COLORADO
Parks and Wildlife
Department of Natural Resources

Southeast Region
4255 Sinton Road
Colorado Springs, CO 80907
P 719.227.5200

May 21, 2024

Erica Goad- Manager of Development
Balanced Rock Power
310 E 100 S
Moab, UT 84532

RE: Ebba Solar Project

Dear Erica Goad,

Colorado Parks and Wildlife (CPW) has received and appreciates the request for comments on the proposed Ebba Solar Project in Lincoln County, Colorado. CPW staff is familiar with the proposed location of the project as well as the area surrounding the site. This project will be approximately 3,100 acres and 300 MWs. CPW has prepared a list of potential impacts to local wildlife and recommendations to avoid, minimize, and mitigate those impacts. Early consultation between CPW and developers of energy projects is critical for avoiding impacts to sensitive species and we appreciate the virtual meeting on May 8, 2024 and the continuing coordination with Balanced Rock Power during the ongoing project development for the Ebba Solar site.

We recognize that renewable energy development is important to meeting the State's greenhouse gas reduction goals and improving climate resiliency. For general solar project development guidelines, and recommendations to avoid, minimize, and mitigate impacts to wildlife, please refer to the Colorado Parks and Wildlife Best Management Practices for Solar Energy Development. This document and other guidance for developers is also available at the CPW Energy and Land Use Website . Impacts to wildlife will result from all forms of development. However, projects that are large in scale, expand development into remote or previously undisturbed areas, displace wildlife from crucial habitat, or cause a significant loss of habitat are of greater concern. CPW encourages a scientific approach to siting decisions and careful consideration of the impacts to habitat necessary to sustain Colorado's wildlife populations. The recommendations in the best management document and this letter are intended to promote responsible development of large scale solar projects, upholding Colorado's responsibility to wildlife while supporting the renewable energy and climate change goals and standards set forth by the State of Colorado.

CPW has a statutory responsibility to manage all wildlife species in Colorado; as such we encourage protection for Colorado's wildlife species and habitats through responsible energy development and land use planning. Protection of core wildlife areas, quality fisheries and habitat, big game winter range and seasonal migration corridors, and raptor nesting locations are of extreme importance. CPW recommends that all proposed projects be assessed to avoid, minimize, or mitigate impacts to sensitive wildlife habitats and species. That includes species of concern as well as Federal and/or State listed species, big game wildlife (migration corridors, winter range, and parturition areas), breeding and nesting habitats for sensitive ground-nesting birds, and nests of raptors sensitive to development in order to prevent loss of habitat or fragmentation of habitat. US Fish and Wildlife Service (USFWS) should be consulted on any Federally-listed Endangered and Threatened Species that might be present at the location.

Potential Impacts to Wildlife Resources:

State Endangered and Threatened Species and State Species of Concern

Burrowing owls, black tailed prairie dogs, mountain plovers, and swift foxes have the potential to be present on site. The burrowing owl is State Threatened, the mountain plover and swift fox are State Species of Concern. Due to the status of these species, it is recommended that special precautions be taken to avoid adverse impacts to individuals in the project area.

Burrowing Owls:

The potential presence of black-tailed prairie dog colonies on the site indicates the potential presence of nesting burrowing owls. Burrowing owls are listed as State Threatened, and nest in active or inactive prairie dog burrows. Where there are black-tailed prairie dog colonies on the location of the proposed project, specific recommendations for pre-construction surveys and buffers around active burrowing owl nests are included in the referenced BMP document.

Mountain Plover:

Portions of the proposed project area are in range of the Mountain Plover (*Charadrius montanus*), a state species of special concern. The Best Management Practices for mountain plover recommend surveys to identify habitat and plover nests within the project area, or plan construction activity outside of critical nesting periods, April 1st through August 15 where these species are found. Mountain plovers can nest in short-grass prairie, dryland cultivated farms, and prairie dog towns; all of which could be located on the project site.

Swift Fox:

The proposed project area is within the overall range of the swift fox (*Vulpes velox*), a state species of special concern. CPW recommends pre-construction surveys to identify and avoid all maternal swift fox den sites. Swift fox live here year-round, breed during December, and raise their young into the next fall. It is recommended that swift fox surveys include daylight searches for den areas and nighttime spotlight searches during August and September.

