	INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Project Title:	Desert Peak Energy Center
Case No.	5.1543-CUP
Assessor's Parcel No.	668-130-017 through -021; 668-270-013 through -016; and 668-280-007 & 017
Lead Agency Name and Address:	City of Palm Springs 3200 E. Tahquitz Canyon Way Palm Springs, California 92262
Project Location:	North and south of Dillon Road, north of 18th Avenue and generally south of 16th Avenue, east of Diablo Road and west of Melissa Lane (extended) in the northern portion of the city.
Project Sponsor's Name and Address:	Desert Peak Energy Center LLC 700 Universe Boulevard, E5E/JB Juno, Beach, FL 33408
General Plan Designation(s):	IND (Industrial) w/Wind Energy Overlay
Zoning:	Energy Industrial Zone (E-I)
Contact Person:	Edward Robertson, Principal Planner City of Palm Springs 3200 E. Tahquitz Canyon Way Palm Springs, California 92262
Phone Number:	760-323-8245
Date Prepared:	April 2022

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CHAPTER 1: INTRODUCTION AND PROJECT DESCRIPTION

Project Location

The Project site is located on approximately 357 acres of land located approximately one mile north of US Interstate-10 and is bounded on the south by 18th Avenue and on the north by 16th Avenue; the site is bisected east-west by Dillon Road. The Project site is also bounded on the west by Diablo Road and on the east by Melissa Lane in northern portion of the City of Palm Springs, Riverside County, California (Exhibit 1, 2, and 3). It occurs primarily within portions of the west half of Section 4 and limited portions of 9, Township 3 South, Range 4 East, San Bernardino Baseline & Meridian (SBB&M). The Project site is currently partially occupied by an existing wind energy facility on two sites, as well as a SCE transmission corridor and the southern portion of the Devers substation. The Project would occupy 78± acres and would have capacity to store 700 megawatts (MWe).

The Project would be developed in two distinct phases spanning two project sites separated by Dillon Road and totaling approximately 357 acres. Phase 1 would occupy approximately 35 acres of a 189-acre site (Phase 1 Site), located immediately south and includes a small portion of the Southern California Edison ("SCE") Devers Substation. Phase 2 is anticipated to be developed approximately 2 years after the completion of Phase 1 and would be built on approximately 35 acres of a 168-acre site (Phase 2 Site), located adjacent to the Phase 1 Site to the south and south of Dillon Road. (See Exhibits 4, 5 and 6)

Project Description

The Project includes a 700-MWe battery energy storage system (BESS) facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition system ("SCDACA"). The Project will consist of approximately 728± battery containers, each with two (2) "silenced" Bard externally-mounted air-conditioning units. Phase 1 will have a storage capacity of 300 MWe and Phase 2 will have a capacity of 400 MWe. The Project also includes a 230-kilovolt overhead generation tie line ("gen-tie line"). The proposed gen-tie will carry load to and from the Project collector substation and the SCE Devers substation. The gen-tie line would extend approximately 0.5 miles to the west from the Phase 1 collector substation to its point of interconnection with the SCE Devers substation.

The 230-kV gen-tie line would be supported by dulled galvanized steel pole structures up to 160 feet tall and spaced approximately every 200 - 600 feet. Site development will include the construction of six or more on-site stormwater retention basins, which will be located just north of Dillon Road in Phase I and just north of 18th Avenue on the south side of battery arrays in Phase 2. The Project has multiple uses, including improving grid reliability, optimizing electricity dispatch, or allowing the capture and storage of surplus electricity from SCE's grid during times of low demand, which can be returned to the grid and used during times of high demand, when energy is in short supply and more expensive.[1]

Substation and Inverters

Underground or overhead collector lines will transmit energy to and from an on-site substation, planned in the northern portion of the Phase 1 Site. Adjacent to the battery enclosures, there will be inverters that convert DC power to AC (and vice versa). An integrated step-up transformer will step up the voltage to 34.5 kV. All the inverters will connect to one of three 34.5kV busses at the collector substation. From there, the voltage will be stepped up to 230kV via one of three GSUs on site. Additionally, the proposed substation would host the grid inter-tie safety equipment and switches required to interconnect to the high-voltage transmission system. The footprint of the proposed on-

[1] SCE Website - Leading the Deployment of Battery Storage, https://www.edison.com/home/innovation/energy-storage.html, Accessed June 2019.

site substation is approximately 250 feet by 470 feet. All outside electrical equipment would be housed in the appropriate National Electrical Manufacturers Association–rated enclosures and screened from view on all sides.

Lighting and Security

The perimeter of Project Sites is enclosed by a 6-foot-tall chain-link fence. The proposed multiple Project sites will also each be surrounded by six-foot chain link fencing topped with 1 foot of three-strand barbed wire. Access onto each of the Phase 1 and Phase 2 Sites would be controlled through drive-through gates. Fencing will prevent unauthorized access to the site and facilities. The total height, above-grade, of the fence would be approximately 7 feet. A tortoise exclusion fence comprised of mesh would be attached to the fence fabric and would extend from approximately 12 inches below-grade to approximately 24 inches above-grade if exclusion fencing is not already in place.

Low-elevation (<14-foot), controlled security lighting will be installed at primary access gates, the on-site substation, and the entrance to energy storage structures. The lighting will only switch on when personnel enter the area (through either motion-sensor or manual activation [switch]). All safety and emergency services signs would be lit when the lights are on. The on-site security lighting would be shielded so the light is directed downwards.

Electrical power to supply the access gate and lighting would be obtained from SCE. Lighting would be only in areas where it is required for safety, security, or operations. All lighting would be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

The proposed project will be an unmanned utility facility. Periodic maintenance will occur, at which time maintenance personnel will visit the site for short periods.

Fire Safety and Suppression

The Project description states that each enclosure unit would have a fire rating in conformance with local fire authority and County of Riverside standards, via compliance with the California Fire Code 2019 as adopted by the City of Palm Springs.[2] The project's fire protection design will comply with Section 1206 Electrical Energy Storage Systems, which adopts the National Fire Protection Association's Standard for the Installation of Stationary Energy Storage Systems (NFPA 855).[3,4] It is the applicant's intent that Underwriters Laboratories ("UL"), an independent engineer's test method, will certify that the batteries used in this Project are manufactured in accordance with UL 9540A, an industry-standard Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems. UL independently tests equipment for compliance with the latest fire safety code requirements. This test method was developed to minimize the risk of thermal runaway to address safety concerns about battery storage equipment raised by fire departments and building officials in the United States. Compliance with these standards and certification includes a Battery Management System (BMS) design that detects high temperatures at the battery cell or battery module level and automatically shuts down the battery rack. Furthermore, installation of battery units would follow manufacturer specifications for the spacing of batteries and clearance distances to further prevent a thermal runaway event. Each unit would also be equipped with thermal

2 Palm Springs, California Municipal Code. 8.04.500 California Fire Code Adopted.

3 California Fire Code 2019, Section 1206 Electrical Energy Storage Systems. https://up.codes/viewer/california/ca-fire-code-2019/chapter/12/energy-systems#1206

4 NFPA 855: Standard for the Installation of Stationary Energy Storage Systems (2020). Prepared by the National Fire Protection Association. https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=855

management systems for thermal management of the batteries. Power to the thermal management system and lighting would be provided through a connection to the on-site station service transformer with connection lines installed above and/or below ground. Cabinets housing batteries are designed with adequate ventilation and will also be equipped with carbon monoxide (CO) detection that would alert the remote monitoring facility that the sensor has been activated.

The BESS would be unmanned, and operational control, including 24/7 monitoring, would be performed off-site through the proposed Supervisory Control and Data Acquisition (SCADA) system. Information that is monitored by the SCADA and associated systems include battery information such as the state of charge, battery health, current, voltage, temperature, and alarm indicators such as fire warning. If there is anomaly or issue with a battery unit, the SCADA and associated remote monitoring systems would immediately alert trained personnel. The facility has the capability to be shut down remotely, if necessary. Local personnel are present in the immediate area during business hours and responsible and available for in-person emergency response around the clock, if necessary. Personnel would be trained to interact closely with the Project engineering team as needed to achieve resolution of operational issues in a timely manner and with a high level of process discipline. In the rare case of a fire, operators would coordinate with first responders and fire officials to safely extinguish the fire and would follow local, state, and federal regulations to dispose of any damaged materials. The need for and manner of battery fire suppression systems will be determined by the Fire Marshall.

Operational staff would also perform periodic inspections and maintenance as necessary.

General Plan and Zoning Consistency

The Project site is designated as Industrial in the City's General Plan Land Use and Industrial-Energy on City Zoning Maps, respectively. The proposed Project is consistent with the City's land use designations; however, energy storage use qualifies as a Utility Installation in the M-1 zone and is subject to approval of a Conditional Use Permit (CUP). Section 94.02.00(A)(2)(o) of the City's Zoning Code states that "public utility structures and installations" may be permitted when such uses are deemed by both the Planning Commission and City Council to be essential or desirable for the public welfare and convenience and in conformity with the General Plan and its objectives.

Utilities and Service Providers

The proposed Project consists of battery storage and will not include habitable structures. No bathrooms or other water and sewer using facilities are proposed. No natural gas or telephone service is proposed. The Project will require fiber communications infrastructure through the local provider.

Environmental Setting and Surrounding Land Uses

North: SCE facilities, including the Devers Substation, and peak power generation station
South: Wind turbines, vacant desert and US I-10
East: Wind turbines and vacant desert
West: Scattered single family residential and vacant desert

Other public agencies whose approval is required.

- California Regional Water Quality Control Board (CWA Section 401 Certification)
- California Department of Fish & Wildlife (California Fish & Game Code Section 1600 – Streambed Alternation Agreement)
- UA Army Corps of Engineers (CWA Section 404 Dredge and Fill Permit
- Coachella Valley Conservation Commission (Coachella Valley Multiple Species Habitat Conservation Plan coverage authorization)

RIVERSIDE COUNTY

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Exhibit

1

TERRA NOVA®
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Regional Location Map
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Source: Terracon GeoReport, 2022

03.29.22

TERRA NOVA®
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Project Vicinity Map
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Exhibit

2

Source: Google Earth, 2022

03.29.22

TERRA NOVA®
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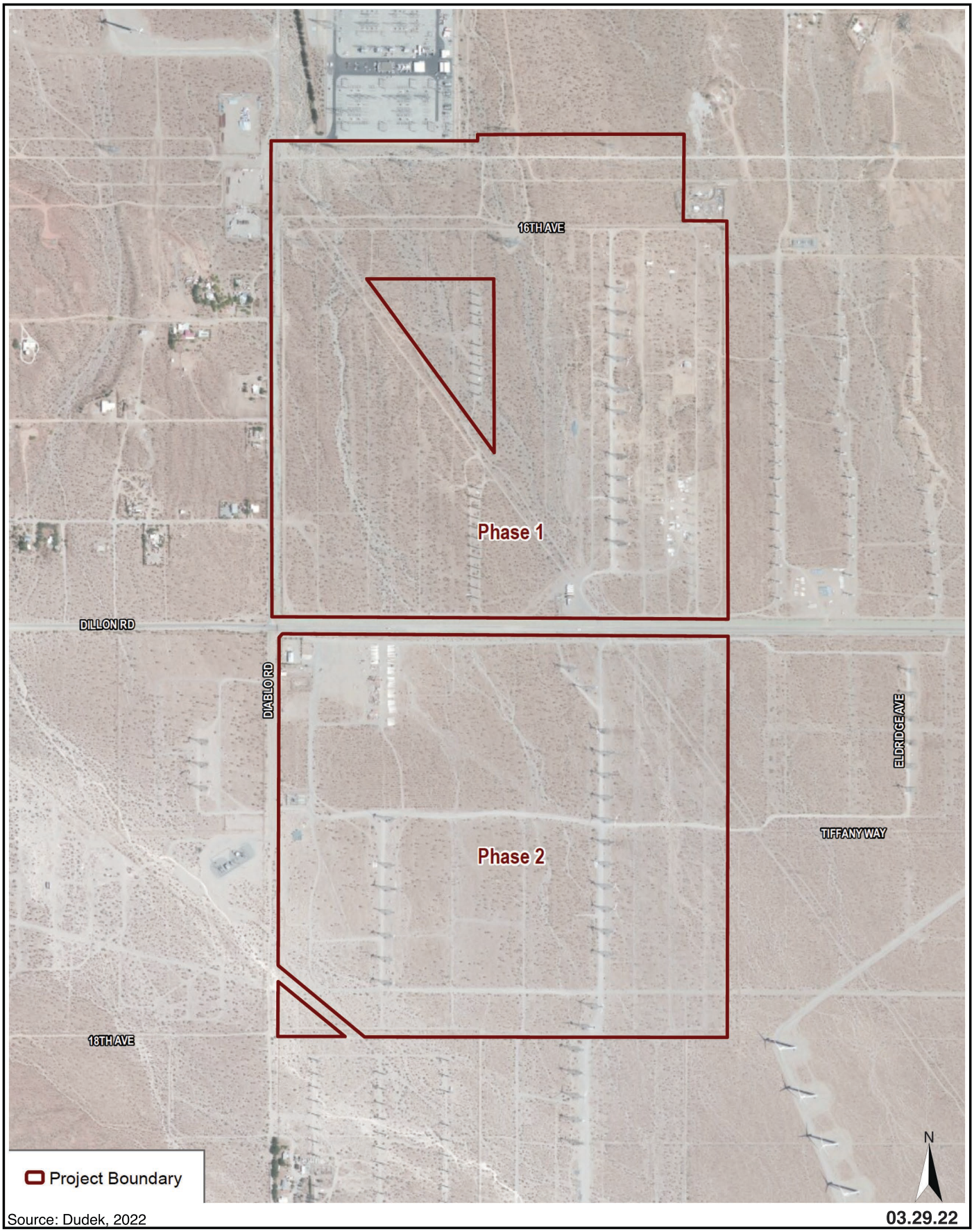
Project Location Map
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Exhibit

