

ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721

TEL: (916) 444-6201
FAX: (916) 444-6209

kjones@adamsbroadwell.com

SO. SAN FRANCISCO OFFICE

601 GATEWAY BLVD., SUITE 1000
SO. SAN FRANCISCO, CA 94080

TEL: (650) 589-1660
FAX: (650) 589-5062

DANIEL L. CARDOZO
CHRISTINA M. CARO
YAIR CHAVER
SARA F. DUDLEY
THOMAS A. ENSLOW
ANDREW J. GRAF
TANYA A. GULESSERIAN
KYLE C. JONES
RACHAEL E. KOSS
NIRIT LOTAN
CAMILLE G. STOUGH

MARC D. JOSEPH
Of Counsel

June 14, 2019

Via E-Mail and Overnight Mail

Humboldt Wind Project Planner
County of Humboldt
Planning and Building Department, Planning Division
3015 H Street
Eureka, CA 95501
ceqaresponses@co.humboldt.ca.us

Re: Comments on the Draft Environmental Impact Report for the Humboldt Wind Energy Project (SCH No. 201872076)

Dear Humboldt Wind Project Planner:

We are writing on behalf of Citizens for Responsible Wind Energy to provide comments on the April 2019 Draft Environmental Impact Report SCH# 2018072076 (“DEIR”) prepared by Humboldt County (“County”), pursuant to the California Environmental Quality Act,¹ for the Humboldt Wind Energy Project (“Project”) proposed by Humboldt Wind, LLC, which is owned by Terra-Gen (“Applicant”).²

The Project proposes to construct and operate 60 wind turbine generators and associated infrastructure with a nameplate generating capacity of up to 155 megawatts. In addition to the wind turbines and transformers, the Project would include ancillary facilities such as temporary staging areas, access roads, 34.5-kilovolt collection lines, an operations and maintenance building, a substation with energy storage infrastructure, utility switchyard modification, and a 115-kV Gen-Tie. The Project traverses land bisected by U.S. Highway 101, roughly 12 miles southeast of the City of Fortuna and 20 miles north of the community of

05-1

¹ Pub. Resources Code § 21000 *et seq.*

² Humboldt County Planning and Building Department, Draft Environmental Impact Report for the Humboldt Wind Energy Project, SCH No. 201872076, (Apr. 2019) (hereafter “DEIR”).

Garberville. The community of Scotia is located adjacent to the northern edge of the Project alignment.

As explained in these comments, the DEIR fails to comply with CEQA's basic requirement to act as an "informational document." It is devoid of meaningful details upon which the public and decisionmakers can adequately assess the Project's significant impacts. The DEIR fails to (1) accurately describe the environmental setting, (2) adequately disclose and analyze the Project's significant impacts, and (3) incorporate all feasible mitigation measures necessary to reduce such impacts to a level of insignificance. Because of these shortcomings, the DEIR is deficient as a matter of law and lacks substantial evidence to properly identify and mitigate the Project's significant impacts, rendering the document inadequate for purposes of compliance with CEQA.

For each of these reasons, the County may not approve the Project until a revised environmental review document is prepared and re-circulated for public review and comment.

We reviewed the DEIR, its technical appendices, and the reference documents with the assistance from technical consultants, Phyllis Fox, Ph.D., PE³ and Biologist and Independent Environmental Consultant Renée Owens.⁴ Dr. Fox and Ms. Owens provide substantial evidence⁵ of potentially significant impacts that have not been adequately disclosed, analyzed, or mitigated. Dr. Fox's and Ms. Owens' technical comments are attached hereto and are hereby submitted to the County, in addition to the comments in this letter. The County must respond to these consultants' comments separately and individually.⁶

O5-1
(Cont.)

³ P. Fox, Comments on the Draft Environmental Impact Report for the Humboldt Wind Energy Project (June 14, 2019) (hereinafter, "Fox Comment"), **Exhibit A**.

⁴ R. Owens, Letter from Renée Owens to Kyle Jones: Comments for the Draft Environmental Impact Report for the Humboldt Wind Energy Project SCH No. 201872076 (June 13, 2019) (hereinafter, "Owens' Comment"), **Exhibit B**.

⁵ CEQA Guidelines § 15384 subd. (b) identifies "reasonable assumptions predicated upon facts, and expert opinion supported by facts" as substantial evidence.

⁶ Documents cited by Fox Comments and Owens Comments not available online are provided in a storage device accompanying the overnight mailing of this comment.

I. STATEMENT OF INTEREST

Citizens for Responsible Wind Energy is an unincorporated association of individuals and labor organizations with members who may be adversely affected by the potential public and worker health and safety hazards and environmental and public service impacts of the Project. The association includes Humboldt County residents and California Unions for Reliable Energy (“CURE”) and its members and families and other individuals that live, recreate and/or work in Humboldt County (collectively “Citizens”).

Citizens supports the development of clean, renewable energy technology, including the use of wind power generation, where properly analyzed and carefully planned to minimize impacts on public health and the environment. Wind energy projects should avoid impacts to sensitive species and habitats, water resources, and public health, and should take all feasible steps to ensure unavoidable impacts are mitigated to the maximum extent feasible. Only by maintaining the highest standards can energy supply development truly be sustainable.

The individual members of Citizens, including Doug Toland, and the members of the affiliated labor organizations live, work, recreate and raise their families in Humboldt County. They would be directly affected by the Project’s environmental and health and safety impacts. Individual members may also work constructing the Project itself. They will be first in line to be exposed to any health and safety hazards that may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts.

The organizational members of Citizens and their members also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for the members that they represent. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in the County, and by making it less desirable for businesses to locate and people to live and recreate in the County, including the Project vicinity. Continued degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduces future employment opportunities.



O5-1
(Cont.)

Finally, the organizational members of Citizens are concerned with projects that can result in serious environmental harm without providing countervailing economic benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment. It is in this spirit we offer these comments.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report (“EIR”) (except in certain limited circumstances).⁷ The EIR is the very heart of CEQA.⁸ “The foremost principle in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.”⁹

CEQA has two primary purposes, none of which is fulfilled by the DEIR. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.¹⁰ “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR “protects not only the environment but also informed self-government.”¹¹ The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”¹²

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and all feasible mitigation measures.¹³ The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and

⁷ See, e.g., Pub. Resources Code § 21100.

⁸ *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.

⁹ *Comtys. for a Better Env’ v. Cal. Res. Agency* (2002) 103 Cal. App.4th 98, 109 (“*CBE v. CRA*”).

¹⁰ CEQA Guidelines § 15002(a)(1).

¹¹ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.

¹² *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

¹³ CEQA Guidelines § 15002(a)(2) and (3); see also *Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.

to “identify ways that environmental damage can be avoided or significantly reduced.”¹⁴ If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.”¹⁵

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position. *A clearly inadequate or unsupported study is entitled to no judicial deference.*”¹⁶ As the courts have explained, “a prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.”¹⁷

III. THE COUNTY FAILS TO DESCRIBE THE EXISTING ENVIRONMENTAL SETTING BY FAILING TO SUFFICIENTLY DESCRIBE THE NATURE OF THE IMPACTED FORESTS

The DEIR describes the existing environmental setting incompletely, thereby skewing the County’s impact analysis. The existing environmental setting is the starting point from which the lead agency must measure whether a proposed Project may cause a significant environmental impact.¹⁸ CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective.¹⁹

¹⁴ CEQA Guidelines §15002(a)(2).

¹⁵ Pub. Resources Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

¹⁶ *Berkeley Jets*, 91 Cal. App. 4th 1344, 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391 409, fn. 12.

¹⁷ *Berkeley Jets*, 91 Cal.App.4th at 1355; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946.

¹⁸ See, e.g., *Communities for a Better Env’t v. S. Coast Air Quality Mgmt. Dist.* (Mar 15, 2010) 48 Cal.4th 310, 316; *Fat v. City of Sacramento* (2002) 97 Cal.App.4th 1270, 1278, citing Remy, et al.; Guide to the Calif. Environmental Quality Act (1999) p. 165.

