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*June 17, 2022*

## Memorandum

To: Nevada State Director, Bureau of Land Management

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ORLANDO** Digitally signed by  
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From: [FOR] Regional Director, National Park Service Interior Regions 8, 9, 10, and 12

Subject: Notice of Intent for the Greenlink West Project

The National Park Service (NPS) appreciates the opportunity to provide scoping comments on the Bureau of Land Management's (BLM) Notice of Intent to prepare an Environmental Impact Statement (EIS) under the National Environmental Protection Act (NEPA) on the proposed Greenlink West Project. The project consists of electrical transmission facilities and associated infrastructure located in southwestern Nevada. As stewards of public lands, the NPS protects resources through a variety of internal programs and serves as an active conservation partner with federal and non-federal agencies and organizations. The Greenlink West Project may impact the nationally recognized resources and values of Tule Springs Fossil Beds National Monument (NM), Death Valley National Park (NP), the California National Historic Trail (NHT), and the Pony Express National Historic Trail (NHT).

These comments herein are arranged by topic:

## General Comments

The Organic Act of 1916 requires the National Park Service "to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of future generations" (54 U.S.C. 100101(a)). Tule Springs Fossil Beds NM was established in 2014 specifically for the preservation, public education, and scientific study of Ice Age fossils, including the Columbian mammoth, sabertooth cat, American lion, dire wolf, and various species of giant ground sloths, ancient camels and ancient horses. The fossil beds at the park are significant to science and contain some of the richest Ice Age faunas in the Southwest. As a

INTERIOR REGION 8 • LOWER COLORADO BASIN\*  
INTERIOR REGION 9 • COLUMBIA—PACIFIC NORTHWEST\*  
INTERIOR REGION 10 • CALIFORNIA—GREAT BASIN  
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AMERICAN SAMOA, ARIZONA\*, CALIFORNIA, GUAM, HAWAII, IDAHO, MONTANA\*,  
NEVADA, NORTHERN MARIANA ISLANDS, OREGON, WASHINGTON

\*PARTIAL

recently established park unit, baseline inventories are being completed for multiple park resources; information on current status is limited.

- Death Valley NP, the largest national park in the contiguous United States, is widely known for its scenic views, vast open spaces that stretch toward distant horizons, and overwhelming silence. The park receives upwards of two million visitors a year.
- The California NHT commemorates the historic path of travel for over 250,000 emigrants to California during the 1840s and 1850s, while the Pony Express NHT commemorates the path taken by riders to deliver messages from east to west between April 1860 and October 1861. Today, both routes offer opportunities to visit surviving sites and trail segments.

### **Renewable Energy Transmission Corridor**

The enabling legislation for Tule Springs Fossil Beds NM states under Section 4, Renewable Energy Transmission Facilities:

*On receipt of a complete application from a qualified electric utility, the Secretary, in accordance with applicable laws (including the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and title V of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.)), shall issue to the qualified electric utility a 400-foot-wide right-of-way for the construction and maintenance of high-voltage transmission facilities depicted on the map entitled “North Las Vegas Valley Overview” and dated November 5, 2013, as “Renewable Energy Transmission Corridor” if the high-voltage transmission facilities do not conflict with other previously authorized rights-of-way within the corridor. (Pub. L. 113-291, 128 Stat. 3791 (2014))*

Issue: NPS must receive and review right-of-way (ROW) permit applications for infrastructure proposed within the boundaries of an NPS unit, or the NPS’ responsibility to determine whether to issue a ROW permit within a park unit in accord with applicable laws and regulations. The NPS also determines the terms and conditions of a ROW permit to meet NPS statutory, regulatory, and policy requirements.

Recommendation: The NPS recommends and offers to work with BLM to ensure the NEPA analysis is sufficient for the requirements of both agencies.

