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Via email: fw8cfwocomments@fws.gov.

Assistant Field Supervisor, Palm Springs Fish and Wildlife Office, U.S. Fish and Wildlife Service
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92284

Re: Manzana Wind Power Incidental Take Permit

Dear Fish & Wildlife Service:

Audubon's history of conservation of California condor of over sixty years includes several important milestones.

- We funded and conducted the study in 1964 that documented the steep decline of the species from 60 to 40 individuals.
- We pressured the U.S. Fish & Wildlife Service to list and conserve the species under the newly created Endangered Species Act in 1973.
- We formed the external review committee in the late 70s that pressured U.S. Fish & Wildlife Service to take an active part in the recovery of the species and contributed \$300,000 in a contract with U.S. Fish & Wildlife Service as "joint lead agencies" in the recovery program in 1979 to show our commitment and to force the Service to take action.
- When the population dropped to 22 in 1980 we advocated for trapping condors and starting a captive breeding program.
- We recognized the potential threat to condors with the development of wind energy in the Tehachapi Mountains as early as 2010 when we joined the [Condor Wind Energy Working Group](#) convened by the Fish & Wildlife Service that created a threat matrix and Best Management Practices.

Kern County continued to permit wind projects in the Tehachapi Mountains, claiming in environmental documents that "based on information and consultation with the agencies it has been determined that the likelihood of an occurrence of a California condor at the project site is too remote to present a potentially significant risk of collision with a wind turbine" (County of Kern 2008). The County's response to EIR comments raising the risk of harm to condors from Audubon and others concluded that "even though it is plausible that a condor could occasionally wander onto or over the project site, the likelihood is remote. And even in the case of such a rare event, it is most likely that the individual or individuals would traverse the site at high altitude, as is typically the case when condors are traveling

long distances” (County of Kern 2008). This analysis was clearly inaccurate, as evidenced by the history of incursion of condors into the Manzana site published in the EA and Conservation Plan.

The U.S. Fish & Wildlife Service’s condor recovery team’s commendable job of growing the population to 300 wild California Condors range wide proves that the Endangered Species Act does work and the Service has the ability to successfully manage these birds. The southern California flock, which grew from 6 condors in 1992 to 99 in 2019 currently number 94 birds. (Service, unpublished data).

The Southern California population has been expanding its range for some time from the Coastal Mountains to the Sierra through the Tehachapi Mountains. The potential for collision with one of the 4,200 turbines in the Tehachapi Mountains and foothills and the attendant infrastructure and operations including electrical lines and metrological towers has increased dramatically.

Audubon has urged and documented the efforts of the wind industry to avoid taking condors beginning in 2013 with the first authorized take of one condor at the Alta East Wind Project, and the establishment of a geofence to track condors that are tagged with GPS units and curtail turbines. We reported on the geofence to our members in the March 2018 AUDUBON MAGAZINE article entitled “How New Technology is Making Wind Farms Safer for Birds.” (<https://www.audubon.org/magazine/spring-2018/how-new-technology-making-wind-farms-safer-birds>).

We incorporate by reference the comments submitted by Santa Barbara Audubon, a certified chapter of National Audubon.

The Permit

Manzana Wind LLC has applied for and the U.S. Fish and Wildlife Service (Service) is considering the issuance of a permit, pursuant to section 10(a)(1)(B) of the Endangered Species Act, for the incidental take of a limited number of California condors (*Gymnogyps californianus*, condors), a federally endangered species. Manzana Wind LLC (Applicant), a wholly owned subsidiary of Avangrid Renewables LLC, has applied for an incidental take permit for the take of no more than four condors (two free-flying birds and two associated eggs or chicks), over a 30-year period during the operation of the existing Manzana Wind Power Project (Project). The permit area covers approximately 5,515 acres in the Antelope Valley region of Kern County, California, along the southern foothills of the Tehachapi Mountains. The Project began operations in 2012 and includes 126 1.5 megawatt (MW) wind turbines, for a total nameplate capacity of 189 MW. The Project is providing renewable energy to the California electrical grid and contributing to the goals of the State’s Renewable Portfolio Standard program (California Senate Bill 100). The Applicant has applied for an incidental take permit because of documented condor activity at the Project and to address the risk associated with this condor activity and has prepared a Conservation Plan. The Service has prepared an Environmental Assessment (EA) for the permit application which includes a Population Viability Analysis (PVA) to assess the impact of the permitted take on the population of California condor.

