent activities in the APWRA and elsewhere have demonstrated that California can have wind power that is both productive and sensitive to wildlife concerns. In the APWRA, all stakeholders have agreed that repowering old turbines, which kill more birds and operate inefficiently, and replacing them with well-sited new turbines is the key to success. If granted, these permit modifications would take us in the opposite direction: more old turbines killing more birds while repowering is deprioritized.

We note that the starting place for the Supplemental Environmental Impact Report’s (SEIR) analysis will be the finding in the 2013 EIR that Alternative 3, extending 100% of AWI’s operations out until 2018, would

better serve the project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible.

Given the extensive investment the County made in the 2013 EIR and the Programmatic EIR due to be released this year, and the fact that this extension was already found to be “infeasible”, Audubon cannot understand how entertaining AWI’s second request to amend its CUPs in two years is a good use of County resources. In any event, the request should be rejected and the SEIR should include a rigorous review of all reasonably foreseeable impacts and necessary mitigation measures.

I. Background

In 2005, AWI abandoned settlement discussions with the Bay Area Audubon Chapters and Californians for Renewable Energy and instead sought Conditional Use Permit (CUP) terms that mimicked some terms of the settlement, but provided AWI with more flexibility and less accountability. (See East BZA Staff Report, July 2013, at 3) AWI's 2005 CUPs included a phased decommissioning of its assets through 2018, including a shutdown of 25% of its fleet in September 2013 and an 85% shutdown in 2015. Notably, AWI understood and agreed to abide by these terms in 2005.

As the September 2013 deadline approached, AWI sought relief from its commitment in the 2005 CUPs, specifically to forego winter shutdowns and the phased decommissioning of its turbines. The County rejected AWI's effort to avoid winter shutdowns, but granted the request to do away with phased decommissioning with the provision that AWI would completely shut down its turbines in 2015. The County acknowledged that the change may result in greater avian mortality, but that the additional losses would be offset because the action would facilitate repowering in the APWRA.

At the time, AWI emphatically stated that the schedule made sense because it allowed for a more consolidated operation through 2015 and would put AWI on the same footing as other turbine operators who had agreed to shut down in 2015 and were working on repowering projects. AWI said—as it has many times over the past eight years—that it was diligently working on a repowering plan, but that it would not be financially possible without the schedule shift.

Audubon and the Attorney General's Office expressed skepticism regarding AWI's repowering plans. AWI has often expressed interest in repowering, but it has consistently failed to demonstrate substantial progress. Notably, AWI's purported repowering project is absent from the County's programmatic environmental impact report (PEIR) for repowered projects in the APWRA, which should be finalized before the end of the year. Audubon and the Attorney General's Office also expressed concern that if the CUP modifications were granted, AWI would likely come back and seek a further extension from 2015 to 2018, further undermining repowering efforts and granting AWI an unfair competitive advantage over other companies in the APWRA that were diligently working on repowering projects.

II. AWI's Request Should Be Rejected because it Undermines Efforts to Reduce Avian Mortality and to Repower the APWRA.

AWI's request should be rejected outright for because it unnecessarily extends the illegal killing of fully protected species with old-generation turbines, hinders repowering efforts, and would constitute bad policy for the County to grant AWI an unfair competitive advantage by continually revising the CUPs in AWI's favor. Further accommodating AWI by extending the use of its outdated turbines through 2018, contravenes the County's policy and creates a further, unreasonable burden on birds that suffer impacts due to APWRA operations.

A. AWI's Old-generation Turbines Will Illegally Kill More Birds without Improving Renewable Energy Resources in the APWRA.

The County has already repeatedly acknowledged that older turbines kill more birds and that decommissioning and repowering old generation turbine sites is the best way to reduce avian

mortality in the APWRA. Moreover, new generation turbines can generate more power with greater efficiency and over a longer period. Now, AWI proposes to extend use of those old generation turbines by another three years.¹

Audubon feels compelled to remind the County that *every* death of a bird protected by the Migratory Bird Treaty Act (MBTA), the Bald & Golden Eagle Protection Act (BGPA), or California's fully-protected species provisions of the Fish & Game Code constitutes an illegal act. Moreover, turbine-related mortality is clearly having a significant negative impact on some species, including the local population of Golden Eagles (who are protected by each of the laws identified above). Granting another permit extension to benefit AWI while allowing it to kill more eagles and other birds, but would do nothing to substantially increase energy production in the APWRA.

The County acknowledged that the 2013 permit adjustment which did away with AWI's phased decommissioning was likely to kill more protected species than if the original schedule were maintained, but rationalized that the impact would be offset by the gain in repowering efforts. (*See* East BZA Staff Report, at 14) However, because AWI's new proposal actually hinders repowering in the APWRA, no such rationale applies here.

B. AWI's Request Undermines Repowering Efforts in the APWRA.

AWI's request represents an obstacle to the County's clearly-stated goal of repowering older assets in favor of installing fewer, new generation turbines that can be sited carefully and operate more efficiently. First, by extending operations from 2015 to 2018, AWI will not be incentivized to repower and will continue to operate on properties that would be better used for repowering. Second, granting AWI's request would disincentivize other companies from repowering their assets.

Common sense dictates that if AWI's request were granted—thereby allowing it to continue 100% operations through 2018—it would lack financial or regulatory incentives to engage in its own repowering effort. Given AWI's lack of progress in repowering over the past several years, there can be no confidence it will make such efforts any time before 2018. Meanwhile, it will continue to profit from its old generation turbines while unnecessarily and illegally killing protected birds.

The extension would also have broader negative effects for APWRA repowering efforts. Because AWI's current operations would continue, it would be unable or unwilling to engage in the kind of negotiations and land swaps needed to further repowering efforts in the APWRA.

Notably, if granted, the request would invalidate the County's key rationale for granting the 2013 CUP modifications. In its report to the East BZA, Planning Staff found that the primary reason to grant the requested modifications was to promote repowering. (*See* East BZA Staff Report, July 2013, at 13-14) According to the Staff Report:

¹ In our testimony regarding the 2013 permit modifications, Audubon raised the question of what the East BZA would do when AWI came back seeking to push its shutdown date out from 2015 to 2018. Based on AWI's behavior to date, if this request is granted, it is almost certain to return to the East BZA again and ask for an extension beyond 2018 for its old generation turbines. Moreover, given that PowerWorks is actively recycling old generation turbines for reuse, it will be incentivized and equipped to keep old turbines operating in the APWRA for as long as possible.

While the County certainly considers every bird fatality to be significant and preferably avoided, *it is also the case that prolonging the operation of AWI's turbines, even just 15 percent (138) of their original power plant for an additional 21/2 years would be disadvantageous to repowering* that is expected to occur on the same properties and would in fact complicate monitoring efforts in those later years. *Repowering itself would be achieved more quickly and efficiently on the whole were there to be comprehensive removals of the old generation turbines completed in 2016.*

(*Id.* at 14, emphasis added) Here, AWI is not asking to keep merely 15% of its operations going but, rather 100%, making repowering and monitoring much more difficult.

AWI's current request and failure to repower also creates additional uncertainties for the analysis and implementation of management measures contained in the County's programmatic environmental impact report (PEIR) for the APWRA. The PEIR did not consider this new permit modification in its analysis, nor did it consider that AWI's continued operations would complicate repowering efforts. Moreover, it would invalidate the PEIR's analysis to the extent it anticipated that AWI may repower or at least would cease operation of old turbines by 2013. Finally, the controversy that would likely ensue if this additional permit modification were granted may result in enforcement actions or litigation that would complicate implementation of projects or mitigation measures covered by the PEIR.

C. The Granting of the Request Would Constitute Bad Policy on the Part of the County.

AWI has repeatedly sought to rewrite its permits when the terms prove inconvenient. In 2006, when it fled settlement discussions with the Audubon chapters, AWI readily agreed to the County's modified CUPs that heavily favored AWI. Yet, as the 2013 deadline approached, AWI sought changes to benefit itself, again at the cost of illegally killing protected birds. Now that 2015 is upon us, it again seeks modifications to permits that the County accommodated AWI by changing hardly a year ago. The only conclusion one can draw is that AWI does not want to abide by the permit commitments it makes.

More generally, it is bad policy for a regulator to continually rewrite permits to accommodate a permittee. It results in an overall loosening of the permit's terms, often to the detriment of natural resources that ought to be protected through the permit, and undermines the regulator's authority. It also invites similar behavior from other permittees and calls into question the validity of the entire process.

Here, Audubon has to ask why would other wind companies readily abide by their permits when they see the County so readily—and regularly—revising AWI's permits to further accommodate the company? If the County grants AWI's request but fails to award similar favors to other companies, it could rightly be accused of favoritism that is bestowing an unfair competitive advantage on AWI at a cost to its competitors.

The County and other stakeholders have invested considerable time and money in trying to collaborate with AWI and contribute to a holistic management effort for the APWRA. AWI has rejected that effort and instead aggressively pursued its own self-interest without regard for finding

collaborative solutions. The County has perfectly reasonable CUPs in place for AWI right now and should not waste further resources modifying them.

III. Conclusion

For the reasons discussed above, and those provided in letters provided by the California Attorney General's Office and the East Bay Regional Park District, AWI's request to further modify its permits should be rejected outright. The County should further its policy of repowering the APWRA rather than creating reasons for companies to continue operating old generation turbines.

Moreover, if this process proceeds, the County must provide a better analysis of whether a Subsequent EIR or Supplemental EIR is appropriate; Audubon is not convinced that the Notice adequately supports the County's determination that a Supplemental EIR is adequate given the additional impacts that will arise from this project and the availability of new mitigation measures (including permits pursuant to the BGEPA).

In any event, any EIR should include rigorous analysis of additional mortality caused by the extension and ensure that the County is not adopting a piecemeal approach to CEQA compliance (i.e., the baseline cannot be merely impacts for the extension alone, but should include those arising from the 2013 permit modification as well). Analysis must consider impacts to birds and on repowering efforts. Moreover, it must include a fully updated analysis of available mitigation measures, their efficacy, and their appropriateness for use in the APWRA.

Thank you for your consideration of our comments. If you would like to discuss these matters further, please do not hesitate to contact me at mlynes@audubon.org or at (916) 737-5707 x. 102.

Respectfully submitted,



Michael Lynes
Director of Public Policy
Audubon California



Cindy Margulis
Executive Director
Golden Gate Audubon Society

Cc: Tara Mueller, California Attorney General's Office
Eric Davis, Assistant Regional Director, US Fish & Wildlife Service
Jill Birchill, Special Agent in Charge, US Fish & Wildlife Service
Kevin Hunting, Chief Deputy Director, California Department of Fish & Wildlife
Dr. Douglas Bell, East Bay Regional Park District

Young, Andrew, CDA

From: Rivera, Sandra, CDA
Sent: Monday, October 06, 2014 12:01 PM
To: Young, Andrew, CDA
Subject: FW: Input for AWI Permit Modification
Attachments: Windmill_Input_0914d.doc

Comments for the NOP

From: Robert Cooper [<mailto:bobcooperhorse@gmail.com>]
Sent: Sunday, October 05, 2014 7:33 PM
To: Rivera, Sandra, CDA
Subject: Input for AWI Permit Modification

Hi Sandra-

Attached is a Word document that I am submitting to the "Notice of Preparation (NOP) - Supplemental Environmental Impact Report for Altamont Winds, Inc. (AWI) Permit Modification."