¹⁹ CEQA Guidelines §15125(a)(1); *Riverwatch v. City of San Diego* (1999) 76 Cal.App.4th 1428, 1453.

05-1
(Cont.)

05-2

Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate and meaningful evaluation of environmental impacts. The importance of having a stable, finite and fixed environmental setting for purposes of an environmental analysis was recognized decades ago.²⁰ Today, the courts are clear that “[b]efore the impacts of a Project can be assessed and mitigation measures considered, an [EIR] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.”²¹

An EIR must also describe the existing environmental setting in sufficient detail to enable a proper analysis of project impacts.²² The CEQA Guidelines provide that “[k]nowledge of the regional setting is critical to the assessment of environmental impacts.”²³ This level of detail is necessary to “permit the significant effects of the project to be considered in the full environmental context.”²⁴

Here, the DEIR relies on zoning information and the economic uses of the site, rather than a description of the type, species, age, or composition of forest habitats that exist and that are essential to accurately determining impacts to biological resources.²⁵ Often, the DEIR generalizes the forest as “timberland” which ignores the variation in the forests.²⁶ Given the richness of biodiversity and specialization of plants and animals, greater detailed data is necessary to properly evaluate the Project’s impacts.²⁷ Ms. Owens was required to utilize data from the Humboldt Redwood Company to provide more accurate detail for her analysis of the DEIR, a burden that falls squarely on the lead agency, not the public to provide.

The DEIR fails as an informational document by not adequately describing the existing environmental setting, thereby misleading the public as to the extent of impacts from the Project. The DEIR must be withdrawn and recirculated with accurate data that reflects the area’s rich biodiversity.

²⁰ *City of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185.

²¹ *City of Amador v. El Dorado City Water Agency* (1999) 76 Cal.App.4th 931, 952.

²² *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* (1997) 60 Cal.App.4th 1109, 1121-22.

²³ CEQA Guidelines § 15125(c).

²⁴ *Id.*

²⁵ Owens Comment, pp. 1-3

²⁶ Owens Comment, pp. 1-3

²⁷ Owens Comment, pp. 1-3

IV. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE, AND MITIGATE SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES

A. The DEIR Fails to Adequately Analyze and Mitigation Impacts to Marbled Murrelet

The Project proposes wind turbines on ridges in an area that is between critical nesting habitat for Marbled Murrelet and the ocean, where the birds hunt. Ms. Owens has evaluated the DEIR's sections on Marbled Murrelet and found that the DEIR failed to establish an environmental setting for the species, underestimated impacts to the species, and proposes improperly deferred and ineffective mitigation for the Project's significant impacts on the species. As such, the DEIR lacks substantial evidence to support its claim that impacts to the species are less than significant.

Marbled Murrelet are protected birds under both the Federal and California Endangered Species Acts, with a population that has remained in decline.²⁸ No wind energy development has been constructed so close to Marbled Murrelet habitat as the proposed Project, meaning the DEIR cannot rely on assumptions based on real-world scenarios regarding interaction of the birds with wind turbines.²⁹ Nesting birds are difficult to observe, resulting in knowledge gaps regarding breeding and behavior.³⁰ Other wind projects near Marbled Murrelet habitat have been withdrawn due to significant and unavoidable impacts to the birds and high costs of mitigation.³¹ Both the California Department of Fish and Wildlife ("CDFW") and United States Fish and Wildlife Service ("USFWS") have expressed concern to the County about the Project's potential to kill Marbled Murrelet given the area's suitable habitat and the species' slow reproductive rate.³² The agencies also suggested that the Project be sited away from flight paths, which the County ignored.³³

O5-3

²⁸ Owens Comment, pp. 8-25.

²⁹ Owens Comment, pp. 8-25.

³⁰ Owens Comment, pp. 8-25.

³¹ Owens Comment, pp. 8-25.

³² Owens Comment, pp. 8-25.

³³ Owens Comment, pp. 8-25.

1. The DEIR Fails to Establish the Existing Environmental Setting for Marbled Murrelet

The DEIR relies on “desk-top” analysis of existing data to determine the number of Marbled Murrelet nests in the area. Most of this data came from existing sightings or data from the Humboldt Redwood Company.³⁴ These sources likely undercount possible nest locations, since the species is hard to detect by nature, and over a third of the Project area is not on Humboldt Redwood Company land.³⁵ The County determined that there must be 100 nests in the area, but then only provided on-the-ground analysis for 39 stands, without explanation or evidence to support this methodology.³⁶ The DEIR then concludes that there are 29 trees suitable for Marbled Murrelet nesting.³⁷ Nest information for Bear Ridge was conducted by interview with the forester, rather than actual on-the-ground analysis.³⁸ The DEIR states that there was limited access to information due to the sensitive nature of the area. However, Ms. Owens was able to review publicly available maps to determine that there are a large number of acres of old growth forest in the area suitable for Marbled Murrelet nesting habitat that should have been visited.³⁹ Ms. Owens’ assessment finds that the conclusion that only 29 trees are suitable nest sites is not supported by evidence and that the DEIR must be recirculated with an accurate description of actual suitable nest sites.⁴⁰

The surveys cited in the DEIR likewise do not establish a baseline for Marbled Murrelet. Both the USFWS and CDFW recommended a minimum of two years of survey data to determine site use by Marbled Murrelet.⁴¹ Instead, the DEIR relies on only six months of survey data, with only five radar surveys conducted daily, between dawn and dusk.⁴² Ms. Owens has determined that this is inadequate since the birds visit their nests up to nine times throughout a day.⁴³ Other factors, such as weather and temperature, affect flight patterns, which

05-3
(Cont.)

³⁴ Owens Comment, pp. 8-25.

³⁵ Owens Comment, pp. 8-25.

³⁶ Owens Comment, pp. 8-25.

³⁷ Owens Comment, pp. 8-25.

³⁸ Owens Comment, pp. 8-25.

³⁹ Owens Comment, pp. 8-25.

⁴⁰ Owens Comment, pp. 8-25.

⁴¹ Owens Comment, pp. 8-25.

⁴² Owens Comment, pp. 8-25.

⁴³ Owens Comment, pp. 8-25.

requires surveys to be conducted through all seasons, rather than the April through September range done here.⁴⁴ Ms. Owens also notes that the DEIR relied solely on radar surveys, which are limited, particularly by blind spots here.⁴⁵ Only two visual confirmations were used to confirm radar sampling assumptions, which do not meet recommendations by the USFWS and CDFW and likely include error.⁴⁶ Because there was limited surveys and analysis, the DEIR fails to establish an accurate baseline for Marbled Murrelet use of the Project site.

2. The DEIR Fails to Accurately Assess Impacts to Marbled Murrelet

Ms. Owens finds that the DEIR underestimates collision risk to Marbled Murrelet based on inadequate surveys, incomplete data collection, and inappropriate assumptions.⁴⁷ Ms. Owens notes that there is a general underestimation of bird strikes by wind turbines globally and that this Project is on track to do the same due to faulty surveys presenting an inaccurate baseline.⁴⁸

In its assessment of collision risks, the DEIR lacks substantial evidence to support its assumption that the Project has an avoidance probability of 0.98, which is nearly complete avoidance, and its conclusion that, conservatively, 10.43 Marbled Murrelet will be killed over 30 years. Ms. Owens shows that there is no supporting evidence to assume Marbled Murrelet will avoid turbines in as high numbers as the DEIR did, nor to label the DEIR's analysis as conservative.⁴⁹ First, as support for assuming an avoidance probability of 0.98, which is nearly complete avoidance, the County cites studies focused on other species, or studies from offshore wind farms, which are different from Marbled Murrelet and this onshore Project in significant ways.⁵⁰ Marbled Murrelet fly back and forth between nesting habitat and the ocean, are not adapted to avoid wind turbines placed in the middle of that range and are especially limited in times of low lighting and fog.⁵¹ An offshore wind project is not placed in the same location as an onshore wind project. Second, the

O5-3
(Cont.)