### **Rights-of-Way**

Utilities that pass over, under, or through NPS-managed land must be authorized under an NPS-issued ROW permit (54 USC 100902, 36 CFR Part 14). NPS ROW permits allow utilities to operate and maintain infrastructure over, on, or under NPS lands; they set the terms and conditions for such operation and maintenance. NPS Director’s Order 53 states that “The NPS may issue right-of-way permits only for those uses or activities specifically authorized by

Congress and only if there is no practicable alternative to the used of NPS lands.” The NPS has recommended to the project proponent and its contractors, and to the BLM and its contractors, that a third-party engineering consultant evaluate the project proposal to identify any micro-siting or route alternatives that would minimize impacts to NPS lands and resources.

Issue: The NPS understands there are several routing alternatives through Tule Springs Fossil Beds NM, as stated in previous Cooperating Agency meetings and in the most recent Plan of Development (POD). The POD does not include an NPS ROW permit in the project proponent’s requirements for any routing alternatives. The project proponent is required to submit a ROW application to the NPS. The NPS is aware of resource surveys the project proponent is actively conducting to include in a NPS ROW application package.

Recommendation: The NPS has previously provided information to the project proponent and BLM staff on the NPS ROW permitting process. The NPS recommends the BLM and project proponent meet with NPS personnel from Tule Springs Fossil Beds NM and the regional office for Interior Regions 8, 9, 10 and 12 to further clarify the NPS ROW application and permitting process. The discussion will include all supporting documents required in an SF-299 ROW permit application; NPS ROW permitting standards including cost recovery, annual rent calculations, permit terms (generally for 10 years’ duration); and activities allowed under a ROW permit.

As the federal agency with administrative authority over public lands in Tule Springs Fossil Beds NM, the POD must identify the NPS as a potential permitting agency. In addition to resource surveys, the NEPA environmental analysis will need to include site-specific analyses if the proposed routes across Tule Springs Fossil Beds NM are retained as alternatives.

The Greenlink West Project has the potential to cause adverse impacts to the resources described below. We recommend the BLM include a thorough analysis of these resources in its EIS for the project and further address potential effects through the Section 106 consultation process where appropriate.

### **Paleontological Resources**

Tule Springs Fossil Beds NM encompasses one of the largest and most diverse late Pleistocene vertebrate fossil assemblages in the southern Great Basin and Mojave Deserts. The indigenous fauna of Tule Springs includes large mammals and other vertebrates, and the fossil assemblage dates from approximately 100,000 to 12,500 years ago. Invertebrates, plant microfossils, and pollen also are present in these deposits. The Las Vegas Formation that contains these fossils, though, dates to over 500,000 years ago and paleontological data from this area continue to contribute to new scientific discoveries.

Issue: The proposed alignment of the Greenlink West Project would pass through fossiliferous deposits in the park as well as east and west of the park. These deposits contain known fossil

sites particularly on adjacent Clark County land to the east of the NM. The construction of the transmission line, including 1.5 miles in the park, will have the potential to impact paleontological resources, including an undetermined number of fossil remains and unrecorded fossil sites; associated specimen data and corresponding geologic and geographic site data. Impacts could result from transmission tower foundations, roadbuilding, vegetation clearing, grading, widening of road cuts, and any other earth-moving activity that disturb or bury previously undisturbed fossiliferous sediments, making those sediments and their paleontological resources unavailable for future scientific investigation.

Recommendation: The Nevada Potential Fossil Yield Classification (PFYC) for the proposed Greenlink West transmission line corridor in TUSK ranks the highest potential to find fossils, with a PFYC value of 5 (on a scale 1-5). In addition to archaeological, biological, and ongoing paleontological surface studies, the NPS requests the project proponent conduct ground penetrating radar (GPR) studies within the ROW corridor. The use of GPR could potentially detect any anomalies that could further inform the effect of subsurface fossils within the ROW corridor.

### **Cultural and Archaeological Resources**

The lands within Tule Springs Fossil Beds NM have been used by humans since at least the Paleoindian period, about 12,000 years ago at the end of the last ice age. The area is of cultural and religious importance to the Southern Paiute people, who consider the land as a place for peace for connecting with the past. It is part of the Salt Song Trail, songs that describe the sacred landscapes of the Paiute people that lived in the region, BLM Upper Las Vegas Wash Conservation Transfer Area Final Environmental Impact Statement (2012).