Raptors and Migratory Birds:

There is suitable habitat for nesting raptors and migratory birds on the proposed project area. Consultation with USFWS is recommended to ensure compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Act. The best way to avoid impacts on the nesting efforts of migratory birds is to focus construction activities outside of the breeding season, March 15th – August 31st. If construction must occur during the breeding season, surveys for active nests should be conducted prior to groundbreaking. All migratory birds are protected under the Migratory Bird Treaty Act and removal or disturbance of any migratory bird nest would require consultation with CPW and USFWS prior to disturbance.

To avoid impacts to nesting raptors, CPW recommends the use of preconstruction surveys to identify raptor nests within the project area and the implementation of appropriate restrictions. CPW recommends adherence to the recommended buffer distances and timing stipulations identified in the CPW document "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" available on the CPW website.

Habitat loss and fragmentation:

In general, CPW recommends that the developer consolidate facilities and roads to the extent possible, to minimize the amount of land that is disturbed and fragmented. Habitat loss and fragmentation are significant concerns regarding solar development and minimizing the project footprint can help reduce the impacts to wildlife. Big game species that can potentially be found in the vicinity of the project site include mule deer, white-tailed deer, elk, and pronghorn.

Although this solar project is located outside Big Game High Priority Habitat (HPH), the biggest impact from this project will be the loss of open space and fragmentation of existing big game habitat. CPW recommends incorporating wildlife corridors, using drainages, into the site layout to allow for continued permeability for big game species. CPW appreciates the conversation on May 8, 2024 and the updated site plans to reflect an east-west corridor between Sections 30 and 31 on the west side of the highway. The updated plans also include increased setback distances from State Highway 71 to avoid pinch points along the road, reducing the potential for wildlife using the road as a corridor.

Noxious weed management:

Also of importance are revegetation of disturbed soils and the control of noxious weed species through the development of a noxious weed management plan prior to initiating construction activities. The revegetation of disturbed areas and control of invasive weed species are important components of the project and it is highly preferred that the site be restored to a native plant community. CPW prefers that native vegetation be retained on site during the operational lifespan of the project, both as habitat for wildlife and to ensure successful reclamation of the project area. Proper reclamation, from a wildlife perspective, involves not only stabilizing the soil and establishing ground cover, but fostering plant communities with a diversity of species and plant types -grasses, woody plants, and broadleaf forbs- which will fully serve the nutritional needs of wildlife. Strict adherence to the Natural Resources Conservation Service's recommendations is advised. CPW would appreciate the opportunity to review the project's Noxious Weed Management Plan prior to the start of construction.

Transmission lines:

CPW preference is for new transmission lines to follow existing transmission line or infrastructure corridors whenever possible to minimize additional impacts on wildlife and habitat fragmentation. If there are connection points in the vicinity of the proposed project and if there is a very short connection line that would not likely impact wildlife resources in the area. However, longer routes to connect the project or changes in the final plans that result in a large transmission corridor could increase the impacts from the development. CPW would like the opportunity to consult on the connection when details of the route can be confirmed to help identify potential impacts for species in the project area and recommended mitigation measures which, if enacted, should provide a measure to avoid or minimize impacts to wildlife.

Of high concern regarding electrical transmission lines is the potential for raptor electrocution. Through the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, the U.S. Fish and Wildlife Service, in cooperation with the Edison Electric Institute, has developed Best Management Practices to minimize impacts to avian species. CPW recommends that both the "Suggested Practices for Avian Protection on Power Lines, the State of the Art in 2006" and the "Reducing Avian Collisions with Power Lines: The State of the Art in 2012" documents be consulted for proper design considerations to minimize raptor electrocution. These documents can be ordered at the Edison Electric Institute website (www.eei.org) or can be downloaded at the Avian Power Line Interaction Committee website (www.aplic.org). This recommendation is applicable to all segments included in the project.