Also, please give a copy to the appropriate county people to check if AWI is in violation of pollution laws. The picture in the document gives an idea of the amount of oil that is being sprayed by many windmills onto the ground near my house. Rain will wash oil under the windmills onto my property.

Please notify me that you have received this email. Thanks.

-Bob Cooper

To: Sandra Rivera, Planning Department, Hayward, CA
From: Bob Cooper, resident of Dyer Rd. (bobcooperhorse@gmail.com)
Subject: Windmills on Dyer Rd.
Date: October 5, 2014

I'm writing this to call attention to the decrepit condition of the windmills on the ridge west of Dyer Rd. From my property (4000 Dyer Rd.), I can clearly see about 20 windmills. In the past year and a half, most of them have started to leak large amounts of oil from their central hubs. Below is a recent picture that shows obvious streaks of oil running from the central hub, along the blade, and then into the air. Both sides of the blade are similarly streaked. These windmills are owned and maintained by Altamont Winds Inc. (AWI)

Obviously, these windmills are polluting the environment. Their operation should cease immediately and not be put back into service until repaired. Fines seem appropriate.

Leaking oil is only a recent symptom of the age of these windmills. A safety issue is the condition of the large electric cables. They were initially installed in the late 1980's and have endured the harsh Altamont sun for over 27 years. Their insulation has developed substantial cracks. The cables' condition has also been hurt because they are severely twisted by the operation of the windmills. These cables carry 480 volts of electricity.

Additionally, windmill towers have failed; one transformers is leaking; most transformers are rusting; and blades brake.

AWI has requested that Alameda County modify AWI's Conditional Use Permit (CUP) to allow AWI to run 800 windmills an additional three years beyond the current end of operation in 2015. Considering the age of these windmills, their current decrepit condition, and evidence of insufficient/neglectful maintenance, County of Alameda should deny AWI's request for their CUP's extension.





October 13, 2014

Sandra Rivera
Assistant Planning Director
Alameda County Community Development Agency
224 W. Winton, Room 111
Hayward, CA 94544

Sent Via E-Mail to:
Sandra.Rivera@acgov.org *DAB*
October 15, 2014

RE: NOP of a Supplemental Environmental Impact Report for Modification to Existing Conditional Use Permits – Altamont Winds, Inc. (AWI) (PLN2014-00028)

Dear Assistant Planning Director Rivera:

The East Bay Regional Park District (“District”) is responding to the County of Alameda’s Notice of Preparation (NOP) of a Supplemental Environmental Impact Report (SEIR) for proposed modifications to 16 existing Conditional Use Permits (CUPs), for turbines owned and operated by Altamont Winds, Inc. (AWI) in the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). AWI (collectively with its operating subsidiary, Wind Works, Inc.) has submitted an application to the County of Alameda to extend its CUPs from their expiration date on October 31, 2015 to October 31, 2018. In 2013, the County amended AWI’s previous CUPs, which would have required a phased removal of wind turbines through 2018, to instead allow operation of all of its wind turbines through 2015. AWI now wishes to amend its CUPs again to allow it to continue operating all of its 828 existing, old generation wind turbines of 85.8 MW rated capacity, for three additional years, from 2015 to 2018.

The District owns or manages over 115,000 acres of open space in Alameda and Contra Costa Counties. This includes more than 5,000 acres of open space lands in and around the two-county APWRA. The District remains very concerned about impacts of the existing APWRA infrastructure on birds and bats in the region, as well as other natural and cultural resource values. The existing infrastructure of the APWRA continues to have significant impacts on wildlife, especially birds and bats (Smallwood 2013, Smallwood et al. 2010, Smallwood and Thelander 2008). The District is therefore opposed to AWI’s application to extend the operation of its 828 existing, old generation wind turbines for three additional years, from 2015 to 2018.

The purpose of the above SEIR, as stated in the County’s NOP, is to supplement the existing Environmental Impact Report (EIR): “Final EIR Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (AWI)” that was certified in July 2013 (ICF International 2013a) and the

Board of Directors

Ayn Wieskamp President Ward 5	Whitney Dotson Vice-President Ward 1	Ted Radke Treasurer Ward 7	Doug Siden Secretary Ward 4	Beverly Lane Ward 6	Carol Severin Ward 3	John Sutter Ward 2	Robert E. Doyle General Manager
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“Draft EIR Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds Inc. (AWI), March 2013” (ICF International 2013b), collectively termed hereafter “2013 EIR”. Specifically, AWI wishes to modify its CUPs to conform to Project Alternative 3 – Continued Seasonal Shutdown, No Phased Decommissioning, Permanent Shutdown in 2018 (p. ES-3, ICF International 2013b). In the 2013 EIR, the County made the finding that Project Alternative 3 “...would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the project objectives and minimizing significant impacts on special status avian wildlife, Alternative 3 is considered infeasible”. It is the opinion of the District that additional information brought forth by the SEIR will not change this finding.

According to the 2013 EIR, Project Alternative 3, which reflects AWI’s proposed modification to its CUPs in the current NOP, would result in fatalities of approximately 138-154 American kestrels, 132-224 burrowing owls, 140 red-tailed hawks, 19-26 golden eagles, and 2820-3078 birds overall, per year for three additional years (see Table 4-2, p. 4-9; ICF International 2013b). These are significant fatalities which could be avoided with the shutdown of AWI’s 858 wind turbines beginning October 31, 2015, as per its existing CUPs. Note that these numbers are relative to cessation of AWI’s wind turbine operations in 2015, and not relative to the existing fatality rates estimated from current operation of AWI’s 858 wind turbines. Relative to the current operations, we would still see an estimated *additional* loss of 11-15 golden eagles and 1,653 – 1,804 birds overall, per year.

These high fatality rates are problematic, especially for long-lived and slow reproducing species such as the golden eagle. The current infrastructure of the APWRA represents a population sink for the local breeding population of golden eagles (Bell and Smallwood 2010), as defined by Hunt (2002) and Hunt and Hunt (2006). The District is collaborating with researchers on monitoring and refining estimates of golden eagle territory occupancy and productivity in the region (USGS 2013), but it is clear that any additional, avoidable mortality of golden eagles in the APWRA at this point is unacceptable given the uncertainty surrounding its local population status.

The NOP states that “Mitigation for impacts resulting from operation of the project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 EIR”. Mitigation Measure BIO-17 in the existing 2013 EIR calls for retrofitting 29 power poles to compensate for one project-related golden eagle death per year. The District views this mitigation measure as wholly inadequate based on the fact that the project will result in many more eagle deaths per year than one eagle and retrofitting of power poles to prevent electrocution of golden eagles should not be the sole form of mitigation to compensate for golden eagle take.

The U.S Fish and Wildlife Service (Service) has begun issuing eagle take permits for wind projects (see <https://www.federalregister.gov/articles/2013/12/09/2013-29088/eagle-permits-changes-in-the-regulations-governing-eagle-permitting> and <https://www.federalregister.gov/articles/2014/06/27/2014-14953/golden-eagles-programmatic-take-permit-decision-finding-of-no-significant-impact-of-final>). The Service now recommends that all projects which could result in take of bald or golden eagles should apply for an eagle take permit to insure adequate mitigation and to protect project owners from violations of the Bald and Golden Eagle Protection Act. In conjunction with these rulings, the Service is developing additional mitigation measures for eagle take (<http://eaglescopng.org/compensatory-mitigation>). The District supports these efforts and views mitigation that contributes to regional conservation of eagle habitat or programs that lessen other eagle mortality factors (e.g. curtailment of

rodenticide use or reduce use of lead ammunition) as vital tools for effective mitigation. For example, conservation of eagle habitat could encompass a range of actions such as purchase of mitigation credits for golden eagles via conservation banks, easements that pay landowners to curtail ground squirrel control programs, or mitigation credit for retirement of wind rights on wind farms that are particularly deadly to eagles.

The District is also concerned about the uncertainty surrounding the location of the project outlined in the NOP. The proposed project would extend CUPs for 828 existing wind turbines distributed across approximately 14,000 acres of the 50,000 acre APWRA. According to the NOP, AWI is in discussions with other wind farm operators to exchange some of its wind turbines for an equal number of wind turbines on other parcels (i.e. asset exchange), which would result in AWI operating wind turbines on parcels of land other than where it currently operates (Figure 2 in the NOP). This is problematic because it is difficult to assess project footprint and impacts if the exact number, placement and configuration of the wind turbines to be covered by the CUP extensions are unknown. For example, avian use and fatalities in the APWRA are not evenly distributed (Smallwood et al. 2009b). In the case of golden eagles, there appear to be clusters of high use in the APWRA (see Figure 1, next page). If AWI's asset exchange results in AWI operating wind turbines for an additional 3 years in a high eagle use area that would otherwise be shut down by existing repowering agreements, then higher golden eagle take may result than was estimated by the existing 2013 EIR and consequently any proposed mitigation measures would be rendered inadequate.

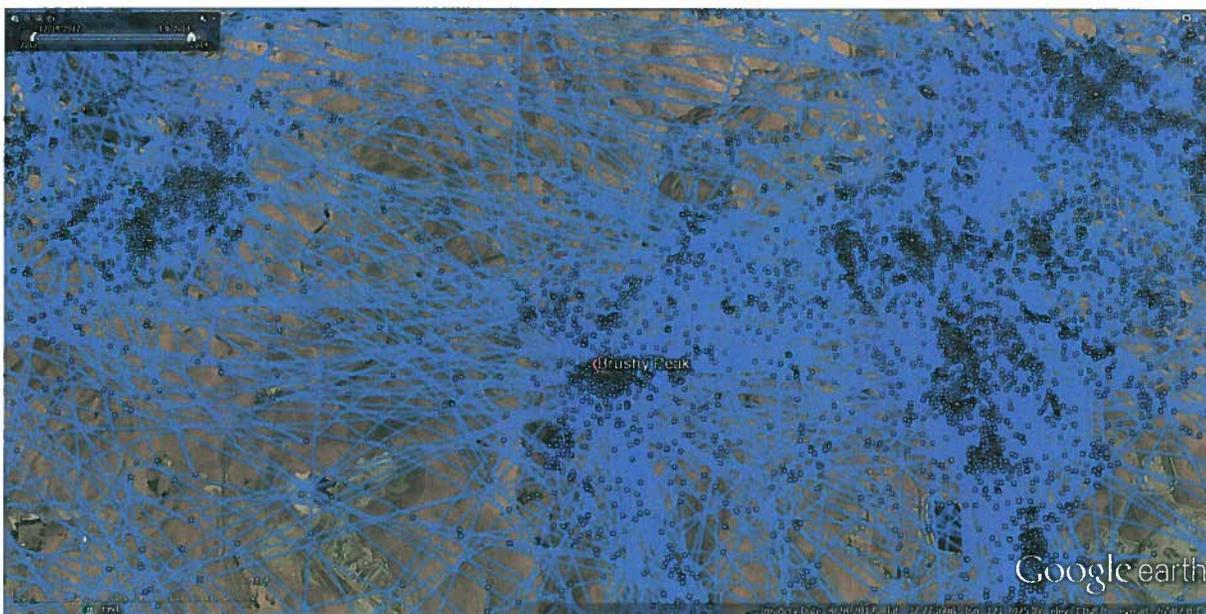


Figure 1. Map of northern APWRA and Brushy Peak (center of map) superimposed with golden eagle GPS satellite tracking locations (circles) and tracks (light blue lines representing the shortest distance between two successive locations; EBRPD, unpublished data). Based on tracking of up to 12 golden eagles between December 2012 and March 2014. Note: clusters of circles indicate areas of high eagle use. Scale bar lower left = approx. 6000'.

