

Appendix F

Paleontological Resources Inventory Report

February 19, 2020

12649

*AES North American Development LLC
690 North Studebaker Road
Long Beach, California 90803
Contact: Michael Hughes*

Subject: Paleontological Resources Inventory Report for the Mountain View Power Partners Wind Repower Project, Riverside County, California

Dear Mr. Hughes:

Dudek was retained by Mountain View Power Partners, LLC (MVPP or project proponent) to complete a paleontological resources inventory for the Mountain View Wind Repower Project (MVPP project or project), located in unincorporated Riverside County (County), California, with some smaller areas under the jurisdiction of the Bureau of Land Management (BLM) and City of Palm Springs (City). The entire project site is 1,255.9 acres. This report presents the results of a records search conducted at the Natural History Museum of Los Angeles County (LACM), a paleontological survey, and desktop geological and paleontological research.

Project Location

The project site is located within the Western Coachella Valley Area Plan, and more specifically, within the San Geronio Pass Wind Energy Policy Area (County of Riverside 2019). The project boundary encompasses approximately 1,255.9 acres of existing energy facilities within unincorporated County of Riverside (County). Specifically, the project site is located within the County of Riverside, in the northwestern portion of the Coachella Valley. State Route (SR-) 111 and the City of Palm Springs are located south of the project site, and Interstate (I-) 10 is located north of the project site (Figure 1, Project Location, in Attachment A, Figures).

The project is mostly located within the boundaries of the County and within the existing Mountain View I & II wind energy facilities. The project also includes approximately 52 and 78 acres of BLM and City of Palm Springs land, respectively. Work proposed within the City's jurisdiction includes replacement of existing underground electrical collection cable and decommissioning of 10 existing wind turbine generators, both of which would be subject to ministerial permits to be issued by the City of Palm Springs. No ground-disturbing activities would occur in the City's jurisdiction and this area will not be discussed further. The project site is located within Section 13 of Township 3 South, Range 3 East and Section 17 and 18 of Township 3 South, Range 4 East of the Desert Hot Springs and Whitewater United States Geological Survey (USGS) Quadrangle. The approximate geographic center of the project site is located at 33° 54' 28.04"N (latitude) and 116° 35' 32.03"W (longitude).

Surrounding land uses can be broadly described as developed with a mix of wind energy facilities, industrial and commercial properties, and rural residences. The Union Pacific Railroad (UPRR) corridor runs east-to-west, south of the project site, and Coachella Valley Water District (CVWD) percolation ponds are located south of the railroad corridor. I-10 runs northwest-to-southeast, north of the project site, and additional wind energy development, SR-62, and vacant desert land are located north of I-10. Existing wind energy projects are located on all sides of the project site, and some commercial and industrial land uses are developed east of the project site, adjacent to Indian Canyon Drive. The area of land between the noncontiguous portions of the project site

consists of wind energy development, rural residential, and undeveloped land. An open space area is located west of the project site.

Project Description

The proposed project would repower the existing on-site wind facilities with 16 new, Vestas 3.6 and 4.2 megawatt (MW) WTGs while removing 93 existing Mitsubishi 600 kW WTGs; 7 existing Mitsubishi 600 kW WTGs would remain as part of the repower project. The seven existing WTGs would be upgraded with and/or refurbished gearboxes, generators, and other components, to improve electrical generation efficiency. Six of the existing WTGs that would remain as part of the proposed project (WTG74-09 through WTG74-14) are located on BLM parcel no. 668-310-038 (ROW Grant CACA-42139), and one WTG (WTG74-15) is located on privately owned parcel no. 669-020-008.

Permits, authorizations, and approvals for the portion of the project on fee-owned lands will include, but may not be limited to the following: Riverside County Wind Energy Conversion Systems (WECS) Permit; Building, and Grading Permits; Federal Aviation Administration Determinations of No Hazard; California State Water Resources Control Board Construction General Permit, Riverside County Airport Land Use Commission Review; and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Joint Project Review (JPR). Additionally, the project proponent has requested a Zone Change and Variance from the County of Riverside.

