



DESERT TORTOISE COUNCIL

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Via email only

13 June 2018

Attn: Gayle Marrs-Smith
Bureau of Land Management, Southern Nevada District
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
blm_nv_sndo_crescentpeak@blm.gov

RE: Scoping comments for the Crescent Peak Wind Energy Project Draft Environmental Impact Statement (Draft EIS)

Dear Ms. Marrs-Smith,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Agassiz's desert tortoise (*Gopherus agassizii*), our comments pertain to enhancing protection of this species during activities authorized by the Bureau of Land Management (BLM).

1. We note in the BLM's Notice of Intent (NOI) in the Federal Register (Vol. 83, No. 51 /Thursday, March 15, 2018) that the project area is 22 miles long (north and south) and 5 miles wide (east and west), would cover 32,531 acres of public land, and is located 10 miles west of Searchlight, Nevada. Given the nature of wind farms, we understand that not all 32,500± acres would be directly impacted; according to one estimate, 750 acres would be directly impacted (Bloomberg News, 4 May 2018). We presume this is the footprint of surface disturbance and is scattered throughout the approximately 32,500 acres of the project area.

2. Whereas we expect that the Draft EIS will document how many acres would be impacted directly by roads, turbine pad sites, transmission towers, etc., we also ask that separate calculations document how many acres of desert tortoise habitats would be temporarily and permanently impacted both directly and indirectly (e.g., “road effect zone”) by the proposed project. As given below, these acreages should be based on field surveys for tortoises rather than available models.

3. To derive these calculations, we expect U.S. Fish and Wildlife Service (USFWS 2017) protocol surveys to be performed in all areas within the “action area” (see below) so that an estimated number of tortoises that could be directly and indirectly impacted by the proposed project can be determined. Based on these data, the proponent will be able to publish in the Draft EIS the number of tortoises that may be displaced and the number of acres of both suitable and occupied tortoise habitats that will be permanently and temporarily lost or degraded. This information will be important in helping to determine appropriate type and amount of mitigation, monitoring, and adaptive management for the tortoise.

4. Prior to performing the focused tortoise surveys described above, the proponent should meet with pertinent USFWS and BLM staff to determine the effective “action area” for this project. The USFWS defines “action area” in 50 Code of Federal Regulations 402.2 and their Desert Tortoise Field Manual (USFWS 2009) as “all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action (50 CFR §402.02).” To facilitate compliance with the federal Endangered Species Act (FESA), it is imperative that the proponent coordinate early with the USFWS, BLM, and Nevada Department of Wildlife (NDOW) to identify the action area for this project to determine protected/special status species that may occur and the types of surveys that should be performed.

5. We reviewed the April 2018 proposal by SWCA Environmental Consultants to perform desert tortoise protocol surveys within linear features of the proposed project, and note that only BLM was contacted to discuss the approach (SWCA 2018). As the Federal Lead Agency, we understand that it is appropriate to discuss initial plans with BLM but as the agency likely to complete a biological opinion for the project, we feel that the USFWS should also be consulted prior to conducting surveys to ensure that the survey approach will provide them with sufficient baseline information to determine the anticipated tortoise take limit during construction, operation, maintenance, decommissioning, and restoration.

6. If, as we suspect, surveys were completed in April and May 2018, we request that the methods of these surveys and results be shared with pertinent USFWS biologists in Las Vegas to ensure the survey approach was acceptable. If not, we expect that additional surveys will be performed in September and/or October 2018 to ensure completeness and compliance with survey protocols, which have been developed based on the above-ground activity periods of the tortoise.

7. Relative to the desert tortoise, the Draft EIS should identify occupied versus unoccupied habitats and suitable versus unsuitable habitats throughout the action area with the help of protocol-level surveys. It should then show how project features would be located to minimize or completely avoid loss of occupied habitats.

8. The Council does not concur with the proposed approach to survey only about half of the proposed project, as shown in SWCA's (2018) maps. We believe that the tortoise protocol surveys are appropriate for all project features for the following reasons. Comprehensive surveys performed for tortoises (a) will allow biologists to detect other rare plant and animal species that occur; (2) test modeled assumption that tortoises are absent from areas that would otherwise not be surveyed; and (3) allow biologists to map plant communities and other biological resources throughout the project footprint as opposed to only those areas where tortoises are more likely to occur. In the absence of these more rigorous surveys, the proponent lacks the baseline information necessary to locate facilities in areas with fewer environmental impacts.

