

1. Immediate Avian Mortality Reduction Measures

Permit Condition:

Each year, the permittee shall seasonally shut down its wind turbines and prevent them from operating at any time between Nov. 15 and the last day of February.

The permittee shall permanently shut down Tiers 1-3 of its highest risk turbines as determined by the methodology of the California Energy Commission assessment of June 1, 2005 (including application of this methodology to the 1000-plus turbines not yet characterized for risk; currently, only 4,074 of the 5,000-plus wind turbines have been characterized for risk).

The purpose of these measures is to reduce avian mortality by at least 50%.

Discussion:

The combination of a 3.5 month winter seasonal shutdown with a permanent shutdown of the highest risk turbines (approximately 350 turbines) is estimated to result in at least a 50% reduction in combined golden eagle, red-tail hawk, burrowing owl, and American kestrel mortality. Even at 50% mortality reduction, however, the Altamont wind turbines will continue to kill from 440 to 650 of these raptors each year.

2. Compensatory Mitigation Payment

Permit Condition:

The permittee and other permittees on a pro rata basis by megawattage shall contribute a combined total of \$6.5 million for the purchase of productive raptor habitat in the Altamont region in the form of land or conservation easements to compensate for avian mortality during the pendency of the permit appeals.

Discussion:

The permit appeals have been pending since November 2003 and January 2004. Because of the delay in the hearing these appeals, the permittees have received an additional 18 months of electricity revenues without incurring the costs of mortality reduction measures. Delay has been a substantial and real monetary benefit to the permittees. We estimate that, even if only the costs of the mortality reduction measures the permittees

themselves have proposed are considered, the permittees have avoided at least \$7 million in compliance costs by not implementing mortality reduction measures over the past 18 months. Thus, the \$6.5 million compensatory mitigation payment is less than what it would have cost for the permittees to comply with their own proposed mortality reduction requirements during the past 18 months.

Nor should this payment cause financial hardship to the permittees. In 2004, the Altamont Pass wind turbines generated more energy than in any other of the past nine years. Because of this increased energy production, they received \$7.6 million more revenue in 2004 than in 2003 (\$65.9 million in 2004 versus \$58.3 million in 2003).

Given the permittees' avoidance of mortality reduction costs during the 18-month pendency of the permit appeals, not to mention their avoidance of any mortality reduction costs for all previous years as well, it is appropriate that a portion of this 2004 revenue increase of \$7.6 million be spent for compensatory mitigation of the bird kills caused during the pendency of the permit appeals. The permittees should not profit from the delay of the permit appeals.

3. Monitoring

Permit Condition:

The County Planning Department shall request the California Energy Commission to conduct and administer an ongoing monitoring program to monitor avian mortality and the effectiveness of mortality reduction measures. The County Planning Department and the CEC shall establish a Technical Advisory Committee to advise on the scientific design of the monitoring program. The permittee shall fund the costs of the monitoring program together with other permittees on a pro rata basis by megawattage.

Discussion:

An effective and scientifically credible avian mortality monitoring program that is independent of the permittees is necessary to assess the effectiveness of the immediate avian mortality reduction measures as well as provide data for the Environmental Impact Report. The CEC has the experience and the expertise to conduct and administer such a program.

4. Environmental Impact Report Preparation

Permit Condition:

Within the next three and one-half years, the County Planning Department shall prepare an Environmental Impact Report. The topics addressed by the EIR shall include:

Repowering (the replacement of existing turbines with new turbines).

Assessing the effectiveness of the immediate avian mortality reduction measures imposed by the permit.

Examining further mortality reduction requirements for existing turbines.

Establishing a formula for compensatory off-site mitigation payments for continuing mortality from existing wind turbines and from new repowered turbines, and examining whether these payments should be retroactive to the beginning of the permit.

The EIR shall include an analysis of the monitoring data from the existing turbines and from the Diablo Winds and Buena Vista repowerings. The permittee shall fund the costs of the EIR together with other permittees on a pro rata basis by megawattage.

Discussion:

The need for a new EIR is acknowledged by the County Planning Department and the permittees. The EIR needs to address both repowering with new turbines and the continued operation of existing turbines, and it needs to be based on the next three years of monitoring data from the existing turbines and from the Diablo Winds and Buena Vista repowerings.

5. Future Avian Mortality Reduction Measures And Compensatory Mitigation

Permit Condition:

This permit is expressly subject to the imposition of further mortality reduction and compensatory mitigation requirements in the future. During year four of the permit, the County Planning Department shall conduct a proceeding to set additional mortality reduction requirements for the permittee's turbines to begin in year five of the permit and to set a formula for compensatory mitigation payments by the permittee, which may be

retroactive to the beginning of the permit. During year eight of the permit, the County Planning Department shall conduct a proceeding to set additional mortality reduction requirements for the permittee's turbines to begin in year nine of the permit and to adjust the formula for compensatory mitigation payments by the permittee.

Discussion:

Even a 50% mortality reduction in raptor mortality means that the Altamont wind turbines will continue to kill from 440 to 650 raptors each year. This rate of raptor mortality is unacceptable in the long term. Especially if repowering proves to be a highly successful method of reducing avian mortality, it will be important to create additional incentives for repowering. Thus, it is necessary to incorporate in the permits a procedure to set additional mortality reduction requirements and requirements for compensatory mitigation payments.