Numerous public and private entities are engaged in research to lessen impacts to golden eagles and other species in the APWRA, especially through repowering (See Smallwood and Neher 2009, Smallwood et al. 2009a, 2009b). Management actions directed at existing infrastructure, such as removal of high-risk turbines have had some success at reducing avian fatality rates (see ICF International 2014, but see Smallwood 2013). However, careful repowering may be the only way to significantly reduce take of birds, especially golden eagles (Bell and Smallwood 2010). The District supports renewable energy and the repowering of the APWRA in a careful and controlled manner as the best way to lessen the existing impacts of renewable energy production. The proposed amendment to the CUPs would postpone the repowering of a significant portion of the APWRA. Rather than extending the existing CUPs for AWI to continue operating its current infrastructure with significant and unavoidable impacts to birds and bats, the CUPs should be allowed to expire in 2015 and efforts should be directed towards repowering.

Thank you for this opportunity to comment on the NOP of a Supplemental EIR for Modifications to Existing Conditional Use Permits – Altamont Winds Inc.

Sincerely yours,



Douglas A. Bell, Ph.D.
Wildlife Program Manager

References

- Bell, D. A. and K.S. Smallwood. 2010. Birds of prey remain at risk. *Science* 330: 913.
- Hunt, W. G. 2002. Golden eagles in a perilous landscape: Predicting the effects of mitigation for wind turbine blade-strike mortality. P500-02-043F. Consultant Report to California Energy Commission, Sacramento, California.
- Hunt, G. and T. Hunt. 2006. The Trend of Golden Eagle Territory Occupancy in the Vicinity of the Altamont Pass Wind Resource Area: 2005 Survey. California Energy Commission, PIER Energy-Related Environmental Research. CEC-500-2006-056.
- ICF International. 2014. Draft Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years 2005-2012. SRC Ref No. M101.
http://www.altamontsrc.org/alt_doc/m101_apwra_2005_2012_bird_fatality_report.pdf
- ICF International. 2013a. Final Environmental Impact Report Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds, Inc. (AWI).
- ICF International. 2013b. Draft Environmental Impact Report Modifications to Existing (Year 2005) Conditional Use Permits – Altamont Winds, Inc. (AWI).

Smallwood, K.S. 2013. Long-term trends in fatality rates of birds and bats in the Altamont Pass Wind Resource Area, California. SRC Ref No. R68.

http://www.altamontsrc.org/alt_doc/r68_smallwood_altamont_fatality_rates_longterm.pdf

Smallwood, S. 2012. Status of avian utilization data collected in the Altamont Pass Wind Resource Area, 2005-2011. SRC Ref. No. P231.

Smallwood, K. S., and L. Neher. 2009. Map-Based Repowering of the Altamont Pass Wind Resource Area Based on Burrowing Owl Burrows, Raptor Flights, and Collisions with Wind Turbines. Final Report to the California Energy Commission, Public Interest Energy Research – Environmental Area, Contract No. CEC-500-2009-065. Sacramento, California. 63 pp.
<http://www.energy.ca.gov/2009publications/CEC-500-2009-065/CEC-500-2009-065.PDF>

Smallwood, K. S., and C. G. Thelander. 2008. Bird Mortality in the Altamont Pass Wind Resource Area, California. *Journal of Wildlife Management* 72:215-223.

Smallwood, K.S., Bell, D.A., Snyder, S.A. and J. E. DiDonato. 2010. Novel scavenger removal trials increase wind turbine-caused avian fatality estimates. *J. Wildlife Management* 74:1089-1097.

Smallwood, K.S., Neher, L. and D. A. Bell. 2009a. Map-based repowering and reorganization of a wind resource area to minimize burrowing owl and other bird fatalities. *Energies* 2:915-943; doi:10.3390/en204400915, www.mdpi.com/journal/energies.

Smallwood, K.S., Neher, L.A., Bell, D.A., DiDonato, J.E., Karas, B.R., Snyder, S.A. and S. R. Lopez. 2009b. *Range Management Practices to Reduce Wind Turbine Impacts on Burrowing Owls and Other Raptors in the Altamont Pass Wind Resource Area, California*. California Energy Commission, PIER – Energy-Related Environmental Research Program. CEC-500-2008-080.

USGS 2013. Golden Eagle Information Brief. Forest and Rangeland Ecosystem Science Center, USGS. August 2013.



State of California – The Natural Resources Agency
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



October 16, 2014

Ms. Sandra Rivera
Alameda County Community Development Agency
244 West Winton Avenue, Room 111
Hayward, CA 94544
sandra.rivera@acgov.org

Dear Ms. Rivera:

Subject: Modifications to Existing Conditional Use Permits-Altamount Winds, Inc. Project, Notice of Preparation of a Supplemental Environmental Impact Report, SCH #2014092057, Alameda County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a Supplemental Environmental Impact Report (SEIR) for the proposed Modifications to Existing Conditional Use Permits- Altamount Winds, Inc. Project (Project). CDFW is submitting comments on the SEIR as a means to inform Alameda County (County), as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

CDFW is a trustee agency pursuant to the California Environmental Quality Act (CEQA) § 15386. Pursuant to Fish and Game Code § 1802, CDFW has jurisdiction over the conservation, protection and management of the fish, wildlife, native plants and the habitat necessary for biologically sustainable populations of such species.

CDFW has regulatory authority over projects that could result in take of any species listed, or is a candidate for listing by the state as threatened or endangered, pursuant to the California Endangered Species Act (CESA). If the proposed Project could result in take of any state listed species, the Project developer should apply for an Incidental Take Permit (ITP), pursuant to Fish and Game Code § 2080 *et seq.*, for the Project.

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code §§ protecting birds, their eggs and nests include 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Fully Protected Species may not be taken or possessed at any time (Fish and Game Code § 3511).

Project Location, Description and CEQA Background

The proposed Project is located within the Altamount Pass Wind Resource Area (APWRA) in Alameda County. The Project consists of modifications to 16 existing Conditional Use Permits (CUPs) for wind turbines owned and operated by Altamount Winds, Inc. (AWI). AWI has submitted an application requesting that these CUPs, set to expire on October 31, 2015, under

modifications approved by the County in 2013, be extended through October 31, 2018 under current conditions for operation of its estimated 828 turbines. The turbines have a rated capacity totaling approximately 85.8 MW. The turbines and support facilities occupy approximately 155 acres and are located within an area approximately 14,000 acres in size.

The SEIR is intended to supplement the EIR (SCH#2012062060) which was certified in July 2013. The EIR evaluated the application made by AWI in 2011 to modify the CUPs which were approved in 2005. CDFW provided a comment letter, dated April 19, 2013, to the County on the 2012 draft EIR. The NOP states that, although the proposed CUP extension was evaluated in the prior EIR as an alternative (Alternative 3), it was only at a limited level of analysis [CEQA Guidelines § 15126.6(d)].

In the 2013 EIR, the County determined that "Alternative 3 would better serve the Project objectives of renewable energy, but would also very substantially increase the avian mortality impacts compared to the project and all other alternatives. For the purpose of meeting the Project objectives and minimizing significant impacts on the special-status species avian wildlife, Alternative 3 is considered infeasible."

The 2013 EIR also included modification of the schedule, previously adopted in 2005, for phased decommissioning of existing turbines prior to repowering. The decommissioning schedule, which included 10% removal by September 2009, 35% by 2013, 85% by 2015 and 100% by 2018, was changed to eliminate the phasing and provided for turbine operation through October 2015. AWI has removed approximately 10% of the original 920 turbines.

The NOP states that the SEIR will not evaluate repowering of the AWI wind farm, and that a separate CEQA document (an Addendum or Supplemental EIR) will be tiered from the Altamont Pass Wind Resource Area Repowering Program EIR (SCH#2010082063; not yet certified).

Biological Resources

The Project area supports special-status species such as the federally and state threatened California tiger salamander (*Ambystoma californiense*); federally endangered and state threatened San Joaquin kit fox (*Vulpes macrotis mutica*); federally and state threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*) also known as Alameda striped racer (*Coluber lateralis euryxanthus*); and state species of special concern, Pacific pond turtle (*Actinemys marmorata*), western burrowing owl (*Athene cunicularia*) and American badger (*Taxidea taxus*). The Project is within federally designated critical habitat for the Alameda whipsnake and California red-legged frog (*Rana draytonii*; state species of special concern). State threatened Swainson's hawk (*Buteo swainsoni*), and state fully-protected golden eagle (*Aquila chrysaetos*), and white-tailed kite (*Elanus leucurus*) which may also occur within the Project area. Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), which is currently a candidate species for listing under CESA and afforded the same protection as a listed species, may also occur within the Project area.

Please be advised that a CESA ITP is warranted if the Project has the potential to result in take of species of plants or animals listed under CESA. As indicated above, the Project area includes locations known to be inhabited by species listed under CESA. Some

decommissioning of turbines and ancillary facilities has already occurred and decommissioning of remaining infrastructure is expected to occur after the proposed expiration of the CUPs in 2018. CDFW believes that wind farm decommissioning activities, especially decommissioning involving ground disturbance, such as equipment staging, vegetation removal, concrete pad removal, trenching and grading, in addition to operation and maintenance activities, is likely to result in take of state-listed species.

In our April 2013 letter, we recommended that the Project proponent obtain an ITP for California tiger salamander and Alameda whipsnake. Continued operation and maintenance of AWI's wind turbines could also result in take of Swainson's hawk and Townsend's big-eared bat. A Swainson's hawk fatality was detected within the APWRA during the 2005-06 survey season and individuals of this species have been killed elsewhere in California from collisions with turbines. Take of a state listed species is in violation of CESA without a valid ITP. We therefore recommend that the County, as the Lead Agency, require that the Project proponent apply for take authorization under an ITP as a condition of approval.

Issuance of a CESA permit is subject to CEQA, therefore, the EIR supporting the issuance of a CESA ITP would need to specify impacts, mitigation measures, and a mitigation monitoring and reporting program. More information about the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>. CDFW recommends early consultation during the ITP application process, and CDFW Bay Delta Region staff is available to provide guidance during the process.

Avian and Bat Impacts

The cessation of the winter seasonal shutdowns was requested by the Project proponent in 2011, and included in the 2012 draft EIR. Winter seasonal shutdowns of 3.5 months in duration are considered to be an effective management action to reduce fatality of golden eagles and red-tailed hawks (*Buteo jamaicensis*) resulting from collisions with turbines (ICF, 2014). In our April 2013 letter, we recommended that the County continue the CUP requirement for seasonal shutdowns. CDFW would like to thank the County for not approving the cessation of the seasonal shutdown, and recommends that the future Project EIR adheres to that requirement.

Repowering within the APWRA that includes replacement of smaller, older-generation wind turbines with modern but fewer turbines with the same or greater overall generating capacity may also lead to reduced turbine-related bird and bat fatalities. The NOP states that the mitigation for impacts resulting from operation of the Project through October 31, 2018 will be carried out in accordance with the mitigation measures prescribed in the 2013 EIR. However, by delaying removal of the existing older-generation wind turbines, additional impacts to avian and bat species are expected to occur. CEQA Guidelines [§ 15126.4 (a)(1)(B)] stipulates that it is not appropriate to defer feasible mitigation measures to a future date. CDFW recommends that the Project EIR include additional mitigation measures (based on rotor swept area), such as acquisition and protection of habitat in perpetuity, to reduce impacts of the Project to avian and bat species to less-than-significant levels.