9. Too often projects such as these do not have valid alternatives that consider other, less environmentally impacting sites. Rather, analyses consider a range of project alternatives that are all focused on one specific site. For this Draft EIS, we expect that the alternatives analysis will include one addressing rooftop solar in the area(s) targeted to receive energy that would be generated at this particular site. Additionally, other geographic locations should be identified in the alternatives analysis to assess the relative environmental impacts of this versus other sites.

10. The Federal Register notice does not include maps of the project and adjacent areas. However, the SWCA (2018) survey protocol map (see <http://www.basinandrangewatch.org>) shows that the proposed project site is bordered to the north and east by Areas of Critical Environmental Concern (ACECs) and designated Wilderness Areas. It is essential that the Draft EIS assess all the direct, indirect, and cumulative impacts (e.g., visual impacts, etc.) to these and other ecologically significant areas surrounding/near the proposed project. Considering the importance of the Piute-Eldorado ACEC for desert tortoise recovery, BLM and USFWS should ensure that no direct or indirect effects due to the project will reduce the function of the ACEC for tortoise recovery. This includes the effects of new roads and increased human activities in the action area.

11. The Draft EIS should include a thorough analysis and discussion of the status and trend of the tortoise in the action area, tortoise conservation area, recovery unit, and range wide. Tied to this analysis should be a discussion of all likely sources of mortality for the tortoise and degradation and loss of habitat from implementation of leasing the area for wind energy development including construction, operation and maintenance, decommissioning, and restoration of the leased lands.

12. Because of the type of proposed project and the large acreage that has been identified, one source (<http://revolution-green.com>) estimates that up to 90 linear miles of new roads would be constructed, used, maintained, decommissioned, and habitat restored in the project area. We request that the Draft EIS include information on the locations, sizes, and arrangements of these roads, who will have access to them, whether the project area will be secured to prevent human access or vandalism, and if so, what methods would be used. The presence of roads even with low vehicle use has several adverse effects on the desert tortoise and its habitats. These include the deterioration/loss of wildlife habitat, hydrology, geomorphology, and air quality; increased competition and predation (including by humans); and the loss of naturalness or pristine qualities.

13. Please include in the Draft EIS analyses of the five major categories of primary road effects to the tortoise and special status species: (1) wildlife mortality from collisions with vehicles; (2) hindrance/barrier to animal movements thereby reducing access to resources and mates; (3) degradation of habitat quality; (4) habitat loss caused by disturbance effects in the wider environment and from the physical occupation of land by the road; and (5) subdividing animal populations into smaller and more vulnerable fractions (Jaeger et al. 2005a, 2005b, Roedenbeck et al. 2007).

14. Road establishment is often followed by various indirect effects such as increased human access causing disturbance of species' behavior, increase predation, spread of invasive species, and vandalism and/or collection. All indirect effects to the tortoise should be analyzed in the Draft EIS. The analysis of the effects from road establishment and use should include cumulative effects to the tortoise with respect to nearby tortoise ACECs, areas designated/needed for connectivity between ACECs, for the recovery unit, and range wide.

15. The Draft EIS should include appropriate mitigation for all direct, indirect, and cumulative effects to the tortoise and its habitats; the mitigation should use the best available science with a commitment to implement the mitigation commensurate to impacts to the tortoise and its habitats. Mitigation should include a fully-developed desert tortoise translocation plan; raven management plan; weed management plan; fire management plan; compensation plan for the degradation and loss of tortoise habitat that includes protection of the acquired, improved, and restored habitat in perpetuity for the tortoise from future development and human use; a plan to protect tortoise translocation area(s) from future development and human use in perpetuity; and habitat restoration plan when the lease is terminated and the proposed project is decommissioned. The proponent should monitor tortoise populations in the adjacent tortoise conservation areas (e.g., Piute Eldorado ACEC) to identify effects of the project and be prepared to implement additional mitigation, as appropriate, in coordination with BLM and USFWS.