3



Source: Dudek, 2022

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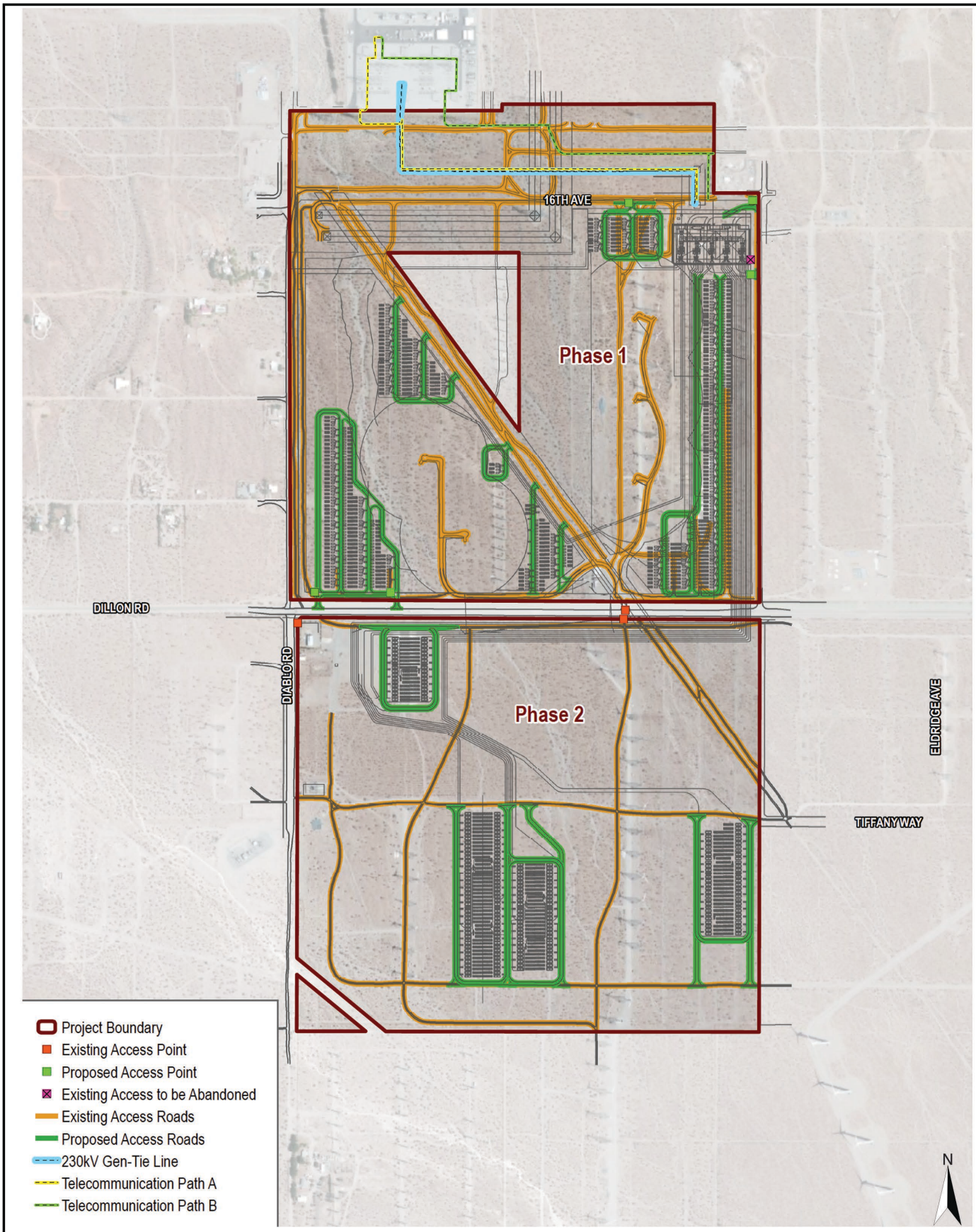
Project Development Site
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Exhibit

4



Source: Dudek, 2022

03.29.22

Project Site Plan - Phases 1 & 2
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

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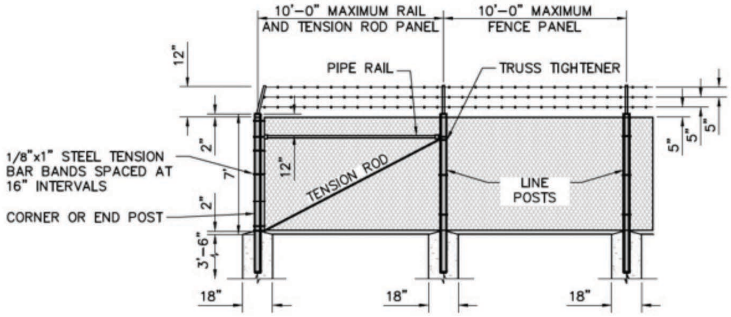
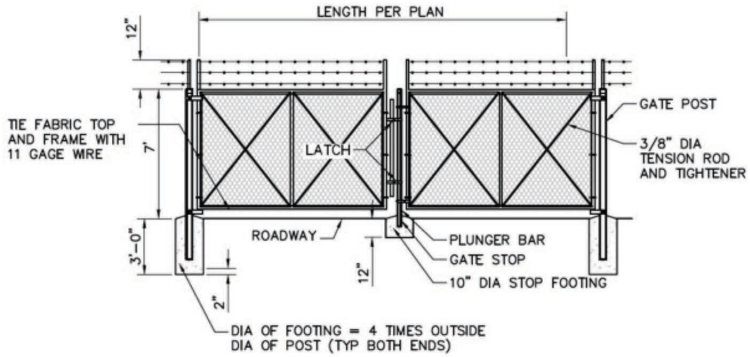
Exhibit

5



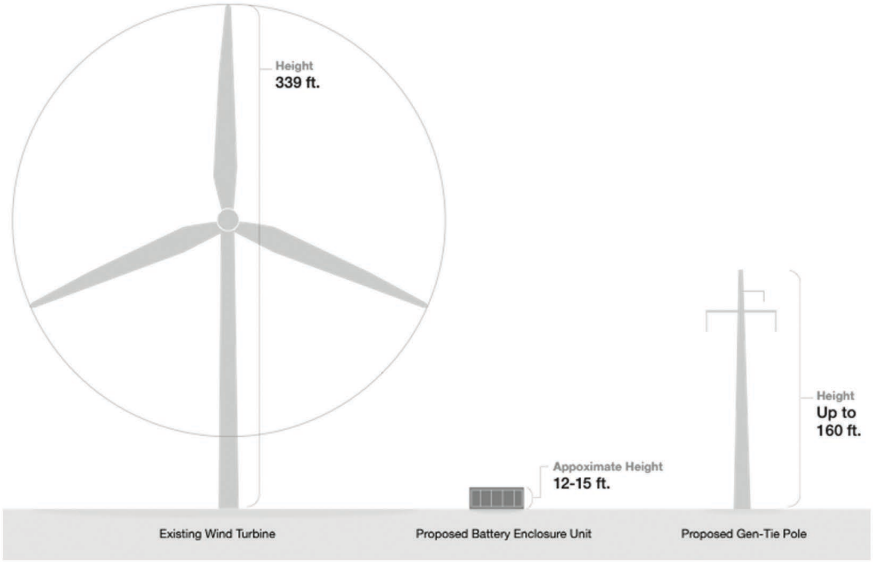
BARBED WIRE FENCE DETAIL

NOT TO SCALE



BARBED WIRE FENCE VEHICLE GATE

NOT TO SCALE



Source: Terracon GeoReport, 2022

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Exhibit

6

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Rendering and Elevations
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Photo A: Northeast View Across Phase 1 Site from eastbound Dillon Road

Photo B: Southeast View Across Phase 2 Site from eastbound Dillon Road

Photo C: Northwest view Across Phase 1 Site from westbound Dillon Road

Photo D: Southwest view across Phase 2 Site from westbound Phase 2 Site

Source: Dudek, 2022

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Views of the Project Site
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

03.29.22

Exhibit

7

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☐	Agricultural and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials
☒	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☒	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☒	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

CHAPTER 2: ENVIRONMENTAL ANALYSIS AND DETERMINATION

DETERMINATION: The City of Palm Springs Planning Department finds

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Robertson

Edward Robertson
Principal City Planner

5.2.22

Date

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with State CEQA Guidelines Section 15063 to determine if the proposed Project may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
    a) The significance criteria or threshold, if any, used to evaluate each question; and
    b) The mitigation measure identified, if any, to reduce the impacts to less than significance.

I. AESTHETICS **Except as provided in Public Resources Code Section 21099, would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Environmental Background

The Project site lies in the northwestern portion of the Coachella Valley of central Riverside County. A low-lying desert valley sloping northwest to southeast, and bounded by the San Bernardino and Little San Bernardino Mountains Range to the northwest and north, the San Jacinto Mountains on the southwest, and the Santa Rosa Mountains on the south. The mountains rise steeply over the valley floor. In the southeast and the lowest portion of the valley is the Salton Sea, a terminal lake at an elevation of approximately 240± feet below sea level.

The Project site is located on gently sloping and coalesced alluvial fans that emanate from the canyons to the north and northwest. The Project site occurs at an average elevation of 1,000± feet above mean sea level. The area topography continues to decline in a south and southeasterly direction to the central northwest-southeast axis of the valley. The Project site has substantial panoramic views of the valley floor and surrounding mountains. Views to the north (upslope) are impacted by the existing Devers Sub-Station (Southern California Edison), on-site and surrounding wind turbines, and a natural gas-powered "peaker" electric generation plant. Views to the west are somewhat affected by scattered single-family development.

Complete buildout of the Project will occupy 70± acres of two sites totaling 357± acres north and south of Dillon Road. Battery arrays would be constructed in eight development areas and include battery cabinets and inverter equipment approximately 12-15 feet above grade. Development site slopes will be benched to address the sloping elevation. The battery enclosures and inverters will be interconnected by underground cabling and overhead "gen-tie" infrastructure (lines mounted on 160± galvanized steel poles at approximately 250-600 feet spacing, and up to 160 feet in height). The gen-tie overhead lines will connect the storage system substation to the SCE Devers Substation located just north of Phase 1.

The Project will incorporate low-elevation (<14-foot), motion detection-controlled security lighting to be installed at primary access gates, the on-site substation, and the entrance to energy storage structures. The lighting would only switch on when personnel enter the area (through either motion-sensor or manual activation [switch]). All safety and emergency services signs would be lit when the lights are on. The lighting fixtures would be shielded so the light is directed downwards. Electrical power to supply the access gate and lighting would be by the local SCE grid. Lighting would be only in areas where it is required for safety, security, or operations. All Project lighting would be directed on site and would include shielding to avoid and minimize illumination of the night sky and potential impacts to surrounding viewers.