Ms. Sandra Rivera
October 16, 2014
Page 4

Conclusion

CDFW appreciates the opportunity to provide comments to the County on the NOP for the Project. CDFW supports the development of renewable energy resources for projects which are in compliance with existing state and federal laws and acts, and when measures are implemented which effectively avoid or reduce impacts to native species and their habitats to levels less-than-significant levels. CDFW staff is available to meet with you to ensure that potential impacts to sensitive species are avoided, minimized or mitigated. If you have any questions, please contact Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541, or brenda.blinn@wildlife.ca.gov; or Mr. Craig Weightman, Environmental Program Manager, at (707) 944-5577, or craig.weightman@wildlife.ca.gov.

Sincerely,



Scott Wilson
Regional Manager
Bay Delta Region

Cc: Ryan Olah, USFWS

Literature Cited

ICF. 2014. Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years, 2005-2012. Alameda Community Development Agency. M101.



October 15th, 2014

Sandra Rivera
Assistant Planning Director
Alameda County Community Development Agency
224 W. Winton Av., Suite 110
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Directors

RE: Comments on Notice of Preparation (NOP) of a Supplemental Environmental Impact Report for Modifications to Existing Conditional Use Permits (CUPs) – Altamont Winds Inc. (AWI) – PLN2014-00028

Dear Ms. Rivera,

Save Mount Diablo (SMD) is a non-profit conservation organization founded in 1971 which acquires land for addition to parks on and around Mount Diablo and monitors land use planning which might affect protected lands. We build trails, restore habitat, and are involved in environmental education. In 1971 there was just one park on Mount Diablo totaling 6,778 acres; today there are almost 50 parks and preserves around Mount Diablo totaling 110,000 acres. We include more than 8,000 donors and supporters.

We appreciate the opportunity to comment on the NOP for a draft supplemental EIR (dsEIR) for the proposed modifications to existing CUPs for AWI. We have some concerns about the proposal, discussed below, that should be considered in how this proposal progresses and addressed in the dsEIR.

Description of unacceptable physical condition of turbines

The dsEIR should provide an accurate description of the baseline conditions found on the site. This description should fully detail the unacceptable state of state of disrepair that at least some of AWI's turbines are in. Photographs from local residents clearly show that turbines in the vicinity of Dyer Rd. are leaking oil from their central hubs, and that oil is staining turbine blades and being broadcast throughout the area, contaminating the ground and potentially local creeks. Photographic evidence of this has been provided to the County and we have heard of other serious lapses in maintenance occurring with turbines owned and operated by AWI.

For example, electrical cables associated with AWI turbines have deteriorated and become extremely twisted, transformers are old and leaking, transformer pads are being undermined by soil erosion and whole towers have fallen over.

This condition of disrepair not only contaminates the environment but could pose a human safety hazard. Given these unacceptable conditions, we believe it would be appropriate for the County to require a full independent inspection of all AWI turbines in the Altamont in order to accurately document the conditions of AWI turbines. Such an inspection should occur before any modifications to existing AWI CUPs are considered.

Staff Directors

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Founders

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Proud Member of

Land Trust Alliance
California Council of Land Trusts
Bay Area Open Space Council



Potential end of AWI turbine operations

AWI has previously agree to formulate a repowering Plan for its turbines. To date it has failed to do so, and is now asking for an extension of existing permits to allow AWI turbines to remain in operation. Given the old age of these turbines and the potentially dangerous state of deterioration of at least some turbines, the dsEIR should include an alternative for immediate cessation of operations of AWI turbines in the Altamont. Pending a thorough independent inspection of AWI turbines it may be revealed that some turbines are in good condition and should continue operations. These turbines should continue operations, but only until their current permits run out in 2015.

AWI should not be permitted to continue operating old turbines in a state of disrepair for an additional three years. We believe that the current CUPs should not be modified to prolong the use of AWI turbines if they are unfit to be in operation now.

Potential priority habitat restoration mitigation measures

The dsEIR would benefit from describing several different priority mitigation measures that range from raptor-specific to measures that address the needs of a broader suite of habitat and species. A potential combination of these two approaches would be the acquisition of easements over broad swaths of land that prohibit the poisoning of rodents on ranchland. This would benefit raptors by increasing their prey base in the Altamont and would also benefit terrestrial species that use ground squirrel burrows as well as prey on the squirrels themselves.

Another potential measure that should be included is riparian habitat restoration. A degraded creek along Dyer Rd. could be a suitable restoration opportunity, but a study should first determine if enough water is present to support the long-term survival of woody vegetation, in this creek and in others around the Altamont.

Because this proposed CPU extension is specific to AWI, a potential mitigation measure specific to AWI-controlled land west of Dyer Rd. (the Dyer Valley area) that should be included in the dsEIR is placing a conservation easement on the valley to link the protected land of Brushy Peak Regional Preserve to the west with the Altamont Hills protected area to the west of Dyer Rd. Dyer Valley is an important wildlife corridor in the area and protecting it with an easement for mitigation could forge a regionally important link between isolated protected lands.

Thank you for the opportunity to provide comments.

Sincerely,

Juan Pablo Galván
Land Use Planner



In Response Reply To:
FWS/R8/MB -SP

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Southwest Region
2800 Cottage Way, Suite W-2606
Sacramento, California 95825



October 15, 2014

Ms. Sandra Rivera
County of Alameda
244 W. Winton Avenue, Room 111
Hayward, CA 94544

Dear Ms. Rivera:

The U.S. Fish and Wildlife Service (Service) received Alameda County's Notice of Preparation (Notice) of a Supplemental EIR for proposed modifications to existing Conditional Use Permits for turbines owned and operated by Altamont Winds Incorporated (AWI). Our comments are in the context of our legal mandate and trust responsibility to maintain healthy migratory bird populations for the benefit of the American public pursuant to the Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.; MBTA) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; Eagle Act). This letter supplements our April 19, 2013 comment letter regarding the *Draft Environmental Impact Report (DEIR) for the Modifications to Existing (Year 2005) Conditional Use Permits (Project) for the Altamont Winds Inc.* Subsequently, the County issued AWI a new CUP based upon Alternative 1, which required AWI to shut down turbines by October 31, 2015.

To ensure that any take of eagles does not exceed the Eagle Act's preservation standard, the Service set regional thresholds (i.e., upper limits) for take of each eagle species using methodology described in the Final Environmental Analysis (FEA) of the Eagle Permit Rule (Service 2009). We also put in place measures to ensure that local eagle populations are not depleted by take that would be otherwise regionally acceptable. As described in our *Eagle Conservation Plan Guidance Module 1: Land-based Wind Energy Version 2* (Service 2013, ECP Guidance), it is the Service's policy that take rates for a local-area population (140 miles for golden eagles) should not exceed 5% annually, whether the impacts of a given project have been offset by compensatory mitigation or not, to ensure sustainable populations of eagles.

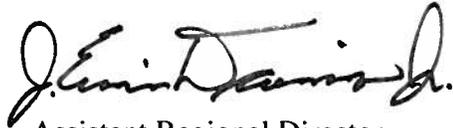
In our Environmental Analysis for an eagle take permit at the Shiloh IV Wind Farm located about 30 miles from the APWRA (Service 2014), we determined that the current take rate for the APWRA golden eagle local-area population is approximately 12% annually. We are concerned that this level of ongoing take is having a negative effect on the local-area population of golden eagles and could affect the sustainability of this population.

In light of the high level of impacts to the local-area population of golden eagles caused by wind generation facilities operating within the Altamont Pass Wind Resource Area, the Service recommends that Alameda County deny AWI's recent request to extend wind operations beyond October 31, 2015. We encourage the County to retain the current schedule for AWI's permanent shutdown of existing wind turbines.

We have met with AWI and have encouraged the company to develop an Eagle Conservation Plan and to apply for an eagle take permit. The Service regards voluntary adherence and early communication (which includes sharing records such as results of studies, audits, monitoring, bird and bat conservation plans (BBCSs) and other useful documents) as evidence of due care with respect to avoiding, minimizing, and mitigating significant adverse impacts to species protected under the MBTA and the Eagle Act.

For additional information or if you have any questions, please contact Ms. Heather Beeler at Heather_Beeler@fws.gov or 916/414-6651.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Erin Davis". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Assistant Regional Director
Migratory Birds and State Programs

cc: Craig Weightman, California Department of Fish and Wildlife, Environmental Program Manager
Jill Birchell, U.S. Fish and Wildlife Service, Office of Law Enforcement

References:

ICF. 2013. Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years, 2005-2011. Alameda Community Development Agency. M96

———. 2009. *Final Environmental Assessment. Proposal to Permit Take Provided under the Bald and Golden Eagle Protection Act. U.S. Fish and Wildlife Service, Division of Migratory Bird Management, Washington, DC.*

———. 2012a. *U.S. Fish and Wildlife Service Land Based Wind Energy Guidelines. March 23. June.*

———. 2013. *Eagle Conservation Plan Guidance. Module 1: Land-based Wind Energy Development. Version 2. April.*

———. 2014. *Final Environmental Assessment for the Shiloh IV Wind Project Eagle Conservation Plan. Division of Migratory Bird Management. Sacramento, CA. With technical assistance from ICF International, Sacramento, CA.*



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October 10, 2014

Sandra Rivera
Assistant Planning Director
Alameda County Community Development Agency
224 West Winton Ave., Room 111
Hayward, California 94544

Scientific Review Committee, c/o Sandra Rivera
Altamont Pass Wind Resource Area
Alameda County Community Development Agency
224 West Winton Ave., Room 111
Hayward, California 94544

RE: Application by Altamont Winds Inc. for Extension of Conditional Use Permits

Dear Assistant Director Rivera and Scientific Review Committee Members:

We are writing in response to the County of Alameda's Notice of Preparation of a supplemental environmental impact report (EIR) for Altamont Winds Inc.'s (AWI's) application to extend the terms of its conditional use permits to operate its old generation wind turbines at the Altamont Pass Wind Resource Area (Altamont Pass) for three more years, from 2015 to 2018. As you are aware, just last year, at AWI's request, the County amended AWI's use permits to require AWI to shut down all of its old turbines by December 31, 2015, instead of September 30, 2018 as required under AWI's previous permits. In exchange, the County deleted the provisions under AWI's previous permits requiring AWI to shut down and remove its old turbines in progressive phases between now and 2018. AWI now seeks to re-extend the term of its permits to December 31, 2018, but this time without the requirements for phased removal of the old turbines between now and 2018.