⁴⁴ Owens Comment, pp. 8-25.

⁴⁵ Owens Comment, pp. 8-25.

⁴⁶ Owens Comment, pp. 8-25.

⁴⁷ Owens Comment, pp. 8-25.

⁴⁸ Owens Comment, pp. 8-25.

⁴⁹ Owens Comment, pp. 8-25.

⁵⁰ Owens Comment, pp. 8-25.

⁵¹ Owens Comment, pp. 8-25.

DEIR's assumption was based on observance in daylight and good weather, which does not reflect conditions on the Project site, which are commonly foggy.⁵² Third, the DEIR's assumption is inconsistent with USFWS' risk assessment for Marbled Murrelets for a similar project in Oregon where the USFWS found that a conservative avoidance probability of 0.75 would be appropriate for a project between foraging and nesting habitat.⁵³

The DEIR also fails to disclose the method used to assign a number of birds killed per unit of avoidance probability or whether the relationship is linear or exponential.⁵⁴ Without this data, it is impossible for the public to ascertain the effect of errors in the assignment of the avoidance probability, as was done here.⁵⁵ A truly conservative estimate of the number of Marbled Murrelets killed is likely much higher than what was presented in the DEIR, because the DEIR's assumptions are not supported and, in fact, not even applicable to this type of Project and species. In addition, the supporting information is missing, so the DEIR does not provide a way for the public to know what the actual estimates of killed Murrelet could be.⁵⁶

3. Mitigation Measures 3.5-1c and 3.5-2c are Ineffective at Reducing Marbled Murrelet Impacts to a Less Than Significant Level

An EIR must propose mitigation measures that reduce or avoid a project's significant impacts.⁵⁷ Mitigation measures cannot be so undefined that it is impossible to judge their effectiveness.⁵⁸ Rather, they must identify the methods used to mitigate the impacts and set out standards that the agency will commit to meet.⁵⁹ Mitigation measures must be enforceable to ensure that they will not be adopted and simply ignored.⁶⁰

⁵² Owens Comment, pp. 8-25.

⁵³ Owens Comment, pp. 8-25.

⁵⁴ Owens Comment, pp. 8-25.

⁵⁵ Owens Comment, pp. 8-25.

⁵⁶ Owens Comment, pp. 8-25.

⁵⁷ Pub. Resources Code § 21100, subd. (b)(3).

⁵⁸ *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.4th 260, 281.

⁵⁹ *North Coast Rivers Alliance v. Marin Mun. Water Dist.* (2013) 216 Cal.4th 614, 647.

⁶⁰ Pub. Res. Code § 21081.6, subd. (b); CEQA Guidelines § 15126.4, subd.(a)(2); *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.4th 1173, 1186.

05-3
(Cont.)

05-4

Mitigation Measure 3.5-1c proposes a Worker Environmental Awareness Program, which proposes training workers in the identification of wildlife habitat and special-status species.⁶¹ Ms. Owens states that in her 30 years of work on projects, she has never seen how increased worker awareness of species translates into less deaths of species.⁶² Workers do not become naturalists after one lecture, and cannot be expected to recall all sensitive species and how to avoid them.⁶³ Further, there are no standards or enforcement to ensure that trained workers will always avoid impacts or provide compensation for failure to do so.⁶⁴ This measure is ineffective and unenforceable and does not mitigate significant impacts to Marbled Murrelet.

Mitigation Measure 3.5-2c proposes a corvid management plan to attempt to reduce corvid predation of juvenile Murrelet in Van Duzen Park.⁶⁵ Much of the support for the analysis of the efficiency of this mitigation measure is based on unavailable data with inappropriate assumptions.⁶⁶ The measure relies on an assumption that Marbled Murrelet nest in the park, based off of a 16 year old study that does not mention the park.⁶⁷ Description of the mitigation measure necessary to gauge its effectiveness is vague and lacking.⁶⁸ The mitigation measure still claims, without supporting evidence, that it would produce 10 times more breeding adults than the number of birds killed by the Project (based off the improperly low estimated birds killed).⁶⁹ Ms. Owens notes that it is possible that corvid management can benefit Marbled Murrelet populations, but there is little real world data about whether any programs elsewhere were successful and little detail in the DEIR to show how such a program would be implemented, enforced, and funded.⁷⁰

Mitigation Measure 3.5-2c also proposes removing derelict fishing gear, based on one SeaDoc study from 2005 showing a program was effective for other bird

⁶¹ DEIR, p. 3.5-74-3.5-75.

⁶² Owens Comment, pp. 8-25.

⁶³ Owens Comment, pp. 8-25.

⁶⁴ Owens Comment, pp. 8-25.

⁶⁵ DEIR, pp. 3.5-83-3.5-84.

⁶⁶ Owens Comment, pp. 8-25.

⁶⁷ Owens Comment, pp. 8-25.

⁶⁸ Owens Comment, pp. 8-25.

⁶⁹ Owens Comment, pp. 8-25.

⁷⁰ Owens Comment, pp. 8-25.

species.⁷¹ There is no evidence that this measure will provide effective compensatory mitigation for the Project's significant impacts from killing of Marbled Murrelet.⁷²

4. The DEIR Proposes Impermissibly Deferred Mitigation in Mitigation Measures 3.5-1a and 3.5-2c

It is generally improper to defer the formulation of mitigation measures.⁷³ An exception to this general rule applies when the agency has committed itself to specific performance criteria for evaluating the efficacy of the measures to be implemented in the future, and the future mitigation measures are formulated and operational before the project activity that they regulate begins.⁷⁴ As the courts have explained, deferral of mitigation may be permitted only where the lead agency: (1) undertakes a complete analysis of the significance of the environmental impact; (2) proposes potential mitigation measures early in the planning process; and (3) articulates specific performance criteria that would ensure that adequate mitigation measures were eventually implemented.⁷⁵

Here, the DEIR proposes Mitigation Measure 3.5-1a, which includes a yet-to-be defined construction buffer to protect Marbled Murrelet nests and Mitigation Measure 3.5-2c, which proposes developing future monitoring plans to assess the effectiveness of the proposed corvid management program.⁷⁶ None of these future actions articulate the performance criteria to ensure successful mitigation of project impacts. For Mitigation Measure 3.5-1a, the public has no idea what the proposed future buffer may be and has no way to determine if it would be effective.⁷⁷ Buffers should be based on real-world metrics and species behavior.⁷⁸ Further, the buffers have a caveat that they only be required if feasible; thus, the Applicant has no concrete performance measure to adhere to.⁷⁹ Similarly, Mitigation Measure 3.5-2c

O5-4
(Cont.)

⁷¹ Owens Comment, pp. 8-25.

⁷² Owens Comment, pp. 8-25.

⁷³ CEQA Guidelines § 15126.4(a)(1)(B); *POET v. CARB*, 218 Cal.App.4th at 735.

⁷⁴ *POET*, 218 Cal.App.4th at 738.

⁷⁵ *Comtys. for a Better Env't v. City of Richmond* (2010) 184 Cal.App.4th 70, 95; *Cal. Native Plant Socy' v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 621.

⁷⁶ DEIR, pp. 3.5-73, 3.5-83-3.5-84.

⁷⁷ Owens Comment, pp. 8-25.

⁷⁸ Owens Comment, pp. 8-25.

⁷⁹ Owens Comment, pp. 8-25.

proposes a monitoring plan to assess the proposed corvid management plan, without reference to corrective actions or other mitigation strategy that could be employed if it fails.⁸⁰ Thus, impacts to Marbled Murrelet would be unmitigated should buffers be infeasible or corvid management efforts fail to lower predation on Marbled Murrelet. Both measures are impermissibly deferred mitigation and do not lower Project impacts to a less than significant level.

