

Wintu Audubon Response to Notice of Preparation for the TANC Transmission Line Project

Introduction:

'Of the 31 species of diurnal raptors and 19 species of owls that regularly breed in North America, 29 have been reported as electrocution victims. Electrocutions have also been reported in over 30 non-raptor North American species, including crows, ravens, magpies, jays, storks, herons, pelicans, gulls, woodpeckers, sparrows, kingbirds, thrushes, starlings, pigeons, and others.' ¹ Greater Sandhill Cranes currently nest in six northeastern counties of California, and the California Dept. of Fish and Game found that 'Power line collisions are presently believed to be the primary mortality factor for all age classes of post-fledged cranes.' ²

The Wintu Chapter of the Audubon Society, based in Shasta County, CA, is very concerned about the potential impacts to birds, other wildlife, and associated ecosystems that may result from the construction and operation of the TANC project.

Legal Protections Framework:

Various Federal and State Laws provide protections for birds, with some species having either state or federal fully-protected status, where no incidental 'take' is permitted. We expect this project to be planned, constructed and operated to reduce as much as possible impacts to birds and other wildlife, and to operate within this legal framework. If necessary, we will seek enforcement of these laws to ensure the protection of birds and other wildlife unduly impacted by this project.

Accordingly, the project owners and planners should work closely with the US Fish and Wildlife Service and CA Department of Fish and Game to ensure full compliance with applicable federal and state laws, as well as with interested stakeholders such as Audubon California and local Audubon chapters where appropriate.

Use of 'Suggested Practices for Avian Protection on Power Lines' and Development of a Avian Protection Plan:

We strongly urge the use of the voluntary planning guidelines: 'Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006' by Edison Electric Institute, APLIC, and the California Energy Commission. It provides useful guidance to minimize impacts to birds in the planning and operation of power line projects. In addition, its use by the project owners and planners will help to establish evidence of a 'good faith effort' to minimize impacts to birds and the environment.

As suggested by the Guidelines, an Avian Protection Plan (APP) should be developed for this project, addressing those issues specified in the Guidelines.

Use of Existing Towers and Corridors:

To reduce potential impacts, the project must use existing power line towers and/or corridors wherever possible.

Potential Impacts:

We have identified potential impacts of the TANC project to birds and other wildlife, associated ecosystems, watersheds and water quality.

The potential impacts need to be adequately assessed, and where impacts are significant, they must either be avoided or fully mitigated. If the impacts after mitigation remain significant and unavoidable, compensatory mitigation should be utilized. A recent precedent was set by requiring up-front compensatory and secondary compensatory mitigations for the anticipated take of two CA fully-protected status species: Bald Eagle and Greater Sandhill Crane, in the Hatchet Ridge Wind Project.³ The TANC project should be held to the same standard wherever similar impacts to CA fully-protected status species are anticipated to occur.

Particularly Sensitive Geographic Areas:

We have identified specific geographic areas that are especially sensitive to this type of development, including an Important Bird Area (IBA) identified by Audubon California, and some of the sensitive species that occur in these areas.

It is imperative that existing power line corridors be utilized where the development is in close proximity to these areas to reduce potential impacts.

1. Legal Protections Framework:

'Three federal laws in the United States protect almost all native avian species and prohibit "taking," or killing, them. The Migratory Bird Treaty Act protects over 800 species of native, North American migratory birds. The Bald and Golden Eagle Protection Act provides additional protection to both bald and golden eagles. The Endangered Species Act applies to species that are federally listed as threatened or endangered.'¹

California state law also has significant protections for many species, including for state threatened and 'fully-protected' status species;

- Bald Eagle, CA state endangered and fully-protected status
- Golden Eagle, CA state fully-protected status
- Greater Sandhill Crane, CA state threatened and fully-protected status
- Swainson's Hawk, CA state threatened status

These species exist in significant numbers over large portions of the region containing the proposed TANC corridors, especially the North Section.

'Take', incidental or otherwise, that occurs to species so protected is a felony offense, prosecutable by substantial fines and jail time.

Wintu Audubon reserves the right to seek prosecution and/or penalties provided under these laws, especially where the violators have refused to use appropriate siting, use of existing powerline corridors and to develop and implement an appropriate Avian Protection Plan and other 'good faith efforts' aimed at avoiding and/or reducing impacts to birds, other wildlife and associated ecosystems.

The project owners and planners should work closely with the US Fish and Wildlife Service and CA Department of Fish and Game to ensure full compliance with applicable federal and state laws, as well as with interested stakeholders such as Audubon California and local Audubon chapters.

2. Use of 'Suggested Practices for Avian Protection on Power Lines':

'Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006' by Edison Electric Institute, APLIC, and the California Energy Commission,¹ should be utilized in the planning and operation of the project. In addition, its use by the project owners and planners will help to establish evidence of a 'good faith effort' to minimize impacts to birds and the environment.

