

NOTES | 12/11/2014 Conference Call**Altamont Pass Wind Resource Area Scientific Review Committee**

Prepared by the Center for Collaborative Policy

Reviewed and approved by the SRC

All 5 SRC Members Present**Discussion Topics**

- SRC Input on AWI Draft Supplemental Environmental Impact Report
- Update on Background Mortality Special Study
- USGS Altamont Analysis Information

Next In-Person Meeting

July 7-8, 2015 timeframe [set post-meeting]

Action Items

Party	Due Date	Action
Facilitator	ASAP	Reorganize SRC consensus comments on AWI Permit Extension DSEIR and include concluding paragraph
Facilitator	1/2/15	Submit SRC consensus comments on AWI DSEIR to Alameda County and consultants
SRC	ASAP	Inform facilitator of availability for May – July 2015 in-person meeting
Facilitator	When known	Work with Shawn Smallwood early to identify availability and agenda item format/logistics for next in-person meeting.

SRC Consensus Input on AWI Permit Extension Draft Supplemental Environmental Impact Report**Related Documents**[P294_ CA Attorney General AWI NOP Letter](#)[P295_ Draft AWI Permit Extension Supplemental EIR](#)[P296_ Alameda County Memo on Questions for AWI DSEIR Review](#)[P297_ SRC Comments on Draft AWI Permit Extension Supplemental EIR](#)[P299_ Power Engs. AWI Draft Supplemental EIR Presentation](#)[P300_ AWI Response to California Attorney General AWI NOP Letter](#)**Introduction**

In 2013, Alameda County approved a Final Environmental Impact Report (FEIR) for a proposal by Altamont Winds, Inc. (AWI) to modify its conditional use permits (CUPs), removing a requirement that it shut down and remove 25% of its turbines by 2013. The proposal at that time included a permit change in which all turbines would be shut down and removed in 2015, rather than a phased shut down and removal of a portion of turbines

extending through 2018. In 2014, AWI submitted an application to the County to again modify its CUPs by proposing an extension of the operational period of all active turbines through October 2018 rather than October 2015. The County's consultant, Power Engineers, developed a Draft Supplemental Environmental Impact Report (DSEIR) to analyze the environmental effects of AWI's proposal (see [P295 Draft AWI Permit Extension Supplemental EIR](#)).

Alameda County asked the SRC to provide consensus comments on whether the DSEIR fully identified avian impacts and whether proposed mitigations related to avian impacts are appropriate and suitable (see [P296 Alameda County Memo on Questions for AWI DSEIR Review](#)). Several SRC members provided individual written comments prior to the meeting, which were summarized in a first version of [P297 SRC Comments on Draft AWI Permit Extension Supplemental EIR](#).

Presentation by Power Engineers on the AWI DSEIR

Chris Knopp of Power Engineers presented an overview of AWI's proposed modifications to its extension of operations in the Altamont Pass Wind Resource Area (APWRA), the need for the Supplemental EIR and its review process, and the proposed DSEIR mitigation measures (see [P299 Power Eng. AWI Draft Supplemental EIR Presentation](#) for the presentation). Additional key points included:

Proposed Project Modifications

- The proposal under evaluation in the DSEIR involves 828 existing turbines (86 megawatt [MW] rated capacity) operating in approximately 155 acres within AWI's project area.
- Additionally, AWI is in negotiations with Green Ridge Power LLC, which currently shares common infrastructure with AWI, regarding a wind turbine exchange to geographically consolidate operations. AWI wants to exchange approximately 300 wind turbines that it presently owns south of Interstate 580 for an equal number of turbines located north of I-580 owned by Green Ridge Power LLC.

Relationship between Draft Supplemental EIR and Previous EIR

- The 2013 FEIR included an alternative, Alternative 3, considering permanent shutdown in 2018, consistent with the proposed modification. However, the county concluded that it had a limited level of analysis of impacts, and therefore a supplemental EIR would be required to adequately analyze potential impacts of the proposed modified project.