The Attorney General's Office objects to AWI's proposal on a number of grounds. First, AWI's permit extension proposal will create serious inequities for other turbine operators at Altamont Pass and will undercut the development of environmentally-responsible wind energy there. As two recent County environmental impact reports indicate, the other turbine operators at Altamont Pass (Next Era Energy Resources, EDF Renewable Energy and Ogin Inc.) are making substantial efforts to expeditiously remove and replace their outdated turbines with upgraded, modern turbines ("repower"). (See ICF International, *Altamont Pass Wind Resource Area Repowering Draft Program EIR*, June 2014 and *Sand Hill Wind Project Final EIR*, March 2014.) Next Era, in particular, is obligated pursuant to a 2010 agreement between the Attorney

General's Office, Next Era, several Bay Area chapters of the Audubon Society, and Californians for Renewable Energy (hereinafter "Next Era Agreement") to either repower or permanently shut down their old turbines by the end of next year. These other companies' current efforts to replace their old generation turbines indicates that repowering is economically feasible and achievable. As an additional benefit, we understand that the modern turbines are far more energy efficient and can generate substantially more energy per turbine than the old generation turbines, even those with the same rated capacity. Thus, while repowering requires an initial substantial capital investment, the resulting increases in a project's efficiency and output, along with its reduced operating and maintenance costs, makes economic sense in the long run. AWI, however, is seeking to obtain an unfair competitive advantage over the other operators at Altamont Pass by attempting to avoid these important repowering investments in order to achieve greater short-term financial gain..

The Next Era Agreement sets the bar for responsible wind operation at Altamont Pass. This agreement requires Next Era to make commercially reasonable efforts to repower all of its old turbines at Altamont Pass in up to three phases by September 30, 2015. Next Era also agreed to site the new turbines in the most bird- and bat-friendly locations, based on the best available science. A key feature of the agreement is that if Next Era is not able to timely obtain all applicable permits for replacing its turbines, it nevertheless must permanently shut down all of its old turbines by November 1, 2015. Next Era also agreed to pay approximately \$2.5 million as a mitigation fee (\$10,500 per megawatt of repowered, installed capacity) to compensate for any ongoing raptor deaths. This mitigation fee is to be divided equally between scientific research on the effects of wind turbines on birds and bats and the preservation of raptor habitat or other conservation efforts. In exchange, the Attorney General's Office and environmental signatories agreed not to challenge the Next Era repowering projects, and agreed to a release of liability for Next Era for any previous and subsequent bird deaths.

The County's approval of AWI's permit extension request would create an uneven playing field, rewarding the company that has done the least to modernize and minimize the environmental effects of its operations at Altamont Pass, and unfairly penalizing the company that has taken the most significant steps to do so. Not only does AWI propose to operate its old turbines for three years longer than Next Era, it proposes to do so without adequate mitigation and on highly inequitable terms. For example, AWI only proposes to pay a \$525 per megawatt mitigation fee, without any explanation or justification – as opposed to Next Era's \$10,500 per megawatt fee. AWI also proposes to remove existing mitigation measures (such as power pole retrofitting) and replace them with untested mitigation measures, such as blade painting. AWI further proposes wholly inadequate monitoring requirements that are much weaker than those contained within the Next Era Agreement.

In addition, the proposal will have significant and unavoidable effects on birds and bats, including golden eagles, which are designated as a "fully protected species" under the California Fish and Game Code. (See ICF International, *Draft EIR, Modifications to Existing (Year 2005) Conditional Use Permits, Altamont Winds, Inc.*, March 2013 (hereafter "AWI EIR"), p. 4-16;

Cal. Fish & G. Code, § 3511.) The AWI EIR (prepared for AWI's previous permit modification request) indicates that continuing to operate the old turbines through 2018 would result in the deaths of approximately 1,653-1,804 more birds, including 11-15 more golden eagles, per year than under AWI's permits as amended last year. (AWI EIR, Tables 4-2 and 4-3, pp. 4-9, 4-20.) Such a level of bird mortality is unacceptable, particularly at a time when all companies operating in the Alameda County portion of Altamont Pass, except AWI, are actively pursuing repowering proposals.

All evidence indicates that repowering can significantly reduce the operational effects of wind turbines on key raptor species, including golden eagles. (See ICF International, M101 - *Altamont Pass Wind Resource Area Bird Fatality Study*, June 2014, p. 4-4 (“[c]omparison of fatality rates at the three operating groups comprised of repowered turbines to fatality rates at older-generation turbines indicates a significant reduction in collision risk and total fatalities per megawatt of rated capacity for all four focal species. These results suggest that avian fatalities could be reduced in areas where modern, high-capacity turbines are deployed in place of older-generation turbines.”) The first year monitoring report for Next Era's first repowering project pursuant to the Next Era Agreement (the Vasco Winds Project in Contra Costa County), shows that during its first year of operation, this project reduced raptor deaths overall by 65%, and golden eagle deaths by up to 97%, from the number of deaths caused by the older turbines previously operating at that site. (See *Final 2012-2013 Annual Report Avian and Bat Monitoring Project, Vasco Winds LLC*, Sept. 2013, p. 47.)

Finally, the County should be aware of the rule in California that a permittee “is barred from challenging a condition imposed upon the granting of a special permit if he has acquiesced therein by either specifically agreeing to the condition or by failing to challenge its validity, and [has] accepted the benefits afforded by the permit.” (*County of Imperial v. McDougal* (1977) 19 Cal.3d 505, 510.) In such circumstances, the permittee waives his right to object to the permit condition, and “is bound by the limitation.” (*Ibid.*; see also *Rosasco Holdings Inc. v. State of California* (1989) 212 Cal.App.3d 642, 654 (landowner barred from challenging transferrable development credit condition in Coastal Commission permit after complying with condition); *Tahoe Keys Property Owners' Assn. v. State Water Resources Control Bd.* (1994) 23 Cal.App.4th 1459, 1484 (property owners' acceptance of mitigation fee condition precluded later challenge to that fee).) “Generally, a property owner may only challenge an allegedly unreasonable permit condition by refusing to comply with the condition and bringing a mandate action to have the condition invalid.” (*Lynch v. California Coastal Comm.* (2014) 229 Cal.App.4th 658, 177 Cal.Rptr.3d 654, 658.) This “rule stems from the equitable maxim, ‘He who takes the benefit must bear the burden.’” (*Ibid.*)

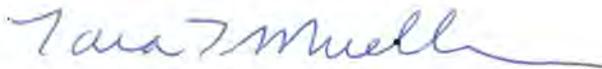
In *County of Imperial v. McDougal*, the County of Imperial issued a conditional use permit allowing a landowner to sell water from its property, on condition that the water could be sold only for use within the county. The landowner accepted and did not challenge the permit but the landowner's successor in interest (McDougal) subsequently violated the permit condition. The county brought an action against McDougal to enjoin him from selling water in violation of

the permit. The California Supreme Court held that, because the landowner's predecessor in interest failed to challenge the permit condition prohibiting the sale of water outside the county, both he and his successor in interest had waived the right to later object to that condition. (*County of Imperial, supra*, 19 Cal.3d at p. 510.) "Thus," the Court held, "McDougal is estopped to assert that the prohibition in the . . . permit against the sale of water for use outside the county is invalid, and he is bound by the limitation." (*Ibid.*)

Similarly here, AWI applied for, and last year the County Board of Zoning Adjustments granted, permit amendments to AWI. These amendments allowed AWI to avoid the obligations under its previous permits for interim, phased removal of the old turbines, including but not limited to the requirement to remove 25% of its original 920 turbines by September 30, 2013. (See AWI EIR, p. 2-1.) As a condition of the County's elimination of these phased removal requirements, AWI agreed to remove all of its old turbines by 2015, three years earlier than was required under its previous permits. AWI has obtained, and is continuing to obtain, significant benefits from this permit. AWI did not appeal the permit decision to the Board of Supervisors or challenge it in court. Consequently, under the reasoning of *McDougal* and its progeny, AWI is barred from collaterally attacking the condition to remove its old turbines by the end of 2015 in a subsequent permit application.

The Attorney General's Office urges the County to carefully consider the environmental, equitable and other implications of allowing AWI's turbines to operate through 2018, and to fully evaluate the environmental impacts of such operation in the supplemental EIR, before acting on AWI's latest permit amendment request.

Sincerely,



Tara L. Mueller
Deputy Attorney General
For KAMALA D. HARRIS
Attorney General

cc: Heather Littlejohn, Alameda County Counsel's Office
Ryan McGraw, General Counsel, Altamont Winds

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APPENDIX E

STEP-UP TRANSFORMER SOILS TESTING

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Analytical Report

Safety Kleen PO Box 555 Salida, CA 95368	Client Project ID: Sample A Wastedirt	Date Sampled: 03/01/12
		Date Received: 03/06/12
	Client Contact: Jason Flores	Date Reported: 03/07/12
	Client P.O.:	Date Completed: 03/12/12

WorkOrder: 1203168

March 12, 2012

Dear Jason:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **Sample A Wastedirt**,
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

WorkOrder: 1203168

ClientCode: SKS

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:

Jason Flores
 Safety Kleen
 PO Box 555
 Salida, CA 95368
 (209) 595-9016 FAX: (209) 545-3680

Email: jason.flores@safety-kleen.com
 cc:
 PO:
 ProjectNo: Sample A Wastedirt

Bill to:

Accounts Payable
 Safety Kleen
 PO Box 660203
 Dallas, TX 75266
 SEND HARDCOPY

Requested TAT:

1 day

Date Received: 03/06/2012

Date Printed: 03/06/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1203168-001	Sample A Dirt	Soil	3/1/2012 13:45	<input type="checkbox"/>	A	A											

Test Legend:

1	8082A_PCB_S	2	FISHHAZSCREEN_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Safety Kleen**

Date and Time Received: **3/6/2012 3:50:25 PM**

Project Name: **Sample A Wastedirt**

Checklist completed and reviewed by: **Zoraida Cortez**

WorkOrder N°: **1203168** Matrix: Soil

Carrier: FedEx

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

* NOTE: If the "No" box is checked, see comments below.

 Comments:



Safety Kleen PO Box 555 Salida, CA 95368	Client Project ID: Sample A Wastedirt	Date Sampled: 03/01/12
		Date Received: 03/06/12
	Client Contact: Jason Flores	Date Extracted: 03/06/12
	Client P.O.:	Date Analyzed: 03/07/12

Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD*

Extraction Method: SW3550B

Analytical Method: SW8082

Work Order: 1203168

Lab ID	1203168-001A				Reporting Limit for DF =1	
Client ID	Sample A Dirt					
Matrix	S					
DF	1					
Compound	Concentration				mg/kg	ug/L
Aroclor1016	ND				0.05	NA
Aroclor1221	ND				0.05	NA
Aroclor1232	ND				0.05	NA
Aroclor1242	ND				0.05	NA
Aroclor1248	ND				0.05	NA
Aroclor1254	ND				0.05	NA
Aroclor1260	ND				0.05	NA
PCBs, total	ND				0.05	NA

Surrogate Recoveries (%)

%SS:	125				
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Comments

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or surrogate coelutes with another peak.