The WTGs would be connected to the Mountwind Substation through above-and below-ground electrical collection systems. The project would include installation of a new transformer at the Mountwind Substation. The existing transformer would be stored on a concrete foundation in a disturbed area directly adjacent to the substation. Underground circuits would be direct-buried at a minimum depth of 36 inches and a maximum depth of 48 inches, in accordance with applicable requirements, including the National Electrical Code. The trench itself would be 2 feet wide, but the larger, temporary disturbance area could be up to 34 feet wide, which would accommodate temporary soil spoils piles generated from trenching, the trenching machine, and other vehicular traffic traveling adjacent to the electrical collection system trenching activities. For the overhead electrical collection system, A total of 43 existing, 45-foot tall utility poles would be replaced. Most new poles would be 55 feet tall, but some would be up to 65 feet tall. Four utility poles would be replaced in-place, requiring a temporary 25-square foot work area at each pole. Thirty-nine utility poles would be replaced immediately adjacent to the existing pole, requiring a temporary 100 square foot work area at each pole. A 10-foot wide spur road would be built to provide vehicle access to 14 of the utility poles.

Regulatory Framework

This section summarizes federal, state, and local and regional laws and regulations that are related to paleontological resources.

Federal Requirements

The Paleontological Resources Protection Act (PRPA) of 2009 directs the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land using “scientific principles and expertise.” The PRPA incorporates most of the recommendations of the report of the Secretary of the Interior

entitled "Assessment of Fossil Management on Federal and Indian Lands" (USDI, 2000) in order to formulate a consistent paleontological resources management framework. In passing the PRPA, Congress officially recognized the scientific importance of paleontological resources on some federal lands by declaring that fossils from these lands are federal property that must be preserved and protected. The PRPA codifies existing policies of the BLM, National Park Service (NPS), United States Forest Service (USFS), Bureau of Reclamation, and the United States Fish and Wildlife Service (USFWS), and provides the following:

1. criminal and civil penalties for illegal sale and transport, and theft and vandalism of fossils from federal lands;
2. minimum requirements for paleontological resource-use permit issuance (terms, conditions, and qualifications of applicants);
3. definitions for "paleontological resources" and "casual collecting"; and
4. requirements for curation of federal fossils in approved repositories.

The PRPA requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land. The PRPA furthers the protection of fossils on federal lands by criminalizing the unauthorized removal of fossils.

The Federal Land Policy Management Act of 1976 (P.L. 94-579; 90 Statute 2743' USC 1701–1782) requires that public lands be managed such that the quality of their scientific values is protected. The act recognizes significant paleontological resources as scientific resources and requires federal agencies to manage public lands in a manner that protects scientific resource quality.

The National Environmental Policy Act of 1969 (P.L. 91-190; 31 Statute 852, 42 USC 4321–4327) requires that important natural aspects of our national heritage be considered in determining the environmental consequences of any proposed project.

State Requirements

Paleontological resources are afforded consideration under the California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines (Title 14, Division 6, Chapter 3, California Code of Regulations:14 CCR 15000 et seq.) includes the following as one of the questions to be answered in the Environmental Checklist (Appendix G, Section VII, Part f): "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" California Public Resources Code, (PRC) Section 5097.5, specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code, Section 622.5, sets the penalties for damage to or removal of paleontological resources. California state laws and regulations under CEQA PRC, Section 5097.5, apply to paleontological resources and the project.

California Environmental Quality Act. Under CEQA, state and public agencies are required to investigate mitigation measures that would reduce significant environmental effects of proposed projects. If paleontological resources are identified during an environmental assessment of a project, then the sponsoring agency must take the resources into consideration when evaluating project effects.

Public Resources Code Section 5097.5. Section 5097.5 of the California Public Resources Code Section protects historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological sites, or any other archaeological, paleontological, or historical feature that is situated on land owned by, or in the jurisdiction of, the State of California, or any city, county, district, authority, or public corporation, or any agency thereof.

Local and Regional Requirements

The Multipurpose Open Space Element of the Riverside County General Plan (County of Riverside 2015) identifies the occurrence of important historical, archaeological, and paleontological resources within the County. Several policies of the County's General Plan Multipurpose Open Space Element address paleontological resources directly (County of Riverside 2015):

OS 19.6 – Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8, a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.

