



# CENTER FOR BIOLOGICAL DIVERSITY

January 10, 2007

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## **Re: Reject the Altamont Pass Settlement Agreement**

Dear Honorable Members of the Board of Supervisors:

The Center for Biological Diversity respectfully requests that the Alameda County Board of Supervisors reject the proposed settlement agreement and draft implementing resolution for the CEQA lawsuits (filed by Golden Gate Audubon Society and Californians for Renewable Energy) challenging the operating permits for existing Altamont Pass wind turbines, and that the Board instead retain the existing permits. This matter is agenda item 8 on the Board's January 11, 2007 agenda.

The Board of Supervisors granted the existing permits on September 22, 2005, after two years of efforts by conservation groups which resulted in addition of permit terms and conditions aimed at reducing avian mortality. The avian terms and conditions, while far from perfect, represented a large step forward toward solving the bird mortality problem at Altamont, and were the product of a very public process extending over a two-year period. The parties are now trying to rush through approval of a settlement agreement which eliminates most of the meaningful avian mortality mitigation measures, with only

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three business days public notice, no time for adequate public review, and no independent scientific analysis.

The settlement agreement is fatally flawed and a giant step backwards for birds at Altamont Pass. Not only does it give away the mitigation measures in the existing permits, but its centerpiece is a so-called “50% mortality reduction” that in actuality will require the companies to reduce mortality by no more than 17%, and possibly not at all.

**I. The Settlement Agreement Discards the Mitigation Measures of the Existing Permits**

**On its face, the proposed settlement agreement eliminates the major mitigation measures in the existing permit terms and conditions that Alameda County and the companies committed to in September 2005.**

**A. Elimination of Mandatory Winter Shutdowns**

So far, the only proven mortality reduction measure at Altamont is the seasonal shutdown of turbines during the winter, when power production is low and raptor mortality is high. In particular, the winter shutdown is the most promising mitigation measure for reducing Red-tailed Hawk mortality, which contributes strongly to overall raptor mortality.

The existing permits require winter turbine shutdowns of 2 months in 2005-06 and 2006-07, 2½ months in 2007-08, 3 months in 2008-09, and 3½ months in 2009-10 and for each year thereafter until the permits expire in 2018.

The settlement agreement eliminates the scheduled 2007-08 increase in the shutdown period from 2 to 2½ months, and eliminates mandatory winter shutdowns entirely after 2007-08. Only if the companies do not agree to a Natural Communities Conservation Plan (NCCP) are the mandatory winter shutdowns restored. There is no requirement to complete an NCCP, or any guarantee that such an NCCP would result in a reduction of avian mortality, if it occurred. The proposed settlement agreement also provides no penalty other than a resumption of wintertime shutdowns if the companies decide not to agree to the NCCP. None of the other existing permit terms and conditions come back into effect.

**B. No Winter Shutdowns, No Permanent Shutdowns of Tiers 1 to 3 for 900 Turbines with Painted Blades and “Control” Turbines**

In addition, the settlement agreement exempts up to 900 turbines in a “blade painting” experiment from both the seasonal winter shutdowns and the Tiers 1 to 3 permanent shutdowns. Blade painting is of dubious value for protecting birds at turbines. Studies of blade painting have shown little if any promise in reducing bird mortality, and painting could just as easily increase as decrease mortality. Even at best, no one believes it can ever amount to more than a marginal reduction in mortality.

Excluding 900 turbines, almost one-third of the turbines of the companies participating in the settlement agreement, from both the winter shutdown and the Tiers 1 to 3 permanent shutdown is a major reduction in mitigation.

**C. The Settlement Agreement Gives the Companies Credit Towards Their Tier 1 And Tier 2 Permanent Shutdown Obligations For Turbines They Shut Down Years Ago For Business Reasons**

Both the existing permits and the settlement agreement require shutdown of Tier 1 and Tier 2 high-risk turbines. Term 5(a)(ii) of the settlement agreement, however, for the first time allows the companies to get credit towards their Tier 1 and Tier 2 obligations for wind turbines removed since May 2002, almost five years ago. This greatly reduces the impact that the permanent shutdown of wind turbines in Tiers 1 and Tier 2 will have on avian mortality.

**D. Elimination Of The Repowering Requirement**

The existing permit terms require repowering of all existing turbines at Altamont by 2018. Repowering is replacing old wind turbines with new, larger, more efficient turbines. A single modern turbine can replace ten or more of the existing obsolete turbines used at Altamont. Repowering would reduce the number of turbines on the landscape, and if implemented using suggested guidelines, would cluster turbines to reduce avian impact areas, site new turbines according to criteria that reduce risk to birds, and raise turbine blades higher off the ground to get the blades above most observed bird flight zones. While the effects of repowering have yet to be confirmed by monitoring data, repowering is believed to hold great potential for significantly reducing avian mortality while maintaining or increasing existing power capacity.