Issue: Salt Songs are visually and physically connected landscapes which derive significance from both symbolic and phenomenological experience of traversing through them. The Greenlink West Project would introduce physiological changes to the cultural landscape and potentially alter the identity of the community.

Recommendation: The NPS recommends the BLM work closely with tribal partners to determine the impacts to the cultural landscape in the Las Vegas Wash area. As stated in the Final EIS and Record of Decision for the Upper Las Vegas Wash Conservation Transfer Area, the Las Vegas Wash should be considered a Traditional Cultural Property (TCP) for the Las Vegas Paiute, Chemehuevi, and Moapa Paiute Tribes.

As a newly established NPS unit, Tule Springs Fossil Beds NM is still gathering data to determine what cultural and archaeological resources are present on site. A historic resource study scheduled to occur later this year will provide baseline evaluation of cultural resource management practices and knowledge of existing archeological resources that can help inform future planning processes and core archeological data products, such as the ethnographic overview and assessment.

## **Sensitive Plants**

Tule Springs Fossil Beds NM is host to a number of endemic plant species, including three special status plant species: Las Vegas buckwheat (*Eriogonum corymbosum* var. *nilesii*), Las Vegas bearpoppy (*Arctomecon californica*) and Merriam's bearpoppy (*Arctomecon merriami*). In addition, all native cacti and yucca, such as Joshua tree, are protected by the State of Nevada.

Issue: The Greenlink West Project may impact these special status species. Indirect impacts may include, but are not limited to, habitat loss and fragmentation, trampling of native plants, soil compaction of sensitive desert soils, and the introduction of noxious weed seed through construction equipment, that would result in the decline of sensitive plant populations. Previous analyses indicate a moderate potential of the Las Vegas bearpoppy and Merriam's bearpoppy occurring within the proposed transmission corridor. Downed transmission lines can also cause fires that would decimate these populations.

Recommendation: The NPS recommends a detailed inventory and survey of all sensitive plant species within and in the vicinity of the proposed ROW within Tule Springs Fossil Beds NM, and an analysis of the impacts of the Greenlink West Project on species populations in the park. We also recommend that the project proponent complete an inventory and survey of nonnative and invasive plants that have a high probability of establishment once soils are disturbed within and in the vicinity of the ROW on park lands. Frequent and diligent site control and monitoring would be required to limit disturbance areas to a minimum. The park can provide guidance on the survey methodology.

## **Natural Sounds**

Natural sounds are important for wildlife, wilderness, visitors, and cultural-historic events. Animals depend on hearing natural sounds for a range of activities including communication, finding food and avoiding predators. Visitors come to parks to experience the natural quiet and the sounds of nature. Sounds associated with our cultural heritage teach us about the past, connecting us to a time and place in history.

Issue: The NPS is concerned that the project, with its preferred alignment through Tule Springs Fossil Beds NM, has the potential to impact the natural soundscape for native peoples, hikers and other visitors coming to the park. Noise from the proposed transmission line would be continuous and add to other existing transmission lines in the renewable energy corridor adjacent to the park. The NPS is mandated to protect visitor experience and to minimize outside noise impacts, consistent with NPS Management Policies 2006.

Recommendation: The NPS recommends that predicted acoustic conditions underneath the transmission line at Tule Springs Fossil Beds NM be evaluated against the natural ambient sound level, defined as the sound level which would exist in an environment without contributions from human sources. The NPS Natural Sounds and Night Skies Division recently completed a

baseline acoustic survey at the park and is available to share resources and experiences from other projects.

## **Air Quality**

Air quality is an important component of the overall NPS visitor experience. At Death Valley NP, the mostly treeless landscape along with the great range of elevations lead to an abundance of striking and accessible views. The view at the entrance to Tule Springs Fossil Beds NM showcases the scenic badland features of the Las Vegas Formation that are not easily viewed elsewhere.

Issue: Construction of the Greenlink West Project has reasonable potential to generate fugitive dust from ground disturbing activities. Surface soils around the two desert parks are highly erodible, particularly at Tule Springs Fossil Beds NM. The park is located in the Upper Las Vegas Wash and, as such, is in a constant state of erosion (for example, erosion at the bases of existing transmission lines are evident at the Eglington Preserve). Palliative measures need to be sufficient to keep fugitive dust from entering parks during frequent high wind events characteristic of the desert. Mitigation measures in the dust control plan must be sufficient to control fugitive dust.