DSEIR Analyses

- The DSEIR includes more current adjusted avian fatality rates per MW per year, provided by the 2005-2011 bird year monitoring results in the 2014 APWRA Repowering Program EIR, in addition to the results published in the 2013 FEIR.
- The DSEIR estimates that extended operations would contribute a maximum additional 182.4 MW during the 2016-2018 bird years for a total of 311 MW from 2013 to 2018.
- If the turbines continue to operate from 2016-2018, the projected ranges of focal species fatalities are approximately 81 to 108 American kestrels, 78 to 142 burrowing owls, 11 to 16 golden eagles, and 52 to 82 red-tailed hawks.
- As part of the turbine exchange, AWI would trade up to 21 of its high-risk turbines (rated 8.5 or higher) for 6 Green Ridge high-risk turbines. AWI would also exchange

- its twenty 250 kW turbines for twenty 100 kW turbines, which would reduce the aggregate operating capacity by 5.3 MW over 3 years.
- Even with mitigation, the DSEIR concluded that CUP extension to 2018 would result in significant and unavoidable adverse impacts on both common and special-status avian species, including the four focal species, burrowing owls, American kestrels, red-tailed hawks, and golden eagles.

Proposed Mitigation Measures

- The DSEIR includes two mitigation measures from the 2013 EIR: BIO-16, which retains the winter seasonal shutdown, and BIO-17, a program to retrofit power poles consistent with USFWS guidance.
- The DSEIR also provides a suite of alternative mitigation concepts (MM Bio-17a), initially outlined in the county's 2014 programmatic repowering EIR, that could reduce, but would not eliminate, the effects of the proposed project through contributions towards conservation and rehabilitation efforts. These include implementing measures that will be outlined in an approved Eagle Conservation Plan or Bird and Bat Conservation Strategy; contributing to raptor recovery or conservation efforts, or other conservation measures identified in the future that were not explicitly specified in the DSEIR.

Draft Supplemental EIR Process Schedule

- Members of the public can comment on the DSEIR until January 2, 2015.
- The County and Power Engineers staff are expected to prepare the Final Supplemental EIR by January 12, 2015, for consideration by the East County Board of Zoning Adjustments on January 22, 2015.

SRC Discussion

SRC members raised the following points in discussion:

- Does the exchange include any strings of taller turbines and any strings with dual ownership? Multiple owners within a string complicates calculating fatality rates for a single company.
 - Andrew Roth of AWI said AWI currently does not own any tall turbines, but may receive about 7 in the turbine exchange. Emre Ergas of NextEra, which owns the Green Ridge turbines, said that after 2015, all of his company's remaining tall turbines will be shut down. Doug Leslie of the Monitoring Team said his understanding was that one of the reasons for the exchange was to resolve the issue of dual ownership strings.
- The lack of finality of the turbine exchange makes it difficult to determine the specifics of the proposal's impact. Many avian fatalities occur in the exchange area, and there are too many unknowns to make an informed decision.
- The number of projected golden eagle and other focal species fatalities in the DSEIR is unacceptable and inconsistent with the goal of a continued reduction in avian mortality in the APWRA.
- The impact analysis in the DSEIR focused on the extent of mortality that would occur as a result of the operational extension but did not address the biological implications of this mortality on local and regional breeding and migratory populations.

- Some members of the SRC agreed with several of the written comments submitted by other organizations (e.g., US Fish and Wildlife Services and the Audubon Society) that oppose the modified project proposal.
- Several SRC members were concerned about the CUP modifications and the repowering timetable. The proposed extension delays full repowering of the APWRA and potentially opens the door for other similar repowering delays.
- Proposed mitigation measures are uncertain, unclear, and are insufficient to fully offset impacts to focal and other avian species resulting from the proposed operational extension. The lack of specificity ignores the need for a nexus between impact and mitigation and provides no indication of efficacy.

SRC members discussed whether it was appropriate for the SRC to comment on the application for the proposed modified project. While some said the SRC should make a concluding statement that it does not support the project application, others said commenting on the application seems more policy-related rather than science-related. County staff said the SRC can comment on the application as part of its advisory role to the Planning Director. The SRC then agreed they wanted the above comments brought forward.

Public Comment

There were no comments from the public.

SRC Consensus on Comments on the AWI Draft SEIR

1. The SRC agreed that the individual comments submitted prior to the meeting accurately represented the SRC's collective views.
2. Individual SRC comments should be submitted as a compiled, consensus document for the DSEIR public review, subject to reorganization by topic and minor clarification edits.
3. The SRC agreed on the following conclusion statement to be added to the compiled consensus comments from the SRC (subject to minor edits):
 - 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 fatalities are likely underestimated, and 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.

Next Steps

- The Facilitator will update P297 per SRC input and recirculate among SRC for clarifying edits, then submit the final version of P297 to Alameda County by January 2, 2015.