16. These mitigation plans should include an implementation schedule that is tied to key actions of the construction, operation and maintenance, decommissioning, and restoration phases of the project so that mitigation occurs concurrently with or in advance of the impacts. The plans should specify success criteria, include a monitoring plan to collect data to determine whether success criteria have been met, and identify actions that would be required if the mitigation measures do not meet the success criteria. Because wind turbines are sources of fire, we request that the Draft EIS include a fire prevention plan in addition to a fire management plan.

17. The Draft EIS should analyze if this new use would result in an increase of common ravens and other predators of the desert tortoise in the region. Future operations should include provisions for monitoring and managing raven predation on tortoises as a result of the proposed action. The monitoring and management plan should include reducing human subsidies for food, water, and sites for nesting, roosting, and perching to address local impacts. The proponent should contribute to the National Fish and Wildlife Foundation's Raven Management Fund for regional and cumulative impacts. It is very important that for any of the transmission options the project should use towers that prevent raven nesting. For example, the tubular design with insulators on horizontal cross arms is preferable to lattice towers, which should not be used.

18. Please ensure that all standard measures to mitigate the local, regional, and cumulative impacts of raven predation on the tortoise are included in this Draft EIS, including developing a raven management plan for this specific project. USFWS (2010) provides a template for a project-specific management plan for common ravens. This template includes sections on construction, operation and maintenance, and decommissioning (including restoration) with monitoring and adaptive management during each project phase (USFWS 2010).

19. We request that the Draft EIS address the effects of the proposed action on global warming and the effects that global warming may have on the proposed action. For the latter, we recommend including: an analysis of habitats within the project that may provide refugia for tortoise populations; an analysis of how the proposed action would contribute to the spread and proliferation of nonnative invasive plant species; how this spread/proliferation would affect the desert tortoise and its habitats (including the frequency and size of human-caused fires); and how the proposed action may affect the likelihood of human-caused fires. We strongly urge the proponent to develop and implement a management and monitoring plan using this analysis and other relevant data that would reduce the transport to and spread of nonnative seeds and other plant propagules within the project area and eliminate/reduce the likelihood of human-caused fires. The plan should integrate vegetation management with fire management and fire response.

We appreciate this opportunity to provide input and trust that our comments will further protect tortoises during authorized project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other BLM projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above.

Regards,



Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

Jaeger, J., L. Fahrig, and K. Ewald. 2005a. Does the configuration of road networks influence the degree to which roads affect wildlife populations? *International Conference on Ecology and Transportation 2005 Proceedings, Chapter 5 - Integrating Transportation and Resource Conservation Planning - Landscapes and Road Networks*, pages 151-163. August 29, 2005.

Jaeger, J., J. Bowman, J. Brennan, L. Fahrig, D. Bert, J. Bouchard, N. Charbonneau, K. Frank, B. Gruber, and K. Tluk von Toschanowitz. 2005b. Predicting when animal populations are at risk from roads: an interactive model of road avoidance behavior. *Ecological Modelling* 185 (2005) 329–348.

- Roedenbeck, I., L. Fahrig, C. Findlay, J. Houlahan, J. Jaeger, N. Klar, S. Kramer-Schadt, and E. van der Grift. 2007. The Rauschholzhausen Agenda for Road Ecology. *Ecology and Society* 12(1): 11. [online]
URL: <http://www.ecologyandsociety.org/vol12/iss1/art11/>
- SWCA Environmental Consultants. 2018. Crescent Peak Wind Project: Proposed desert tortoise survey protocol. Unpublished report prepared on behalf of Crescent Peak Renewables, LLC. Las Vegas, NV. 6 pp.
- U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.
- U.S. Fish and Wildlife Service. 2010. Common raven predation on the desert tortoise. USFWS, Ventura Fish and Wildlife Office, Ventura, CA.
- U.S. Fish and Wildlife Service. 2017. Status of the desert tortoise and critical habitat (dated 11 October 2017). Unpublished report prepared by the Desert Tortoise Recovery Office of the USFWS. Reno, NV. 24 pages.