OS 19.7–Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the County Geologist shall be notified, and a paleontologist shall be retained by the project proponent. The paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.

OS 19.8 – Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.

OS 19.9 – Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

Paleontological Sensitivity

County of Riverside

Paleontological resources (fossils) are the remains or traces of ancient life that predate written human history or middle Holocene age (> 5,000 years ago) and are limited, nonrenewable resources of scientific and educational value and when identifiable and collected with associated taphonomical, stratigraphical, phylogenetical, and sedimentological data, are usually considered to be scientifically significant (Society of Vertebrate Paleontology [SVP] 2010).

Occurrences of paleontological resources are closely tied to the geologic units (i.e., formations, members, or beds) that contain them. The probability for finding paleontological resources can be broadly predicted from

the geologic units present at or near the surface. Therefore, geological mapping can be used for assessing the potential for the occurrence of paleontological resources.

The paleontological sensitivity of geological units is ranked based on the record of the geological unit to produce significant paleontological resources. The paleontological resource sensitivity classification used in this study (County of Riverside 2013) is presented in Table 1 below.

Table 1. Assessment of the Paleontological Sensitivity of Rock Units

| Resource Sensitivity/ Potential | Definition |
|---|--|
| High Sensitivity (High A) | High A is based on geologic formations or mappable rock units that contain fossilized body elements and trace fossils such as tracks, nests, and eggs. |
| High Sensitivity (High B) | High B is a sensitivity designation equivalent to High A but is based on the occurrence of fossils at a specified depth below the surface. The category High B indicates that fossils are likely to be encountered at or below a certain depth and may be affected during excavation by construction activities. A standard condition is attached to the project's environmental planning document, specifying that during grading-stage review, a paleontological resource impact mitigation program is a condition for any excavation that reaches or exceeds the specified depth. The depth is generally based on the depth at which other fossils have been discovered in similar sediments near the project area. |
| Low Sensitivity/ Low Potential | After a literature search, records check, and field survey, areas may be determined by a qualified vertebrate paleontologist to have low potential for containing significant paleontological resources subject to adverse effects. These can include igneous geologic units such as granite and some volcanics. Sediments that are less than 10,000 years old are also included, as they are too young to contain fossils. |
| Undetermined Sensitivity/ Undetermined Potential | Areas underlain by sedimentary rocks, for which literature and unpublished studies are not available, have an undetermined potential for containing significant paleontological resources. These areas must be inspected during a field survey conducted by a qualified vertebrate paleontologist. A specific determination of high or low potential for containing significant nonrenewable paleontological resources can be made. |

Source: County of Riverside 2013.

Background Research Methods and Results

Geological Map Review

The project area lies within the northern portion of the Peninsular Ranges Geomorphic province (Walawender 2000). The Peninsular Ranges were formed by uplift of plutonic igneous rock resulting from the subduction of the Farallon Plate underneath the North American Plate during the Mesozoic (approximately 125 to 90 million years old) (Abbott 1999; USGS 1999) and are overlain by younger Cenozoic sedimentary deposits (Walawender 2000).

Review of geologic mapping by Dibblee and Minch (2004a,b) at a scale of 1:24,000 indicates the project area contains surficial sedimentary deposits defined as recent to Pleistocene (approximately 2.58 million years ago – 11,700 years ago) alluvial fan deposits derived from the San Bernardino Mountains to the north (map unit Qf) and recent Quaternary alluvium and gravels (map units Qa and Qg) derived as alluvial fan deposits from

the neighboring mountains and Whitewater River wash. Quaternary alluvium underlies the majority of the project area and is defined as alluvially derived sand and gravel within valley areas (Dibblee and Minch 2004a,b). Quaternary gravels are mapped within the washes in the northern project area and are defined by Dibblee and Minch (2004a,b) as alluvial sand and gravelly sand. The recent and Pleistocene fan deposits are mapped in the western project area outside the Whitewater River drainage and are defined by Dibblee and Minch (2004a,b) as sand and gravel derived from the decomposition of plutonic igneous gneissic rocks.