Rather than the ineffective and impermissibly deferred mitigation above, Ms. Owens proposes 1) offsite compensatory mitigation using land purchases and conservation with success criteria that protect old growth forests and 2) curtailing wind turbines when Marbled Murrelet are detected.⁸¹

The DEIR fails to establish a proper baseline about Marbled Murrelet use of the Project site and lacks substantial evidence to supports its assumptions and conclusions and fails to provide an accurate, much less a conservative, estimate of Marbled Murrelets killed from Project activities. The DEIR lacks substantial evidence to show that the mitigation measures would reduce impacts to less than significant and substantial evidence shows that they will be ineffective and are deferred, resulting in significant unmitigated impacts to Marbled Murrelet. Ms. Owens' review of the DEIR demonstrates that the County has failed to provide substantial evidence to show that the Project will have less than significant impacts on Marbled Murrelet after mitigation. Instead, the Project will kill more the birds than disclosed and lacks mitigation measures to effectively avoid or compensate for the deaths. The DEIR must be withdrawn and recirculated after completing the appropriate studies and surveys for Marbled Murrelet, providing the assumptions and data to the public, and proposing effective mitigation measures.

B. The DEIR Fails to Establish the Existing Environmental Setting for Northern Spotted Owl

The Northern Spotted Owl is a state and federally protected species that is particularly sensitive to impacts, slow to recover from losses, and present near the Project site.⁸² Despite the presence of such a fragile species, the County did not

⁸⁰ Owens Comment, pp. 8-25.

⁸¹ Owens Comment, pp. 25-28.

⁸² Owens Comment, pp. 25-28.

O5-4
(Cont.)

O5-5

conduct any protocol surveys for Northern Spotted Owl.⁸³ The DEIR relies on surveys that use an inadequately small 0.7-mile buffer, rather than the 1.3-mile buffer suitable for Project site.⁸⁴ Like with Marbled Murrelet, the DEIR also improperly relies on Humboldt Redwood Company data, even though it is not publicly available and does not cover the entire site, and data from the California Natural Diversity Database, which is not specific and detailed enough to provide comprehensive data needed to determine Northern Spotted Owl use of the area.⁸⁵ Without accurate information supported by substantial evidence on the existing setting for the Northern Spotted Owl, the DEIR cannot accurately assess potentially significant impacts to Northern Spotted Owl, nor tailor mitigation measures to lessen those impacts. As such, the DEIR lacks substantial evidence to determine that impacts to Northern Spotted Owl will be less than significant.

O5-5
(Cont.)

C. The DEIR Fails to Adequately Mitigate Impacts to Eagles

The Project impacts Bald and Golden Eagles through nest disturbance during construction and increased collision risk with wind turbines and the gen-tie line but fails to provide adequate mitigation for these impacts. Mitigation Measure 3.5-3 proposes to minimize impacts on eagles by performing preconstruction surveys to determine the location of nests, which are to be submitted to USFWS and CDFW.⁸⁶ This survey deadline occurs at the end of the nesting season, so its results would be outdated when completed.⁸⁷ This timeline fails to protect eagle nests.⁸⁸ The DEIR also proposes a Worker Environmental Awareness Program, which has already been discussed as inadequate above.⁸⁹

O5-6

The DEIR also proposes electric pole retrofitting in order to mitigate electrocution impacts to eagles.⁹⁰ Ms. Owens identifies studies that have shown that retrofitting of poles has been ineffective in the past.⁹¹ Given the Fully Protected status of Bald and Golden Eagles and the fact that loss of just a few

⁸³ Owens Comment, pp. 25-28.

⁸⁴ Owens Comment, pp. 25-28.

⁸⁵ Owens Comment, pp. 25-28.

⁸⁶ DEIR, pp. 3.5-87-3.5-88.

⁸⁷ Owens Comment, pp. 34-35.

⁸⁸ Owens Comment, pp. 34-35.

⁸⁹ Owens Comment, pp. 34-35.

⁹⁰ DEIR, p. 3.5-92.

⁹¹ Owens Comment, pp. 34-35.

individuals can contribute to a regional population sink, Ms. Owens proposes further mitigation measures, such as undergrounding the gen-tie line and increasing compensatory mitigation funding.⁹²

↑ 05-6
(Cont.)

D. The DEIR Fails to Adequately Analyze and Mitigate Impacts to Bats

The DEIR notes that the Project site is home to nine bat species of conservation concern, including an unusually high concentration of the normally rare Hoary Bat, but the does not properly analyze impacts to these bats.⁹³ The Project's construction could cause temporary disturbance or permanent removal of bat roosts and Project operation can cause bat mortality.⁹⁴ Hoary bats make up the highest proportion of bat fatalities at wind energy facilities.⁹⁵ The CDFW provided recommendations to the County for monitoring bats to determine their use of the area, but the County did not conduct these surveys for the Project.⁹⁶ This is inappropriate given the special characteristics of Hoary Bat use at the site.⁹⁷

05-7

The DEIR includes a faulty analysis, unsupported by substantial evidence, of impacts to special-status bats. First, the DEIR suggests that an appropriate level of impact for special-status bats is causing sufficient mortality to a species whereby its local population is no longer self-sustaining.⁹⁸ However, normal practice is for any mortality of special-status species to be considered significant.⁹⁹ The DEIR goes on to suggest that because there is ample habitat elsewhere and that bats can move, there are few impacts to species.¹⁰⁰ Ms. Owens provides substantial evidence that forced relocation of bats from loss of habitat will induce stress in the species that can harm them.¹⁰¹

↓

⁹² Owens Comment, pp. 34-35.

⁹³ DEIR, pp. 3.5-38-3.5-40.

⁹⁴ Owens Comment, pp. 28-31.

⁹⁵ Owens Comment, pp. 28-31.

⁹⁶ Owens Comment, pp. 28-31.

⁹⁷ Owens Comment, pp. 28-31.

⁹⁸ DEIR, p. 3.5-129.

⁹⁹ Owens Comment, pp. 28-31.

¹⁰⁰ Owens Comment, pp. 28-31.

¹⁰¹ Owens Comment, pp. 28-31.

Mitigation measures proposed to reduce bat deaths to a less than significant level are ineffective, vague, and impermissibly deferred. Mitigation Measure 3.5-15 proposes to avoid and compensate for impacts to bats but fails to include necessary criteria to define what successful avoidance is and when compensation must occur and in what form.¹⁰² Mitigation Measure 3.5-1.8a proposes developing a future Technical Advisory Committee to be funded by the applicant to later determine whether Project operations pose a risk to bat populations.¹⁰³ As Ms. Owens notes, it is not a question of if, but how the DEIR needs to mitigate collision impacts to bats.¹⁰⁴ Measures to lessen the impacts of the Project must be included in this DEIR, not left for an Applicant-funded committee with the Applicant as one-quarter of the representation to discern.¹⁰⁵ There are no standards provided in the DEIR as to what mitigation would be formulated by the committee.¹⁰⁶ Ms. Owens explains that instead of the ineffective mitigation in the DEIR, the Applicant must commit to compensatory land purchases and establish clear protocols describing a compensatory mitigation program.¹⁰⁷

Mitigation Measure 3.5-18b proposes mortality monitoring, which is not actual mitigation, but could inform future mitigation management.¹⁰⁸ More details need to be added to this measure to demonstrate that the search circumference is supported by the latest peer-reviewed science.¹⁰⁹ Given the steep terrain and forest, detection dogs should be employed.¹¹⁰

The DEIR found that bats were more active on nights with higher temperatures, lower humidity, and lower wind speed.¹¹¹ Ms. Owens proposes that more adequate mitigation could be formulated, whereby criteria conditions correlated to bat mortality could be identified and turbines could be curtailed when conditions are met.¹¹²

¹⁰² Owens Comment, pp. 28-31.