Recommendation: The NPS recommends that every effort be made to avoid or minimize impacts to highly erodible desert soils while retaining as many existing native plants to help stabilize soils. The NPS also recommends that the project include a defined plan for air quality monitoring at Tule Springs Fossil Beds NM throughout construction, including a responsible party and funding source for monitoring, and include an adaptive management plan to manage for fugitive dust.

## **Visitor Experience**

The NPS strives to provide visitors with quality experiences. Death Valley NP nears two million visitors a year. Tule Springs Fossil Beds NM is located next to a large metropolitan area with more than two million residents and more than 42-43 million visitors per year.

Issue: The NPS is concerned the Greenlink West Project will run through one of the main visitor experience areas at Tule Springs Fossil Beds NM. The area, along Durango and Moccasin Roads, is considered a main entrance to the park and includes an interpretive kiosk, trailhead and parking area for visitors. The view beyond the kiosk and parking area is considered the most scenic entrances to the park, displaying a view of the badland features of the Las Vegas Formation that is not easily viewed elsewhere.

Recommendation: The NPS recommends the BLM and project proponent work with the park to re-route the alternatives through the park or microsite towers to avoid, minimize, or mitigate impacts to this area.

## Off-Highway Vehicle (OHV) Use

OHV use is a major recreational activity in the West, especially in Nevada. The exponential increase of OHV use in the last decade has increased the conflict between recreation and the protection of resources. Illegal OHV use, particularly dirt-bike riding, is noted as common in the Upper Las Vegas Wash area (BLM Upper Las Vegas Wash Conservation Transfer Area Final Environmental Impact Statement, 2012).

Issue: The construction of transmission lines and associated infrastructure would increase human activity within Tule Springs Fossil Beds NM. Vegetation removal in the transmission corridor for construction vehicles has the potential to attract illegal OHV use into the park creating unauthorized user-created roads, damage sensitive paleontological resources, destroy wildlife habitat, as well as introducing new invasive plant infestations to the area. The park has inadequate visitor support infrastructure and infrequent ranger patrols to monitor OHV activity.

Recommendation: The NPS recommends the BLM and project proponent work with NPS to re-route the alternatives through the park to avoid, minimize, or mitigate OHV use or trespass and invasive plant infestations in the area. The NPS also recommends the BLM use the best available science to analyze likely increases in OHV damage and cultural and paleontological resource threats with increased construction activity in the area. Any roads or vehicle tracks created for construction should be restored to the maximum extent possible to reduce soil compaction and eliminate the appearance of a road or track. If sections of road or track on adjacent BLM managed lands cannot be restored for reasons of project maintenance, NPS recommends the BLM use appropriate means to close the project road for public use (*e.g.*, berms, gates, signs) so as not to create new access points adjacent to the park that may lead to illegal OHV activities and resource damage in the park.

## Visual Resources

The NPS Organic Act establishes the agency's responsibility to conserve the scenery for the enjoyment of this and future generations. Scenic views are valued for their beauty, connect people with culture and history, and are an important resource identified by NPS visitors. In 2020, 6.1 million visitors spent an estimated \$279 million in local regions while visiting parks in Nevada. *See* Visitor Spending Effects - Economic Contributions of National Park Visitor Spending - Social Science, U.S. National Park Service ([nps.gov](https://www.nps.gov)).

Issue: The NPS is concerned that the viewshed at popular visitor areas could be adversely impacted by the presence of the transmission line and associated infrastructure.

- The preferred alignment of the Greenlink West Project (Link 155) runs through one of the main visitor use areas for Tule Springs Fossil Beds NM. The area, near the intersection of Durango and Moccasin Roads, is considered a main entrance to the park

and features an interpretive kiosk, trailhead, and parking area for visitors. The view beyond the kiosk and parking area is considered the most scenic entrances to the park. The project would introduce up to 180-foot-high towers at the site with little or no way to mitigate visual impacts.