Safety Kleen PO Box 555 Salida, CA 95368	Client Project ID: Sample A Wastedirt	Date Sampled: 03/01/12
		Date Received: 03/06/12
	Client Contact: Jason Flores	Date Extracted: 03/08/12-03/12/12
	Client P.O.:	Date Analyzed: 03/08/12-03/12/12

CA Title 22 Acute Fish Bioassay Screen Test for Hazardous Waste

Extraction Method: CA DFG (Polinsi & Miller)

Analytical Method: CA DFG (Polinsi & Miller)

Work Order: 1203168

Lab ID	1203168-001A	Species	Pimephales promelas	Avg. Length (mm)	33.2
Client ID	Sample A Dirt	Common Name	Fathead Minnows	Avg. Weight (g)	0.327
Matrix	Soil			Max Weight (g)	0.351
Control Water	Soft Synthetic Water			Min Weight (g)	0.287

Concentration	Survival		Dissolved O2 (mg/L)		pH		Temperature (°C)		Comments	
	A	B	A	B	A	B	A	B		
Control	10	10	8.92	8.95	7.48	7.49	20.4	20.4	Analyst:	AB
250 mg/L	10	10	8.92	8.96	7.58	7.57	20.4	20.4		
500 mg/L	10	10	8.93	8.90	7.60	7.59	20.4	20.4	Date:	3/8/2012
750 mg/L	10	10	8.89	8.94	7.61	7.60	20.4	20.4	Time:	12:00 PM
Control	10	10	8.86	8.89	7.45	7.47	20.3	20.3	Analyst:	AB
250 mg/L	10	10	8.87	8.90	7.55	7.54	20.3	20.3		
500 mg/L	10	10	8.85	8.83	7.57	7.57	20.3	20.3	Date:	3/9/2012
750 mg/L	10	10	8.81	8.88	7.58	7.59	20.3	20.3	Time:	12:00 PM
Control	10	10	8.70	8.63	7.39	7.42	20.6	20.6	Analyst:	CM
250 mg/L	10	10	8.68	8.69	7.51	7.53	20.6	20.6		
500 mg/L	10	10	8.77	8.68	7.55	7.54	20.6	20.6	Date:	3/10/2012
750 mg/L	10	10	8.78	8.71	7.56	7.53	20.6	20.6	Time:	12:00 PM
Control	10	10	8.66	8.73	7.35	7.36	20.8	20.8	Analyst:	CM
250 mg/L	10	10	8.60	8.57	7.45	7.48	20.8	20.8		
500 mg/L	10	10	8.49	8.60	7.47	7.47	20.8	20.8	Date:	3/11/2012
750 mg/L	10	10	8.55	8.63	7.50	7.48	20.8	20.8	Time:	12:00 PM
Control	10	10	8.52	8.57	7.34	7.34	20.0	20.0	Analyst:	AB
250 mg/L	10	10	8.49	8.46	7.43	7.45	20.0	20.0		
500 mg/L	10	10	8.40	8.44	7.46	7.45	20.0	20.0	Date:	3/12/2012
750 mg/L	10	10	8.47	8.49	7.48	7.47	20.0	20.0	Time:	12:00 PM

	Initial		Final	
	Control	750 mg/L	Control	750 mg/L
Hardness (mg/L as CaCO3)	40	40	40	40
Alkalinity (mg/L as CaCO3)	32.8	37.08	35.28	45.64
Conductivity (uS/cm)	163.5	190.4	168.4	188
Salinity (mg/L)	N/A	N/A	N/A	N/A

Result: Mortality <40% at 750mg/L. Therefore LC50>=500mg/L ('non-hazardous')

96 LC50: N/A
 95% Upper Confident Limit: N/A

LC50 Method: N/A
 95% Lower Confident Limit: N/A

APPENDIX F

**FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT
REPORT REVISED MITIGATION MONITORING
PROGRAM**

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Introduction

Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the State CEQA Guidelines require a lead agency that adopts an environmental impact report (EIR) to establish a program to monitor and report on the adopted mitigation measures in order to ensure that approved mitigation measures are implemented subsequent to project approval. Specifically, the lead agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation. As stated in Public Resources Code Section 21081.6(a)(1):

The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

This mitigation monitoring and reporting program (MMRP) is designed to meet that requirement. As lead agency for this project, Alameda County will use this MMRP to ensure compliance with mitigation measures associated with implementation of the proposed conditional use permit modifications in the FSEIR. Under each identified resource, the MMRP provides the adverse impact(s), its corresponding mitigation measure(s), and the implementation and monitoring requirements, defined as follows.

- **Impact:** Identifies the impact number and statement as shown in the FSEIR.
- **Proposed Mitigation Measure(s):** Provides full text of the mitigation measure as shown in the FSEIR.
- **Timing:** Defines the phase of the project when a specific mitigation action will be taken.
- **Implementing Party(s):** Designates the party or parties responsible for implementing the mitigation measure.
- **Monitoring:** Identifies the party responsible for review of the mitigation measure's implementation, and the action and criteria necessary for ensuring implementation.

Mitigation is required to address significant or potentially significant impact(s) on the following resources specific to the FSEIR.

- Biological Resources

A sample mitigation monitoring compliance form is provided at the end of this document. For detailed information regarding environmental resource impact methodology and analysis, please see the 2013 FEIR, DSEIR and FSEIR.

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FINAL SUPPLEMENTAL MITIGATION MONITORING AND REPORTING PROGRAM

IMPACT	PROPOSED MITIGATION MEASURE	TIMING	IMPLEMENTATION	MONITORING
<p>Impact BIO-1: Potential to cause a substantial adverse effect, either directly or through habitat modifications, on a special-status species.</p>	<p>BIO-16: Implement Seasonal Shutdowns to Reduce Avian Fatalities</p> <p>In order to reduce the potential impacts of the proposed project on avian species (to include raptors and special status species), AWI will implement seasonal shutdowns on all turbines for the remaining operational period. Turbines will be turned off on November 1 each year and will remain off until February 15 of the following year. No operational modifications will occur during the February 16 to October 31 period. AWI will notify County CDA each year when turbines have been shut down, and again when they have resumed operating.</p>	<p>November 1 to February 15 of each year</p>	<p>Project Applicant</p>	<p>Reviewing Party County of Alameda, SRC</p> <p>Criteria Verify that seasonal shutdowns have been implemented</p> <p>Monitoring Action Verify each year between November 1 and February 15</p>

	<p>BIO-17: Mitigate for the Loss of Individual Golden Eagles, Raptors, and Special Status Avian Species by Retrofitting Electrical Facilities</p> <p>AWI will mitigate for the proposed project's additional contribution to golden eagle mortality by retrofitting hazardous electrical poles in an onsite location (if any hazardous poles are located onsite), or in an offsite location. This mitigation measure will also benefit mortality reduction for other raptors and special status avian species. The mitigation must occur within 140 miles of the proposed project, the area typically defined by the USFWS as the "local population." The proposed project, with implementation of mitigation measure BIO-16, (together identified as Alternative 1 in the analysis of project alternatives) is projected to result in the fatality of approximately one eagle (cumulatively, and statistically, 0.7–1.0) when compared to the existing avian baseline condition (the No Project Alternative) (2013 FEIR Table 3.2-5). Although the baseline fatality rate is higher, this mitigation measure addresses the impacts of the 2013 project proposal (with Mitigation Measure BIO-16), which is approximately one additional eagle fatality. Based on current published draft guidance from the USFWS (2012), and using a general example, a ratio of 29 utility pole retrofits for each eagle is suggested by the USFWS. Whereas the approved 2013 CUP modifications were projected to result in about 8 to 11 eagle fatalities (with seasonal shutdown), these were compared to a baseline in which between 7 and 10 eagle fatalities were anticipated; hence the estimate of only one "net" additional eagle fatality as the impact. In addition, the proposed 2014 CUP modifications, for the period 2016-2018 are also compared to a baseline in which 7 and 10 eagle fatalities from turbine operations are also projected. For this reason, the number of additional eagle fatalities, and in turn the number of power pole retrofits to mitigate for the projected number of eagle fatalities is notably greater – 11.1 eagle fatalities, requiring 322 power pole retrofits.</p> <p>AWI may contract directly with an electrical utility to fund this mitigation; however, a written agreement and evidence of the completion of the retrofits must be provided to the County CDA. USFWS has estimated the cost of retrofits at \$7,500 per pole, and therefore AWI may contribute between \$322,000 and \$1,288,000 to a third party mitigation account (approved by the County CDA) instead of contracting directly with a utility. The third party mitigation account holder would have the responsibility of completing the mitigation or contracting for the mitigation to be completed. Evidence of completion of mitigation must be provided to the County CDA within one year of approval of the proposed project.</p>	<p>Prior to decommissioning and reclamation activities; after decommissioning and reclamation activities</p>	<p>Project Applicant</p>	<p>Reviewing Party County of Alameda</p> <p>Criteria Check to ensure retrofitting of electrical poles has been conducted</p> <p>Monitoring Action Require measure as part of issuing grading/building permits. Verify compensation after decommissioning and reclamation activities.</p>
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	<p>BIO-17a: Compensate for the loss of special-status species, including golden eagles, by contributing to conservation efforts</p> <p>The Secretary of the Interior issued Order 3330 on October 31, 2013, outlining a new approach to mitigation policies and practices of the Department of the Interior. This approach recognizes that certain strategies aimed at some species can provide substantial benefit to others and to the ecological landscape as a whole. The landscape-scale approach to mitigation and conservation efforts is now central to the Department's mitigation strategy. Although the Order was intended for use by federal agencies and as such is not directly applicable to the County, it is evident that such an approach would likely have the greatest mitigation benefits, especially when considering ongoing and long-term impacts from wind energy projects.</p> <p>With these considerations in mind, the County has outlined some options that are currently available to compensate for impacts on raptors including special-status species. The options discussed below are currently considered acceptable approaches to compensation for impacts on raptors, in lieu of or in conjunction with Mitigation Measure 17. Although not every option is appropriate for all species, it is hoped that as time proceeds, a more comprehensive landscape-level approach to mitigation will be adopted to benefit a broader suite of species than might benefit from more species-specific measures. The County recognizes that the science of raptor conservation and the understanding of wind-wildlife impacts are continuing to evolve and that the suite of available compensation options may consequently change over the life of a project.</p> <p>To promote the conservation of raptors, the project proponent may compensate for special-status species raptor fatalities estimated within their project area. The project proponent shall submit for County approval a Special-Status Species Mitigation Plan outlining the estimated number of special-status species fatalities based on the type or types of compensation options to be implemented. The Project proponent will use the Special-Status Species Mitigation Plan to craft an appropriate strategy using a balanced mix of the options presented below, as well as considering new options suggested by the growing body of knowledge during the course of the project lifespan, as supported by a Resource Equivalency Analysis (REA) or similar type of compensation assessment acceptable to the County that demonstrates the efficacy of proposed mitigation for impacts on special-status species. The REA process and an example are included in Appendix G.</p> <p>REA is an approach to estimate quantitatively the amount of compensatory mitigation that is needed to mitigate impacts on raptors from windfarm operations. The USFWS would use the REA to evaluate the mitigation requirements for golden eagles (USFWS, 2013), but it may also be useful in evaluating the mitigation needs of other species.</p> <p>The County Planning Director, in consultation with the TAC, will consider, based on the REA, whether the proposed Special-Status Species Mitigation Plan is adequate, including consideration of whether each Special-Status Species Mitigation Plan</p>	<p>Compensation measures as detailed in an approved Special-Status Species Mitigation Plan must be implemented within 60 days of the permit approval.</p>	<p>Project Applicant</p>	<p>Reviewing Party The County Planning Director, in consultation with the TAC.</p> <p>Criteria The County Planning Director, in consultation with the TAC, will consider, based on the REA, whether the proposed Special-Status Species Mitigation Plan is adequate.</p> <p>Monitoring Action Require measure as part of issuing grading/building permits. Verify compensation after decommissioning and reclamation activities.</p>
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	<p>incorporates a landscape-scale approach such that the conservation efforts achieve the greatest possible benefits. Compensation measures as detailed in an approved Special-Status Species Mitigation Plan must be implemented within 60 days of the permit approval. Special-Status Species Mitigation Plans may be revised—and will be reviewed by the County.</p> <ul style="list-style-type: none"> • Obtaining a programmatic eagle take permit (ETP) and carrying out measures outlined in an approved Eagle Conservation Plan and Bird and Bat Conservation Strategy. The Project proponent may elect to apply for programmatic eagle take permits from USFWS. The programmatic eagle take permit process currently involves preparation of an Eagle Conservation Plan (ECP) and a Bird and Bat Conservation Strategy (BBCS). The ECP specifies avoidance and minimization measures, advanced conservation practices, and compensatory mitigation for eagles—conditions that meet USFWS’s criteria for issuance of a permit. The BBCS outlines measures being implemented by the applicant to avoid and minimize impacts on migratory birds, including raptors. If programmatic eagle take permits are obtained by the project proponent, those permit terms, including the measures outlined in the approved ECP and BBCS, may constitute an appropriate conservation measure for estimated take of golden eagles and other raptors, including special-status species, provided such terms are deemed by the County to be comparable to or more protective of raptors than the other options listed herein. These measures are optional and voluntary, but may be accepted in lieu of some or all of the required power pole retrofits required by Mitigation Measure BIO-17, if the applicant chooses to implement Mitigation Measure BIO-17a. The option of obtaining an ETP would require the applicant to receive USFWS approval of its ECP, not merely applying for the ETP. • Contribute to regional conservation of raptor habitat. The project proponent may address regional conservation of raptor habitat by funding the acquisition of conservation easements within the APWRA or on lands in the same eco-region outside the APWRA, subject to County approval, for the purpose of long-term regional conservation of raptor habitat. Lands proposed for conservation must be well-managed grazing lands similar to those on which the projects have been developed. The project proponent will fund the regional conservation and improvement of lands (through habitat enhancement, lead abatement activities, elimination of rodenticides, and/or other measures) using a number of acres equivalent to the conservation benefit, as determined through a project-specific REA. The conservation easements will be held by an organization whose mission is to purchase and/or otherwise conserve lands, such as The Trust for Public Lands, The Nature Conservancy, California Rangeland Trust, or the East Bay Regional Parks District. The project proponent will obtain approval from the County regarding the amount of conserved lands, any enhancements proposed to increase raptor habitat value, and the entity holding the lands and/or conservation easement. The REA must be completed and approved within six (6) months of the CUP approval and acquisition of conservation 			
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	<p>easements be completed within twelve (12) months of the CUP approval. The REA must be accepted by the USFWS and the County.</p>			
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APPENDIX G