Impact Avoidance, Minimization, and Mitigation Recommendations:

- Due to the potential presence of swift fox within the project area, CPW recommends preconstruction surveys for maternal swift fox dens. If an active maternal den site is

present, CPW recommends no human encroachment, surface disturbance, or construction activity within 0.25- mile of an active maternal den site from March 15 through June 15.

- Due to the use by foraging raptors within the project area and the potential for raptor nest sites within the project boundary, CPW recommends preconstruction surveys for raptor nest sites prior to surface disturbance or vegetation removal. If a nest is located during the survey CPW recommends adherence to the recommendations in the "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" for best management practices to minimize impacts to nesting raptors

- Due to the potential presence of prairie dog colonies within the project site CPW recommends the adherence to CPW's Burrowing Owl Survey protocol if development occurs during the spring or summer months (Feb 1 to August 31). If nesting burrowing owls are present, no human encroachment or surface disturbance should occur within a 200-meter buffer of nesting burrows from March 15 to August 15. If burrowing owls occupy the site, CPW recommends that earthmoving and other disturbance activities be delayed until late fall after they have migrated.

- Due to the potential presence of Mountain Plovers, if the initial site disturbance is planned to occur between April and August CPW recommends pre-construction surveys using USFWS protocols in suitable nesting habitat and any active mountain plover nests should be flagged. CPW recommends no surface disturbance (other than existing agricultural activities) within 300 feet of active nest sites until young are hatched, independent, and fledged (April 1 - August 15).

- To allow for continued permeability for big game species such as mule deer, white tailed deer, and pronghorn, CPW recommends incorporating wildlife corridors into the project design. These corridors should be designed with no curves and at least 250 feet wide. CPW appreciates the plan being updated to have a corridor to allow for east-west connectivity.

- CPW is aware that the solar project area will include security fencing. The typical specifications for security fencing make this fence type exclusionary for most wildlife. In these cases CPW requests that the project design adhere to the recommendations for exclusionary fencing that are safe for wildlife. The CPW document "Fencing with Wildlife in Mind" is available at our website. For any installed fencing CPW recommends an 8 foot fence with a smooth top to the fence (e.g., no top barbed wire or exposed metal rods) to prevent wildlife from impaling themselves. If wildlife exclusion fencing is installed CPW would request that efforts also be taken to avoid entrapping wildlife within the facility during construction of the fence and that the

solar facility is checked regularly post-construction, or structures are installed to allow animals to escape, in the unlikely event that a deer or other wildlife become trapped in the facility. CPW recommends designing the fencing to allow for small animal connectivity. This includes approximately 6 inch spacing from the ground to the bottom of the fence.

- CPW also recommends that any security lighting be designed to minimize light pollution and take into consideration lighting initiatives to reduce impacts to wildlife.

- Wildlife-friendly fencing should be used in areas that do not require security fencing. This will allow for continued wildlife use and passage through the parcel.

- Also of concern with fence design would be setbacks from roads. Big game and other wildlife will have to move around these facilities and final design should avoid layouts that consolidate wildlife movements adjacent to roadways that might increase risk of wildlife-vehicle collisions (Sawyer et al, 2022). This is of particular importance in winter range where animals congregate in larger numbers. CPW appreciates the updated plan, reflecting increased setback distances from State Highway 71.

CPW may have additional recommendations when the final layout and development plans are available for the proposed solar facility. Any surface water or evaporation ponds associated with the site could increase the risk to wildlife on the installation either due to toxicity issues or by acting as an attractant. In locations with a potential risk to avian species CPW recommends development of a post-construction monitoring program in accordance with the USGS 2016 report Mortality Monitoring Design for Utility-Scale Solar Power Facilities.

CPW appreciates this opportunity to review the proposed Ebba Solar Project and we look forward to reviewing any other plans (i.e. infrastructure layout, reclamation plans, or changes to the reviewed plans) and biological surveys or assessments that are developed as the project nears implementation. If you have any questions regarding this letter, please contact Southeast Regional Land Use Specialist Cassidy English at 719-227-5224 or cassidy.english@state.co.us.

Sincerely,

Tim Kroening
Area Wildlife Manager
Area 14-Colorado Springs