Paleontological Survey, Records Search, and Literature Review

Dudek paleontological technicians Jason Collins and Kira Archipov conducted an intensive-level, pedestrian survey of the project and a 100-foot radius buffer on the following dates: August 18 to August 20, 2020 and September 9 and September 18, 2020. The areas surveyed included grading limits associated with the proposed WTGs, electrical collection system, the temporary laydown yard, and access roads. The existing wind turbines that will be decommissioned will be dismantled from existing access road and areas that are continuously disturbed as a result of ongoing operation and maintenance activities. The removal of these existing WTGs will not extend into the ground surface. Because this process would not result in any possible impacts, these disturbed areas were not included in the pedestrian survey.

Dudek paleontologists requested a paleontological records search of the LACM fossil collections on August 4, 2020, and the results were received on August 10, 2020. The records search included both the invertebrate and vertebrate collections. The records search results are provided in Attachment B. According to the records search results, several fossil invertebrate and vertebrate localities are documented near the project area. Invertebrate fossil locality, LACM IP 437, located near the west side of Gunsight Pass, produced unspecified Pleistocene invertebrates at an unknown depth. The LACM also reported unspecified fossil invertebrates from LACM IP 4779, located in Indian Wells, and freshwater gastropods from LACM VP 6922/LACM IP 5218, located northwest of the intersection of Poll Line Road and the end of Jackson Street. LACM vertebrate localities reported near the project site include unspecified vertebrates collected from older alluvium northeast of Palm Springs International Airport and southeast of North Palm Springs. No depth below the surface data were provided for this locality (LACM VP 1269) (Attachment B). Finally, LACM VP 6255 – 6256 produced fossil Bighorn sheep (*Ovis canadensis*), rodents (*Ammospermophilus*, *Perognathus*), Fringe-toed lizard (*Uma*), and crustaceans (ostracods) from Lake Cahuilla beds at a depth between 1.5 – 4 meters below the surface in La Quinta (Attachment B).

Scientifically significant paleontological resources have been recovered from correlative Pleistocene old alluvial deposits elsewhere in the County and include recorded fossil collecting localities. These localities have yielded fossils of terrestrial mammals (e.g., mammoths, mastodons, ground sloths, dire wolves, sabre-toothed cats, large and small horses, large and small camels, and bison) in addition to plant macro- and micro-fossils and microvertebrate fossils (Jefferson 1991a, 1991b; Reynolds and Reynolds 1991; Scott and Cox 2008; Springer et al. 2009, 2010; Scott 2010).

Furthermore, Dudek paleontologists recovered a fossil pinecone from alluvial deposits in the Palm Springs area, which was curated at the Western Science Center in Hemet (Williams and Siren, pers. obs. 2017).

Given the young age and coarse-grained nature of the surficial sediments present within the project area, they are assigned a low potential to yield paleontological resources. However, these young alluvial sediments are likely underlain by older Pleistocene alluvial sediments with a high paleontological potential (High B) resource

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sensitivity given the fact that these same age deposits have yielded fossils elsewhere in the region (Attachment B).

Management Considerations

This paleontological resources report was completed to provide an inventory of existing paleontological resources within the project area and to determine paleontological sensitivity. The following recommendations would reduce potential impacts to significant paleontological resources to a less than significant level.

Prior to construction-related excavations, a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP 2010) standards should be retained, attend the pre-construction meeting, and present a worker environmental awareness program (WEAP) to the construction crew. The WEAP should discuss the types of fossils that may potentially be uncovered during project excavations, regulation protecting paleontological resources, and appropriate actions to be taken if fossils are discovered.


If excavations of 10 feet or more below the original ground surface (i.e. 10 feet below the depth of documented artificial fill) are planned for the project, the qualified paleontologist, or qualified paleontological monitor, meeting the Society of Vertebrate Paleontology (SVP 2010) standards, should be present to monitor the excavations for paleontological resources. The qualified paleontologist should determine if the sediments are old enough and fine-grained enough to warrant continued monitoring. If it is determined to not continue paleontological monitoring at the 10 foot depth due to subsurface geological conditions, then paleontological spot-checking should occur at 5-foot increments below 10 feet to determine the suitability for fossil preservation.