The existing permits require the companies to permanently shut down and repower 10% of their existing turbines by 2009, to shut down and repower an additional 25% of their turbines by 2013, and to shutdown and repower an additional 50% of their turbines (i.e., 85% shutdown in total) by 2015.

The settlement agreement removes any repowering requirement for Altamont turbines, regardless of how effective a mitigation measure it may prove to be. It allows **all** of the existing turbines to remain in operation until 2018.

## **E. No Environmental Impact Report Requirement**

The existing permit terms require the wind companies to prepare an Environmental Impact Report (EIR) on a Specific Plan for Altamont beginning in 2007. The purpose of the EIR is to evaluate the environmental impacts of continued operation of existing turbine facilities and the proposed repowering program, and the effectiveness of the various strategies to reduce and minimize avian mortality and other adverse impacts on wildlife. The EIR would also consider off-site mitigation (acquisition and protection of raptor breeding habitat) to compensate for ongoing bird deaths.

An EIR will occur under the settlement only if the companies agree to a Natural Communities Conservation Plan (NCCP). There is no requirement to complete an NCCP, or any guarantee that such an NCCP would result in a reduction of avian mortality, if it occurred. Term 7(a) of the settlement replaces the EIR with a stated “intent” to develop an NCCP—if the companies do not agree to an NCCP, there will be no EIR. The proposed settlement agreement also provides no penalty other than a resumption of winter shutdowns if the companies decide not to agree to the NCCP. None of the other permit terms and conditions come back into effect.

## **F. The County’s Ability To Impose Additional Permit Conditions At Three Years (2008) And Eight Years (2013) Is Eliminated**

Under the existing permits, the County is required to review the permits in the third year (2008) and the eighth year (2013). The settlement eliminates the three- and eight-year reviews of the progress toward reducing bird deaths and eliminates the ability of the County to impose any additional permit conditions in the future to which the companies do not agree. Term 11 of the settlement agreement prohibits the County from imposing any additional permit conditions in the future except with the consent of the owners.

## **II. The Numbers Game: Why The So-Called “50% Mortality Reduction” Is Illusory And Is Actually No More Than A 17% Reduction**

The central feature of the proposed settlement agreement is its requirement that “[t]he Wind Power Companies shall achieve a 50% reduction in raptor mortality within three (3) years of the effective date of this agreement.” Settlement Agreement ¶ 3; Ex. G-1 at ¶ 2. Whether that requirement results in any actual, real-world reduction in the number of birds killed depends crucially on two things: 1) what “baseline” is selected, i.e., the estimate of existing mortality from which the 50% mortality reduction will be calculated; and 2) whether the same method is used to calculate the reduction in mortality as is used to calculate the baseline.

Because of fundamental statistical and mathematical inconsistencies and errors in how the settlement agreement “baseline” was chosen and in how compliance with the 50% reduction requirement is measured in the settlement, the “50% mortality reduction”

requirement will not require the companies to reduce mortality by more than a **maximum of 17%**, and may not require *any mortality reduction at all*.

Calculating avian mortality from wind turbines is a multi-step process. First, field searches are done to locate and identify birds killed by wind turbines. These searches form the basis for a calculation by species of *unadjusted* annual avian mortality—“unadjusted” because it does not take into account the fact that the field workers searching for dead birds do not find all the birds that are present when they search (i.e., “searcher efficiency”), nor does it take into account the fact that not all birds killed by turbines are present when searchers search for them because some have been consumed or taken away by scavenging animals (i.e., “scavenging”). The unadjusted annual avian mortality is multiplied by an experimentally determined *adjustment factor* to account for the dead birds that the searchers do not find because of searcher efficiency and scavenging.

The settlement agreement sets a **baseline** annual mortality of **1,300 raptors**. Settlement Agreement ¶ 3(a); Ex. G-1 at ¶ 2(a). This is an estimate of adjusted annual mortality *for all raptor species* from the 2004 Smallwood & Thelander report for the California Energy Commission, based on surveys from 1998 to 2003. A 50% reduction is half of 1,300 raptors, or 650 raptors.