RESOURCE EQUIVALENCY ANALYSIS FOR A TYPICAL WIND ENERGY PROJECT IN THE ALTAMONT PASS WIND RESOURCE AREA, ALAMEDA COUNTY

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Appendix C3

**An Example Resource Equivalency Analysis for a Typical
Wind Energy Project in the Altamont Pass Wind
Resource Area, Alameda County**

An Example Resource Equivalency Analysis for a Typical Wind Energy Project in the Altamont Pass Wind Resource Area, Alameda County

Introduction

ICF International (ICF) developed this example Resource Equivalency Analysis (REA) as an approach to estimate quantitatively the amount of compensatory mitigation that is needed to mitigate impacts on raptors from windfarm operations. The REA is based on the approach used by the U.S. Fish and Wildlife Service (USFWS) to evaluate the mitigation requirements for golden eagles (U.S. Fish and Wildlife Service 2013). In this paper we provide background information on the REA process, methods, results, and conclusion for a sample wind project in the Altamont Pass Wind Resource Area (APWRA). USFWS's REA is based on a modeling approach used in natural resource damage assessment as a way to ensure that environmental impacts are mitigated, and as a tool to account for environmental debits and credits with respect to fatalities and mitigation. Additional information on USFWS's model can be found in *Eagle Conservation Plan Guidance [ECP Guidance], Appendix G. Examples Using Resource Equivalency Analysis to Estimate Compensatory Mitigation for the Take of Golden and Bald Eagles from Wind Energy Development* (U.S. Fish and Wildlife Service 2013).

Resource Equivalency Analysis Background

REA is a method of determining compensation using non-monetary metrics. REA, habitat equivalency analysis, habitat evaluation procedures, and other quantitative tools have been used for years to evaluate ways to mitigate environmental impacts and select among various preferred mitigation alternatives. REAs were first used in the late 1990s for an oil-spill Natural Resource Damage Assessment (NRDA) case on the North Cape of Rhode Island (Sperduto et al. 1999, 2003). They have subsequently been used for a variety of other resources, including resources as varied as marbled murrelets and coral reefs. The use of REAs is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act; the Oil Pollution Act; and California's Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Government Code Section 8670 et seq.). These regulations authorize trustee agencies to seek monetary compensation for injured natural resources (National Oceanic and Atmospheric Administration 1995). REA has also been internationally adopted by the European Union for addressing a full range of environmental liabilities (Cole & Kriström 2008).

A recent opinion paper by Cole (2011) advocates the use of REA as a method to specify appropriate types and amounts of compensation at windfarms. Additionally, USFWS recently provided REA examples in its ECP Guidance (U.S. Fish and Wildlife Service 2013:Appendix G) to illustrate the calculation of compensatory mitigation for the annual loss of bald and golden eagles caused by windfarm operations. USFWS's REA model is provided in a spreadsheet format. Inputs to the model include maximum lifespan, age of first reproduction, number of years females reproduce, productivity, age distribution of birds killed, productivity of mitigation, and a discount rate (i.e., the

rate used in calculating the present value of expected yearly benefits and costs – 3%). This information is used to calculate direct losses, indirect losses, generational impacts, debits, productivity of mitigation, and credits owed. Based on these inputs, the model calculates the total debit in bird-years¹ associated with a specific timeframe. Additionally, USFWS’s REA example notes that the REA metric of bird-years lends itself to consideration of other compensatory mitigation options, and implies that with enough reliable information, any compensatory mitigation that directly leads to an increased number of birds could be considered for compensation within the context of the REA (U.S. Fish and Wildlife Service 2013:Appendix G). The result of the REA is a comparison of the debit in bird years from the impact with the suggested benefit in bird years from the mitigation (i.e., the model demonstrates that the debits and the credits are equal).

Methods

We adjusted USFWS’s golden eagle REA to include information specific to red-tailed hawks, burrowing owls, and American kestrels. These species were selected because they have been identified as *focal species* by Alameda County and other parties for the purposes of managing raptor impacts in the APWRA. The general rationale for using these species as focal species is that they are susceptible to turbine-related fatalities in significant numbers and they occupy ecological niches similar to those of many of the raptors in the region; consequently, management for these focal species could be expected to have benefits for other raptors and other migratory birds. The inputs used in the red-tailed hawk REA are listed in Table 1, the inputs used in the burrowing owl REA are listed in Table 2, and the inputs used in the American kestrel REA are listed in Table 3.

Table 1. REA Inputs to Develop a Framework of Compensatory Mitigation for Potential Take of Red-Tailed Hawk (RTHA) from Wind Energy Development in the APWRA

Parameter	REA Input	Reference
Start year	2015	Start of impact; expected to be 2015 for repowering program.
Estimated take (per year)	22	Estimated in PEIR based on Vasco monitoring results. Estimate to be adjusted in subsequent years following monitoring under Mitigation Measure BIO-11g. Estimate provided is for a “typical” 80 MW project such as Golden Hills.
Average maximum lifespan	25	Preston and Beane 2009.
Age distribution of birds killed at wind facilities (based on age distribution of RTHA population)	0–1=30% 1–4=45% 4+=25%	Preston and Beane 2009.
Age start reproducing	2+(age class 2–3)	Preston and Beane 2009.

¹ A *bird-year* refers to all ecological services provided by one bird for 1 year.

Parameter	REA Input	Reference
Expected years of reproduction	23	Years of reproduction is based on the maximum lifespan minus the age at which RTHA starts reproducing. Preston and Beane 2009.
% of adult females that reproduce annually	84%	Preston and Beane 2009.
Productivity (mean number of individuals fledged per occupied nest annually)	1.4	Preston and Beane 2009. Productivity varies across the country; several values are 1.4, including productivity in Montana. A CDFW study of the Los Banos Wildlife Area in California showed productivity of 2.1 (Schaap 2007).
Year 0–1 survival	61%	Estimated from literature.
Year 1–2 survival	79%	Estimated from literature.
Year 2–3 survival	79%	Estimated from literature.
Year 3–4 survival	79%	Estimated from literature.
Year 4+ survival	90.90%	Estimated from literature.
Relative productivity of mitigation (conservation and enhancement of lands resulting in additional survivorship)	0.10 birds/acre/year	Estimated as described below.
Number of years of avoided loss from mitigation	30	Requirement under MM BIO-11h is that conservation lands would be preserved in perpetuity. A 30-year conservation benefit is assumed.
Discount rate	3%	A 3% discount rate is commonly used for valuing lost natural resource services (Lind 1982; Freeman 1993; National Oceanic and Atmospheric Administration 1999; court decisions on NRDA cases).

Table 2. REA Inputs to Develop a Framework of Compensatory Mitigation for Potential Take of Burrowing Owl (BUOW) from Wind Energy Development in the APWRA

Parameter	REA Input	Reference
Start year	2015	Start of impact; expected to be 2015 for repowering program.
Estimated take (per year)	5	Estimated in PEIR based on Vasco monitoring results. Estimate to be adjusted in subsequent years following monitoring under Mitigation Measure BIO-11g. Estimate provided is for a “typical” 80 MW project such as Golden Hills. Estimate rounded up from 4.4.
Maximum lifespan	8	Poulin et al. 2011. Longevity record based on banding data is 8 years.

Parameter	REA Input	Reference
Age distribution of birds killed at wind facilities (based on age distribution of BUOW population)	0-1=50% 1+=50%	Unknown. An even age distribution of juveniles and adults was assumed.
Age start reproducing	1	Poulin et al. 2011 (actual is 10 months).
Expected years of reproduction	7	Years of reproduction is based on the maximum lifespan minus the age at which BUOW starts reproducing. Poulin et al. 2011.
% of adult females that reproduce annually	100%	Unknown. Assumed all adult females breed annually.
Productivity (mean number of individuals fledged per occupied nest annually)	4.5	Poulin et al. 2011. Productivity varies across country from 1.6 to 7.4. Selected median of 4.5.
Year 0-1 survival	30%	Poulin et al. 2011 notes 30% survival rate for juveniles in southern California.
Year 1-2 survival	81%	Poulin et al. 2011 notes 81% survival rate for adults in southern California.
Year 2-3 survival	81%	Poulin et al. 2011 notes 81% survival rate for adults in southern California.
Year 3-4 survival	81%	Poulin et al. 2011 notes 81 % survival rate for adults in southern California.
Year 4+ survival	81%	Poulin et al. 2011 notes 81 % survival rate for adults in southern California.
Relative productivity of mitigation (conservation and enhancement of lands resulting in additional survivorship)	0.10 birds/acre/year	Estimated as described below.
Number of years of avoided loss from mitigation	30	Requirement under MM BIO-11h is that conservation lands would be preserved in perpetuity. A 30-year conservation benefit is assumed.
Discount rate	3%	A 3% discount rate is commonly used for valuing lost natural resource services (Lind 1982; Freeman 1993; National Oceanic and Atmospheric Administration 1999; court decisions on NRDA cases).

