California Wind Energy Association

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California Energy Commission
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California Energy Commission
Dockets Office, MS-4
Docket No. 09-RENEW EO-01
1516 Ninth Street
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Via email to: docket@energy.state.ca.us

RE: Environmental NGO December 5, 2013, Letter - Golden Eagles

Dear Chris:

The California Wind Energy Association (CalWEA) is writing once again in response to a letter submitted by several environmental non-governmental organizations (eNGOs) engaged in the DRECP. The December 5, 2013, letter from Defenders of Wildlife, Sierra Club, Audubon California, Natural Resources Defense Council, California Native Plant Society, and Center for Biological Diversity ("Dec. 5 eNGO letter") concerns, in part, CalWEA's October 21, 2013, letter that responded to a September 20, 2013 letter signed by several of these groups ("Sept. 20 eNGO letter"). As before, we provide necessary additional information and perspective in our shared objective of considering all baseline fatalities of golden eagles, and the most recent eagle population data.

In summary, we show, very conservatively, that wind-energy-related golden eagle mortality accounts for less than 2% of total anthropogenic sources of mortality, and we explain why the eagle population in the DRECP area is likely to be stable.

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Baseline eagle fatalities

To recap: Section 4 of the Dec. 5 eNGO letter recounts the Sept. 20 eNGO letter that cited Pagel et al.[1] summarizing reported mortalities of golden eagles in California and across the U.S. That study reported 27 eagle fatalities in California between 1997 and June 2012, not including the Altamont Pass Wind Resource Area (APWRA) and documented 79 golden eagle fatalities in the contiguous U.S. outside of the APWRA between 1997 and June 2012. The eNGOs urge the DRECP to use the Pagel data. The letter refers to CalWEA's October 21, 2013, letter stating that less than 2% of all reported human-caused golden eagle fatalities are attributable to wind energy facilities, and notes that (in contrast to the Pagel figures) the 2011 report by Tetra Tech that supports the 2% figure reported that only 12 fatalities (nationally) were due to collisions with wind turbines outside of the APWRA. The Dec. 5 eNGO letter also recounts the 565 golden eagle fatalities reported in the Tetra Tech study as historically occurring in the Altamont Pass WRA, and urges the DRECP to consider all sources of mortality to golden eagles, asserting that "wind energy [plays] a key role."

CalWEA agrees with the eNGOs that all sources of mortality to golden eagles should be considered, as this will allow wind-related mortality to be put into proper perspective. The Pagel study is indeed a more current summary of eagle fatalities than the Tetra Tech study, and reflects the Pagel authors' access to information that is not in the public domain and was not made available to Tetra Tech. The Pagel study, however, reviews only wind-related facilities, thus it is missing the contextual information that the Tetra Tech study provided. The Tetra Tech study estimated that less than 1% of all human-caused eagle fatalities could be attributed to wind facilities outside the APWRA. AWEA (which commissioned the original Tetra Tech report in 2011) increased that figure to "less than 2%" earlier this year to encompass the newly reported Pagel data.

This figure is supported by recent statements by the U.S. Fish and Wildlife Service that some 2,500 eagle carcasses are sent each year to the National Wildlife Property Repository, casualties from various sources of human activity.[2] Indeed, the Pagel figures in the context of these new data render the "less than 2%" figure a significant over-estimate. Moreover, unlike the systematic surveys conducted at modern wind facilities, no such surveys are conducted around power lines or other major sources of mortality, which badly skews these numbers against the wind industry.

In this larger context -- even including the anomalously high APWRA mortality figures, adjusted for reductions experienced since 2005 and expected after project repowering -- total wind energy mortality would still be under 2% of all anthropogenic sources. Based on estimates cited in the Pagel study, as many as 75 eagles were being killed annually at the APWRA in the 2005-2007 timeframe, largely prior to the start of repowering. Studies indicate that various measures, including repowering, taken since 2005 to reduce golden eagle mortality and that of other focal species had, by 2010, already achieved a 50%

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[1] Pagel, Joel E. et al., "Bald Eagle and Golden Eagle Mortalities at Wind Energy Facilities in the Contiguous United States," Journal of Raptor Research, 47(3):311-315. 2013.