Audubon’s 2014 Climate science hosted online at www.climate.audubon.org reveals that 314 species of our North American birds are seriously threatened on their breeding and wintering grounds by changes in climate suitability depending on how fast we can reduce our emissions. Transforming our energy sector to emission-free generation by wind, solar and geothermal energy is a key strategy to combat the effects of climate change on our birds while providing jobs and economic benefits to people and is a priority for Audubon. Audubon supports wind energy as a solution to climate change.

We appreciate the extensive outreach that Peter Sanzenbacher and Ray Bransfield of the Service and Laura Nagy and Amy Parsons of Avangrid have provided to Audubon and our conservation partners in meetings as well as individual and facilitated group conversations in order to clarify the need, purpose and terms of the Proposed Action.

We anticipate additional permit applications from the wind industry in the Tehachapi Mountains area and this first permit will likely set an important precedent for all following permits. Therefore it must set the highest standard for conservation of condors.

It is clear to Audubon that the No Action Alternative is not acceptable, and the Application for the permit is a positive step forward for the wind industry and for Avangrid in particular, a step we have encouraged. We agree with the EA when it states

Under the no action alternative, any take resulting from the Project would not be exempted under section 9 of the Endangered Species Act. Additionally, because the no action alternative would not include a mitigation program, the impacts of any take would result in some level of long-term impacts to the condor population. (EA, p. 19)

A firm commitment from the Applicant to the Service in a Conservation Plan that follows the mitigation hierarchy of avoid first, minimize second and includes compensatory mitigation for the potential take of a condor is preferred by Audubon to the No Action Alternative. In our opinion the No Action Alternative would create uncertainty for the public, lack cooperation between the Service and the Applicant, provide no advanced compensatory mitigation to offset take nor commitment to avoidance and minimization measures, and leave take of a condor at Manzana or other wind facilities, if any, to uncertain outcomes.

We provide the following comments on the EA, PVA and Conservation Plan for the Proposed Action with the purpose of strengthening the permit with the continued recovery of the condor as a priority.

The Environmental Assessment (EA)

1. The alternatives in the EA are exceptionally narrow.

The EA provides only two alternatives – the No Action Alternative and the Proposed Action. The Service chose not to conduct any scoping activities to solicit and consider other alternatives from the public. This does not fulfill the Service’s obligations under the National Environmental Policy Act, which requires the Service to evaluate a reasonable range of alternatives. *See*, 42 U.S.C. § 4332(2)(E). The regulations further specify that the agency must “rigorously explore and objectively evaluate all reasonable alternatives” including those “reasonable alternatives not within the jurisdiction of the lead agency,” so as to “provid[e] a clear basis for choice among the option.” 40 C.F.R. § 1502.14. This requirement applies equally to EAs and EISs. *Davis v. Mineta*, 302 F.3d 1104, 1120 (10th Cir. 2002); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-29 (9th Cir. 1988).

Given the opportunity, Audubon would have recommended that the Service consider and analyze an alternative of a 10-year Reduced Permit Initial Term with 2 Ten Year Extensions. The Extensions can be automatic when the PVA is rerun and updated to include more recent data on cumulative permitted and unpermitted take from the wind industry and other sources and population growth that shows that the

Southern California population of condor have not suffered a population level decline that would bring the population and the species closer to jeopardy. An entirely new PVA may not be required and an update of the models in the current PVA could be run with new cumulative data on permitted and unpermitted take and population growth, but the 10-year update should be required. The data used in the PVA with the EA is from 2013 with projected not actual population growth.

The Extension should also be accompanied by a Review of the effectiveness of the permit which would be made available to the public, and perhaps reviewed by a Technical Advisory Committee of interested parties who can provide comment on the Review to the Service and the Applicant.

This commitment by Applicant and the Service for publicly available 10-year Reviews of the permit and a 10-year required updated PVA model that includes cumulative impacts to date would help insure the support for the permit by taxpayers who pay for the recovery of California condor, and the many volunteers and conservation organizations that have played key roles in the recovery of California condor in addition to the opportunity for the Service and Applicant to update, re-evaluate and improve the permit if needed.