Discussion of Impacts

a), c) **Less Than Significant Impact.** Lands surrounding the Project development sites are largely vacant desert much of which has been developed with windfarms and associated facilities, as well as major transmission corridors running though the subject and surrounding lands. The Devers substation to which storage will be grid-connected and the electric power peaker plant also to the north have a substantial effect on the surrounding mountain viewsheds. The Project is separated into development site within the larger planning area, which will continue to also host large-scale wind turbines and associated facilities Development sites are therefore separated by drainages and natural lands around turbines thereby further reducing the visual effects of the proposed Project. The gen-tie towers in the northern portion of Phase 1 could have the greatest effect but would be in an area that is already cluttered by existing power poles, lines and power transmission and conditioning equipment. Impacts will be relatively low for those occupying surrounding lands and traveling on public roadways. Project impacts would be less than significant.

b) **Less Than Significant Impact.** The site is located on the expansive alluvial fans of the upper Coachella Valley that gently trend northwest to southeast across the Project lands. Vegetation on the subject and surrounding lands is thin and comprised of creosote scrub and herbaceous plants. There are no trees or rocky slopes of outcroppings on the site in the vicinity. The Project site is located approximately 2.57 miles northeast of the San Jacinto Mountain foothills and approximately 4.35 miles southwest of the Little San Bernardino Mountain foothills. It should be noted that neither Avenue 18 or Avenue 16 are paved and currently consist of dirt roads serving adjoining windfarm and associated development. The subject site is bisected by the east-west Dillon Road that provides important connectivity between North Palm Springs and communities to the east, including Desert Hot Springs and Sky Valley. There are no historic buildings or designated scenic highways in proximity of the site. Therefore, the Project will not have a significant impact on scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

d) **Less Than Significant Impact**. Existing sources of lighting include security and related lighting at the Devers Substation and the peaker plant to the north. Scattered residences to the west of Diablo Road include those with on-building and free-standing security lighting. There is also limited security lighting incidental with existing equipment storage in the vicinity. Low-elevation (<14-foot), motion-controlled security lighting fixtures will be installed at primary access gates, the on-site substation, and the entrance to energy storage structures. The lighting will only switch on when personnel enter the area (through either motion-sensor or manual activation [switch]). All safety and emergency services signs would be lit when the lights are on.

The on-site security lighting would be shielded so the light is directed downwards All security and other lighting will be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

Mitigation Measures:

None required.

Monitoring:

None required.

Sources: Palm Springs General Plan, 2007; Palm Springs Zoning Ordinance; Project materials.

II. AGRICULTURAL AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
	☐	☐	☐	☒

c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Background

The subject property is located on a low desert alluvial fan at an elevation of between approximately 900 and 1,000 feet above mean sea level and in an area that receives an annual average rainfall of approximately 3.5 inches, which is generally received in low and moderate intensity storms. Conditions at the site are generally very dry with substantial prevailing westerly winds that further dry out the soils. The nearest agricultural lands are located more than 10 miles to the southeast where rich and complex soils provide prime and other valuable farmlands. Valley agriculture is dependent primarily on imported Colorado River water from the All-American Canal. There are no irrigation water resources in the Project area. Neither does the climate support timberlands.

Discussion of Impacts

a-e) No Impact. There is no prime farmland, forest land, timberland, or Williamson Act contract land in the City of Palm Springs or surrounding area. The Project site is currently zoned as Energy Industrial Zone (E-I). Implementation of the requested Conditional Use Permit will have no impacts on Agricultural or Forestry Resources.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan, 2007; Zoning Map for Palm Springs; "Riverside County Important Farmland 2016 Map," sheet 2 of 3, California Department of Conservation, published July 2017.

III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Background

The Project site is located in the Salton Sea Air Basin (SSAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is one of the 35 air quality regulatory agencies in the State of California and all development within the SSAB is subject to SCAQMD's 2016 Air Quality Management Plan (2016 AQMP) and the 2003 Coachella Valley PM_{10} State Implementation Plan (2003 CV PM_{10} SIP). The SCAQMD operates and maintains regional air quality monitoring stations at numerous locations throughout its jurisdiction. The Project site is located within Source Receptor Area (SRA) 30, (Coachella Valley) which includes monitoring stations in Palm Springs, Indio, and a newly opened station in the unincorporated community of Thermal.

Criteria air pollutants are contaminants for which state and federal air quality standards (i.e. California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS)) have been established. The SSAB exceeds state and federal standards for fugitive dust (PM_{10}) and ozone (O_3), and is in attainment/unclassified for $PM_{2.5}$. Ambient air quality in the SSAB, including the Project site, does not exceed state and federal standards for carbon monoxide, nitrogen dioxides, sulfur dioxide, lead, sulfates, hydrogen sulfide, or vinyl chloride.

Ozone (O_3) is a pungent, colorless, toxic gas, and a component of photochemical smog. It is formed when byproducts of combustion react in the presence of ultraviolet sunlight. This process takes place in the atmosphere where oxides of nitrogen combine with reactive organic gases, such as hydrocarbons. Exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue. Children and people with pre-existing lung disease are most susceptible to the effects of ozone.

Particulate Matter (PM_{10} and $PM_{2.5}$) consist of fine suspended particles of ten microns or smaller in diameter, and are the byproducts of road dust, sand erosion and transport, diesel soot, wind and dust storms, and the abrasion of tires and brakes. The elderly, children and adults with pre-existing

respiratory or cardiovascular disease are most susceptible to the effects of PM. Elevated PM_{10} and $PM_{2.5}$ levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks and hospital admissions. The SSAB is a non- attainment area for PM_{10} and is classified as attainment/unclassifiable for $PM_{2.5}$.

Existing Conditions

Both project Phase 1 and 2 sites are covered with exposed soils with sparse desert vegetation. Numerous stock piles were encountered at the site, primarily in the eastern portion of the Phase 1 site. The site surface generally consists of cohesionless sandy soils. Onsite soils are largely unconsolidated, alluvium and eolian sand and are highly susceptible to erosion. The Palm Springs General Plan identified the subject and surrounding lands as having a "High" susceptibility to wind erosion. These conditions cause soil loss, dryness and deterioration of soil structure, nutrient and productivity losses, air pollution, and sediment transport and deposition. Changes in land use, such as removing native vegetation and building roads and other types of infrastructure, that have led to increases in wind-blown sand across the valley floor. Without proper mitigation, grading of the site will result in loose soil that can be readily picked up and transported down-wind.

Discussion of Impacts

a) **Less Than Significant With Mitigation.** The Project site is located within the SSAB and will be subject to SCAQMD's 2016 AQMP and the 2003 CV PM_{10} SIP. The 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). SCAG is the regional planning agency for Riverside, Los Angeles, Orange, Ventura, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. With regard to future growth, SCAG has prepared the 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016–2040 RTP/SCS), which provides population, housing, and employment projections for cities under its jurisdiction. The growth projections in the 2016–2040 RTP/SCS are based on growth projections in local general plans for jurisdictions in SCAG's planning area.

The proposed Project is consistent with the City's land use designations and would not impact population, as it will operate as an unmanned facility, visited only periodically by maintenance staff when needed. The proposed Project will be subject to rules and guidelines set forth in the AQMP. The Project shall also be developed in conformance with the 2003 Coachella Valley PM_{10} State Implementation Plan (2003 CV PM_{10} SIP). While programmatic SCAQMD Rule 403 and other regulations shall apply, mitigation is set forth below to further enforce the application of these requirements for the control of fugitive dust. Therefore, the proposed Project is consistent with the intent of the AQMP and will not, with adherence to Mitigation Measure AQ-1 below, conflict with or obstruct implementation of the applicable air quality plan.

b) **Less Than Significant Impact.** A significant impact would occur if a Project would result in a cumulatively considerable net increase in a federal or state non-attainment pollutant. As stated above, the subject area is located in the Coachella Valley portion of the Salton Sea Air Basin, which is classified as a "non-attainment" area for PM_{10} and ozone. The 2003 Coachella Valley PM_{10} State Implementation Plan was adopted to achieve attainment.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to project air quality emissions that will be generated by the proposed (Appendix A: Desert Peak Phase 1 & 2 AQ/GHG Reports). CalEEMod was developed by SCAQMD and is used by jurisdictions throughout the state to quantify criteria pollutant emissions.

Criteria air pollutants will be released during both the construction and operation phases of the proposed, as shown in Tables 1, 2 and 3. Tables 1 and 2 summarize short-term construction-related emissions, and Table 3 summarizes ongoing emissions generated during operation. As set forth in the application, development will be sequenced starting with Phase 1 during years 2022 through 2023. Phase 2 will follow during years 2024 and 2025.

Construction Emissions:
The proposed consists of a battery electrical storage system (BESS) that would store up to 700 megawatts (MWe) of electricity in lithium-ion batteries on site. The construction activities would include site preparation, grading, hauling, paving, limited structure construction, and application of architectural coatings. For purposes of this analysis, a construction period of approximately 15 months has been assumed.

Tables 1 and 2 show the maximum emissions generated during construction, none of which exceed SCAQMD thresholds for any criteria pollutant. The data reflect average daily unmitigated emissions over the construction period, including summer and winter weather conditions.

The Phase 1 Air Quality Report states that Phase 1 will result in 47,542 CY of cut and 208,088 CY of fill, with about 160,546 CY of import. The report also cites a total of 21,498 haul trips associated with Phase1. The Phase 2 Air Quality Report states that Phase I will result in 1 CY of cut and 114,832 CY of fill, with about 160,546 CY of import. With less the 1 CY of cut, Phase 2 import will total about 114,832 CY. The report also cites a total of 14,848 haul trips associated with Phase 2.

Applicable standard requirements and best management practices include, but are not limited to, the implementation of a dust control and management plan in conformance with SCQAMD Rule 403, proper maintenance and limited idling of heavy equipment, phasing application of architectural coatings and the use of low-polluting architectural paint and coatings.

Table 1
Phase I Maximum Daily Construction-Related Emissions Summary (pounds per day)
Unmitigated

Construction Emissions[1]	**CO**	**NO_x**	**VOC/ROG**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2022	67.43	84.72	3.94	0.30	204.97	25.04
2023	103.55	73.94	6.52	0.22	15.86	4.09
Daily Maximum	103.55	84.72	6.52	0.30	204.97	25.04
SCAQMD Thresholds	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**Yes**	**No**

[1] Average of winter and summer emissions.
Emission Source: CalEEMod model, version 2016.3.2.

Table 2 Phase 2 Maximum Daily Construction-Related Emissions Summary (pounds per day) Unmitigated						
Construction Emissions[1]	**CO**	**NO_x**	**VOC/ROG**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2024	52.63	56.55	4.70	0.22	149.61	19.53
2025	85.64	77.48	7.88	0.21	15.50	4.69
Daily Maximum	85.64	77.48	7.88	0.22	149.61	19.53
SCAQMD Thresholds	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**
[1] Average of winter and summer emissions. Emission Source: CalEEMod model, version 2016.3.2.						

As shown above, the potential for significant unmitigated impacts is associated with the generation of dust (PM10) during construction of Phase 1. Standard dust control measures, if applied properly, can substantially reduce fugitive dust generation on a development site. Adherence to Mitigation Measure AQ-1 will ensure that proper mitigation is applied, which will ensure that these impacts will be less than significance.

Operational Emissions:

CalEEMod estimates operational air pollutant emissions from three emission source categories: Energy, Mobile, and Area sources. The Project will result in the development of an unmanned utility facility to store energy in BESS containers. SCE will not generate additional or "new" electricity for the proposed utility facility.[5] The operational emissions associated with the Project will be negligible and limited to mobile emissions from routine maintenance of the site. The following table summarizes the daily emissions of the Project. SCAQMD thresholds will not be exceeded for any criteria pollutant. Therefore, impacts are considered less than significant.

Table 3 Maximum Operational-Related Emissions Summary Combined Phase 1 & 2 (pounds per day)						
Operational Emissions Source[1]	**CO**	**NO_x**	**VOC/ROG**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	<0.05	<0.01	<0.01	<0.00	<0.01	<0.01
Mobile	<0.16	0.19	<0.01	<0.01	23.72	2.37
Off-road	23.44	6.99	0.66	0.02	0.29	0.27
Total	**23.44**	**7.86**	**0.67**	**0.02**	**24.06**	**2.65**
SCAQMD Thresholds	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**
[1] Average of winter and summer emissions. Emission Source: CalEEMod model, version 2016.3.2. Notes: VOC = volatile organic compound; NOx = oxides of nitrogen; CO = carbon monoxide; SOx = sulfur oxides; PM10 = coarse particulate matter; PM2.5 = fine particulate matter; SCAQMD = South Coast Air Quality Management District. See Attachment A for complete results. Totals may not sum precisely due to rounding. "<0.01_" _denotes emissions are less than 0.01 pounds per day.						

Due to its nature, the operation of the proposed Project will not exceed any SCQAMD thresholds, and impacts will be minimal and less than significant.

5 SCE Website - Leading the Deployment of Battery Storage, https://www.edison.com/home/innovation/energy-storage.html, Accessed June 2019.

c) **Less Than Significant.** The nearest sensitive receptors are mobile homes and single-family residences at and in the vicinity of Indian Canyon Way and Dillon Road, approximately 1.33 miles east of the project site. To determine if the proposed Project has the potential to generate significant adverse localized air quality impacts, the mass rate Localized Significance Threshold (LST) Look-Up Table was used. The mass rate Localized Significance Threshold (LST) Look-Up Table allows quantification of localized emissions at a distance of up to 500-meters (0.31 miles), and does not provide for further distances, assuming that greater distances would not result in impacts. Since the nearest sensitive receptor is located more than 500 meters from the proposed Project site, no impacts to sensitive receptors would occur during construction or operation.