The settlement agreement, however, calculates the mortality reduction percentage based on the mortality of only a subset of four raptor species: Golden Eagles, Red-tailed Hawks, American Kestrels, and Burrowing Owls. Settlement Agreement ¶ 3(a)(i); Ex. G-1 at ¶ 2(a)(i). It also limits the adjustment factor for these four species to 2.5; that is, in calculating adjusted annual mortality in future years to determine the mortality reduction, the adjustment factor by which the unadjusted annual mortality is multiplied can be no greater than 2.5. Settlement Agreement ¶ 3(a)(iii); Ex. G-1 at ¶ 2(a)(iii).

Again, the baseline is **1,300** annual raptor deaths. Smallwood & Thelander found that the unadjusted annual mortality for the four species was as follows: Golden Eagle, 60; Red-tailed Hawk, 154; American Kestrel, 59; Burrowing Owl, 72. This equals a total of **345** raptors and is the unadjusted annual mortality for those four species for the Altamont Pass Wind Resource Area at a time before any mitigation measures were instituted.

The maximum searcher efficiency and scavenger adjustment factor permitted under the settlement agreement is 2.5. When the 345-raptor unadjusted annual mortality is multiplied by the 2.5 adjustment factor, the result is **863** raptors as the adjusted pre-mitigation raptor mortality for these four species under the methodology mandated by the settlement agreement. That is, even before instituting any mitigation measures the companies have miraculously “achieved” an automatic and instantaneous mortality reduction from 1,300 raptors to 863 raptors, a difference of 437 raptors. 437 is 33% of 1,300 (437 divided by 1,300 equals 33%), so the companies start off being credited with a

**33%** automatic mortality reduction before they have instituted any mitigation measures (and before they have actually saved a single bird), and need only take mitigation measures to reduce mortality by **17%** in order to meet the so-called “50% mortality reduction” requirement. A 17% reduction is far less than what is expected from the combination of mitigation measures in the existing permit conditions.

How can this be? This 33% automatic mortality reduction credit comes from a combination of two errors: 1) the 1,300-raptor estimate by Smallwood & Thelander that the settlement agreement uses as the baseline was based on **all** raptor species, not just the four species used to calculate the reduction in mortality, and 2) Smallwood & Thelander used a 3.27, not a 2.5, adjustment factor for the four species in calculating the 1,300-raptor estimate.

It gets worse. It is possible that the companies may be able to easily meet the so-called “50% mortality reduction” requirement without instituting any mitigation measures at all, and without actually saving a single bird, depending on where the Scientific Review Committee ultimately sets the adjustment factors for each of the four species. The companies have long argued that the adjustment factors used by Smallwood & Thelander are too high for large raptors like Golden Eagles and Red-tailed Hawks. If the Scientific Review Committee keeps the adjustment factor for the two small raptor species at the maximum of 2.5 permitted by the agreement, then the combined pre-mitigation annual adjusted mortality for those two species is as follows: For American Kestrels, unadjusted mortality of 59 times the adjustment factor of 2.5 equals adjusted annual mortality of 148; for Burrowing Owls, unadjusted mortality of 72 times the adjustment factor of 2.5 equals adjusted annual mortality of 180; for the two species, the combined total is **328**.

Remember, the companies must reduce annual adjusted raptor mortality to 650 raptors (i.e., 50% of 1,300) under the settlement agreement. Now 650 total raptors minus 328 small raptors equals 322, so as long as the *adjusted* Golden Eagle plus Red-tailed Hawk mortality is less than **322**, the companies are home free. The *unadjusted* Golden Eagle plus Red-tailed Hawk annual mortality is 60 plus 154 equals 214. The *adjusted* Golden Eagle plus Red-tailed Hawk annual mortality will be less than or equal to 322 so long the adjustment factor for those two species is less than or equal to 1.5 (the unadjusted mortality of 214 multiplied by an adjustment factor of 1.5 equals an adjusted mortality of 322). So if the Scientific Review Committee sets the adjustment factor for Golden Eagles and Red-tailed Hawks at a number that is less than or equal to 1.5, then the companies have instantaneously “achieved” a 50% reduction without taking a single mitigation measure and without saving a single bird.

To summarize, if the Scientific Review Committee sets the maximum 2.5 adjustment factor for small raptors and sets an adjustment factor of 1.5 or less for large raptors, then the companies are deemed to be in compliance with the “50% mortality reduction” requirement now, they were “in compliance” on September 22, 2005, and they were “in

compliance” from 1998 to 2003 during the Smallwood & Thelander study. Even if the Scientific Review Committee sets the adjustment factors for all four species at the settlement agreement maximum of 2.5, at most the companies will only have to reduce actual mortality by 17%, not 50%.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Miller", written in a cursive style.

Jeff Miller  
Bay Area Wildlands Coordinator  
Center for Biological Diversity