The qualified paleontologist should produce a final paleontological monitoring report that discusses the paleontological monitoring program, any paleontological discoveries, and the preparation, curation, and accessioning of any fossils into a suitable paleontological repository.


Summary Conclusion

Due to the likelihood of Pleistocene sediments at depth, the project has the potential to impact buried paleontological resources. Recommendations provided herein would reduce the potential for impacts to unknown, buried paleontological resources. Please do not hesitate to contact me if you have any questions about this report by email at mwilliams@dudek.com or phone at (225) 892-7622, or Sarah A. Siren by email at ssiren@dudek.com or phone at (760) 846-9326.

Respectfully submitted,



Michael J. Williams, Ph.D.



Sarah A. Siren, M.S.

DUDEK

DUDEK

Mr. Michael Hughes

*Subject: Paleontological Resources Inventory Report for the Mountain View Power Partners Wind Farm
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cc: *Wendy Worthey, Dudek
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Att: *Attachment A, Figures
Attachment B, Museum Records Search Results*

References

- Abbott, P.L., 1999. *The Rise and Fall of San Diego: 150 Million Years of History Recorded in Sedimentary Rocks*. San Diego, California: Sunbelt Publications.
- County of Riverside. 2013. *County of Riverside General Plan, Chapter 5: Multipurpose Open Space Element*. Riverside County Planning Department. Pp.OS40-OS43.
- County of Riverside. 2015 (Revised). *County of Riverside General Plan, Chapter 5: Multipurpose Open Space Element*. Riverside County Planning Department. Pp.OS49-OS51.
- Dibblee, T.W. and J.A. Minch. 2004a. Geologic map of the Desert Hot Springs quadrangle, Riverside County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-121, scale 1:24,000.
- Dibblee, T.W. and J.A. Minch. 2004b, Geologic map of the Whitewater quadrangle, Riverside County, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-120, scale 1:24,000.
- Jefferson, G.T. 1991a. *A Catalogue of late Quaternary vertebrates from California: Part One, nonmarine lower vertebrate and avian taxa*. Natural History Museum of Los Angeles County, Technical Reports, No. 5. Updated 18 May 2012.
- Jefferson, G.T. 1991b. *A Catalogue of late Quaternary vertebrates from California: Part Two, Mammals*. Natural History Museum of Los Angeles County, Technical Reports, No. 7. Updated 18 May 2012.
- Reynolds, S.F.B., and R.L. Reynolds. 1991. "The Pleistocene Beneath Our Feet: Near-Surface Pleistocene Fossils in Inland Southern California Basins." In, M.O. Woodburne, S.F.B. Reynolds, and D.P. Whistler (eds.), *Inland Southern California: The Last 70 Million Years*. Redlands: San Bernardino County Museum Special Publication 38 (3&4): 41–43.
- Scott, E. 2010. "Extinctions, Scenarios, and Assumptions: Changes in Latest Pleistocene Large Herbivore Abundance and Distribution in Western North America." In E. Scott and G. McDonald (eds.), *Faunal Dynamics and Extinction in the Quaternary: Papers Honoring Ernest L. Lundelius, Jr.* Quaternary International 217: 225–239.
- Scott, E., and S.M. Cox. 2008. "Late Pleistocene Distribution of Bison (Mammalia; Artiodactyla) in the Mojave Desert of Southern California and Nevada." In X. Wang and L.G. Barnes (eds.), *Geology and Vertebrate Paleontology of Western and Southern North America, Contributions in Honor of David P. Whistler*. Natural History Museum of Los Angeles County Science Series No. 41, p. 359–382.