- Viewshed analyses completed by NPS also indicate the transmission line and associated infrastructure range in distance from 1.5 -10 miles from the boundary of Death Valley NP and would be visible from several Key Observation Points inside the park.

Recommendation: The NPS appreciates the early coordination already extended by the BLM and requests ongoing coordination to minimize visual impacts at Tule Springs Fossil Beds NM. The NPS recommends the visual resource impact assessment describe the visibility and potential impacts of the project to all potentially impacted NPS sites in terms of proximity and contrast, and the change in landscape character as viewed from the units. The project proponent should utilize the best available technology for reducing day- and night-time visual impacts of project infrastructure.

## **Night Skies**

Night skies are a critical component of natural, cultural, and historic resources across the NPS. Dark night skies enhance the qualities of solitude and undeveloped wilderness character that animals depend on for survival, park visitors seek for connections, and many cultural-historical parks require for preservation.

Issue: The NPS is concerned about impacts to the visitor experience from artificial lighting related to the Greenlink West Project. Death Valley NP showcases some of the darkest night skies in the United States and is certified as a Gold Tier International Dark Sky Park. Stargazing and astronomy programs are some of the most popular ranger-led activities and attracts planetary scientists and visitors from around the country and world. Although light pollution from Las Vegas inhibits most of the night sky surrounding Tule Springs Fossil Bed NM, portions of the night sky can be still viewed in the park, even from the edge of the urban interface. The park recently launched a Night Sky Astronomy program to share stargazing experiences with neighboring urban communities.

Recommendation: The NPS recommends analysis and comparison of the night sky impacts between the alternatives. Furthermore, the NPS requests that lighting plans for alternatives include consideration for the International Dark Sky Park status of Death Valley NP and address dark night sky values. The NPS also requests that lighting plans for project infrastructure near NPS units address wildlife and ecosystem values based on current scientific literature and best practices. The NPS Natural Sounds and Night Skies Division is available to share resources and experiences from other projects.

## **Wildlife Connectivity**



Landscape-level concerns transcend agency boundaries. Public lands surrounding the Greenlink West Project provide critical habitat connections to a number of wildlife associated with the NPS including the desert tortoise and bighorn sheep.

Issue: The NPS is concerned with the loss of habitat or connectivity resulting from the construction of towers, new roads and cleared areas. These changes to the landscape could negatively impact important and sensitive species, such as Gila monster, desert tortoise, Le Conte's thrasher, Western burrowing owl, desert kit fox, and bighorn sheep, by destroying or fragmenting habitat. Introduced invasive weeds also have the potential to spread and outcompete with native species and alter the ecosystem.

Recommendation: The NPS recommends analyzing impacts to connectivity for wildlife at Death Valley NP and Tule Springs Fossil Beds NM – in particular, species that move among the south and north units of the NM. Climate change effects on habitat and movement should also be analyzed in the EIS.

### **Avian Wildlife Mortality**

Death Valley NP offers a wide diversity of habitats resulting in a high biodiversity of bird species. 350 species of birds have been documented at the park including 14 species of raptors that are resident year-round. Sensitive birds such as Le Conte's thrasher and Western burrowing owls also occur at Tule Springs Fossil Beds NM.

Issue: Construction activities resulting from the Greenlink West Project can pose direct (*i.e.*, mortality) and indirect (*i.e.*, nest abandonment) impacts to resident birds. In addition, transmission lines pose electrocution and collision risks to birds. The transmission line would introduce new collision risk to raptors and other birds that are found at Death Valley NP as well as Tule Springs Fossil Beds NM.

Recommendation: The Migratory Bird Treaty Act of 1918 protects the take of protected migratory bird species without prior authorization by the U.S. Fish and Wildlife Service (USFWS). The NPS recommends limiting ground-disturbing activities during the migratory bird breeding season, which generally occurs March 1 to July 31 in Nevada (USFWS). The NPS recommends that historic breeding seasons be used as a starting point for ground-disturbing activity limitations, but that surveys are conducted to detect birds breeding outside the historic season due to climate change. The NPS also supports recommendations from the Avian Power Line Interaction Committee to reduce mortality of birds around transmission lines and associated infrastructure.