¹⁰³ DEIR, pp. 3.5-136-3.5-137.

¹⁰⁴ Owens Comment, pp. 28-31.

¹⁰⁵ Owens Comment, pp. 28-31.

¹⁰⁶ Owens Comment, pp. 28-31.

¹⁰⁷ Owens Comment, pp. 28-31.

¹⁰⁸ Owens Comment, pp. 35-38.

¹⁰⁹ Owens Comment, pp. 35-38.

¹¹⁰ Owens Comment, pp. 35-38.

¹¹¹ DEIR, Appendix L, p. 16.

¹¹² Owens Comment, pp. 35-38.

The DEIR fails to provide adequate analysis of impacts to sensitive bat species, and proposes ineffective, vague, and impermissibly deferred mitigation. As such, the DEIR's determination that impacts to bats will be less than significant is not supported by substantial evidence. On the contrary, Ms. Owens provides substantial evidence that the Project will significantly impact potentially thousands of special-status bats without mitigation.

05-7
(Cont.)

E. The DEIR Fails to Disclose the Status of Fully Protected Species

California Fully Protected Species Law prohibits the take of Fully Protected Species.¹¹³ The DEIR fails to disclose that Golden Eagles are Fully Protected Species under California law.¹¹⁴ There are other Fully Protected Species, such as Peregrine Falcon, White-Tailed Kite, and Ringtail, that may be harmed by the Project.¹¹⁵ The DEIR fails to analyze the Project's potentially significant impacts on these species and proposed measures to avoid or mitigate significant impacts to these species.¹¹⁶

05-8

F. The DEIR Fails to Adequately Analyze and Mitigate Impacts to Special-Status Fish and Other Aquatic Species

As an initial matter, Ms. Owens concludes that the DEIR failed to properly establish the environmental setting for special-status fish and other aquatic species, failed to accurately describe the abundance of species and the nature of the riparian habitat in the area, failed to describe the full extent of Project impacts on Humboldt Bay, and failed to provide effective mitigation for impacts to species. Thus, the DEIR fails as an informational document.

05-9

1. The DEIR Fails to Provide Enough Data to Establish the Environmental Setting

The DEIR identifies several special-status aquatic species that could be impacted by the Project but failed to complete enough studies to provide a proper

¹¹³ Fish and Game Code §§ 3511, 4700, 5050, 5515.

¹¹⁴ Fish and Game Code § 3511.

¹¹⁵

¹¹⁶ Owens Comment, p. 28.

understanding of the existing environmental setting from which impacts could be ascertained.¹¹⁷ Ms. Owens explains that the DEIR did not include onsite sampling of fish populations, nor recent fish surveys, leaving the public with no information regarding the abundance of the species.¹¹⁸ There is no analysis of water quality, nor any explanation of the relationship between water quality and habitat for species.¹¹⁹ Ms. Owens suggests that at least one year and preferably two years of water quality metrics must be provided before construction so that an adequate water quality baseline can be established.¹²⁰

2. The Lack of Water Quality Analysis Leads to an Inadequate Discussion of Project Impacts

Without an adequate baseline or understanding of the relationship of water quality with aquatic species habitat, the DEIR cannot, nor does it try to, properly discuss the impacts of Project construction on special-status aquatic species. Turbidity, total suspended solids, water temperature, and dissolved oxygen must be monitored for changes to accurately determine the impacts to habitat.¹²¹ The DEIR acknowledges that the Project's construction activities could harm water quality but does not fully assess the impacts to water quality and habitat throughout the Project area.¹²² Upland construction and vegetation removal will lead to sedimentation in the Van Duzen and Lower Eel Rivers and ultimately impact Humboldt Bay, which is already dealing with high levels of sedimentation.¹²³ The existing sedimentation issue already harms threatened salmonids and would be made worse by the Project's construction. Treated wastewater proposed for dust suppression would likely contain phosphates, which increase nutrients in waters, potentially increasing dissolved oxygen levels.¹²⁴ These impacts were not addressed in the DEIR.

O5-9
(Cont.)

¹¹⁷ Owens Comment, pp. 4-16.

¹¹⁸ Owens Comment, pp. 4-16.

¹¹⁹ Owens Comment, pp. 4-16.

¹²⁰ Owens Comment, pp. 4-16.

¹²¹ Owens Comment, pp. 4-16.

¹²² Owens Comment, pp. 4-16.

¹²³ Owens Comment, pp. 4-16.

¹²⁴ Owens Comment, pp. 4-16.

3. Proposed Mitigation Measure 3.5-22a to Limit Impacts to Riparian Habitat is Vague and Ineffective

The mitigation proposed in the DEIR is impermissibly ineffective and vague. The DEIR proposes that disturbance of riparian areas is “expected to be reduced” and project components would be “designed to minimize impacts when possible.”¹²⁵ First, because the impacts to water quality from sedimentation issues is not adequately described, it is unlikely that impacts will be minimized.¹²⁶ Second, simply expecting that disturbance will be reduced, without any specifics or justification, is vague and unenforceable.¹²⁷ Ms. Owens identifies numerous details that are missing from Mitigation Measure 3.5-22a such as target ecosystem function following construction, timeline for restoration, and an adaptive management framework.¹²⁸

O5-10

Whereas the DEIR fails to adequately analyze special-status fish populations, Ms. Owens proposes numerous studies mitigation measures that should be considered in a recirculated EIR:

- Employ standardized surveys of fish communities for at least two years,
- Provide water quality data on impacted streams,
- Develop stronger erosion control measures than silt fencing,
- Include clear metrics for revegetation of cleared areas, including timelines and publicly involved adaptive management,
- Prevent of the use of treated wastewater with phosphates for dust suppression, and

¹²⁵ DEIR, p. 3.5-155-3.5-156.

¹²⁶ Owens Comment, pp. 4-16.

¹²⁷ Owens Comment, pp. 4-16.

¹²⁸ Owens Comment, pp. 4-16.

- Develop a Sacramento pikeminnow control plan prevent the invasive species from dominating the ecosystem.¹²⁹

↑
05-10
(Cont.)

G. The DEIR Fails to Analyze Impacts and Provide Adequate Mitigation for Special-Status Mammals

The DEIR notes the presence of special-status Sonoma Tree Vole, Ringtail, Pacific Fisher, and American Badger within the Project site but does not conduct any focused surveys to determine whether these species could be impacted by the Project and mitigation for any impacts.¹³⁰ The Pacific Fisher was found numerous times, suggesting an abundance in the area, yet the County did not provide focused surveys to assess impacts of this threatened species.¹³¹ These mammals are at risk from disturbance from Project construction.¹³² Mitigation measures implemented to limit predation by raptors near turbines involves the use of rodenticides, which are the main cause of Pacific Fisher decline elsewhere, and can exacerbate the decline of the species here.¹³³

05-11

Ms. Owens reviewed mitigation measures designed to lessen impacts to Pacific Fishers and other mammals and found that they are ineffective at reducing impacts to a less than significant level.¹³⁴ Mitigation Measure 3.5-19c proposes only 50-foot buffers from dens if discovered which are inadequate to prevent disturbance of the dens from construction noise.¹³⁵ The Mitigation Measure is further limited in that it does not require buffers if a den is abandoned, despite the fact that abandonment would occur due to disturbance by construction activities.¹³⁶ Finally if buffers are infeasible, the Applicant will coordinate with CDFW to passively relocate animals, which is not adequate mitigation since passive relocation results in harassment.¹³⁷ Thus, even with Mitigation Measure 3.5-19c in place, significant impacts to mammals would still occur. The DEIR has failed to analyze and

¹²⁹ Owens Comment, pp. 4-16.
¹³⁰ Owens Comment, pp. 31-34.
¹³¹ Owens Comment, pp. 31-34.
¹³² Owens Comment, pp. 31-34.
¹³³ Owens Comment, pp. 31-34.
¹³⁴ Owens Comment, pp. 31-34.
¹³⁵ Owens Comment, pp. 31-34.
¹³⁶ Owens Comment, pp. 31-34.
¹³⁷ Owens Comment, pp. 31-34.

ascertain impacts to special-status mammals on the Project site and failed to mitigate impacts to a less than significant level.

05-11
(Cont.)

V. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ANALYZE, AND MITIGATE SIGNIFICANT IMPACTS FROM THE PROJECT GEN-TIE LINE, WILDFIRE RISK, GHG EMISSIONS, AND AIR QUALITY

Dr. Fox has reviewed the DEIR and concluded that it fails to adequately disclose, analyze, and mitigate in several areas. As such, the DEIR fails as an informational document and must be withdrawn.

A. The Project's Gen-Tie Line

1. The DEIR Fails as an Informational Document by Not Disclosing the Risk of Wildfire from the Project's Gen-Tie Line

The Project includes a 25-mile long overhead transmission or Gen-Tie line through heavily forested regions that are classified as high or very high fire hazard severity zones.¹³⁸ The Gen-Tie line would be placed within a 100-foot-wide transmission corridor and feature aboveground pole heights up to 65 feet.¹³⁹ The DEIR acknowledges that the Gen-Tie line would cause impacts to special-status birds through increasing collision risk, impacts to aquatic resources by placing the line under the Eel River, and impacts to special-status plants during clearing land for the Gen-Tie Line. Dr. Fox has reviewed the DEIR and found that the DEIR fails to address additional impacts from the Gen-Tie line, including aesthetic impacts, wildfire risk, and greenhouse gas ("GHG") impacts.¹⁴⁰ The DEIR fails to adopt feasible mitigation measures, such as undergrounding of powerlines, or proposes ineffective and improperly deferred mitigation measures that do not mitigate Project impacts to a less than significant level.¹⁴¹

05-12

The DEIR does not discuss the extent to which transmission lines in forested areas, such as the project's gen-tie line, are causing devastating wildfires in California.¹⁴² Climate change and drought have caused California wildfires to

¹³⁸ DEIR, pp. 2-16-2-17.

¹³⁹ DEIR, p. 2-17.

¹⁴⁰ Fox Comment, pp. 3-5.

¹⁴¹ Fox Comment, pp. 3-5.

¹⁴² Fox Comment, pp. 3-5.

increase in frequency and severity, with a higher number of deaths and acres burned than normal.¹⁴³ As noted by the DEIR, many of these wildfires were caused when overhead powerlines sparked due to interaction with wind and vegetation.¹⁴⁴ The DEIR notes that standards for vegetation management and transmission line construction would be followed, but does not mention that numerous massive wildfires have occurred year after year in California from transmission lines even though these standards are in place and being followed.¹⁴⁵ The recent Tubbs, Thomas, and Camp fires have spurred action by the California Legislature, Public Utilities Commission, and the Governor's Office of Planning and Research to change these standards to be more responsive to the on-the-ground realities and actually do enough to prevent fires.¹⁴⁶

The DEIR mentions that the gen-tie line will extend approximately 25 miles through forested areas designated as high and very high fire hazard severity zones but does not address the risk of wildfire associated with the line, irrespective of compliance with standards that have a proven track record of failure.¹⁴⁷ Dr. Fox provides substantial evidence that the placement of the gen-tie line in this area would still pose a large risk of starting disastrous wildfires.¹⁴⁸ The DEIR fails as an informational document for not including this complete discussion and must be withdrawn and recirculated with this analysis completed.

2. The DEIR Proposes Ineffective and Impermissibly Deferred Mitigation for Wildfire Risk

The DEIR concludes that Mitigation Measures 3.13-2a and 3.13-2b would mitigate the Project's wildfire risk to below a level of significance.¹⁴⁹ These claims lack analysis and evidentiary support. As long as the Project includes above ground transmission lines, there will be a significant fire risk.¹⁵⁰

¹⁴³ See Fox Comment, pp. 3-5.

¹⁴⁴ DEIR, pp. 3.13-17-3.13-18.

¹⁴⁵ Fox Comment, pp. 3-5.

¹⁴⁶ See Senate Bill 901 (2017-2018 Sess.); California Public Utilities Commission, Wildfires, (2019) available at <https://www.cpuc.ca.gov/CPUCNewsDetail.aspx?id=6442454974>; Governor's Office of Planning and Research, Commission on Catastrophic Wildfire and Recovery, (2019) available at <http://opr.ca.gov/wildfire/>.

¹⁴⁷ See DEIR, pp. 2-16-2-17.

¹⁴⁸ Fox Comment, pp. 3-5.

¹⁴⁹ DEIR, pp. 3.13-19-3.13-23.

¹⁵⁰ Fox Comment, pp. 10-13.

The DEIR proposes Mitigation Measures 3.13-2a and 3.13-2b which include a Fire Safety and Management Plan and an Emergency Response Plan, respectively.¹⁵¹ The DEIR does not explain how these plans eliminate the source of the risk from the gen-tie line, even if they were fully implemented.¹⁵² In fact, the above-ground transmission line will still be present and still provide the possibility of starting a fire in the area.¹⁵³ The conclusion that plans will reduce the Project's increased fire risk lacks substantial evidence demonstrating they will be effective in eliminating the risk of wildland fires. Further mitigation to eliminate the increased fire risk, such as undergrounding the gen-tie line, must be considered in a revised DEIR.

The plans included in Mitigation Measures 3.13-2a and 3.13-2b propose formulating protocols for fire potential and limiting wildfire expansion in the future without necessary specifics.¹⁵⁴ Plans for mitigation can and should be formulated now, for public review in a recirculated DEIR.

3. The DEIR Fails to Analyze the Aesthetic Impacts from the Project's Gen-Tie Line

The DEIR notes that the gen-tie line will have aesthetic effects but concludes, without support, that it will not cause significant aesthetic impacts.¹⁵⁵ The DEIR relies on the Visual Resources Technical Report in Appendix C, which admits that the effects from the gen-tie line were not evaluated.¹⁵⁶ No discussion was included in the DEIR about the surrounding area and viewpoints, nor does it include visual images of the area.¹⁵⁷ The DEIR does not include design details of the line from which analysis of aesthetic impacts could be performed.¹⁵⁸

The DEIR notes that there are few viewpoints of the gen-tie, that most of the views would be obscured by taller trees, but that some poles may be discernable.¹⁵⁹

¹⁵¹ DEIR, pp. 3-19-3-23.

¹⁵² Fox Comment, pp. 10-13.

¹⁵³ Fox Comment, pp. 10-13.

¹⁵⁴ Fox Comment, pp. 10-13.

¹⁵⁵ Fox Comment, pp. 14-18.

¹⁵⁶ Fox Comment, pp. 14-18.

¹⁵⁷ Fox Comment, pp. 14-18.

¹⁵⁸ Fox Comment, pp. 14-18.

¹⁵⁹ DEIR, p. 3.2-53.



O5-12
(Cont.)

O5-13

Noise analysis of the gen-tie construction indicates that sensitive receptors are as close as 200 feet from the gen-tie, which should be close enough to be visually impacted by the gen-tie line.¹⁶⁰ Despite all of the ways in which the DEIR finds that aesthetic impacts could occur, it still concludes, without evidence, that impacts would be less than significant.¹⁶¹ Dr. Fox has instead provided evidence that transmission lines generally have significant aesthetic impacts and that in the absence of evidence to the contrary, should be presumed to do so.¹⁶²

05-13
(Cont.)

The DEIR also concludes that the aesthetic impact of the gen-tie line despite failing to comply with Humboldt County General Plan Policy E-S5, which requires underground placement of transmission lines, where feasible, when above-ground lines would unavoidably affect views.¹⁶³ The DEIR lacks support because the DEIR does not include evidence demonstrating that the gen-tie line will not have significant impacts.

4. The DEIR Improperly Dismisses Undergrounding the Gen-Tie Line as Infeasible Mitigation

The County received a comment during the scoping period for the Project that an alternative using underground lines be analyzed, but the DEIR claims, without support, that underground lines would increase ground disturbance and not reduce a significant impact.¹⁶⁴ Dr. Fox explains that these assertions are incorrect.¹⁶⁵ There would be less overall ground disturbance since there would be no need to clear cut a 100-foot buffer around the gen-tie line for 25 miles.¹⁶⁶ The area over the underground line could be re-vegetated, rather than the gen-tie line which must be kept clear of vegetation.¹⁶⁷ Impacts from bird strikes, fire hazards, GHG, and aesthetic impacts would all be lessened by undergrounding the Project's gen-tie line.¹⁶⁸

05-14

¹⁶⁰ DEIR, Appendix U; Fox Comment, pp. 14-18.

¹⁶¹ Fox Comment, pp. 14-18.

¹⁶² Fox Comment, pp. 14-18.

¹⁶³ Humboldt County General Plan Policy E-S5(B).

¹⁶⁴ DEIR, p. 6-5.

¹⁶⁵ Fox Comment, pp. 5-6.

¹⁶⁶ Fox Comment, pp. 5-6.

¹⁶⁷ Fox Comment, pp. 5-6.

¹⁶⁸ Fox Comment, pp. 5-6.

Dr. Fox notes the numerous benefits of using an underground line. The gen-tie line would no longer be visible, eliminating permanent aesthetic impacts.¹⁶⁹ Bird strikes or impacts to eagles from the gen-tie line would be eliminated.¹⁷⁰ The lines would be more reliable since they would not be subject to extreme weather events or human activities.¹⁷¹ Underground lines have lower maintenance costs and are safer to use.¹⁷²

Underground lines are feasible, as demonstrated by utilities already undergrounding their lines. San Diego Gas & Electric reports that 60 percent of its lines are underground, including rural lines similar to the Project's lines.¹⁷³ Pacific Gas & Electric is also evaluating undergrounding some lines to lessen the risk of wildfires near homes.¹⁷⁴

While the DEIR summarily dismisses undergrounding the gen-tie line as infeasible and not likely to mitigate any significant impacts, Dr. Fox has provided substantial evidence that it is feasible and would lessen numerous impacts from the Project. The DEIR must be withdrawn and recirculated with undergrounding of the gen-tie line considered.

B. The DEIR Underestimates the Project's Sources of GHG Emissions, Improperly Concludes GHG Emissions are Less Than Significant, and Lacks Mitigation to Reduce Impacts to a Less Than Significant Level

Dr. Fox reviewed the DEIR and determined that the DEIR underestimates GHG emissions, and makes unsupported claims the Project will offset non-renewable energy production. The DEIR thus lacks substantial evidence to support its conclusion that Project GHG emissions are less than significant and lacks mitigation measures to reduce Project GHG emissions.

1. The DEIR Underestimates Project GHG Emissions

¹⁶⁹ Fox Comment, pp. 5-6.

¹⁷⁰ Fox Comment, pp. 5-6.

¹⁷¹ Fox Comment, pp. 5-6.

¹⁷² Fox Comment, pp. 5-6.

¹⁷³ Fox Comment, pp. 5-6.

¹⁷⁴ Fox Comment, pp. 5-6.

05-14
(Cont.)

05-15

The DEIR fails to consider several sources of GHG emissions from the project and fails as an informational document. Further, any conclusions that the Project's GHG emissions are less than significant are unfounded without considering all sources of emissions.

First, the DEIR fails to include the GHG emissions from the large amounts of vegetation removed by the Project. The Project site is dominated by redwood and Douglas Fir forest, which sequester large amounts of carbon.¹⁷⁵ The DEIR does not mention how the removal of all the vegetation would increase global GHG emissions.¹⁷⁶ Instead, the DEIR relies on the area being zoned timberland and that timber harvesting practices involve active replanting.¹⁷⁷ Most of the vegetation would not be replaced, as it is being cleared to build the turbine pads, access roads, or provide a buffer for the gen-tie line.¹⁷⁸ Also, there is no evidence to support that the trees would have been harvested by the Humboldt Redwood Company and if they were, that the responsible party would be subject to mandatory replanting.¹⁷⁹ There is no mandatory mitigation measure to identify lands to plant trees as compensatory mitigation, and even if there was, there is no accounting for the difference in carbon sequestration between young and mature trees.¹⁸⁰ Dr. Fox has determined that removal of the vegetation for the Project would lead to a net increase of 1,703 to 3,638 Metric Tons of Carbon Dioxide ("MTCO_{2e}") equivalent emitted annually, which exceeds the DEIR's significance threshold of 1,100 MTCO_{2e} per year.¹⁸¹

Second, the Project's emissions for construction are underestimated. As explained in further detail in Section C, the Project modeled construction equipment operation in a manner that understated emissions by ignoring several factors of this project, such as topography.¹⁸² As a result, construction would increase the use of diesel fuels and GHG emissions would increase correspondingly.¹⁸³

¹⁷⁵ Fox Comment, pp. 23-26.

¹⁷⁶ DEIR, pp. 3.8-19-3.8-20.

¹⁷⁷ Fox Comment, pp. 23-26.

¹⁷⁸ DEIR, pp. 3.8-19-3.8-20.

¹⁷⁹ Fox Comment, pp. 23-26.

¹⁸⁰ Fox Comment, pp. 23-26.

¹⁸¹ Fox Comment, pp. 23-26.

¹⁸² Fox Comment, pp. 18-19.

¹⁸³ Fox Comment, pp. 18-19.

Third, the DEIR ignores GHG emissions associated with manufacturing of the Project's components.¹⁸⁴ Climate change analysis must look at cumulative impacts to the global problem, and the County must make a good faith effort to calculate emissions data.¹⁸⁵ This analysis must reflect evolving scientific knowledge and regulatory schemes.¹⁸⁶ Manufacturing of Project components will result in an increase of GHG emissions.¹⁸⁷ Further, methods to determine the GHG emissions of materials exist and are proposed to be used as a factor in state purchasing by the Department of General Services.¹⁸⁸ The DEIR must make a good faith effort to determine these sources of emissions.

Fourth, the DEIR does not include all GHG compounds. Dr. Fox has found that the DEIR does not assess Sulfur hexafluoride ("SF") emissions, which have a global warming potential 22,800 times carbon dioxide and spend 3,200 years in the atmosphere.¹⁸⁹ Emissions and leaks can occur during Project construction and operation, but the DEIR does not analyze their effect.¹⁹⁰

Finally, the DEIR suggests that the Project will actually reduce GHG emissions by 173,454 MTCO₂e per year through replacing fossil fuel-based energy generation.¹⁹¹ Senate Bill 100 already requires that all energy procurement in California come from renewable sources by 2045.¹⁹² Thus any reductions in the use of non-renewable energy would occur independently from the Project.¹⁹³ Even if there was no mandate for 100 percent renewable energy in California, there is no certainty that the Project would replace any existing generation.¹⁹⁴ The DEIR lacks an enforceable measure to require the shutdown of non-renewable energy

O5-15
(Cont.)

¹⁸⁴ Fox Comment, p. 27.

¹⁸⁵ CEQA Guidelines § 15064.4, subd. (a).

¹⁸⁶ CEQA Guidelines § 15064.4, subd. (b).

¹⁸⁷ Fox Comment, p. 27.

¹⁸⁸ The International EPD System, What is an EPD? EPD International AB, *available at* <https://www.environdec.com/What-is-an-EPD/>; California Department of General Services, Buy Clean California Act, *available at* <https://www.dgs.ca.gov/PD/Resources/Page-Content/Procurement-Division-Resources-List-Folder/Buy-Clean-California-Act>.

¹⁸⁹ Fox Comment, p. 26.

¹⁹⁰ Fox Comment, p. 26.

¹⁹¹ DEIR, p. 3.8-18.

¹⁹² Senate Bill 100 (2017-2018 Sess.).

¹⁹³ Fox Comment, pp. 25-26.

¹⁹⁴ Fox Comment, pp. 25-26.

generation. The DEIR lacks substantial evidence to support its conclusion that the Project would have a positive effect on GHG emissions.

2. The Project's GHG Emissions are Significant and Require Mitigation

As shown above, Dr. Fox provides substantial evidence that the Project will increase net GHG emissions. The Project's adjusted GHG emissions will exceed the threshold of 1,100 MTCO_{2e} per year, even before addressing the sources of emissions the DEIR failed to quantify.¹⁹⁵ Contrary to the DEIR's unsupported assertion that the Project will have a GHG benefit, the Project will have a significant impact on global climate change and must mitigate those impacts below a threshold of significance. The DEIR must be withdrawn and recirculated to address the Project's GHG impacts.

O5-15
(Cont.)

C. The DEIR Underestimates Construction Emissions

1. The DEIR Ignores the Project Site's Difficult Terrain

Dr. Fox has reviewed the Project's CalEEMod files and determined that the analysis of construction impacts is inadequate. The CalEEMod cited in the DEIR does not consider the terrain of the Project site since it used default terrain in the model.¹⁹⁶ The Project site includes steep hills and slopes, whereas the CalEEMod default assumptions include flat land.¹⁹⁷ Dr. Fox concludes that actual emissions would be up to two to four times higher than disclosed in the DEIR, possibly exceeding the thresholds of significance for reactive organic compounds and particulate matter.¹⁹⁸

O5-16

Dr. Fox also found that the CalEEMod relied on emission models obtained from steady-state engine dynamometer results, which do not represent actual duty cycles.¹⁹⁹ This reliance would underestimate emissions from a project on flat land and thus further underestimate emissions from this Project due to the difficult terrain.

¹⁹⁵ Fox Comment, pp. 23-26.

¹⁹⁶ Fox Comment, pp. 14-19.

¹⁹⁷ Fox Comment, pp. 14-19.

¹⁹⁸ Fox Comment, pp. 14-19.

¹⁹⁹ Fox Comment, pp. 14-19.

2. The DEIR Ignores Windblown Dust

Dr. Fox discovered that the CalEEMod explicitly does not analyze emissions from windblown dust from graded areas and storage piles, nor fugitive dust from off-road travel.²⁰⁰ Dr. Fox has consistently found that fugitive dust emissions from grading, truck loading, and inactive disturbed areas exceeds thresholds of significance for particulate matter.²⁰¹ Windblown dust is particularly threatening at this site because of the presence of high winds that make it desirable for wind energy generation.²⁰² The CalEEMod assumed an average wind speed of 4.9 miles per hour, even though the DEIR noted a nearby average wind speed of 6.5 miles per hour.²⁰³ Stronger winds can raise significant amounts of dust beyond what conventional dust control measures and address.²⁰⁴ Strong winds occurring with simultaneous construction activities could cause public health impacts from excessive particulate matter emissions and silica exposure.²⁰⁵ Dr. Fox recommends that an AP-42 and AERMOD models be ran to accurately calculate Project emissions.²⁰⁶

05-17

3. The DEIR Concludes that Air Quality Impacts are Significant and Unavoidable Despite Available Feasible Mitigation Measures

The DEIR concludes that NOx emissions would be significant and unavoidable after requiring Mitigation Measure 3.4-1, which requires Tier 4 equipment, if available, or a future emissions reduction plan.²⁰⁷ First, Dr. Fox notes that the development of the emissions reduction plan is deferred to a future time, without including the required standards for permissibly deferring mitigation.²⁰⁸ Additionally, Dr. Fox has identified several mitigation measures that should have been included:

05-18

²⁰⁰ Fox Comment, pp. 19-21.

²⁰¹ Fox Comment, pp. 19-21.

²⁰² Fox Comment, pp. 19-21.

²⁰³ Fox Comment, pp. 19-21.

²⁰⁴ Fox Comment, pp. 19-21.

²⁰⁵ Fox Comment, pp. 19-21.

²⁰⁶ Fox Comment, pp. 19-21.

²⁰⁷ DEIR, p. 3.4-19.

²⁰⁸ Fox Comment, pp. 21-23.

- Selective catalytic reduction can reduce NOx emissions up to 90 percent,
- Lean NOx catalyst technology can reduce NOx emissions up to 40 percent,
- Exhaust gas recirculation can reduce NOx emissions up to 40 percent,
- The use of alternative fuels,
- Limitation of engine idling,
- Purchase offsets, and
- Employ a construction site manager to verify engines are properly maintained.²⁰⁹

O5-18
(Cont.)

The DEIR ignores the difficult terrain and high wind speeds at the Project site, thus underestimating and excluding sources of air quality emissions. The DEIR fails as an informational document and lacks support that air emissions will be less than significant. The DEIR cannot determine that NOx emissions are significant and unavoidable as feasible mitigation is available to lessen emissions further. The DEIR must be recirculated to include modeling with proper assumptions and include all sources of construction.

VI. THE DEIR PROPOSES IMPROPERLY DEFERRED MITIGATION

In addition to the improperly deferred mitigation discussed above, Dr. Fox reviewed the DEIR and found illegally deferred mitigation issues throughout the document:

- Mitigation Measure 3.5-23e proposes a future Reclamation, revegetation, and Weed Control Plan,
- Mitigation Measure 3.6-31 proposes a future historic American Landscape Survey Report,

O5-19

²⁰⁹ Fox Comment, pp. 21-23.

- Mitigation Measure 3.6-3b proposes a future Site Protection Plan,
- Mitigation Measure 3.9-1 proposes a Soil Sampling Report to make future recommendations to protect public health during construction,
- Mitigation Measure 3.9-2 proposes a future Blasting Plan to evaluate safety of blasting,
- Mitigation Measure 3.12-1 proposes future development of a Transportation Route Plan,
- Mitigation Measure 3.12-2 proposes a future Traffic Control Plan,
- Mitigation Measure 3.13-1a proposes a future Fire Service Financing Plan, and
- Mitigation Measure 3.13-1b proposes a future Fall Protection and Rescue Plan.²¹⁰



O5-19
(Cont.)

By proposing to develop plans in the future, rather than during the public review process, the County prevents the public from being able to evaluate and comment on the efficiency of this mitigation, thus prejudicing the public and bypassing the goal of CEQA. Both Dr. Fox and Ms. Owens have offered feasible, enforceable mitigation measures that are available to replace the DEIR's illegal, deferred plans. The DEIR must be withdrawn and recirculated to the public with more specific mitigation measures or specific performance standards for future plans, as required by CEQA.

VII. CONCLUSION

The DEIR fails as a matter of law to adequately describe the existing setting, lacks substantial evidence to establish proper baselines, underestimates impacts, relies on ineffective and deferred mitigation measures, and lacks substantial evidence to support its conclusion that the mitigation would ensure that the Project's impacts will be less than significant or that all feasible mitigation measures have been adopted. The DEIR also fails to disclose enough information



O5-20

²¹⁰ Fox Comment pp. 12-13.

about impacts thus failing as an informational document. Dr. Fox and Ms. Owens have specifically shown how the County's conclusions in the DEIR are unsupported by substantial, if any, evidence. They have also provided substantial evidence showing that the Project would cause significant impacts on special-status species, from air quality emission, from GHG emissions, and from wildfire. The DEIR must be withdrawn and recirculated after all violations of CEQA have been addressed.



05-20
(Cont.)

Sincerely,

A handwritten signature in blue ink, appearing to read 'K. Jones', with a long horizontal flourish extending to the right.

Kyle C. Jones

KCJ:lj

Attachments