Table 3. REA Inputs to Develop a Framework of Compensatory Mitigation for Potential Take of American Kestrel (AMKE) from Wind Energy Development in the APWRA

Parameter	REA Input	Reference
Start year	2015	Start of impact; expected to be 2015 for repowering program.
Estimated take (per year)	26	Estimated in PEIR based on Vasco monitoring results. Estimate to be adjusted in subsequent years following monitoring under Mitigation Measure BIO-11g. Estimate provided is for a "typical" 80 MW project such as Golden Hills. Estimate rounded from 26.3.
Average maximum lifespan	11	Smallwood and Bird 2002.
Age distribution of birds killed at wind facilities	0-1=57% 2-11=43%	Calculated proportion of population in each age class from survival rates and assumed they would be killed in proportion to availability.
Age start reproducing	1	Smallwood and Bird 2002.
Expected years of reproduction	10	Years of reproduction is based on the maximum lifespan minus the age at which BUOW starts reproducing. Smallwood and Bird 2002.
% of adult females that reproduce annually	80%	Estimated.
Productivity (mean number of individuals fledged per occupied nest annually)	3.1	Smallwood and Bird 2002.
Year 0-1 survival	62.9%	Smallwood and Bird 2002.
Year 1-2 survival	57.1%	Smallwood and Bird 2002.
Year 2-3 survival	57.1%	Smallwood and Bird 2002.
Year 3-4 survival	57.1%	Smallwood and Bird 2002.
Year 4+ survival	57.1%	Smallwood and Bird 2002.
Relative productivity of mitigation (conservation and enhancement of lands resulting in additional survivorship)	0.10 birds/acre/year	Estimated as described below.
Number of years of avoided loss from mitigation	30	Requirement under MM BIO-11h is that conservation lands would be preserved in perpetuity. A 30-year conservation benefit is assumed.
Discount rate	3%	A 3% discount rate is commonly used for valuing lost natural resource services (Lind 1982; Freeman 1993; National Oceanic and Atmospheric Administration 1999; court decisions on NRDA cases).

In addition to the life history factors, the key assumptions related to the REA are (1) the expected annual fatalities, (2) the relative benefits of the mitigation, (3) the years of benefit/avoided loss from the mitigation, (4) the start year of the fatalities, and (5) the start year of the mitigation. The

expected fatality rate was determined using the methods described in the PEIR, based on the expected rate of red-tailed hawk, burrowing owl, and American kestrel fatalities (birds/MW/year) observed at the Vasco winds project site, extrapolated to a typical 80 MW project.

The relative benefits of the mitigation were estimated by assuming that survival benefits arise from the management of conservation lands, including the removal of rodenticide, eliminating the killing of ground squirrels with lead shot, increasing prey abundance, and other management factors that increase the survival of the focal species. As ground squirrel density and availability is a key element of raptor survivorship and therefore productivity, greater numbers of ground squirrels would be expected to benefit individuals. Additionally, raptors are known to die from secondary poisoning after consuming vertebrate prey that has ingested rodenticides (Mineau et al. 1999); consequently, eliminating toxins will also increase survival. Considering these factors, we assumed that these management actions and the conservation of lands would result in a productivity increase (resulting in additional RTHA, BUOW, and AMKE in the environment) of 0.1bird per acre of habitat managed. Such quantification is difficult based on the currently available scientific literature; however, we believe these assumptions to be reasonable metrics that could be updated as new information becomes available in the future.

The period over which the mitigation would provide benefits was assigned a 30-year duration. Although the conserved lands would be preserved in perpetuity, the duration of the average life of a wind project was assigned to the duration of mitigation.

Finally, to simplify the example and the interpretation of the results, and considering that projects would be phased over time under the repowering program, the start year of the fatalities and the start year of the mitigation were considered to be the same: 2015.

ICF modified the USFWS golden eagle REA model to approximate the life-history information associated with RTHA, BUOW, and AMKE as described above. In this process we used the variable *acres* needed to result in increased productivity rather than showing the unit of benefit in terms of *poles* retrofitted to result in avoided fatalities and/or loss of productivity.

Results

The results from the red-tailed hawk REA using the inputs described above determine the total lost bird-years from the expected impact (Table 4) and the relative productivity of the mitigation (Table 5). These metrics are used to calculate the compensatory mitigation requirement as shown in Table 6. This calculation endeavors to ensure that the compensatory mitigation provides a credit that is equal to the debit for the expected take.

Table 4. Total Lost Bird-Years

Year	PV ² Bird-Years		
	RTHA	BUOW	AMKE
2015	131.47	13.06	40.14
2016	127.64	12.68	38.97
2017	123.93	12.31	37.84
2018	120.32	11.95	36.74
2019	116.81	11.60	35.67
2020	113.41	11.26	34.63
2021	110.10	10.93	33.62
2022	106.90	10.62	32.64
2023	103.78	10.31	31.69
2024	100.76	10.01	30.77
Total PV Bird-Years	1,155.12	114.71	352.70

Table 5. Relative Productivity of Conserving/Enhancing 1 Acre

Year	PV Bird-Years/Conserved Acre		
	RTHA	BUOW	AMKE
2015	0.598	0.178	0.154
2016	0.580	0.173	0.150
2017	0.563	0.168	0.146
2018	0.547	0.163	0.141
2019	0.531	0.158	0.137
2020	0.515	0.153	0.133
2021	0.500	0.149	0.129
2022	0.486	0.145	0.126
2023	0.472	0.140	0.122
2024	0.458	0.136	0.118
2025	0.445	0.132	0.115
2026	0.432	0.128	0.112
2027	0.419	0.125	0.108
2028	0.407	0.121	0.105
2029	0.395	0.118	0.102
2030	0.384	0.114	0.099
2031	0.372	0.111	0.096
2032	0.362	0.108	0.093
2033	0.351	0.104	0.091

² PV = Present Value- within the context of a Resource Equivalency Analysis (REA), refers to the value of debits and credits based on an assumed annual discount rate (3%). This term is commonly used in economics and implies that resources lost or gained in the future are of less value to us today.

Year	PV Bird-Years/Conserved Acre		
	RTHA	BUOW	AMKE
2034	0.341	0.101	0.088
2035	0.331	0.098	0.085
2036	0.321	0.096	0.083
2037	0.312	0.093	0.081
2038	0.303	0.090	0.078
2039	0.294	0.087	0.076
2040	0.285	0.085	0.074
2041	0.277	0.082	0.072
2042	0.269	0.080	0.070
2043	0.261	0.078	0.067
2044	0.254	0.075	0.066
Total PV Bird-Years	12.064	3.589	3.117

Table 6. Credit Owed for a 10-year Take

	RTHA	BUOW	AMKE	
Total Debit	1,155.12	114.71	352.70	PV Bird-Years
÷ Relative Productivity of Conservation of 1 Acre	12.06	3.59	3.12	Avoided loss of PV bird-years/acre
= Credit owed	95.78	31.96	113.04	Acres to be conserved

The REA for red-tailed hawk indicates that approximately 96 acres of conserved lands (preserved for at least 30 years), managed for red-tailed hawks, would be required to compensate for the loss from 10 years of estimated take (22 birds/year) from a typical 80 MW wind project.

The REA for burrowing owl indicates that approximately 32 acres of conserved lands (preserved for at least 30 years), managed for burrowing owl, would be required to compensate for the loss from 10 years of estimated take (5 birds/year) from a typical 80 MW wind project.

The REA for American kestrel indicates that approximately 113 acres of conserved lands (preserved for at least 30 years), managed for American kestrel, would be required to compensate for the loss from 10 years of estimated take (26 birds/year) from a typical 80 MW wind project.

Detailed calculations are provided in REA spreadsheet models, available for review from Alameda County.

Conclusions

This analysis provides an empirical evaluation of the mitigation that is needed to offset impacts on red-tailed hawk, burrowing owl, and American kestrel using the REA process; however, it should be noted that a variety of assumptions and variable life history information can substantively influence the results provided by the worksheets. Similarly, the expected benefits of the mitigation could vary depending on the specific conditions of the mitigation site. This REA example is intended to be used as a framework, guide, and planning tool for the County and applicants to estimate compensatory mitigation for specific projects. Under this approach, each applicant would input the estimated number of fatalities expected annually to calculate the mitigation needed for that species. If an applicant believes there is additional or more current literature that should be cited, the life history and ecological information could also be updated.

Assuming that a single mitigation site could provide resource values for red-tailed hawk, western burrowing owl, and American kestrel (given that all three species forage, breed, and winter in the region), a single mitigation site of 113 acres could serve as mitigation for all three species. Therefore, in this example, an 80 MW project with projected fatalities of 22 (RTHA), 5 (BUOW) and 26 (MAKE) would require 113 acres of mitigation every 10 years.

References Cited

- Cole, S. G. 2011. Wind Power Compensation Is Not for the Birds: an Opinion from an Environmental Economist. *Restoration Ecology*. 19:2. Available: <http://dx.doi.org/10.1111/j.1526-100X.2010.00771.x>.
- Cole, S. G., and B. G. Krström. 2008. Annex 5: *Discounting*. In: REMEDE Toolkit (see Lipton et al. 2008). Available: http://www.envliability.eu/docs/D13MaintToolkit_and_Annexes/D13MainToolkit.html
- Lind, R. 1982. A Primer on the Major Issues Relating to the Discount Rate for Evaluating National Energy Options. in R. Lind (ed), *Discounting for Time and Risk in Energy Policy*. Washington, DC: Resources for the Future.
- Freeman, A. M. III. 1993. *The Measurement of Environmental and Resource Values: Theory and Methods*. Washington, DC: Resources for the Future.
- Mineau, P., M. R. Fletcher, L. C. Glaser, N. J. Thomas, C. Brassard, L. K. Wilson, J. E. Elliott, L. A. Lyon, C. J. Henny, T. Bollinger, and S. L. Porter. 1999. Poisoning of Raptors with Organophosphorus and Carbamate Pesticides with Emphasis on Canada, US and UK. *Journal of Raptor Research* 33(1):1-37.
- National Oceanic and Atmospheric Administration. 1999. *Discounting and the Treatment of Uncertainty in Natural Resource Damage Assessment*. Technical Paper 99-1. Silver Spring, MD.
- National Oceanic and Atmospheric Administration. 1995. *Habitat Equivalency Analysis: An Overview*. Damage Assessment and Restoration Program. March 21 (Revised October 4, 2000, and May 23, 2006).
- Poulin, R., L. Danielle Todd, E. A. Haug, B. A. Millsap, and M. S. Martell. 2011. Burrowing Owl (*Athene cunicularia*). *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology.

Retrieved from the Birds of North America Online:
<http://bna.birds.cornell.edu/bna/species/061doi:10.2173/bna.61>

Preston, C. R., and R. D. Beane. 2009. Red-tailed Hawk (*Buteo jamaicensis*). *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/052doi:10.2173/bna.52>

Schaap, M. 2007. Raptor Nest Monitoring on the Los Banos Wildlife Area Complex, 2006–2007. September. Final Report. Publication #34. Los Banos, CA: California Department of Fish and Game, Resource Assessment Program.

Smallwood, J. A., and D. M. Bird. 2002. American Kestrel (*Falco sparverius*). *The Birds of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/602doi:10.2173/bna.602>

Sperduto, M.B., S.P. Powers., M. Donlan. 2003. Scaling Restoration to Achieve Quantitative Enhancement of Loon, Seaduck, and other Seabird Populations. *Marine Ecology Progress Series* 264:221–232.

U.S. Fish and Wildlife Service. 2013. *Eagle Conservation Plan Guidance. Module 1- Land-based Wind Energy Version 2*. April.

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