[2] See, e.g., as mentioned in Elliot Negin, "Wind Energy Threat to Birds is Overblown," Huffington Post (11-22-13). Available at: http://www.huffingtonpost.com/elliott-negin/wind-energy-threat-to-bir_b_4321113.html.

reduction in fatalities,[3] with substantial additional capacity to be repowered by 2016. These studies also indicate that repowering the APWRA with larger modern turbines will result in a significant reduction in the number of raptors killed. Initial monitoring reports from the repowering of the Vasco Winds project shows reductions in golden eagle fatalities substantially greater than 50% after one year of study.[4] Assuming, conservatively, that a 50% reduction in eagle fatalities is sustained throughout and beyond repowering efforts in the APWRA, total national wind-related fatalities (including APWRA) would still amount to less than 2% of all human-caused fatalities. This is not the "key role" in golden eagle impacts suggested by the eNGO letter.

Population data

To recap: The Dec. 5 eNGO letter notes that the Millsap et al. (2013) study[5] cautions that its findings "do not address the question of whether golden eagles have the demographic resiliency to absorb additional mortality and maintain their stable population trajectory." The eNGOs therefore urge the DRECP agencies to "proceed with caution" when developing an eagle take permit for the DRECP.

Once again, the eNGOs gloss over the positive news contained in the Millsap study, that "golden eagles are not declining widely in the western United States." The extent to which there is a distinct local population in the DRECP area is an important question. Golden eagles that use the DRECP region travel widely and use areas both outside of the DRECP boundary and outside of the state of California. Results of banding studies indicate that golden eagles captured in California have been recorded as far away as Idaho, Wyoming, and southern Mexico.[6] Nestlings captured in San Diego County and tracked with satellite telemetry were recorded in northern California, Oregon, Nevada, and Baja California.[1] Additionally, golden eagles that reside in northern California, Nevada, and other areas during most of the year migrate to the DRECP region for the winter. In particular, the Sonoran Basin and Range area of the DRECP region is used primarily by seasonal migrants that migrate there for the winter.[7] These eagle use and movement patterns indicate that the eagles that use the DRECP region are likely to be drawn from the stable golden eagle population of the western U.S.

We appreciate your consideration of this additional information and perspective.

Sincerely,

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[3] ICF International. 2012. Altamont Pass Wind Resource Area Bird Fatality Study, Bird Years 2005–2010. November. M87. (ICF 00904.08.) Sacramento, CA. Prepared for Alameda County Community Development Agency, Hayward, CA. Available at https://docs.google.com/file/d/0BxLyP98NDSMbQ0YtNS1DcV85X1k/edit?pli=1.

[4] Ventus Environmental Solutions. September 2013. *2012-2013 Annual Report; Avian and Bat Monitoring Project Vasco Winds, LLC.* Prepared for NextEra Energy Resources, Livermore, CA. Available at: http://www.altamontsrc.org/alt_doc/p274_ventus_vasco_winds_2012_13_avian_bat_monitoring_report_year_1.pdf.

[5] Millsap, Brian A. et al. 2013. "Golden Eagle Population Trends in the Western United States: 1968–2010." *The Journal of Wildlife Management;* DOI: 10.1002/jwmg.588.

[6] Bittner, D. and C. Meador. 2011. Golden Eagle Movements in Western North America. Presented at the Western Raptor Symposium hosted by the Western Section of The Wildlife Society and Wildlife Research Institute. Riverside, California February 8-9, 2011.

[7] Kochert, M. N., K. Steenhof, C. L. Mcintyre and E. H. Craig. 2002. Golden Eagle (Aquila chrysaetos), 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.bnaproxy.birds.cornell.edu/bna/species/684 Accessed online on April 26, 2012.

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