### **Cumulative Effects**

The Greenlink West Project has a high associated probability of presenting opportunities for the siting of renewable energy along its proposed corridor. To date, the BLM has received seven

new utility-scale solar project applications near the proposed Esmeralda substation north of Death Valley NP. In the Amargosa Valley adjacent to the park, the BLM has received at least fourteen applications for new utility-scale solar projects that would connect to the proposed Amargosa substation. To address this recent influx of interest in the Amargosa Valley, the BLM is preparing to offer three competitive parcels, including the Amargosa Solar Energy Zone, for leasing in the coming months.

Issue: The NPS is concerned about cumulative effects to the shared landscape and NPS resources surrounding Death Valley NP from solar development proposals associated with the Greenlink West Project. In addition, a number of gold and lithium mining operations to support renewable energy development are also being proposed in the same landscape. Cumulatively, these solar facilities and mining operations could further impact the scenic viewshed of iconic peaks, wilderness areas and other significant features at the park (*i.e.*, Titus Canyon). Water use for both construction and operation of solar installations and mining operations may strain already overallocated groundwater basins. Any water withdrawals that may affect Devil’s Hole and the federally endangered Devil’s Hole pupfish are of particular concern. The development of multiple large-scale solar facilities and mining operations can interfere with migratory movements or movements of animals into new ranges. These connected and reasonably foreseeable future actions should be considered in the evaluation of the project.

Recommendation: The NPS recommends that the BLM consider lands surrounding Death Valley NP to analyze the cumulative impacts of all proposed utility scale transmission, utility scale solar fields, and mining operations for gold and lithium, to NPS resources and values such as scenic views and groundwater quantity. The quantity of proposed utility-scale solar projects to connect to the Greenlink West Project would be situated in areas with a high potential for resource conflict with park resources and values (2012 Final Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (FES 12-24; DOE/EIS-0403)).

## **NEPA Implementation**

The NPS serves as a NEPA Cooperating Agency for the Greenlink West Project and looks forward to effective collaboration and cooperation with the BLM.

Issue: The Federal Register Notice initiating the scoping process for this project was published on April 29, 2022. Recent changes to federal NEPA regulations took effect May 20, 2022. The “Phase One” final rule reinstated three key provisions to (1) Purpose and Need, (2) Agency NEPA Procedures, and (3) Definition of “Effects” or “Impacts”.

Recommendation: The NPS recommends that the BLM clarify how Phase I final rule may be incorporated into the NEPA process for the Greenlink West project. The NPS supports a redefinition of the Purpose and Need according to the revised regulations, to consider the BLM’s purpose and need and range of reasonable alternatives, particularly around Tule Springs Fossil

Beds NM. A robust and comprehensive analysis and discussion on the Cumulative Effects of all proposed utility scale transmission, utility scale solar fields, and mining operations for gold and lithium, particularly around Death Valley NP, should also be included in the EIS. Overall, due to the level of development interest (i.e., solar, transmission, gold and lithium mining) in the Amargosa Valley, the NPS recommends the BLM collaborate with other agencies and partners on landscape level analysis and planning of the Nevada desert to identify areas most appropriate for development and to minimize impacts to sensitive resources.

## **Conclusion**

The NPS appreciates the ongoing coordination with BLM and looks forward to additional opportunities of mutually beneficial participation. Addressing impact topics on NPS lands and NPS-administered sites helps us provide the utmost protection of resources and the visitor experience. If you have any questions regarding our comments or concerns, or if you need additional information, please contact Tule Springs Fossil Beds National NM Acting Superintendent, Erin Eichenberg ([erin\\_eichenberg@nps.gov](mailto:erin_eichenberg@nps.gov)), Death Valley NP Superintendent, Mike Reynolds ([mike\\_reynolds@nps.gov](mailto:mike_reynolds@nps.gov)), or External Energy & Minerals Specialist, Lena Lee ([lena\\_lee@nps.gov](mailto:lena_lee@nps.gov)).

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