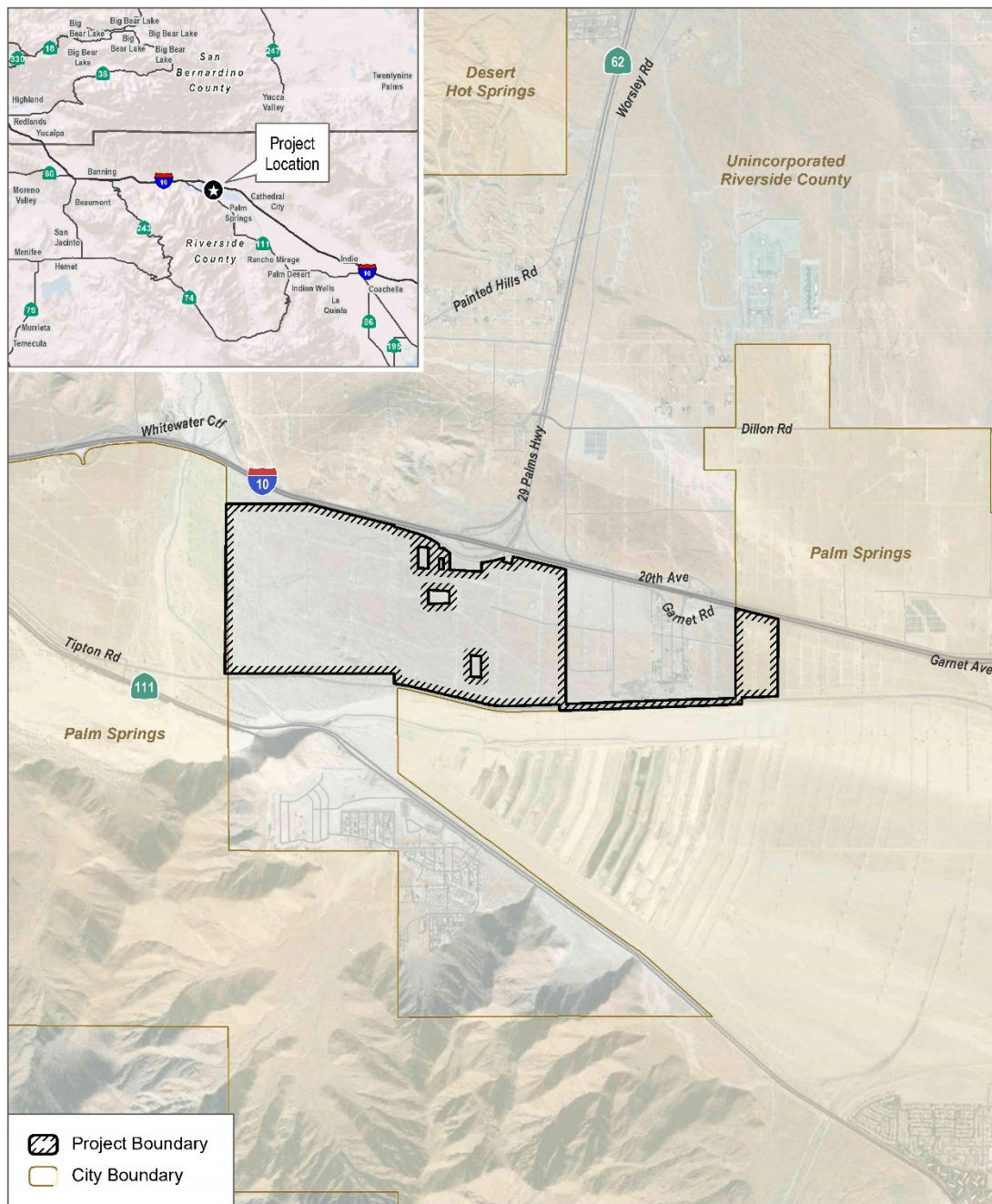
Mr. Michael Hughes

Subject: *Paleontological Resources Inventory Report for the Mountain View Power Partners Wind Farm Repower Project, Riverside County, California*