A 30-year permit with no required review and no required update of cumulative impact data and population data in a new or revised PVA gives the public little confidence in such a long term permit and gives the Service and Applicant limited ability to take any action based on new information or data, relies on a PVA with data from 2013, does not give the Service the option to stop issuing new take permits or take other prompt action to address threats to condor, to re-evaluate and improve permit conditions or mitigation and minimization actions, or adaptive management strategies based on data, or take other actions to conserve condors.

As presented in the EA the only opportunity or commitment to the improvement or reporting of the Proposed Action - a 30-year permit - would be the application for a new permit by Applicant if they exceed their take limit, an unwanted, unpredictable and possibly contested trigger.

The Audubon alternative would allow the permit to be able to adapt to new conditions, improve the permit conditions, inform the taxpayer that funds the recovery of the condor and puts data-driven conservation of condors above all else.

2. The EA and the Conservation Plan should be more completely cross referenced to insure consistency and that the Applicant will minimize and mitigate to the maximum extent practicable”.

In 2.2.5 Minimization and Mitigation Measures the EA states that “the Applicant current employs general conservation measures at the Project to minimize risk of mortality or injury to wildlife, including condors” and states that “Applicant currently employs general conservation measures at the Project and includes “Following standard industry practices for the design and maintenance of their transmission and collection lines to minimize the potential for wildlife electrocutions (e.g., Avian Powerline Interaction Committee 2006).” Applicants Conservation Plan also states that “Overhead electrical infrastructure is consistent with Avian Power Line Interaction Committee (APLIC) suggested practices for reducing avian electrocution (APLIC 2006).” (California Condor Conservation Plan, p. 12) but in Table 3 of Condor Threat Minimization Associated with Operational Activities there is no mention of using APLIC standards for electrocution nor collision with electrical lines.

This is one example of a Minimization and Mitigation Measure that has not been thoroughly coordinated between the EA and the Conservation Plan, and we urge the Service to re-examine this coordination with another cross check between the EA and the Conservation Plan.

3. 4.1.2.2 Mitigation of Incidental Take

(a) The EA states

Using the results of the PVA referenced above, the focus of this mitigation would be to increase the number of captive-reared condors available for release into the wild. Specifically, the PVA estimated that the loss of an adult condor and its contribution to population growth could be offset by the release of 2.0-3.0 captive-bred, 1.5 year-old juvenile condors. (p. 20)

The Conservation Plan commits to compensatory mitigation in the amount of \$527,822 to fund “an FTE at Oregon’s Zoo Jonsson Center for Wildlife Conservation until six additional 1.5 year condors are produced” as well as “\$10,000/year for transportation of condors to the release site” (p. 66) among other commitments and guarantees. We appreciate the thought that went into this document by the Applicant.

However, we suggest that this compensatory mitigation is inadequate for the following reasons:

- (i) There are additional expenses other than an FTE that are involved in raising condor chicks to 1.5 years. These expenses may include medical treatments such as vaccinations or other treatments, telemetry if attached to the chick, and other like expenses that should be the responsibility of the Applicant and not the U.S. taxpayer that funds the Recovery Program. These expenses should be calculated and included in the EA and Conservation Plan.
- (ii) A 1.5-year-old chick released in the wild has many obstacles to overcome, and may need to be re-captured, treated with chelation or vaccine boosters, or for micro trash ingestion, or injury by fire, and may be brought back into captivity for treatment. The years until the chick replaces an adult bird of breeding age, if that is the status of the bird or birds that are taken, may incur considerable expenses by the Condor Recovery Team or others, and should be the responsibility of the Applicant, again not of the U.S. taxpayer that funds the recovery of the condor.

There are various formulas for calculating the replacement value of the take of a bird, including calculations used for estimating replacement costs at oil spills and the Service and Applicant should re-calculate the costs of replacing an adult condor and egg or chick, if any.