3. Develop an Avian Protection Plan (APP):

This plan should include various elements as outlined in the 'Suggested Practices'⁴ such as:

- Development of a Corporate Bird Management Policy
- Employee Training
- Permit Compliance
- Construction Design Standards
- Nest Management
- Avian Reporting System
- Risk Assessment Methodology
- Mortality Reduction Measures
- Avian Enhancement Options
- Quality Control
- Public Awareness; involving stakeholders in the decision-making process.
- Key Resources

4. Use of Existing Towers and Corridors:

To minimize impacts to Wildlife and ecosystems this project *must* utilize existing powerline corridors and/or structures wherever possible. Two corridors are proposed for the North Segment, resulting in greatly increased impacts to the environment, including significant deforestation and greatly increased risk of electrocution to birds.

Therefore, unless mandated by state or federal law, at least one existing power line corridor should be utilized for the North Segment and an existing corridor should be utilized for the central valley segment; the construction and subsequent existence of new powerline structures and corridors is totally unjustified and irresponsible given the resulting impacts to the environment.

5. Potential Impacts:

The following are potential impacts likely to result from the construction and subsequent operation and maintenance of the TANC project:

- Direct mortality to birds by electrocution and by collision with power lines
- Habitat fragmentation
- Reduction and degradation of suitable habitat
- Degradation of water quality, fisheries and watersheds due to erosion from construction, grading and permanent loss of vegetation.
- Impacts to wildlife, plants, groundwater and watersheds from application of herbicides used for vegetation management along project corridors.
- Detrimental effects on wildlife and resulting from the presence of strong electromagnetic fields (E.M.F.).
- Contributing to the acceleration of global warming by removing a significant percentage of existing forest and other vegetation which currently acts to remove CO₂ from the atmosphere.

Cumulative Impacts:

-There are already numerous existing transmission lines in the region that are imposing the above impacts; the addition of this project to existing and proposed projects needs to be adequately assessed and mitigated.

-Contributing to the acceleration of global warming by removing a significant percentage of existing forest and other vegetation which currently acts to remove CO₂ from the atmosphere is a cumulative impact and should be assessed and mitigated as such.

6. Assessing Biological Impacts:

- Use best available science practices and protocols to assess impacts to:
ecosystems and wildlife affected by electrocution, habitat fragmentation, habitat loss and degradation, exposure to strong E.M.F. and degradation of water quality resulting from construction and operation of project.
- assess area of forest lost in order to establish estimate on loss of CO₂ storage capacity.

7. Proposed Mitigations:

Note: Impacts have yet to be officially identified and assessed since this is customarily described in the Draft Environmental Impact Report . It is difficult at this point for us to provide suggestions for appropriate specific mitigation measures. Accordingly, we will provide these in response to the DEIR.

-Mitigations for identified biological impacts shall be used that adequately reduce these impacts to a less than significant level.

-Use existing transmission line corridors as much as possible unless prohibited by state or federal law.

-Install proven bird diverters, plates or globes in known Sandhill Crane and other waterfowl migration routes, stopover, wintering, breeding areas and in or near any of the listed areas of

concern, to reduce direct collision mortality.⁵

CDFG cites the effectiveness of these measures in reducing Greater Sandhill Crane mortality in the region: 'In the past five years, power line markers (orange plastic globes) at certain key areas have been successful in eliminating collisions and mortality at Modoc NWR (C. Bloom, pers. comm.).'⁶

-Use of Compensatory Mitigation where impacts are determined to be significant even with mitigations. Up-front Compensatory Mitigation should be required where significant impacts are predicted for CA state fully-protected status species. (-see Hatchet Ridge Wind precedents on compensatory mitigations discussed under 'Hatchet Ridge' later in this document.)³

For example: Funds can be used to purchase, improve, or protect breeding, stopover, and wintering habitat for birds/wildlife impacted, with the goal of replacing birds/wildlife lost due to displacement, direct mortality from contact with lines/towers, reduction in populations due to habitat loss/degradation, habitat fragmentation etc.

8. Particularly Sensitive Geographic Areas:

In addition to potential impacts to avian and other wildlife and habitat posed by the project throughout the project area, we have identified specific geographic areas in close proximity to the proposed power line corridors that are especially sensitive to this type of development:

-Millville Plains Area: (The central TANC corridor appears to bisect this area.) Millville Plains is a rectangle roughly defined as the area east of I-5, South of Redding, south of hwy 44, crossing Dersch Rd., between ash creek rd. and Deschutes Rd. and Bisected by Millville Plains Rd., north of the town of Cottonwood.

Significant numbers of raptors congregate and hunt here, including Golden Eagle, which is protected by Federal and State laws and is designated a CA state fully-protected status species. Other notable species include: Burrowing Owl, Prairie and Peregrine Falcon, Merlin, Accipiters, Ferruginous and Rough-legged Hawk, migrating Greater Sandhill Crane, a CA state threatened and fully-protected status species, Greater White-fronted Geese, Tundra Swan, and Swainson's Hawk, a CA state threatened status species.⁷

Large transmission lines are already present in this area; to minimize additional impacts, existing transmission towers and/or corridors should be utilized.

