



**ALAMEDA COUNTY COMMUNITY DEVELOPMENT
AGENCY
PLANNING DEPARTMENT**

Decision of the Planning Director

Determination of 50% fatality reduction in the Altamont Pass Wind Resource Area (APWRA) and Adaptive Management Plan Requirements

Planning File Name(s): C-8161, C-8201, C-8203, C-8233, C-8234, C-8235, C-8236, C-8237, C-8238, C-8239, C-8241, C-8244, C-8023, C-8036, C-8037, C-8134, C-8136, C-8137, C-8173, C-8182, C-8225, C-8231, C-8232, C-8240, C-8263, C-8243

Lead County Staff:

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Location/Zoning/General Plan Land Use Designation:

Parcels located in the APWRA where wind turbines are owned beneficially solely by EDF (formerly enXco) or Forebay Wind/FloDesign Wind Turbine (formerly SeaWest Power Resources, LLC). Parcels are designated as Large Parcel Agriculture under the *East County Area Plan* and Agriculture under the County Zoning Ordinance.

Relevant Dates:

On November 13, 2003 and on January 29, 2004, the East County Board of Zoning Adjustments (EBZA) approved CUPs for the continued maintenance and operation of wind turbines in APWRA. On September 22, 2005, the Alameda County Board of Supervisors (County) upheld the EBZA decision with inclusion of several conditions. A lawsuit was filed against the County to set aside the issuance of the CUPs. After extensive negotiations, a Settlement Agreement was agreed to in November 2006. On January 11, 2007, the County modified the CUPs of the Settling Party wind companies consistent with the terms of the Settlement Agreement. In October 2007, the Settlement Parties began mediation, and Agreed to Terminate Mediation in October 2008. On March 10, 2011, the EBZA modified the Conditional Use Permits to incorporate conditions from the widely discussed Adaptive Management Plan.

Background:

The Adaptive Management Plan (AMP), adopted pursuant to Condition 7 of the 26 amended Conditional Use Permits (CUPs) modified by Resolution R-2007-111, states that the Scientific Review Committee (SRC) shall make the determinations as to whether a 50% reduction in raptor mortality had been achieved by the dates in the Section 6 of the AMP. Section 6 (c)(ii) and (iii) of Exhibit G-1.a Addendum for Settling Parties states, in part, the following:

(ii) SeaWest. If and only if by September 30, 2012, a 50% reduction in raptor mortality is not achieved, SeaWest shall have ceased operation of and permanently removed 25% of its Applicable Turbines by February 15, 2013.

(iii) enXco. If and only if by September 30, 2012, a 50% reduction in raptor mortality is not achieved, SeaWest shall have ceased operation of and permanently removed 25% of its Applicable Turbines by February 15, 2013.

On December 5, 2012, at the SRC in-person meeting, the SRC reviewed and commented on the *Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years 2005-2010 (M87)* monitoring report. The report concluded that there is strong evidence of a reduction in raptor fatalities in the APWRA since 2005 and that some metrics indicate that the 50% reduction in focal species fatalities has been achieved.

SRC Recommendations:

Under the Adaptive Management Plan, the SRC is to determine whether, by September 2012, there has been a 50% reduction in avian mortality in the Altamont Pass Wind Resource Area, compared to baseline.

Under the Adaptive Management Plan, a finding that the 50% was not achieved would have required two wind companies to remove additional turbines from their operations.

Three SRC members agreed that a 50% reduction had occurred, and based their decision on the Monitoring Team's final 2005-2010 Bird Fatality Report, which found that there was a 51% reduction in fatalities of four focal raptor species in the last three years of monitoring (2008-2010) compared to first three years of monitoring data (2005-2007). These members also considered an adjustment developed by SRC Member Julie Yee for a bleed-through bias in the data which resulted in a calculation of a 52% avian mortality reduction.

Two SRC members were unwilling to support a "yes" finding on the 50% question. They expressed concern about wide confidence intervals in analyses to date; that the fatality trend was increasing since 2008 with 2010 fatality reduction below 50%; whether the 2010 uptick might continue as a trend; and whether unusually high mortality in 2006 might have had too strong of an influence on the final 50% reduction calculation. One SRC member also disagreed with the three-year rolling average method of analysis used. One disagreeing SRC member noted that he was not a committee member when the decision was made to use the moving average.

All SRC members agreed that:

- There is great scientific uncertainty around avian mortality in the Altamont and wide confidence intervals in data;

- Viewing 2011-12 bird year data will be important to gain information on the trend after the 2010-11 bird year;
- The Monitoring Team should calculate the 50% as well using only the 60% of turbines that have been consistently monitored since 2005 (core), in case a new rolling panel monitoring design started in 2010 introduced complications into the data.

After extensive discussion, the SRC was not able to reach a consensus on the 50% reduction question.

- Three SRC members agreed that the 50% reduction in fatalities had been achieved.
- One member disagreed that the 50% reduction had been achieved.
- A fifth SRC member stood aside, meaning disagreement with the majority but indicating a willingness not to block the SRC from moving forward.