Update on Background Mortality Special Study Design

Related Documents

[M105 Background Mortality Draft Study Plan](#)

Background

The Alameda County Board of Supervisors instructed County staff to limit the 2014-15 avian fatality monitoring program to \$250,000. Additionally, several repowering projects will likely begin in spring 2015. Given these budget and time constraints, the SRC had discussed several potential studies and their benefits, and they ultimately recommended a focused background mortality study on non-turbine-related fatalities. At the July SRC conference call meeting, the SRC agreed that the Monitoring Team would finalize the project study design with the aid of an analysis subcommittee (comprised of SRC members Mike Morrison and Julie Yee and Monitoring Team project manager Doug Leslie) and begin implementation in the fall. The goal of the agenda item was to update the SRC on the special study's progress to date.

Introduction

Doug Leslie said the Monitoring Team conducted several clearing searches since November 1. The Monitoring Team found many old fatalities, including at non-turbine sites. He added that most of the non-turbine sites are where turbines previously existed but were removed. The Monitoring Team also found two fresh fatalities at non-turbine areas – a burrowing owl and a varied thrush (a new species sighting for APWRA).

SRC Discussion

In response to SRC questions, Doug Leslie said that the fresh burrowing owl fatality consisted mostly of feathers but also had some bone attached.

Public Comment

There were no comments from the public.

Next Steps

- The Monitoring Team will continue to conduct the background mortality study.

Information: USGS Altamont Analysis

Related Documents

[P298 USGS Leslie New Altamont Data and Models Summary](#)

Background/Introduction

Dr. Leslie New of USGS provided an overview of her preliminary work on estimating eagle fatalities in the U.S. at wind facilities and developing a golden eagle population model. The initial model runs helped identify factors that may significantly contribute to wind turbine-related eagle fatalities (e.g., search methods, turbine characteristics, site characteristics, and weather). She also examined the interaction between variables (e.g., rain and wind interacting with the turbine site characteristics). Preliminary model runs found significant effects in certain variables such as power type and interaction between rain and wind.

Dr. New said she has received some comments from Monitoring Team and SRC members, some of which alerted her to issues with the data (such as what constitutes a valid fatality). She will run more model queries after she corrects the fatality data inputs. Additionally, she is working to calculate more specific weather data, as current data are very coarse. She

welcomes additional feedback. SRC member Julie Yee of USGS offered to be a liaison between Dr. New and anyone interested in the eagle population model.

Open Discussion

Several people said relating fatalities to weather data will be very complex.

Joe Platt of Power Engineers said the weather data for the carcass find date are irrelevant to the actual death date. Dr. New acknowledged that is a major issue, and her team is exploring several approaches to ascertain the most accurate weather data for the death date.

An SRC member said the APWRA data lack specific metrics to sufficiently capture weather impacts on birds. For example, the weather recording devices cannot distinguish different weather conditions between hill ridges. Dr. New said that USGS included weather in the model analyses because the scientific literature often mentions weather as a potential issue, and the preliminary model runs consistently identified weather as a significant variable. She also said that the model, once it is refined, can help identify significant factors affecting birds, such as if birds are more susceptible to wind turbine fatalities above a specific wind speed, which may inform management decisions.

Brian Karas of the Monitoring Team said some fatalities have more definitive death dates. He suggested finding specific weather data for these fatalities with precise death dates.

In response to an SRC member's question, Dr. New said she used a frequentist approach rather than a Bayesian because the data appeared to lack sufficient prior information to inform certain parameters (i.e., Bayesian approach). The SRC member suggested trying a Bayesian approach to the model for scenarios with more definitive information. Dr. New and the SRC member decided to continue this discussion offline.

Meeting Summaries Review and Approval

Related Documents

[P291 SRC Meeting Summary June 2014](#)

[P292 SRC Call Notes 7-9-14](#)

This agenda item was postponed due to lack of time.

Wrap Up and Next Steps

Next Steps

- The facilitator will poll the SRC regarding availability for the next in-person meeting, expected in the May - July 2015 timeframe.
- The facilitator will work with NextEra scientific consultant Shawn Smallwood early to identify his availability to present his research at the next SRC meeting, and will work with him on agenda item format and logistics.

Next In-person Meeting: May-July 2015

Tentative Topics:

- Review draft 2005-2013 Monitoring Report
- Review Background Mortality Special Study Report
- Update on NextEra burrowing owl studies by Shawn Smallwood

ATTENDEES

SRC

Joanna Burger
Jim Estep
Michael Morrison
Sue Orloff
Julie Yee

Consultants

Doug Leslie
Brian Karas

Identified Public

Kim Brown, Ventus Environmental Solutions
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