A health risk assessment included in the was also conducted for the Project and evaluated the potential of the project to contribute to chronic disease and cancers (see Appendix A). Project construction would result in emissions of diesel particulate matter from heavy construction equipment and trucks accessing the site. Diesel particulate matter is characterized as a toxic air contaminant (TAC) by the State of California. The Office of Environmental Health Hazard Assessment (OEHHA) has identified carcinogenic and chronic non-carcinogenic effects from long-term exposure but has not identified health effects due to short-term exposure to diesel exhaust.

According to OEHHA, health risk assessments (HRAs), which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of the proposed construction activities would constitute only a small percentage of the total 30-year exposure period. However, in an abundance of caution the construction HRA was performed to evaluate the cancer and non-cancer health impacts of the project during construction on sensitive receptors proximate to the project. The complete HRA is included as Appendix A and the results are shown in Table 4 below.

Table 4
Construction Health Risk Assessment Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – _Residential	Per Million	9.2	10	Less than Significant
Chronic Hazard Index – _Residential	Index Value	0.01	1.0	Less than Significant

d) **Less Than Significant Impact.** An odor impact depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies.

Heavy equipment operating on the Project site would emit odors during construction. However, such odors would be temporary and would cease to occur after construction. The Project is an unmanned utility facility with no onsite sources of objectionable odors. Therefore, impacts from odors would be less than significant.

Mitigation Measures and Monitoring:

AQ-1 Dust Control Plan: SCAQMD Rule 403.1

SCAQMD Rule 403 (403.1 specific to the Coachella Valley): A Dust Control Plan shall be prepared and implemented by all contractors during all construction activities, including ground disturbance, grubbing, grading, and materials import and export. Said plan shall include but not be limited to the following best management practices:

- Treated and stabilized soil where activity will cease for at least four consecutive days;
- All construction grading operations and earth moving operations shall cease when winds exceed 25 miles per hour;
- Water site and equipment morning and evening and during all earth-moving operations;
- Operate street-sweepers on impacted paved roads adjacent to site;
- Establish and strictly enforce limits of grading for each phase of construction;
- Wash off trucks as they leave the site to control fugitive dust emissions
- Cover all transported loads of soils, wet materials prior to transport, provide freeboard (space from the top of the material to the top of the truck) to reduce PM_{10} and deposition of particulate matter during transportation
- Use track-out reduction measures such as gravel pads at Project access points to minimize dust and mud deposits on roads affected by construction traffic
- Provide permit-related signage with contact and other information per Rule 403.1.

Monitoring:

AQ-A Dust Control Plan: SCAQMD Rule 403.1

SCAQMD Rule 403 (403.1 specific to the Coachella Valley): Prior to or concurrent with issuance of any grading, grubbing or other site disturbing permit, applicant shall submit and secure City approval of the subject dust contrail plan.

Responsible Party: General and Grading Contractors, City

Schedule: Approved dust control plans prior to site disturbance. Adherence to the confirmed plans during all Project plan reviews.

Sources: "Final 2016 Air Quality Management Plan," prepared by South Coast Air Quality Management District, March 2017; "Final Localized Significance Threshold Methodology," prepared by the South Coast Air Quality Management District, Revised, July 2008; "2003 Coachella Valley PM_{10} State Implementation Plan," August 1, 2003; CalEEMod Version 2016.3.1.

IV. BIOLOGICAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Environmental Background

The Coachella Valley, including the City of Palm Springs, is located at the western edge of the Colorado Desert subdivision of the Sonoran Desert. This region is characterized by an extremely hot and dry climate, with a low elevation valley floor bordered by rocky mountain slopes and ranges. The unique geomorphic and geographic terrain has created an environment that supports many diverse plant and wildlife species that have adapted to the extreme climatic conditions.

Rainfall in the Project vicinity is 3.5± inches annually and the site, being located downwind of the San Gorgonio Pass, is subject to strong and desiccating winds and high rates of solar insolation. A series of braded ephemeral streams cross the site but do not appear to support wetlands or riparian

habitats. Development in the vicinity is sparse and is largely limited to other energy facilities including the Devers Sub-station, several wind turbine arrays, scattered residential and expanses of vacant desert.

A wide range of common plant species, such as mesquite, smoke tree, desert holly, creosote bush, and palo verde, are supported by the conditions present in the valley, as are a wide range of wildlife species. Bird species of concern include golden eagle, western burrowing owl, and others. There are also a range of sensitive plant and animal species present in the Coachella Valley, some of which have been listed as threatened or endangered by federal and state agencies.

Within the Coachella Valley region, some plant species that are federally listed as endangered include the Coachella Valley milkvetch and triple-ribbed milkvetch. Threatened or endangered wildlife species include the Peninsular bighorn sheep, Casey's June beetle, Coachella Valley fringe-toed lizard, arroyo southwestern toad, and mountain yellow-legged frog. Sensitive bird species include the least Bell's vireo and southwestern flycatcher, both listed as endangered. In addition, there are several species of birds considered "sensitive" by state and federal wildlife agencies.

The City of Palm Springs is within the boundaries and subject to the provisions of the Coachella Valley Multiple Species Conservation Plan (CVMSHCP)[6] which is a comprehensive regional plan that balances growth in the Coachella Valley with the habitat requirements of federal and state endangered species. The City of Palm Springs' General Plan and CVMSHCP were referenced to analyze potential impacts to biological resources associated with the proposed development, and are discussed below.

Existing Site Conditions

Most of the Phase 1 Project site is currently surrounded on all sides by a six-foot chain-link fence topped with barbed wire. The existing power corridor along 16th Avenue and Powerline Road is not fenced. Phase 2 is also essentially fenced off from surrounding lands. These existing fences were apparently installed when the existing windfarms we constructed. In some instances, subsurface tortoise exclusion fencing has also been installed. New fencing, including. tortoise exclusion fencing, will be added to each of the Phase 1 and Phase 2 development sites, which will further isolate these lands both within the beyond the existing Phase 1 and 2 sites where fencing does not currently exist.

Discussion of Impacts

a) **Less Than Significant Impact With Mitigation Incorporated**. Biological resource assessments were conducted, as was Coachella Valley Multiple Species Habitat Conservation Plan consistency analysis for the proposed Project in 2019, 2020 and 2021 (Appendix B: Biological Resource Reports). The assessment included literature reviews and field assessments of the site, including special status plant surveys.

Existing Conditions at the Project Site

The Project site is located on a gently sloping alluvial fan emanating from the foothills and mountains to the northwest, creating a series of shallow braided streams that are typically dry. The on-site vegetation community is creosote scrub with associated species including burrobush (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), sweetbush (*Bebbia juncea*), brittlebush (*Encelia farinosa*), and jojoba (*Simmondsia chinensis*). Herbaceous plants include common Mediterranean grass (*Schismus barbatus*) and redstem stork's bill (*Erodium cicutarium*). Sonoran creosote scrub community was dominant undisturbed plant community found across the site.

6 Recirculated Final Coachella Valley Multiple Species Habitat Conservation Plan; Figure 8-3.

Potentially Occurring Special Status Plants

The literature review identified four non-listed special-status species not covered by the CVMSHCP that were determined to have a moderate to high potential to occur within the Project area: (1) singlewhorl burrobrush (*Ambrosia monogyra*), (2) Arizona spurge (*Euphorbia arizonica*), (3) slender cottonheads (*Nemacaulis denudate var. gracilis*), and (4) desert spike-moss (*Selaginella eremophila*). Therefore, focused surveys were conducted for these target species.

According to the two biological resources assessments prepared for the Project, no federally or state-listed species have a potential to occur within the study area within and near the Project site. No special-status species were determined to have a moderate to high potential to occur within the study area (Attachment E of Phase I and Phase II Biological Resources Reports). Additionally, no special-status plant species were detected within the rare plant survey area during the May 2021 focused survey. Neither were special-status plant species detected within the rare plant survey area during the April 2020 focused survey for the Phase 2 portion of the Project, and these species are not expected to occur in the rare plant survey area. No special-status plant species were incidentally observed within the rare plant study area. Focused surveys were not conducted within the eastern or northern portions of the study area during the June and November 2020 general biological survey lack of access. It is noted that no special-status plant species with a moderate or high potential to occur potential are expected to occur within or near the study area (Attachment E of Phase I and Phase II Biological Resources Reports).

Potentially Occurring Special-Status Wildlife Species

Special status wildlife species were identified in the literature review and/or observed on site. No focused special-status wildlife surveys were conducted; however, general resource site surveys were sufficient to identify special status species. Four special-status wildlife species were incidentally detected within the study area during the May 2021 biological surveys: olive-sided flycatcher (*Contopus cooperi*), loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), and San Diegan tiger whiptail (*Aspidoscelis tigris Stejnegeri*), all California Species of Special Concern. Loggerhead shrike, olive-sided flycatcher, and San Diegan tiger whiptail are not covered under the CVMSHCP; however, burrowing owl is covered under the CVMSHCP.

Burrowing owl and loggerhead shrike could nest on site and San Diegan tiger whiptail occurs on site. Desert tortoise (*Gopherus agassizii*) is a federally and state-listed species covered under the CVMSHCP and was determined to have a low potential to occur within the study area. Five other non-listed species have a moderate to high potential to occur within the study area: red diamondback rattlesnake (*Crotalus ruber*), Le Conte's thrasher (*Toxostoma lecontei*), San Diego desert woodrat (*Neotoma lepida intermedia*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), and Palm Springs round-tailed ground squirrel (*Spermophilus [Xerospermophilus] tereticaudus chlorus*). Of these, red diamondback rattlesnake and San Diego desert woodrat are the only species that are not covered under the CVMSHCP.

Nesting Birds

The California Department of Fish and Wildlife (CDFW) and Migratory Bird Treaty Act (MBTA) protect a broad range of migratory birds from nest disturbance during breeding season. The CVMSHCP requires compliance with the Act, and as a permittee, the City must comply with the Act.

In order to avoid impacting nesting birds, either avoidance of Project-related disturbance during the nesting season (generally from approximately January 15 through August 31); or the completion of pre-construction surveys conducted by a qualified biologist immediately prior to on-site disturbance and vegetation removal during the nesting season are required, and have been required below under Mitigation Measure BIO-2. The implementation of pre-construction surveys will assure that impacts to nesting birds are reduced to less than significant levels.

Potential of Burrowing Owl on Project Site

The Project site is suitable habitat for burrowing owl and this species was determined to be present during field surveys. Burrowing owl are only partially covered under the CVMSHCP; however, protocol compliant pre-construction surveys are required to assure that the species does not locate on the site prior to development or is disturbed during construction. Mitigation Measure BIO-3, provided below, will assure that impacts to burrowing owls will be less than significant.

Summary

No endangered species are expected to occur on the Project site. The developer will be required to pay a CVMSHCP development mitigation fee for any new disturbance that results from development of the Project. This fee helps to offset impacts from development by funding the acquisition of suitable habitat elsewhere for permanent conservation. In addition, the Project will be required to conduct pre-construction MBTA and burrowing owl surveys, to ensure that impacts to protected avian species are kept at less than significant levels.

Overall, with implementation of mitigation measures provided below, Project impacts would be less than significant.

b, c) **Less Than Significant.** The Project site does not contain any perennial streams, riparian habitat, marshes, protected wetlands, vernal pools or sensitive natural communities protected by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The Project may impact up to one acre (0.23 acres of potential impacts identified) of desert dry wash woodland, which is a covered community under the CVMSHCP. Final plans are expected to avoid all or most of identified areas of potential impact. The applicant will also be required to secure a streambed alteration agreement from CDFW and/or a CWA Section 401 water quality certification from the California Regional Water Quality Control Board if the Project does encroach into either waters of the State and a federal CWA 404 dredge and fill permit from the US Army Corps of Engineers if there are impacts to waters of the US.

d) **Less Than Significant.** As noted, the Project area has been isolated from surrounding lands with a six-foot chain link fence topped by barbed wire. Therefore, the Project will not further interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. Since areas of new fencing will be cleared of vegetation, the Project is not expected to significantly impede the use of native wildlife nursery sites.

e, f) **No Impact.** A significant adverse impact would occur if a Project was inconsistent with local regulations pertaining to biological resources. As discussed above, the Project site is located within an area that has already been extensively developed as renewable energy generation and distribution facilities. The Project is subject to payment of the CVMSHCP's developer impact mitigation fee, as provided in Mitigation Measure BIO-1, which will mitigate potential impacts to covered species.

The Project development area is adjacent to the Upper Mission Creek/Big Morongo Canyon Conservation Area; however, the nearest Project development site is more than 400 feet northeast of the Conservation Area, so no additional mitigation measures or provisions are required. In compliance with the CVMSHCP, the project will be required to implement all applicable CVMSHCP Land Use Adjacency Guidelines for areas of proposed development located adjacent to the Conservation Area. The Project will not conflict with any policies or ordinances that protect biological species, or any habitat conservation plans or natural community conservation plans. No impact is anticipated.

Mitigation Measures:

BIO-1 Coachella Valley MSHCP: To ensure compliance with the CVMSHCP and its ongoing implementation, prior to the issuance of building permits, the applicant shall pay the appropriate Coachella Valley Multiple Species Habitat Conservation Plan Mitigation Fee as set forth by the Coachella Valley Conservation Commission.

BIO-2 Nesting Bird Surveys: If any ground disturbance is proposed during nesting season (between February 1st and August 31st), a qualified biologist shall conduct a nesting-bird survey focusing on MBTA covered species prior to on-site disturbances.

If nesting birds are found, no work shall be permitted within 160 feet (non-breeding season) and 250 feet (breeding season) of the nest until young have fledged, as determined by the qualified biologist. The biologist shall implement protection measures such as no-disturbance buffer zone as the biologist deems necessary to assure protection of MBTA covered species, including burrowing owls.

If the initiation of ground disturbing activities is proposed outside of nesting season, this mitigation measure shall not apply for those areas of disturbance.

BIO-3 Burrowing Owl Protection: To protect burrowing owl, a protocol-compliant pre-construction survey will be required. Pre-construction surveys for burrowing owls shall be completed in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), with the first survey no less than 14 days prior to initiation of Project-related activities, and the second within 24 hours of Project-related activities. A qualified biologist will survey the site prior to any site disturbance, and if required by the biologist based on the presence of the burrowing owl, up to a 500-foot no-disturbance buffer zone will be established outside the Project limits for burrows. If owls are found in the burrow(s), a 160 to 250-foot diameter buffer would be established during non-breeding and breeding seasons, respectively. Also, no work would be permitted within the no-disturbance buffer zone(s) until young have fledged, as determined by the biologist.

BIO-4 Desert Tortoise Protection**:** The applicant shall notify the U.S. Fish and Wildlife Service 45 days prior to the initiation of grading to allow for the potential salvage of adult tortoises within this notification time period. Said desert tortoise clearance surveys and relocation shall be conducted in accordance with the U.S. Fish and Wildlife Service's protocol. Pursuant to the Project description, a tortoise exclusion fence comprised of mesh will be attached to the exclusion fence fabric and will extend from approximately 12 inches below-grade to approximately 24 inches above-grade.

BIO-5 General Avoidance and Mitigation Measures**:** The following impact avoidance and minimization measures will help to further ensure that Project impacts to biological resources are less than significant:

A. To prevent inadvertent entrapment of special-status wildlife during construction, all excavated steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day. Alternatively, areas of potential entrapment shall be provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped wildlife. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape.

B. Construction employees will limit their activities, vehicles and equipment operations, and storage of construction materials to any fenced portion of the Project footprint, where feasible.

C. Equipment staging and storage, fueling, and staging areas shall be located on disturbed upland sites. Best Management Practices (BMPs) shall be used to avoid direct drainage of materials or storm runoff into jurisdictional features or other sensitive habitats. All necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. All Project-related spills of hazardous materials, including raw concrete, shall be reported to the City and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

BIO-6 If the final Project development plans result in impacts to waters of either the state or the United States, the applicant will or may be required to secure a CDFW Section 19602 Streambed Alteration Agreement, a CWA Section 401 water quality certification from the California Regional Water Quality Control Board and/or a federal CWA 404 dredge and fill permit from the US Army Corps of Engineers. Proof and copies of secured permits shall be provided to the City Planning Department before development permits are issued.

Mitigation Monitoring:

BIO-A To comply with the CVMSHCP, prior to issuance of grading permits, the overall area of new disturbance shall be calculated and the appropriate per acre fee paid to the City.
Responsible Parties: Developer, City Planner
Schedule: Prior to issuance of grading permits.

BIO-B The Project biologist shall submit pre-construction burrow owl and nesting bird survey reports to the City Planner prior to the issuance of any ground disturbing permit on the site (including grubbing).
Responsible Parties: Project Biologist
Schedule: Prior to on-site disturbance.

BIO-C Notify the U.S. Fish and Wildlife Service 45 days prior to the initiation of grading.
Responsible Parties: Developer, City Planner
Schedule: Prior to issuance of grading permits.

BIO-D Establish and implement all appropriate BMPs prior to the initiation of grading or any other site disturbance.
Responsible Parties: Developer, City Planner
Schedule: Prior to issuance of grading permits.

BIO-E Prior to the issuance of grading permits or any other site disturbance, the applicant shall provide proof and copies of all permits require pursuant to CFG Code 1602, CWA 401 and CWA 404.

Responsible Parties: Developer, CDFW, CRWQCB, USACE
Schedule: Prior to issuance of grading permits.

Sources: Palm Springs General Plan, 2007; "Coachella Valley Multiple Species Habitat Conservation Plan," 2007; "Biological Resources Assessment for the Desert Peak Energy Center - Phase I, Noble Site, City of Palm Springs" Technical Memorandum prepared by Dudek August 23, 2021.

V. CULTURAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Environmental Background

Section 15064.5 of the CEQA Guidelines generally defines a historic resource as a resource that is: (1) listed in or determined to be eligible for listing in the California Register of Historical Resources (California Register); (2) included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code); or (3) identified as significant in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code). Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register. The California Register automatically includes all properties listed in the National Register of Historic Places (National Register) and those formally determined to be eligible for listing in the National Register.

Section 15064.5(a)(3)(D) of the CEQA Guidelines generally defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important in prehistory or history." Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community.

The City of Palm Springs is located in the Coachella Valley, which has been home to Native Americans for millennia. The Cahuilla Indians are the first known human inhabitants in the area, who lived in three small groups: the Pass Cahuilla of the Beaumont/Banning area; the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains; and the Desert Cahuilla from the Coachella Valley. The Cahuilla Indians have occupied the region for several centuries, leaving numerous cultural resources and artifacts that tell the story of their way of life.

Phase 1 Resources
A records and literature search indicate that 28 cultural resources have been recorded within 1.0-mile (1608 m) of the Project area of potential effect (APE), four of which were identified within the Project APE, and consisting of three historical isolates and one prehistoric isolate. The historic isolates consist of two steel, flat top beverage can with church-key openings and two rotary-opened sanitary cans. The prehistoric isolate consists of an isolated chalcedony flake. The four cans were originally identified in the northernmost portion of the APE along the dirt road that extends east/west south of Devers Substation. The chalcedony flake was identified in the eastern portion of the site.

Phase 2 Resources
A records and literature search conducted on the Phase II property identified 50 previous cultural investigations conducted within 1.0-mile of the Project APE. Of these 50 resources, ten previous studies overlap portions of the Project APE. The records search also indicated that 36 cultural resources have been recorded within 1.0-mile of the Project APE. Of these 36 cultural resources, two were identified within the Project APE and were determined to consist of two historical isolates.

The Native American Heritage Commission (NAHC) conducted a search of the Sacred Lands File for a 1-mile radius surrounding the Project APE; the Sacred Lands File search failed to indicate the presence of Native American cultural resources in the immediate Project APE.

A pedestrian cultural resource survey of the Project APE was conducted. The site consists largely of undeveloped desert landscape with cleared legacy wind turbine construction pads and surrounding existing wind turbines, well-established dirt and paved roads, and several laydown yards located near the proposed overhead generation tie-line (gen-tie line) along Melissa Lane. There are also large patches of graded and leveled soils. Research indicates that none of the structures within the Project APE are older than 50 years and no built environment features were recorded. In summary, the results of the pedestrian survey were negative for cultural resources.

The proposed Project's impacts on Cultural Resources are described below.

Discussion of Impacts

a) **No Impact.** The historic resources survey included comprehensive records searches provided by the Eastern Information Center (EIC) of the University of California-Riverside and other resources. In addition, independent historical research was conducted, including historic maps and aerial photographs, consultation with Native American representatives, and an on-site field survey. No historic structures or features were identified on the site. No historic resource was identified in previous surveys as occurring on the site. The proposed Project will have no impact on historic resources.

b) **Less Than Significant Impact With Mitigation Incorporated**. The Phase 1 and 2 Project area is located on a broad gently sloping alluvial fan emanating from the mountains and foothills to the west and northwest. These lands are very dry, received about 3.5 inches of rain annually and are subject to high and persistent winds. No important ethnobotanical resources have

been identified on the Project site or the vicinity. As noted, neither the records and literature search, nor the pedestrian site surveys identified any significant cultural resources on site or in the vicinity. A single lithic isolate was identified but no other resources of potential significance were found.

Native American Consultation

As part of the cultural resource survey, the State Native American Heritage Commission (NAHC) was contacted to request a record search in the Commission's sacred lands file. As noted above, the search failed to indicate the presence of Native American cultural resources in the immediate Project APE. The NAHC provided a list of 22 Native American groups and individuals who may have knowledge of cultural resources in the Project APE. Furthermore, the pedestrian site surveys conducted on the Project property identified a single prehistoric isolate consists of an isolated chalcedony flake.

On January 11, 2022, the City sent cultural consultation requests to Tribes listed on the NAHC Tribal list, as mandated by AB 52, regarding the proposed Project. As of the preparation of the assessment, the City have not received any requests for consultation from local or regional tribes. Please also see Section XVIII, Tribal Cultural Resources.

Archaeological Sensitivity

The site has a low potential to contain any unknown archaeological resource. Although unlikely, it is possible that unanticipated resources could be encountered during ground-disturbing activities associated with the proposed Project. The Project site is within the ACBCI's traditional use area. Therefore, Mitigation Measure V-1 is recommended to reduce potential impacts to less than significant levels, consistent with the findings of the cultural resource investigation, and concerns of local Tribes. With the implementation of this mitigation measure, potential impacts associated with archaeological resources will be reduced to less than significant levels.

c) **No Impact**. No cemeteries or human remains are known to occur on-site nor have historic or prehistoric burial sites been located in the vicinity. It is unlikely that human remains will be uncovered during Project development. Should human remains be uncovered during excavation or grading of the site, California law (Health & Safety Code Section 7050.5) requires that all activity stop, that the coroner be notified, and that he or she determine the nature of the remains, and whether Native American consultation will be required. The Project must comply with this requirement of law, which assures that there will be no impact to cemeteries or human remains.

Mitigation Measures:

CUL-1 A qualified archaeological (and Tribal monitor if requested) shall be on site during all earth moving activities. The monitors shall be empowered to stop and redirect activities, should a resource be identified. All construction work occurring within 100 feet of a resource find shall immediately stop until the monitors can evaluate the significance of the find and determine whether additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f), California PRC Section 21082), the monitors may record the find and allow work to continue. If the monitors determine that the discovery is significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted as determined by the monitors.

Monitoring:

CUL-A The Project monitors shall prepare a report documenting monitoring activities. The monitoring report shall be submitted to the City within 30 days of completion of excavation and/or grading activities.
Responsible parties: Project proponent, Project monitors, Planning Department.
Schedule: Within 30 days of completion of monitoring activities.

Sources: Palm Springs General Plan, 2007; Cultural Resources Inventory Report for the Desert Peak Energy Center – Phase I prepared by Dudek in June 2021; Cultural Resources Inventory Report for the Desert Peak Energy Center Project (– Phase II) prepared by Dudek in January 2021.

VI. ENERGY **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Environmental Background

Primary energy sources include nuclear energy, fossil energy (oil, coal and natural gas) and renewable sources like wind, solar, geothermal and hydropower. These primary sources are converted to electricity, a secondary energy source, which flows through power lines and other transmission infrastructure to developments.

In the state, the California Energy Commission (CEC) is the primary energy policy and planning agency and was established by the Legislature in 1974 in response to the energy crisis of the early 1970s. The CEC's mandate is to reduce energy costs and environmental impacts of energy use − such as greenhouse gas (GHG) emissions − while ensuring a safe, resilient, and reliable supply of energy in the state.

The Project site is located in the corporate limits of the City of Palm Springs and the service area of Southern California Edison (SCE). Currently, SCE serves approximately 4.4 million residential service accounts and 520,000 commercial service accounts which use up to 69% of the electricity generated by SCE in its service area.[7]

[7] Errata to Southern California Edison Company's Amended Energy Efficiency Rolling Portfolio Business Plan For 2018-2025 by SCE (May 15, 2017) – Page 42 and 43.

Energy Storage Systems (ESS) are used to store energy using thermal, electro-mechanical or electro-chemical solutions. Energy Storage Systems (BESS) are a sub-set of ESS which use electro-chemical solutions and include some of the following types of batteries: Lithium-ion, Lead-acid, Sodium Sulphur, Zinc bromine, and Flow.[8] The proposed Project proposes the use of lithium batteries for its BESS system.

Natural gas is provided by the Southern California Gas Company (SoCalGas). Its service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from the City of Visalia to the Mexican border.[9] There is no natural gas service to the subject property.

Discussion of Impacts

a) **Less Than Significant Impact**. A limited amount of energy would be utilized during construction activities to operate construction equipment and tools. At buildout, up-to 700 (MWe) of energy would be delivered to and stored at the site using BESS. Limited lighting at the site would be mostly on-demand where light is called for by motion sensors, thereby reducing both operational energy demand and light impacts. The Project's location adjacent to the SCE Devers Substation will also essentially minimize line losses, and allow an efficient transfer of energy from storage to the grid.

Overall, at buildout, the Project is not anticipated to use significant amounts of energy. Rather, the Project would store energy on the site and provide it to the grid as needed. Therefore, the implementation of the proposed Project will provide a beneficial impact to electricity supplies in the region, and its impacts on energy will be less than significant.

Therefore, the Project will have a less than significant environmental impact because it will not result in wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

b) **No Impact.** The Project will not interfere with any state or local plan that promotes renewable energy or energy efficiency. Rather, the Project will implement a storage facility that will reduce the strain on the grid during times of high demand. Adherence to the applicable state standards enforced by the State and the City will ensure the Project is consistent with current energy standards and conservation goals.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan, 2007.

[8] An online Report on Lithium-ion Battery Energy Storage Systems - The risks and how to manage them by AIG Energy Industry Group.

[9] SoCalGas, Company Profile, https://www.socalgas.com/about-us/company-profile, Accessed March 2019.

VII. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Background

The Project site is located in the northwestern portion of the Coachella Valley, which forms the northern half of the Colorado Desert geomorphic province of California.[10] This province consists of a low-lying barren desert basin at about 245 feet below sea level and the associated Salton Sea. The valley is bounded by the Little San Bernardino Mountains on the north and northeast, San Jacinto Mountains on the west and southwest, and the Santa Rosa Mountains on the south. The Coachella Valley is partially covered by alluvial and sand deposits some exceeding 20,000 feet in depth. The sources of sands found on the subject property are alluvial materials carried by fluvial action from the mountain canyons to the north with substantial deposits of aeolian transported sand and dust. These deposits are subject to wind erosion from northwest winds, including air movements flowing through the San Gorgonio Pass. The prevailing winds sort soils and sift out the finer materials and move them southward, creating dunes during transport.[11]

Ground Faulting and Rupture[12] [13]

The subject area of the Coachella Valley is crossed by several roughly parallel splays of the San Andreas Fault. The Project site is crossed by splays of the Banning Branch fault and is approximately 3.5 miles southwest of the Coachella/Mission Creek Branch, both of the San Andreas Fault Zone. The Phase 1 portion of the Project site is crossed by the active Banning Branch and portions are located within mapped Alquist-Priolo (A-P) Earthquake Fault Zones as delineated by the California and US Geological Surveys. The Banning Branch A-P zone is about 1,385 feet wide; the faults in the western portion of the Phase 1 site are not firmly located. The short segment Devers Fault is located approximately one-half mile northeast of the Phase 1 site.

The Banning Branch traverses the site in a northwesterly direction. Fault trenching studies were conducted in the eastern portion of the Phase 1 site and in the property to the east of the site in the early 1980s and between 2014-2015 (Gary S. Rasmussen & Associates, 1981; 1983; Neil O. Anderson and Associates, 2014; 2015). These studies identified a broad zone of faulting in the area; the fault zone identified in Rasmussen's fault trench excavated in the eastern portion of the site is approximately 350 feet wide, with the majority of the faults observed therein extending upwards to within a few inches of the ground surface.

Based on these findings, Rasmussen identified a structural setback zone from these faults that includes the entire width of the fault zone as observed in their trenches, and extends 50 feet to the north and 75 feet to the south of the end of the zone (see Exhibit 8). Approximately 40 of the BESS structures are proposed to be built within the fault zone and structural setback established by Gary S. Rasmussen & Associates (1981).

According to Terracon (2022a)[14], as a result of more recent subsurface studies (Neil O. Anderson and Associates (2014, 2015)) for the property to the east of the Phase 1 site, a wider structural setback zone has been proposed for the northeastern portion of the Phase 1 site. The setback described by Anderson was recommended for the project by the geotechnical investigation (Terracon 2022). The application of the Rasmussen setback on the south will provide an important buffer between future batteries and inverters and the known and implied locations of the faults to the north.

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10 Geological Gems of California State Parks | GEOGEM Note 53 Colorado Desert Geomorphic Province.

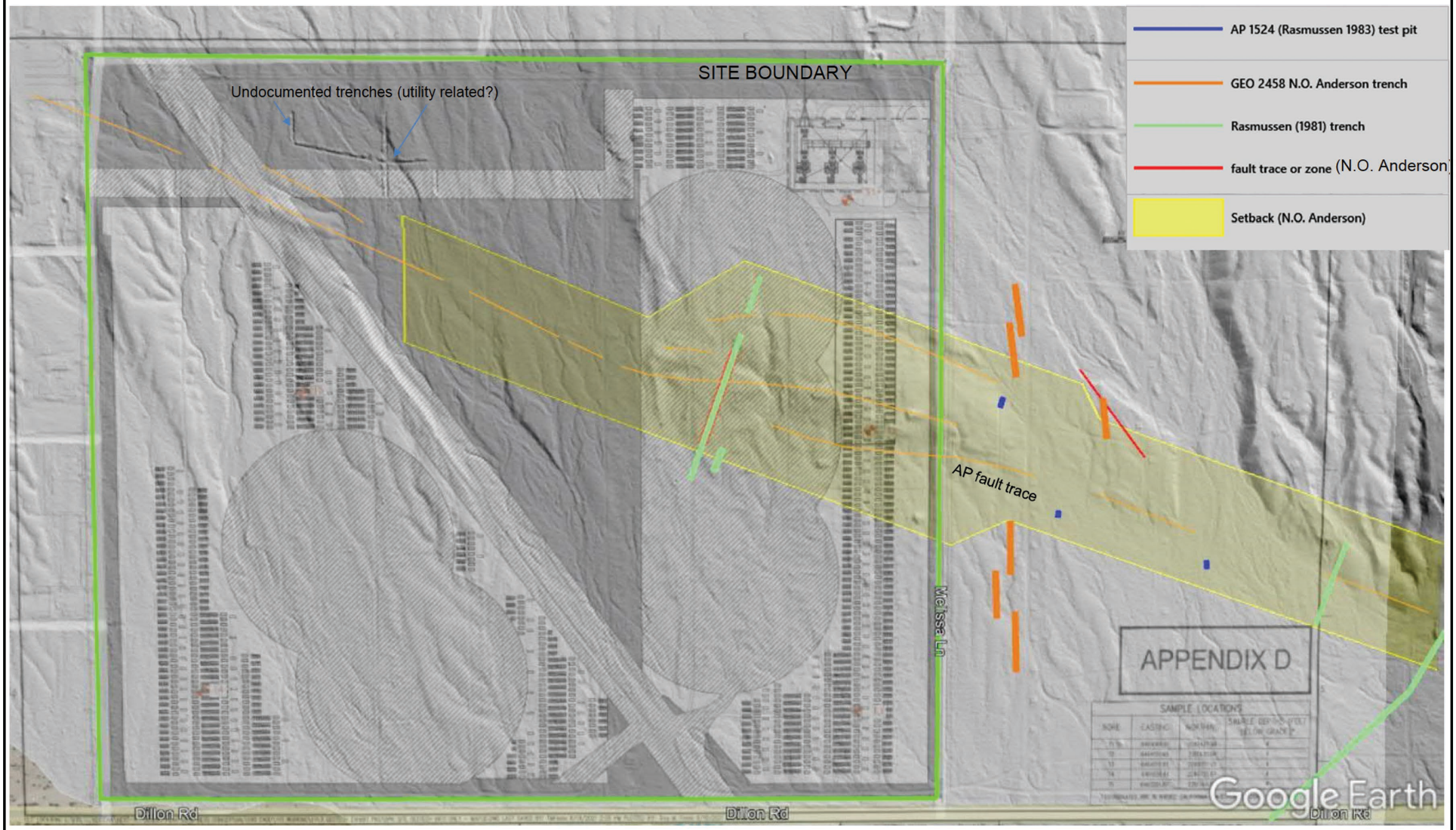
11 "Sand Forms in the Coachella Valley, Southern California" by Salah A. Beheiry, 1967 *Annals of the Association of American Geographers* Volume 57, 1967 - Issue 1.

12 Fault Hazard Evaluation – Desert Peak BESS Project, prepared by TerraCon, January 27, 2022.

13 Technical Memorandum – Limited Geologic/Seismic Review of Materials Prepared by Others for the Proposed Desert Peak Energy Center, prepared by Earth Consultants International. February 27, 2022.

14 TerraCon 2022.

The Neil O. Anderson and Associates study does not extend their subsurface studies into the Project site. Therefore, it is recommended that the southern boundary of the Anderson setback zone in the subject Phase 1 site be delineated to coincide with the southern boundary proposed by Rasmussen & Associates (1981). Approximately 60 to 66 of the BESS structures are proposed to be built within the fault zone and structural setback proposed by Neil O. Anderson and Associates (Anderson) in the eastern half of the site. The effects of applying the combined Anderson and Rasmussen recommended setback will be the aforementioned reduction in BESS facilities and a deferral on refined site planning for those BESS units planned in the northwest portion of the Phase 1 site pending additional seismic subsurface investigation.



Source: Terracon GeoReport, 2022

03.29.22

TERRA NOVA®
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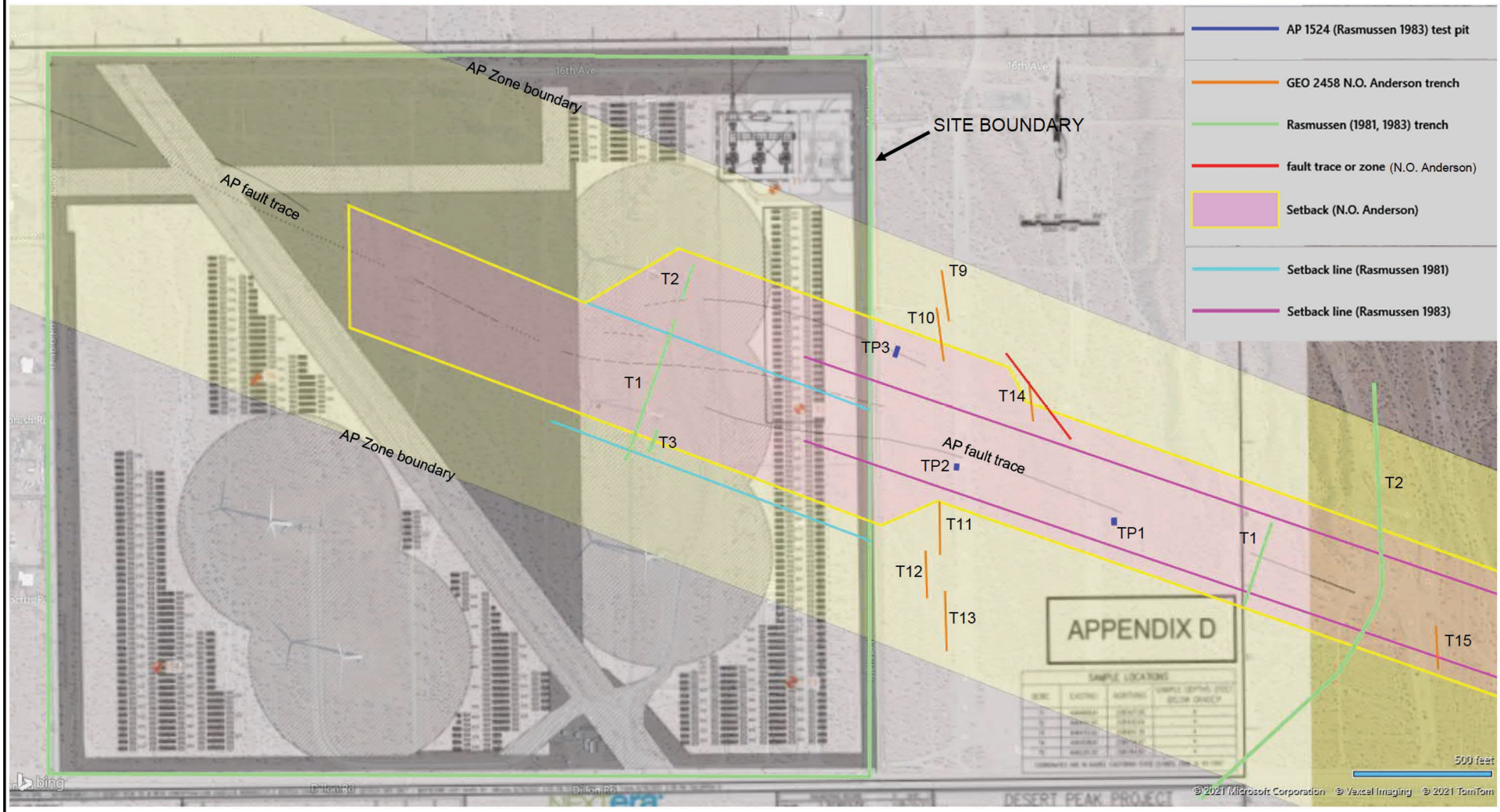
Phase 1 Fault Investigations Map
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

Exhibit

8



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Source: Terracon GeoReport, 2022

03.29.22

Exhibit

9

TERRA NOVA®
PLANNING & RESEARCH, INC.

Phase 1 Fault Setback Recommendations Map
Desert Peak Energy Center
Conditional Use Permit
City of Palm Springs, California

West Phase 1 Project Area

As noted, the Banning fault is believed to have a relatively high probability of rupturing during the Project's lifetime. Estimates of lateral slip per event on this fault range between about 1 and 5.9 meters (3.3 and 19.4 feet) (Castillo et al., 2021). The splays along the Banning Branch traverse the Phase 1 site as a zone of west-northwest striking subparallel surface breaks. Based on trenching studies within and near the site, sense of slip is primarily right-lateral strike slip but includes a significant component of compression/thrust offset. (Terracon 2022). The location of unmapped traces of the Banning Branch in the western portion of the Phase 1 site are largely inferred but not well located.

The Terrracon report states that there is significant potential for surface rupture to occur during the lifetime of the proposed Project within the setback zones established by prior consultants and within approximately 100 feet of the mapped fault trace in the unexplored western portion of the site. As a result, structures placed across the active fault zone are expected to experience significant deformation if the fault ruptures. There are insufficient data to determine whether most of this lateral displacement will occur along one fault trace in particular, or will be accommodated across the entire width of the fault zone identified in the eastern portion of the site (see Rasmussen 1981, trench T-1). In addition to ground rupture, an earthquake on the Banning fault would generate strong to very strong ground shaking at the site.

The approximate boundaries of previously established setback zones are depicted Exhibit 9 above. Terracon has defined a narrower structural setback from the fault in the western half of the site, but this does not appear to be based on subsurface data. Review of the uninterpreted LiDAR image included in Terracon's (2022a) report suggests that the fault zone in the western half of the site is wider than anticipated, with the streams in that area laterally displaced several times along their course, indicating multiple fault traces. Based on review of the LiDAR image, the main fault zone in that area also appears to be south of the trace included in the California-issued Alquist-Priolo Earthquake Fault Zone map that covers the site (CDMG, 1980).

Prior to the application of structural setback zones the locations and limits of previously established setback zones, fault trenches, and observed faults should be closely established and their application to Phase 1 of the proposed Project refined. In the northwest portion of the Phase 1 site exploration by trenching should be conducted for the portions of the site within the AP Zone where improvements are currently proposed and subject to setback. Terracon indicates that sufficient information is not currently available to establish setback limits in the western portion of the Phase I Project.

The applicant has agreed to delete batteries and inverters that would be placed within the Anderson setback in the northeast portion of the Phase 1 site and as delineated in the Terracon geotechnical report (2022). For the northwestern areas of the Phase 1 site that have not had fault trenching adequate to define locations of possible fault traces, additional seismic subsurface investigation shall be undertaken prior to placing infrastructure in those areas.

Project Area Soils

Two soil types occur on the Project site; these include Carsitas fine sand (CkB) and Carsitas gravelly sand (CdC). Both CdC and CkB soils are typically found on flat to gently sloping alluvial fans with small and slightly entrenched braided streams in the CdC soils; runoff is generally slow. Both soils have a high susceptibility to wind-blown erosion. Both soils have a low shrink-swell potential, are moderately at risk of corrosion for steel and low for concrete. There do not appear to be any significant constraints associated with these soils. While the site could be subject to strong ground shaking and even surface rupture, the potential for liquefaction is relatively low given the depth to groundwater exceeds 50 feet.

Seismically Induced Settlement
Strong ground shaking can cause soils to become dense or to compact, resulting in local or regional settlement of the ground surface. Settlement can damage structures and foundations, as well as pipelines, canals, and other grade-sensitive structures. The potential for seismically induced settlement to occur is controlled by the intensity and duration of ground shaking and the density of subsurface soils. The valley floor is mainly comprised of loose, recently deposited alluvial and aeolian sediments and is highly susceptible to seismically-induced settlement. Development proposed in these areas should include subsurface geotechnical investigations that evaluate the potential for seismically-induced settlement. Proper, corresponding foundation design and the densification or compaction of subsurface soils prior to development can mitigate some of the damaging effects associated with settlement.

Potential Hazards
Lithium-ion batteries have flammable chemical electrolytes and are susceptible to thermal runaway if the battery has faults or contaminants, or experiences physical or operational stress.[15] Additionally, lithium-ion batteries can spontaneously reignite hours or even days later after a fire event if cells go into thermal runaway, making decommissioning, deconstructing and storing more complicated. The Phase 1 site could be subject to ground rupture in the event of a major quake along the Banning Fault and the entire site would experience significant ground shaking in such an event. Whether and to what extent these circumstances pose a significant threat of fire, release of toxins or other hazards is not fully known.

Experience in the manufacture, siting and operation of large-scale lithium battery arrays is somewhat limited given the new utility-scale of this technology. A variety of hazards have been identified and accidents have occurred with lithium batteries ranging from those powering small devices, through EVs and now utility-scale arrays. A much cited example, on April 2019 an explosion occurred at a 2.16 MWh lithium-ion battery BESS site in Surprise, Arizona. Four firefighters were severely injured. Since that time, energy industry and first responders have been working on new regulations to address these new and unfamiliar safety considerations. Also see Section IX: Hazards below.

The proposed electrical substation and BESS are considered both critical and high-risk facilities, as they should remain operational after an earthquake (critical) but, if severely damaged, could pose a hazard to the surrounding community (high-risk). The Technical Background Report to the Safety Element for the City of Palm Springs (Earth Consultants International, 2005) indicates that essential facilities should not be located on or near the Banning fault. The City's General Plan Safety Element (City of Palm Springs, 2007) goes further, stating that new critical, sensitive and high-occupancy facilities should be prevented from being located within 100 feet of a potentially active fault (Action SA1.5).

Since submittal of development plans, the applicant has agreed to set back project infrastructure, including batteries, inverters, substation and other project facilities, from the Anderson-defined setback zone described in the project geotechnical report (Terracon, 2022). The Project will be further refined to remove project facilities from the northwest portion of the Phase 1 site until such time as additional fault trenching locates the currently implied faults in this area of the project. Also see Section IX: Hazards and Hazardous Materials for further discussion of fire safety and prevention measures in compliance with appropriate fire code.

[15] Ken Boyce, principal engineer director, UL Energy and Power Technologies division, as reported in industry publication *Utility Dive*, September 28, 2020.

The ultimate development of the site will result in the construction of a battery energy storage facility, substation and underground collection and overhead transmission lines, and associated amenities whose impacts are discussed below.

Discussion of Impacts

a-i, ii) Less Than Significant With Mitigation. According to the California and US Geological Surveys (1998) and a number of fault hazard studies conducted on the subject and nearby properties, a substantial portion of the Phase 1 site is located within a wide Alquist-Priolo Earthquake Fault Zone associated with the numerous splays of the Banning Branch of the San Andreas Fault. There are other known active earthquake faults in the Project vicinity, including the Mission Creek Fault to the northeast and the Garnet Fault to the southeast. The Banning Fault is capable of producing on-site ground surface ruptures and a magnitude 7.4 earthquake that would result in peak horizontal ground accelerations of up to 1.24g in the Project vicinity[16].

Within the northwest portion of the Phase 1 site, the fault zone consists of several splays the exact locations of which are not known (shown as dashed lines on A-P maps) with some being no more than implied. The fault northeast of the Banning Fault is believed to have been responsible for generating the magnitude 6.0 North Palm Springs earthquake in 1986. According to Terracon, observations of ground failure from this earthquake focused along the mapped Banning Branch fault trace resulting in extensional cracks in surface soils and compressional features indicating reverse displacement east of Hwy 62.

The Project application discusses fire suppression improvements and states that only batteries that are Underwriters Laboratories ("UL")-certified and that include built-in fail safe designed specifically to prevent thermal runaway and the spread of fire would be used. The applicant also states that the fire detection systems and, if necessary, the suppression system, will be designed and installed based on the requirements of NFPA855 and UL 9540A results. To the extent required by state and local fire code, a smoke detection and fire suppression system would be installed, which would suppress a fire and also automatically shut down other adjacent batteries if smoke or fire is detected.

The proposed battery storage containers would be engineered to meet all local, state, and federal requirements pertaining to seismicity. The storage containers would be placed level on crushed aggregate, concrete piers, or steel piles. Each battery storage container would be fastened to the foundation on which it will be located. The applicant also states that within the containers, battery racks would be attached to the floor of the storage container using methods and materials approved by a structural engineer to withstand damage from seismic ground shaking. No permanent occupancy is proposed at the Project site, and people would generally not be present except during construction or during scheduled or required maintenance or repairs. With conformance to all applicable building codes and regulations, impacts would be less than significant.

It is appropriate for the Project, with such a large storage capacity and important grid-balancing role, to be considered an essential facility that should be expected to remain operational in the event of a self-initiated fire or after an earthquake.

[16] Terracon 2022. The report states that based on the USGS Design Maps Summary Report, using the American Society of Civil Engineers (ASCE 7-16) standard, the modified peak ground acceleration (PGAM) at the project site is expected to be 1.242g. Based on the USGS Unified Hazard Tool, the project site has a mean magnitude of 7.62.

Project impacts associated with seismically-induced ground rupture and ground shaking will be significant if the Project development area does not exclude the lands within the A-P Zone and specifically within the setback limits established by Anderson et al (2014; 2015). Therefore, mitigation measures set forth below remove proposed development from these areas. Other measures are designed to avoid, minimize and/or mitigate elsewhere on the site impacts associated with faulting and groundshaking.

a-iii) **Less Than Significant With Mitigation**. Ground failure can occur for a variety of reasons, including the nature of the soils, the depth to groundwater, potential for string ground shaking and other causes. Even engineered cut and fill slopes constructed on the valley floor may be subject to failure if they are of sufficient height or steepness. These slopes must be designed to resist seismically induced failure, and their design should be based on site-specific soil stability analyses that include subsurface soil sampling and laboratory testing. Proper foundation design and the densification or compaction of subsurface soils prior to development can mitigate some of the damaging effects associated with settlement. See mitigation measures below and geotechnical recommendations set forth in the Terracon 2022 report.

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 50 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. The Project site is located within an area designated as having a "Low" potential for liquefaction (Low -- Fine-grained granular sediments susceptible to liquefaction, but with groundwater depths greater than 50 feet.)[17]

a-iv) **Less Than Significant Impact**. The Project site is located on the valley floor, far distant from mountain foothills where landslides and/or rockfall hazards are greatest. The site is not located within a landslide hazard area. The risk of landslides on-site or in the vicinity is considered low. Nonetheless, due to the presence of cohesionless sandy soils, sloughing or caving should be anticipated and appropriate precautions will be taken as set forth in the Terracon 2022 report and mitigation measures below, including laying back of trench and other slopes, during construction.

b) **Less Than Significant With Mitigation.** Soil erosion is the removal of soil by water, wind, and gravity (slumping). The rate of erosion is determined by four soil properties: texture, organic matter content, soil structure, and permeability. Other factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of slope, and the amount and type of vegetative cover. As mentioned above, the Project site does not include any mountains or hills or other prominent geologic features and is gently sloping.

On-site soils have a high susceptibility to wind erosion. Grading will be required to level and create benches to site battery and inverter cabinets and associated equipment and materials. Approximately 78 acres of new site disturbance would occur. Construction would also require some temporary excavation of soils to install Project components, such as buried cables and conduit, foundations for substation structures and transmission poles, and other Project improvements.

[17] Technical Background Report to the Safety Element of the Palm Springs General Plan, prepared by Earth Consultants International, September 2005.