- Springer, K., E. Scott, J.C. Sagebiel, and L.K. Murray. 2009. "The Diamond Valley Lake local Fauna: Late Pleistocene Vertebrates from Inland Southern California." In, L.B. Albright III (ed.), *Papers on Geology, Vertebrate Paleontology, and Biostratigraphy in Honor of Michael O. Woodburne*. Museum of Northern Arizona Bulletin 65:217–235.
- Springer, K., E. Scott, J.C. Sagebiel, and L.K. Murray. 2010. "Late Pleistocene Large Mammal Faunal Dynamics from Inland Southern California: The Diamond Valley Lake Local Fauna." In E. Scott and G. McDonald (eds.), *Faunal Dynamics and Extinction in the Quaternary: Papers honoring Ernest L. Lundelius, Jr.* Quaternary International 217: 256–265.
- SVP (Society of Vertebrate Paleontology). 2010. "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." <http://vertpaleo.org/PDFS/68/68c554bb-86f1-442f-a0dc-25299762d36c.pdf>.
- USDI (U.S. Department of Interior). 2000. Assessment of Fossil Management on Federal & Indian Lands. Report available at:
https://www.blm.gov/sites/blm.gov/files/programs_paleontology_quick%20links_Assessment%20of%20Fossil%20Management%20on%20Federal%20%26%20Indian%20Lands%2C%20May%202000.pdf.
- USGS (U.S. Geological Survey). 1999. Divisions of Geologic Time—Major Chronostratigraphic and Geochronologic Units. U.S. Geological Survey Fact Sheet 2007-3015. USGS, Geologic Names Committee.
- Walawender, M.J. 2000. *The Peninsular Ranges: A Geological Guide to San Diego's Back Country*. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Williams, M., and S. Siren. 2017. Fossil Pinecone Specimen Uncovered During Construction at Palm Springs Wastewater Treatment Plant in the City of Palm Springs. Personal observation by M. Williams and S. Siren (Dudek). March 23, 2017.

Attachment A

Figure



SOURCE: Topo by AES 2020, Aerials by Riverside County 2016, FEMA, SCAG 2016

FIGURE 1-1

Project Location

DUDEK

0 2,000 4,000 Feet

Paleontological Memorandum - Mountain View Power Partners Wind Repower Project

Attachment B

Museum Records Search Results



Natural History Museum
of Los Angeles County
900 Exposition Boulevard
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tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

August 10, 2020

Dudek

Attn: Michael Williams, Senior Paleontologist

re: Paleontological resources for the Mountain View I & II Wind Energy Repower Project,
City of Palm Springs and Unincorporated Riverside County, California

Dear Michael:

I have conducted a thorough search of our paleontology collection records for locality and specimen data for the proposed development at the Mountain View I & II Wind Energy Repower Project, City of Palm Springs and Unincorporated Riverside County, California, project area as outlined on the portion of the Whitewater and Desert Hot Springs USGS topographic quadrangle maps that you sent to me via e-mail on 4 August 2020. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County.

| Locality Number | Location | Formation | Taxa | Depth |
|-------------------------------|--|---------------------------------|-------------------------|---------|
| LACM VP 1269 | Near intersection of Varner Road and Edom Hill Road | Older alluvium | Unspecified vertebrates | Unknown |
| LACM IP 437 | West side of Gunsight Pass | Unknown formation (Pleistocene) | Invertebrates | Unknown |
| LACM VP 6922/ LACM IP 5218 | 1/4 mile northwest of intersection of Poll Line Rd and end of Jackson St | poss. Palm Springs Formation | freshwater Gastropods | unknown |

| | | | | |
|-------------------|------------------------------------|---------------------------------|--|---------------|
| LACM IP 4779 | | Unknown formation (Pleistocene) | Invertebrates | Unknown |
| LACM VP 6255-6256 | Indian Wells | | Bighorn sheep (<i>Ovis canadensis</i>); rodents (<i>Ammospermophilus</i> , <i>Perognathus</i>); Fringe-toes lizard (<i>Uma</i>); crustaceans (ostracods) | 1.5 – 4 m bgs |
| | PGA West: Tom Weiskopf golf course | Lake Cahuilla beds | | |

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

Excavations that extend down to older sedimentary deposits may well encounter significant fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally collect any specimens without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the records of the Natural History Museum of Los Angeles County. It is not intended to take the place of a thorough paleontological assessment of the proposed project area covering other institutional records, a literature review, or any potential on-site survey.

Sincerely,



Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice