## 141 Jeffrey and Laura Mckernan

- The comment consists of an introduction to the letter and states the authors' opposition to the Campo Wind Project with Boulder Brush Facilities (Project) due to the "significant adverse and disproportionate impacts to human beings, quality of life and economic well-being, health, safety, community character, wildlife, pets, visual, biological, cultural, groundwater and other resources." The comment also states the authors' support for the No Project Alternative. In response, the comment does not raise an issue as to the adequacy of the analysis in the Draft Environmental Impact Report (EIR); therefore, no further response is required.
- The comment states that the idea the County of San Diego (County) could approve such a gigantic ignition risk is outrageous and irresponsible. The comment concludes by stating that additional comments follow. For a discussion of ignition risks and wildfire impacts, refer to Chapter 2.5, Hazards and Hazardous Materials, and Chapter 2.9, Wildfire, of the Draft EIR. Please also refer to Global Response GR-7, Fire Protection Services and Wildfire Impacts. The comment does not raise a specific issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response is required.
- The comment is addressed to the Bureau of Indian Affairs (BIA). The comment states the authors' opposition to Project Alternative 1 and Alternative 2 and expresses support for the No Action Alternative. In response, the comment is addressing the alternatives in the Draft Environmental Impacts Statement (EIS) prepared for the Project by the BIA. The comment does not raise an issue regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- The comment states the reasoning as to why the authors purchased their home 16 years ago, referencing the breathtaking views, remote location, natural beauty, open space, and wildlife that surrounds it. It also states the authors' enjoyment of spectacular sunsets and star filled skies. The comment does not raise an issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response to this comment is required.
- The comment states that the Project does not comply with the Campo Band of Diegueño Mission Indians Reservation (Reservation) land use plan. The comment also quotes the following language: "with its concern that this development does not threaten the environment . . . of the Reservation or surrounding communities."

In response, as explained by the BIA in its response to public comments on its Draft EIS for the Project, under the terms of the Campo Lease between the Campo Band of Diegueño Mission Indians (Tribe) and Developer, the applicability of Tribal laws is limited (see Final EIS Appendix T, Response to Comment TR-2). Although not directly applicable to the Project, the BIA provided summaries of the Tribe's land use and environmental authorities for reference, including the Campo Environmental Protection Agency (CEPA or Campo EPA) statutes, the Campo Land Use Code, and the Campo Land Use Plan. Even though the Campo Land Use Code and Plan have limited applicability to the Project per the terms of the Campo Lease, the Draft EIR analyzes the Project's consistency with policies in the Campo Land Use Plan (see Draft EIR Table 3.1.6-6). The analysis in the Draft EIR determined that the Project is consistent with those policies. The County's Draft EIR also incorporates by reference the BIA's determination that the Campo Wind Facilities would be consistent with Campo land use policies.

- I41-6 The comment also states that the Project does not meet the "long range goals of the community" and that the Project does not coordinate or "work in harmony toward creating a desirable community." Please refer to Response to Comment I41-5 for a discussion of consistency with the Campo Land Use Plan policies.
- The comment states the Boulder Planning Group, along with residents, developed and overwhelmingly supported a community plan that prohibited large-scale energy projects and established residential setbacks and logical requirements of sound measurements, and notes that this plan was approved by the County Board of Supervisors. It then goes on to state that, after many objections and backroom meetings between the County and wind/solar industry, the Board of Supervisors agreed to amend the General Plan and Boulevard Community Plan.

The comment then mentions that the County hired Dudek to re-write the General Plan and to destroy the Boulevard Community Plan and mentions that Dudek had written the EIR for the Tule Wind Project before being hired by the County and was consulting during this time for other large-scale energy companies with projects planned for the area. The author then concludes this comment by stating, "The end result is this disgusting place where we find ourselves now. A beautiful land on and off the Reservation being invaded by money hungry large-scale energy developers who don't care about the human beings here, or the destruction of the land and wildlife." Although the concluding remark of this comment mentions the destruction of land and wildlife, it does not specifically raise an issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response is required.

- The comment states common sense should dictate that one does not introduce a new ignition source into an area that is designated as an extreme fire hazard area. The comment further states there have been at least three fires at the Kumeyaay Wind Farm since its construction and that the fire suppression system did not operate in at least one instance, which resulted in a brush fire. In response, ignition sources and wildfire risk are analyzed in Chapter 2.5 and Chapter 2.9 of the Draft EIR. Please also refer to Global Response GR-7. The comment does not raise a specific issue regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- Highway 94 and Kumeyaay Trail, and the Fire on La Posta Road, fires spread quickly and are hard to fight in the area's terrain. The comment also states that any fire that starts at the Campo Wind Farm will most likely not be limited to the Reservation boundaries and that building miles of new roads into previously non-accessible areas will result in fire potential increases. The Draft EIR analyzes the potential wildfire impacts and ignition risks in Chapter 2.5 and Chapter 2.9. Please also refer to Global Response GR-7. The comment does not raise a specific issue regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- The comment states that the turbines over 600 feet tall and new overhead power lines would seriously restrict firefighting efforts, and there would be no firefighting capabilities within at least 500 feet on either side of the transmission lines or turbines. In response, please refer to Global Response GR-7 and Global Response GR-9, Aviation. It is unclear which requirement the commenter is referring to in regard to the restricting firefighting capabilities within 500 feet of transmission lines or turbines. The comment does not raise a specific issue regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- The comment states that the majority of catastrophic wildfires are started by powerlines, then man, then nature and that 2018 was the deadliest and most destructive wildfire season on record. The comment does not raise an issue regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- I41-12 The comment states that to approve and construct this Project or any other project of this magnitude is negligent and perilous. The comment does not raise any issue concerning the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- I41-13 The comment states that, during Red Flag Warnings, San Diego Gas & Electric turns off the commenter's and the Reservation's power. The commenter also states the Kumeyaay is operating the existing turbines even when winds reach speeds of up to 60

or 70 miles per hour. The comment further states that the turbines are supposed to be shut down, but they never are, when wind gusts reach 50 miles per hour. Lastly, the comment states it is reasonable this will happen with Project turbines since it is located on Tribal land, and that this ongoing practice is irresponsible and dangerous.

In response, the Project wind turbines would not be required to be shut down during Red Flag Warnings. Also, as described in Chapter 1, Section 1.2, Project Description, of the Draft EIR, the Project's wind turbines could operate 24 hours a day, 7 days a week. Blades typically begin to rotate and generate power in winds as low as 6.7 miles per hour, referred to as the cut-in speed, and are designed to operate in wind speeds up to approximately 56 miles per hour, referred to as the cut-out speed. At wind speeds faster than 56 miles per hour, blades rotate parallel to the wind and the wind turbine stops producing electricity. This braking system is linked to the wind turbine control system used to prevent over-speeding of the rotor. Each wind turbine would also be equipped with a mechanical brake located at the output shaft of the gearbox. This brake is only applied to prevent rotation of the machinery for certain service activities. Turbines can withstand sustained wind speeds of more than 100 miles per hour.

I41-14 The comment states in the past the authors enjoyed peace and quiet in the early morning and night. The comment further states in recent years the author has been hearing a hum similar to a large air conditioning unit, and that this may be due in part to the wear on the aging Kumeyaay wind turbines. The comment then states the noise is also due to Tule and Ocotillo wind farms. Lastly, the comment states the authors were part of a study conducted by Wilson-Ihrig that measured infrasound and low-frequency noise (IFLN).

In response, Chapter 2.6, Noise, of the Draft EIR analyzes the proposed Project's noise impacts, including potential impacts from the proposed wind turbines. Please also refer to the Acoustical Analysis Report (Appendix G to the Draft EIR) and Global Response GR-4, Noise. In regard to the Wilson Ihrig study, per Figure C-11 on page 32 of the March 18, 2019, report, the unweighted sound pressure level measured at the McKernan residence associated with a Kumeyaay wind turbine blade passage frequency is less than 50 dB. Were G-weighting to be applied to this value, the result would be less than 10 dBG. Thus, while the Wilson-Ihrig study may have detected infrasound and low frequency noise (ILFN) at the McKernan residence, the magnitudes are extremely low.

I41-15 The comment states that Dudek has chosen to use the A weighted measurement, which is not a true measurement for the real and harmful effects of infrasound and low frequency noise (IFLN), as the C-weighted and G-weighted measurements are. In response, the Acoustical Analysis Report (Appendix G to the Draft EIR) was prepared

in accordance with the acoustical metrics required for a noise impact assessment by the County in its noise ordinance. As for potential effects relating to ILFN, please refer to Global Response GR-2, Public Health, and Global Response GR-4.

- I41-16 The comment states there is no reference for any distance from any turbine to the author's home and that for only homes within 0.25 miles to be considered is nonsense. In response, Figures 3 through 7 in the Acoustical Analysis Report (Appendix G of the Draft EIR) illustrate (via noise contours) what predicted sound levels (dependent on wind speed as received by the operating wind turbines at hub height) from aggregate wind turbine operation can be expected at locations in the Project Vicinity. Also, the Draft EIR did not only consider impacts to residences within 0.25 miles of a turbine.
- 141-17 The comment states noise levels will increase exponentially when 60 turbines are placed into operation. The comment further states levels cannot be based on two turbines placed in proximity. In response, the combined sound energy from aggregate wind turbine operation for the Project would be additive and represented with metrics based upon logarithmic scales (decibels). The predicted sound levels from the acoustic combination of 76 studied operating wind turbines are represented by the sound contours in Figures 3 through 6 of the Acoustic Analysis Report (Appendix G to the Draft EIR). Please note the Campo Lease only allows for up to 60 turbines, though 76 potential locations were analyzed. Please also refer to Global Response GR-4.
- The comment states that noise levels from all of the Project's wind turbines will be unnerving. Please refer to Global Response GR-4 Noise, and EIR Chapter 2.6. This comment does not raise an issue regarding the adequacy of the noise analysis contained in the Draft EIR; therefore, no further response is required.
- The comment references the "downwind effect" of turbines, stating that the turbines could possibly form atmospheric disturbances, and asks how the industry can stand firm that turbines do not cause adverse health effects. In response, the downwind effect refers to the impact experienced by wind farms that sit downwind from other wind farms, in that these downwind farms may experience reduced electricity generation due to reduced wind speeds that have previously passed through the turbines. This is also known as the "wake effect." The comment does not provide any evidence that downwind effects impact global weather patterns. Please refer also to Global Response GR-2.
- **I41-20** The comment states if the wake effect can affect the atmosphere and turbine efficiency and damage turbines, imagine what effect it can have on human beings. Please refer to Response to Comment I41-19.

- The comment states that the turbines can affect the atmosphere around human beings, affect the efficiency of the functions of human beings, and damage human beings. Please refer to Response to Comment I41-19 and Global Response GR-2.
- The comment states these are 600 feet tall 4.2-megawatt turbines not in operation anywhere. The comment further states the effects will be greater than any presently recognized. In response, for clarification, the proposed turbines would have a hub and blade height of approximately 586 feet. For the Acoustical Analysis Report (Appendix G to the Draft EIR), the 3.83-137 turbine model/type was chosen for conservatism. Please refer to Response to Comment O6-13. Please also refer to Global Response GR-2.
- The comment states effects to visual resources would be significant, adverse, and unavoidable and cannot be mitigated. The comment also states the visual impacts would be experienced to the greatest degree in immediately adjacent areas. The comment also describes the current extent of available views from the authors' property. The Project's visual impacts are analyzed in Chapter 2.1, Aesthetics, of the Draft EIR. Please also see Global Response GR-8, Visual Impacts. This comment does not raise concerns regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- The comment states that the visual simulations included in the Visual Resources Report (Appendix B to the Draft EIR) are inaccurate and misleading and appear "imaginary." In addition, the comment states that wind turbines do not fade into the distance and that the existing turbines are 260 feet smaller in height than the proposed turbines. The comment further states that the authors' views will be destroyed by the Project.

In response, methodology associated with the selection of key observation points and the development of visual simulations for the Project is documented in the Chapter 2.1 and the Visual Resources Report (Appendix B) of the Draft EIR. In the Visual Resources Report, please see Section 5.1.3, Key Observation Points, and Section 5.1.4, Visual Simulations. As described in Section 5.1.3, nine Key Observation Points were selected for the Campo Wind Facilities and three Key Observation Points were selected for the Boulder Brush Facilities. The Key Observation Points are representative of views to the Project Site from public roads in the Project Vicinity.

Regarding visual simulations, information, including the scale of proposed wind turbines and the diameter of support towers and gen-tie poles, was provided to the County by the Developer. During the development of visual simulations, this information was not altered or otherwise manipulated to obscure or mislead the public

regarding anticipated visual change associated with the Project. Responses to Comments O6-79, I37-8, and I37-10 also address visual simulations prepared for the Project. Please also refer to Global Response GR-8.