Under the California Condor Recovery Contribution Plan of January, 2014 submitted by Alta Windpower Development, LLC to Bureau of Land Management and U.S. Fish and Wildlife Service for a 51-turbine wind energy project in the Tehachapi Mtns on BLM lands in the same area, the Applicant agreed to provide almost \$3 million worth of funding to California Condor Recovery Program to be used to support of California condor conservation measures over 30 years of their Right of Way grant in light of the Service’s authorized take of one condor in the biological opinion. The Service approved this contribution as noted in the Plan, which is attached to our comments for reference:

The Service analyzed the proposed financial contribution as a conservation measure in the biological opinion (Alta Windpower 2013, Service 2013a). The Bureau requires the

final California condor recovery contribution plan be approved by the Service and the Bureau within 6 months of the signing of its record of decision on the project and prior to the initiation of operation of the facility. The record of decision was signed on May 23, 2013, and the facility is scheduled to initiate operations in January, 2014. (Alta Windpower Development LLC, California Condor Recovery Contribution Plan, p. 1)

We understand that the consultation with BLM was a section 7 consultation and differs from the section 10 consultation of the Manzana permit. Since the Manzana permit contemplates take of up to 4 Condor, we think that Applicant should consider and the Service should encourage a calculation and inclusion of a sizeable contribution to the California Condor Recovery Program for additional costs of growing and protecting 6 1.5 year old chicks to adulthood and for conservation measures that would more closely approximate the contributions by Alta Windpower Development, LLC.

- (b) This section of the EA contains this statement: *“Conversely, if the take that occurs are juvenile or non-breeding birds, or if the actual amount of take is less than what is permitted, the potential exists that the mitigation associated with the proposed action would provide a net benefit to the recovery of the California condor.”*

We understand the net benefit of the actual amount of take is less than what is permitted, but if the take is juvenile or non-breeding birds, these are birds that are on their way to becoming breeding birds and future productivity will be lost. How is that a net benefit to the recovery of the California condor?

- (c) We suggest the following for consideration for inclusion in the Adaptive Management Plan that will be prepared by Applicant and approved by the Service:
- (i) Following the take of one condor, if a detection and curtailment technology for Condor has not been verified by third party validator such as American Wind & Wildlife Institute’s Technology Program, rather than or with experimental technology, Applicant should consider and Service should encourage a response of a seasonal curtailment of turbines or a string of turbines during daylight hours only until a verified detection and curtailment technology has been installed and implemented. This should be included in the Conservation Plan at 5.5.2.3.
 - (ii) Applicant should allow testing and verification of detection and avoidance technologies by others, and at the cost of others, in coordination with the Service and an independent third-party validator such as American Wind & Wildlife Technology Office to expedite the availability of verified technologies for future permits and/or conflicts with wind energy and condors as wind energy continues to develop in California and elsewhere and condors continue to expand their range.

The PVA

The PVA models should be re-run with updated cumulative impacts data every 10 years and made available to the public, as recommended in the Audubon proposed alternative above.

The Conservation Plan

1. 5.3.3 Calculation of the Appropriate Amount of Mitigation Needed to Offset the Loss of A Condor.

See comments on **4.1.2.2 Mitigation of Incidental Take** in EA above

2. 5.4 Monitoring

- (a) Applicant proposes to conduct seasonal weekly inspections at 10 established turbine locations distributed throughout the Permit Area during spring (April-May) and fall (August-mid-October).

Applicant has provided little empirical data on the carcass persistence rate of a Condor carcass, nor how an observer would be able to detect a condor carcass in a permit area of over 5,000 acres and 126 turbines by searching only 10 turbines. Further analysis is needed. We recommend participation by USGS as a third party scientific validator of this analysis and setting of a protocol.

Take includes harm or injure so the possibility that a condor could be wounded by a turbine blade but continue to fly further from the turbine than the proposed search area must also be considered.

The Conservation Plan does not mention the possibility of monitoring some or all of the permit area with drones, satellite photos or other new technologies, but this possibility should also be included in the monitoring techniques and adaptive management and may provide broader more effective coverage.

Additionally, Audubon participated in the [Condor/Wind Working Group](#) convened by US Fish & Wildlife Service. The work group creates Interim Work Products and a Threat Matrix that may help inform Best Management Practices for the Conservation Plan at Manzanita.

Thank you for the opportunity to comment on the Proposed Action in the EA.

Sincerely,

Garry George
Director, Clean Energy Initiative
AUDUBON
garry.george@audubon.org

Katie Umekubo
Senior Attorney, Nature Program
NATURAL RESOURCES DEFENSE COUNCIL
kumekubo@nrdc.org

Frank Bedard, Jr.
Conservation Chair
KERN AUDUBON
mbedard@bak.rr.com

Bruce Schoppe
VP, Conservation
Ventura Audubon Society
vpconservation@venturaaudubon.org

Robert E. Parker
President
Kerncrest Audubon Society
rsparker7@msn.com