As described under the SRC Charter, the less-than-100%-consensus recommendation is to be forwarded to Alameda County with a full explanation of the areas of disagreement, as described in the attached Key Outcomes.

Public Comment:

Audubon representatives from the Golden Gate and Santa Clara Chapters expressed that 50% mortality rate reduction should be continued to be met and not be a one-time requirement. Concerns regarding the quality of the data were expressed; however, they would defer to the SRC members' confidence in the decision.

Wind company representatives generally stated that there are more turbine removals that are not part of the current data analysis which will contribute to the downward trend of fatalities and it is important to look for long-term cycles.

Shawn Smallwood, the scientist who is conducting the FloDesign research study, said that if the SRC determined the 50% reduction was not achieved, removal of the turbines would change the environment, and potentially cause the research study and monitoring efforts to be open to criticism.

Heather Beeler with the US Fish and Wildlife Service said there are a lot of complications in making the determination, and the Fish and Wildlife Service is very interested in Shawn Smallwood's study.

Evaluation:

The following evaluation includes the review of the SRC December 5th in-person meeting outcomes as noted above, the SRC January 16th conference call discussion on additional 60% core turbine analysis, data related to turbine removals, the effects of removing an additional 25% of the wind turbines owned by EDF and FloDesign Wind, and the continuation of avian fatality monitoring.

SRC Discussion. In 2010, the SRC recommended a new monitoring program, three-year rotating panel design, and a new baseline, which was supported by the Settling Parties. The three-year rotating panel design allowed for a way to reduce costs, retain statistical power and continue providing a good estimate of annual fatality rates. At the same time, the recommended new baseline (2005-2008) is considered to have had similar fatality conditions as the original baseline period (1998-2003), and the recommended new baseline does not rely on assumptions about the uneven sampling in the original baseline study. Four of the five current SRC members took part in the review and development of the new monitoring program.

Three SRC members agreed that the 50% reduction in fatalities had been achieved based on the new monitoring program. However, the members that felt the 50% reduction had not yet been achieved questioned whether a new design in the monitoring program might have introduced bias into the analysis. As a result, the SRC had asked the Monitoring Team to conduct an analysis comparing the 60% core or fixed turbines to the entire sample of turbines, to determine if the results were different. Subsequently, the SRC discussed the Monitoring Team analysis on January 16th and agreed that the data provided by the monitoring team does not indicate a larger problem with the new rotating panel design, and it helps clarify some uncertainty.

Data Related to Turbine Removals. The monitoring data in the Final 2010 Bird Year Report include data from 2005 through 2010 Bird Years. EDF had removed 42 turbines in the 2011 Bird Year, which is not part of the current analysis and should contribute to the continued downward trend in fatalities. In addition, the FloDesign Wind research study will prompt the removal of 80 old generation wind turbines in the coming year that should further augment the reduction in avian fatalities.

Implications of Removing Wind Turbines. The two wind companies, EDF (enXco) and Forebay Wind (FloDesign/SeaWest), must remove 25% of their turbines in the APWRA if a 50% reduction in avian mortality is not achieved. To reach 25%, EDF must remove a total of 195 wind turbines. EDF has removed 179 to date, and would need to remove only 16 more to achieve the 25%. In addition, EDF will be required to remove hazardous turbines ranked HRT 8.0 with related Golden Eagle fatalities, which will result in three more turbines to be removed. On the other hand, Forebay Wind must remove 135 turbines to reach 25%. The company has removed 42 turbines to date, so it would be required to remove another 93 turbines. As noted by Shawn Smallwood, the FloDesign research study, funded by the California Energy Commission (CEC – PIER), could be adversely affected by the removal of 93 turbines. The Fish and Wildlife Service is also interested and supportive of the research project.

Monitoring Program. The CUPs/AMP established a monitoring program and a schedule to reach a 50% reduction in avian mortality. The Monitoring Program for old generation turbines will continue during the life of the permits to confirm whether the avian fatalities rates in the APWRA continue their downward trend.

Decision:

Based upon the recommendations, discussions, and available information set forth above, it is concluded that the Conditional Use Permit(s), AMP requirement to attain a 50% reduction in avian mortality has been met. EDF (enXco) and Forebay Wind (FloDesign/SeaWest) are not required to remove additional turbines per Section 6 (c)(ii) and (iii) of Exhibit G-1.a Addendum for Settling Parties.

Appeal Procedures/Expiration:

Any person who is adversely affected or aggrieved by this decision may appeal the decision pursuant to Condition 5 of the 26 amended Conditional Use Permits (CUPs) modified by Resolution R-2007-111 . The Planning Director's decision will become effective unless an appeal is received within 10 days of the date of this decision. In this case, any appeal must be received by March 15, 2013, at the County Planning Department, 224 W. Winton Avenue, Rm. 111, Hayward, 94544, or with the Clerk of the Board, Alameda County Board of Supervisors, Administration Building, 1221 Oak Street, Oakland, 94612.