- The comment states shadow flicker needs to be analyzed using the 600-foot height of the proposed turbines. The comment states the author currently experiences shadow flicker from over 5 miles away. The comment states the authors can see 22 turbines from their property. In response, this comment raises concerns with the Shadow Flicker Analysis (Appendix O of the Draft EIR). For clarification, the proposed turbines would have a total height of 586 feet. See Response to Comment O6-13 and Global Response GR-8.
- I41-26 This comment states that National Environmental Policy Act Section 101(B) requires that measures be taken to ensure aesthetically pleasing surrounding views are retained. The comment further states this Project does not and cannot comply with this section and seriously violates the authors' protection under this section. In response, this comment refers to National Environmental Policy Act Section 101(B) regarding aesthetics. Please refer to Sections 3.11 and 4.11 of the Final Environmental Impact Statement (EIS) prepared for the Project by the BIA (January 2020). The Draft EIR has been prepared in accordance with the requirements of the County Guidelines for Determining Significance and Report Format and Content Requirements - Visual Resources<sup>1</sup> and California Environmental Quality Act (CEQA) Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.). As the designated lead CEQA agency, the County is responsible for preparing this document. The County does not have jurisdiction over the Reservation and thus would not be subject to the legal requirements under the National Environmental Policy Act. This comment does not raise an issue regarding the analysis contained in the Draft EIR; therefore, no further response is required.
- The comment states that early morning and evening skies will be adversely affected by turbine lighting. In response, impacts associated with the operation of flashing warning lights atop proposed wind turbines have been analyzed in Chapter 2.1 and the Visual Resources Report (Appendix B) of the Draft EIR. The analysis concluded that wind turbine obstruction lighting would result in significant and unavoidable light and glare impacts. See Section 2.1.3.5, Light and Glare, of the Draft EIR and Section 5.3.2.5, Light and Glare, of the Visual Resources Report. This comment does not raise concerns regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.

County of San Diego. 2007. County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements – Visual Resources. Land Use and Environmental Group, Department of Planning and Land Use, Department of Public Works. July 30, 2007.

The comment states the community is groundwater dependent and, unlike the Reservation, they are not protected by the federal government if the wells run dry. The comment raises concerns over the Project's use of up to 173 acre-feet or 56,325,513 million gallons of groundwater for construction. The comment then states during construction of the ECO Substation the water demand doubled, which could happen with the proposed Project. The comment further states the proposed Project could use 4.5 times more groundwater than the ECO Substation, which it took 4 years for groundwater levels to recover from.

In response, the Project's impacts to groundwater are analyzed in Section 3.1.5, Hydrology and Water Quality, and the Groundwater Resources Evaluation (Appendix J-1) of the Draft EIR. The Draft EIR also includes Groundwater Mitigation Monitoring and Mitigation Plans for the Boundary Creek and Flat Creek Watersheds (included as part of Appendices J-2 and J-3 of the Draft EIR). Project Design Feature PDF-HY-2 would ensure that, as part of the Project, significant impacts on water levels in the aquifers accessed by off-site water sources would be avoided. PDF-HY-2 requires the developer to implement the Groundwater Mitigation Monitoring and Mitigation Plans, which are included as appendices to the Draft EIR.

I41-29 The comment states during construction there will be blasting, drilling, and pile driving that will have Off-Reservation impacts. The comment also states that fractured rock aquifers outside of the Reservation could be changed or wells could collapse, and that sediment could end up in the wells as a result of Project construction activities. In response, when explosive charges detonate in rock, they are designed so that most of the energy is used in breaking and displacing the rock mass. However, some of the energy can also be released in the form of transient stress waves, which in turn cause temporary ground vibration. Detonating charges also creates rock movement and release of high-pressure gas, which in turn induces air overpressure (noise), airborne dust, and audible blast noise. In the very-near zone, crushing usually occurs in the rock around the charge. The extent of this compressive and shear failure zone is usually limited to one or two charge radii (half the diameter of the charge). Beyond the plastic crushing zone, the rock or ground is temporarily deformed by elastic strain waves. For some distance, tangential strain intensity exceeds the rock's strength and new fractures are created. The magnitude of dynamic strain and particle motion decreases as distance from the charge increases.

Radial cracks are created in rock around detonating charges as a result of induced strain that exceeds the rock's tensile strength. These cracks generally do not extend farther than 26 charge radii. For instance, if the diameter of the charge is 5 inches, radial cracks might extend 65  $(5/2 \times 26)$  inches into adjacent rock. The nearest off-site groundwater wells are located approximately 4,500 feet from the on-site wellfield. Off-site water

wells properly designed and constructed according to California Water Wells Standards: Bulletins 74-81 and 74-90 in the fractured rock aquifer are unlikely to be directly impacted from blasting on the reservation.

- This comment states that property values would decrease as a result of the Project. The comment also states that studies that suggest that wind turbines do not influence the value of homes are absurd. Please refer to Global Response GR-1, Socioeconomic Impacts.
- 141-31 The comment states that a potentially disastrous impact of the Project would be avian mortality. The comment also refers to the Kumeyaay Wind Project construction and mortality study, of which the author was unable to obtain a copy and refers to information the author received regarding the number of carcasses recovered. The comment also states that if 2 red-tailed hawks and 25 carcasses were recovered in one year, then over 15 years it is possible that 30 red-tailed hawks and 345 individuals from other species would be killed.

In response, it is speculative to identify exact bird mortality impact numbers at this time. While it is never possible to accurately enumerate future avian mortality, the task of attempting to predict this is covered within the preparation of the Bird and Bat Conservation Strategy (BBCS) as provided for in mitigation measure M-BI-B. BBCSs are, under most circumstances, voluntary and typically confidential; however, they do not speculate on the exact number of bird impacts by species, but instead provide indices to compare to other projects, as there are a number of variables that affect avian impacts (e.g., season, time of day, storm events, climate conditions, topography, other environmental pressures elsewhere across the globe that might influence migration patterns). These variables apply to, and affect, each species differently.

The BBCS also establishes the avian monitoring program methods and triggers for implementing adaptive management measures. Once implemented, the adaptive management measures would reduce impacts and thus reduce the avian mortality rate. In addition to the preparation of a BBCS, the Project also includes implementation of Avian Power Line Interaction Committee standards (M-BI-8 and M-BI-B[e]) and removal of carcasses to reduce attraction of birds of prey (M-BI-9 and M-BI-B[d]). Please also refer to Global Response GR-5, Biological Resources, which provides the methodologies employed to analyze impacts to eagles, bats, and other avian species from wind turbines.

I41-32 The comment states that if conservative estimates are used, then 4 red-tailed hawks will be killed per year and 46 individuals of other species would be killed by the Project each year. In response, please refer to response I41-31 regarding specific avian

mortality estimates. Please also refer to Global Response GR-5, which provides the methodologies employed to analyze impacts to eagles, bats, and other avian species from wind turbines. This comment does not raise concerns regarding the adequacy of the Draft EIR; therefore, no further response is required.

- Ital-33 The comment states that, over 15 years, an estimated 60 red-tailed hawks and 690 individuals of other species could be killed due to operations of Tule Wind Phase II and Torrey Wind Projects. Additionally, the comment expresses concern for the danger of killing golden eagles. In response, please refer to response I41-31 regarding specific avian mortality estimates. Please also refer to Global Response GR-5, which provides the methodologies employed to analyze impacts to golden eagles, bats, and other avian species from wind turbines. This comment does not raise concerns regarding the adequacy of the Draft EIR; therefore, no further response is required.
- The comment notes that a pair of red-tailed hawks and fledglings have been sighted around their property. The comment expresses concern that the red-tailed hawks would become casualties. This comment does not raise concerns regarding the adequacy of the Draft EIR; therefore, no further response is required.
- The comment states that there are U.S. Fish and Wildlife Service studies regarding avian mortalities at wind energy facilities and the number of fatalities are extremely high. In response, the comment does not provide references for the literature cited. This comment does not raise concerns regarding the adequacy of the analysis in the Draft EIR; therefore, no further response is required.
- Ital-36 The comment states that the Tribe and Terra-Gen should be required to post a decommissioning bond prior to breaking ground on construction, and states that there is no guarantee that Terra-Gen will be in business in 15 years. The comment also states that the Tribe will not be responsible, and that the taxpayer will no doubt have to pay the bill. In response, the Campo Wind Lease does require a Restoration Security to be assessed on the 15th anniversary of the commercial operations date of the Campo Wind Facilities and every 5 years thereafter, and it shall be adjusted, either to a greater or lesser amount, to reflect the then-applicable entire estimated restoration cost, which includes decommissioning. This comment does not raise an issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response is required.
- The comment states that the greenhouse gas emission benefits are based on the turbines operating at 100% generating capacity. The comment further states the turbines produce at best 50% to 75% generational capacity; therefore, the electricity produced and the emissions must be recalculated. In response, the estimated energy capacity was

## **Responses to Comments**

based on actual production rates provided by the Developer, not on a theoretical 100% generating capacity. Additionally, it should be noted that for the Full Build-Out Project Alternative (1), the Draft EIR-estimated greenhouse gas benefit of the Project reflects the maximum number of turbines (60) contemplated under the Campo Lease; therefore, greenhouse gas benefits were not overestimated.

- This comment states that consumers' electric bills continue to increase, since wind power costs almost twice as much to produce than natural gas. The comment does not raise an issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response is required.
- I41-39 The comment provides concluding remarks and states the Project would be an environmental and human disaster. The comment does not raise an issue regarding the adequacy of the analysis contained within the Draft EIR; therefore, no further response is required.



INTENTIONALLY LEFT BLANK