-Hatchet Ridge: is in Shasta County, just west of Burney, bisected by state route 299E. (The north section of the TANC project bisects this area.)

This area is on the Pacific Flyway and has been shown to be traversed by migrating Greater Sandhill Crane and Bald Eagle.³ The Hatchet Ridge Wind project, which will be built on the ridge, has established a precedent by requiring up-front Compensatory Mitigation and Secondary Compensatory Mitigation for predicted impacts to Greater Sandhill Crane and Bald Eagle.³ The TANC project should be held to the same standard anywhere the TANC project is predicted to cause mortality to CA fully-protected status species, not just on Hatchet Ridge.

-Crystal and Baum Lake /Hat Creek/Cassel Area: located in Shasta County, south east of Burney near Cassel. (The proposed north section corridor cuts right through this site.)

This area, which contains Crystal and Baum Lakes, is home to the Crystal Lake Fish Hatchery. The lakes and surrounding habitat support numerous Osprey, Bald Eagle, a CA state threatened and fully-protected status species, and various species of ducks, geese, Herons and White Pelicans. In addition, the section of Hat Creek just north of the two lakes is home to several Bald Eagles and numerous Osprey. Golden Eagle, a state fully-protected status species, have also been observed foraging there.

-Important Bird Areas (IBA's):

Audubon California has identified areas throughout California that are especially important for maintaining bird diversity in the state. These are called 'Important Bird Areas (IBA's). An IBA that has the potential to be impacted by the TANC project's north section:

Eagle Lake: (The proposed south corridor in north section passes just north of lake.) Designated as an IBA, Eagle Lake supports thousands of individuals of 27 species of wintering waterfowl each winter⁹ and significant numbers of 8 raptor species. Recent Audubon Christmas Bird Count (CBC) data indicates a large wintering population of Bald Eagle, (29 in 2008-9,⁹ 45 in 2007-8¹⁰).

It is imperative that existing power line corridors be utilized where the development is in close proximity to these areas to reduce potential impacts.

Conclusion:

It is apparent that given it's massive scope, the TANC project has the potential for tremendous impacts to birds, wildlife and associated ecosystems.

We have made a considerable effort to assist the project proponents in minimizing these impacts by providing our input in this response to the NOP. We are available to assist further in this process and welcome the opportunity to work with the project proponents as this process unfolds.

Sincerely,

Claudia Lyons Yerion, Conservation Chair, and the Board of Directors of
Wintu Audubon, Redding, California

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Endnotes:

1. Avian Power Line Interaction Committee (APLIC). 2006. 'Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006'. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C and Sacramento, CA.

2. California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Program, *5 - Year Status Review: GREATER SANDHILL CRANE (Grus canadensis tabida)*, Reported to: California Fish and Game Commission, 1994(California Dept. of Fish and Game, 1994), p.3.

3. Shasta County Dept. of Resource Management, *Mitigation and Monitoring and Reporting Program*, (June, 2008), Table 4-1, 8. Available online at: <http://www.co.shasta.ca.us/departments/resourcegmt/drm/Hatchet%20Ridge/MMRP.pdf>

4. Avian Power Line Interaction Committee (APLIC). 2006. 'Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006', 135-140.

5. Brown, W. M. and R. C. Drewien, *Evaluation of two power line markers to reduce crane and waterfowl collision mortality*, Wildlife Society Bulletin 23(2):217-227, 1995, Results of a study of collision fatalities in cranes along 8, 0.8 km segments of power lines in the San Luis Valley, Colorado. Treatment segments tested the effectiveness of swinging plates and yellow SVD devices in reducing collisions as

compared to control segments. Both devices were effective in reducing collisions. Cranes and waterfowl comprised 80% of fatalities along the segments prior to the study.

6. California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Program, *5 - Year Status Review: GREATER SANDHILL CRANE (Grus canadensis tabida)*, Reported to: California Fish and Game Commission, 1994, (California Dept. of Fish and Game, 1994), p. 8.

7. Yutzy, Bob, *Places to Bird, Shasta County's Favorite Birding Destinations*, Millville Plains, (Wintu Audubon Society), http://www.wintuaudubon.org/places_to_bird.htm

8. Shasta County Dept. of Resource Management, *Draft Environmental Impact Report for the Hatchet Ridge Wind Project*, (Shasta County Dept. of Resource Management, December 2007), pp. 3.4-20.

9. National Audubon Society, *Audubon Christmas Bird Count, Eagle Lake (CAEL), California Region*, 2008-9. View data online at: <http://cbc.audubon.org/cbccurrent/> .

10. National Audubon Society, *Audubon Christmas Bird Count, Eagle Lake (CAEL), California Region*, 2007-8.