Any disturbance to soils from construction activities would increase the potential for erosion, as soils would be loosened and exposed to precipitation and wind. Project construction is required to adhere to erosion control measures imposed by the City of Palm Springs and South Coast Air Quality Management District (SCAQMD) Rule 403 (dust control). All grading activities will require grading permits from the Palm Springs Department of Building and Safety, along with detailed dust control plans, and would be required to comply with the standards designed to limit potential erosion impacts, including stormwater best management practices (BMPs) and wind erosion PM10 management plans (also see Mitigation Measure AQ-1, above).

With implementation of the required erosion control measures, Project impacts would be less than significant.

c) **Less Than Significant Impact With Mitigation.** Portions of Phase 1 of the Project are located on a geologic unit that is unstable and that could adversely affect the Project's construction of elevated pads, battery and inverter cabinets, and transmission poles Extensive benching and other site development could be affected if proper mitigation is not implemented. In the event of a major seismic event on-or off-site landslide, lateral spreading, subsidence or collapse could possibly occur. BESS containers could be significantly damaged and could result in a facility-related fire and the uncontrolled release of toxic materials could occur. All excavations required for underground components of the Project would be backfilled and properly compacted. Operation of the proposed Project would not require groundwater pumping that could lead to subsidence.

With the possible exception of facilities constructed within the mapped Alquist-Priolo zone, other potential impacts associated with this geologic unit, including strong ground shaking and ground failure, may be mitigable to levels that are less than significant with focused consideration of all manufactured slopes, deep and shallow foundations, pads, substation components and other parts of the Project. With the implementation of mitigation measures GEO-16 and GEO-19, the potential for on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse will be less than significant.

d) **No Impact.** The Project site does not contain any expansive soil. No impact is anticipated.

e) **No Impact**. The proposed Project consists of an unmanned utility-scale energy storage facility which will have no restroom facilities. Therefore, the proposed Project would have no impact related to the use of septic tanks or alternative wastewater disposal systems.

f) **Less Than Significant Impact With Mitigation**. The Project site is not known to contain unique paleontological or geologic features that could directly or indirectly be impacted by the Project. The coarse-grained, younger, alluvial deposits that cover the Project site have a low paleontological resource sensitivity. However, deeper and older, finer-grained Pleistocene age deposits in this area have produced scientifically significant vertebrates and have a moderate to high paleontological resource sensitivity. Fossil localities from the nearby area have yielded paleontological resources in older Quaternary alluvial deposits. According to the records search results received from the Natural History Museum of Los Angeles County (LACM), the closest fossil locality to the Project area within older Quaternary alluvial deposits is located southeast of the Project area, on the southern side of Seven Palms Valley, and north of Flat Top Mountain. This locality yielded a specimen of fossil horse (Equus). These

same older Quaternary deposits are exposed just west and northwest of the Project area.[18] With mitigation set forth below, potential impacts to paleontological resources will be less than significant.

Mitigation Measures:

Several of the mitigation measures set forth below are taken directly from the Terracon 2022 geotechnical report and are explicitly cited below to ensure that all areas of potential seismic and other geotechnical constraints are adequately addressed. As appropriate, the Project geotechnical engineer may with the City's consent alter and refine these measures consistent with sound engineering practices for critical facilities.

GEO-1. All Phase 1 BESS facilities (including batteries, inverters and substations located within the Alquist-Priolo Fault Zone and the setback limits established by Anderson et al (Anderson setback; see Exhibit 9) in the Terracon January 2022 Fault Hazard Evaluation, shall be removed from the Project development plans. Future development within the "Anderson" setback shall require additional geotechnical investigations, including fault trenching and mapping in accordance with standard professional practices. Prior to preparing and processing plans and securing building permits for batteries, inverters or substations within the northwest portion of the Phase 1 site, the applicant shall submit a comprehensive seismic and geotechnical assessment of the unmapped portions of the Project site, including trenching across those portions of the Banning Fault AP Zone that have not been adequately evaluated and which are planned for development.

GEO-2. To ensure adequate mitigation of potentially significant lateral and vertical displacement associated with a seismic event on the Banning Branch or other nearby faults, prior to the issuance of building permits, the applicant shall prepare and submit to the City structural engineering analysis that demonstrates the structural viability of the BESS facilities, including but not limited to battery and inverter arrays, above ground gen-tie power poles, substation structures and other facilities and systems.

GEO-3. Structural analysis and documentation shall be prepared and submitted to the City for review to determine how these structures and their internal components will perform in the event of seismically induced ground deformation occurring at the site. Final design shall minimize potential damage to battery arrays and other facilities in the event of a major earthquake.

GEO-4. During the design and construction of foundations, all grading for the substation and BESS yard, except for those supported on driven piles or drilled shaft foundations, shall incorporate the limits of the proposed structure plus a minimum lateral distance of two feet beyond the edges or as recommended by the Project geotechnical engineer.

GEO-5. Self-contained BESS structures to be supported on a gravel pad, shall consist of Class 2 aggregate base extending minimum of 12 inches below bottom of the self-contained BESS structure or 12 inches below surrounding grade, whichever is deeper. Engineered fill shall extend a minimum of 1 foot below the bottom of the aggregate base pad or 3 feet below existing grade whichever is deeper.

[18] Paleontological Resources Review – Desert Peak Energy Center – Phase I, prepared by Dudek. June 30, 2021.

GEO-6. Shallow mat foundations shall be supported on engineered fill extending to a minimum of 1 foot beneath the bottom of foundations, 3 feet below existing grades, or the depth of undocumented fill, whichever is greater. Onsite soils are acceptable to be reused as engineered fill beneath foundations. Overexcavation and recompaction is not necessary for the driven pile and drilled shaft foundations.

GEO-7. Earthwork on the Project shall be observed and evaluated by the Project geotechnical engineer. The evaluation of earthwork shall include observation and testing of engineered fill, subgrade preparation, foundation bearing soils, and other geotechnical conditions exposed during the construction of the Project.

GEO-8. The contractor shall notify the Project geotechnical engineer of imported soil sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. For all import material, the contractor shall also submit current verified reports.

GEO-9. The proposed mat or gravel pad foundations shall be supported on engineered fill. The overexcavation shall then be backfilled up to the footing or mat base elevation with engineered fill placed in lifts of 8 inches or less in loose thickness and should be moisture conditioned and compacted following the recommendations in the Terracon 2022 geotechnical report. The lateral extent of the overexcavation shall extend a minimum of 1 foot beyond the edge of the foundation.

GEO-10. All fill soils identified in the Terracon 2002 report, including soils stockpiles and already distributed areas of fill, shall be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

GEO-11. Positive drainage shall be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations shall be prevented during construction. Backfill against foundations and in utility line trenches shall be well compacted and free of all construction debris to reduce the possibility of moisture infiltration.

GEO-12. In utility trenches, any soft and/or unsuitable material encountered at the bottom of excavations shall be removed and be replaced with an adequate bedding material. A non-expansive granular material with a sand equivalent greater than 30 shall be used for bedding and shading of utilities, unless allowed or specified otherwise by the utility manufacturer.

GEO-13. Detailed foundation design and engineering shall comply with Terracon 2022 recommendations, including those for mat and gravel pads, as set forth in the Terracon report (see Mat and Gravel Pad Foundation Design Recommendations).

GEO-14. The applicant shall submit for City approval structural analysis of all elevated structures, including gen-tie transmission poles, battery and inverter array foundation design, mounting and securing that avoids or minimizes the potential for structure deformation, failure, release of toxic materials or the occurrence of battery fires.

GEO-15. All grading plans shall include a soil erosion prevention/dust control plan. Blowing dust and sand during grading operations shall be mitigated by adequate watering of soils prior to and during grading, and limiting the area of dry, exposed and disturbed materials and soils during these activities. To mitigate against the effects of wind erosion after site development, a variety of measure shall be provided including maintaining moist surface soils using chemical soil stabilizers or by other approved means.

GEO-16. Unprotected, permanent graded slopes shall not be steeper than 3:1 (horizontal/vertical) to reduce wind and water erosion. Fill slopes shall be overfilled and trimmed back to competent material. Fill slope surfaces shall be compacted to 90% of the laboratory maximum dry density by either over-filling and cutting back to expose a compacted core, by approved mechanical methods and as otherwise recommended by the Project geologist.

GEO-17. Installation of slope protection, cutoff walls, deepening of proposed foundations below the maximum depth of scour and comparable measures shall be applied, as determined by the Project geologist, to mitigate potential scour and any resulting slope instability.

GEO-18. There shall be a cessation of grading activities during rainstorms or high wind events. As necessary, the Project contractor shall install flow barriers and soil catchments (such as straw bales, silt fences, and temporary detention basins) during construction to control soil erosion.

GEO-19. Excavations within sandy soil shall be kept moist, but not saturated, to reduce the potential of caving or sloughing. Where excavations over 4 feet deep are planned, lateral bracing or appropriate cut slopes of 1.5:1 (horizontal/vertical) shall be provided. No surcharge loads from stockpiled soils or construction materials shall be allowed within a horizontal distance measured from the top of the excavation slope and equal to the depth of the excavation.

GEO-20. A Paleontological Resources Impact Mitigation Program (PRIMP) and Worker Environmental Awareness Program shall be developed prior to commencement of any new site disturbance such as trenching or grading activity on-site. The program shall be developed by a qualified paleontologist, pursuant to Society of Vertebrate Paleontology (SVP) (2010) guidelines and shall be consistent with the SVP (2010) guidelines and outline requirements for preconstruction meeting attendance and worker environmental awareness training. The program will educate and instruct on-site personnel to avoid areas with potentially high paleontological sensitivity, including Pleistocene alluvial deposits, based on construction plans, geotechnical reports and the Paleontological Resources Review prepared for the Project.

The PRIMP shall include procedures for adequate discoveries treatment, paleontological methods (including sediment sampling for microinvertebrate and microvertebrate fossils), reporting, and collections management in the event a discovery is made during construction activities. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the construction contractor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources by a qualified paleontologist. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, often that day for smaller discoveries while the monitor is on site, or within a matter of days for a larger salvage given sufficient crew and oversight, the qualified paleontologist will remove the rope and allow grading to recommence in them area of the find.

Monitoring:

GEO-A. Revised Project Compliance
Final Project design and engineering shall reflect removal of all previously proposed Project facilities located within the Anderson setbacks established by previous trenching and

seismic evaluations. Final plans shall delineate relocated improvements and the subject set back line.
Responsible Party: City, Developer
Schedule: Prior to approval of construction plan set or issuance of grading permits.

GEO-B. California Building Code
Project design and engineering shall conform to the prevailing California Building Code (CBC), and industry design standards for all Project facilities, where appropriate, in order to mitigate the effects of groundshaking and earthquake damage.
Responsible Party: City, Developer, General Contractor
Schedule: Prior to approval of construction plan set or issuance of grading permits.

GEO-B. Structural Foundations
Structural foundation designs and subsurface soil improvements shall be conducted as recommended in the Project geotechnical analysis and based on the California Code of Regulations Volume 18, Title 14, Article 10, Section 3721[a]) to minimize geotechnical hazards. Such measures shall include but are not limited to overexcavation and hydrocompaction, other remedial grading, strengthening and deepening structural foundations.
Responsible Party: City, Developer, Project Geologist, Project Structural Engineer, General Contractor
Schedule: Prior to approval of construction plan set or issuance of grading permits.

GEO-C. Ground Improvements
Ground improvements consisting of removal and recompaction of loose, near surface sandy soils, is required to minimize dynamic settlement of dry soils. Other methods may include deep dynamic compaction, additives to the soils, such as cement or fiber (e.g., nylon) and flooding of in-place loose granular soils, to increase the density of the resultant compacted fill and thereby removing or reducing to insignificant levels the tendency to settle under dynamic shaking. Deep foundation elements should also be considered, as determined by the Project geologist, when effective at bypassing zones of loose sand subject to dynamic settlement.
Responsible Party: City, Project Geologist, Developer, General Contractor
Schedule: During construction

GEO-D. Dust Control/Soil Erosion Plan
All grading plans shall include a soil erosion prevention/dust control plan. Blowing dust and sand during grading operations shall be mitigated by adequate watering of soils prior to and during grading, and limiting the area of dry, exposed and disturbed materials and soils during these activities. To mitigate against the effects of wind erosion after site development, a variety of measure shall be provided including maintaining moist surface soils using chemical soil stabilizers or by other approved means.
Responsible Party: City, Project Geologist, Developer, General Contractor
Schedule: Prior to issuance of grading permits

Sources: Palm Springs General Plan, 2007; "Soil Survey of Riverside County, California, Coachella Valley Area," U.S. Department of Agriculture Soil Conservation Service, 1980; IEEE 693: Recommended Practices for Seismic design of Substations; Paleontological Resources Review – Desert Peak Energy Center – Phase I, prepared by Dudek. June 30, 2021; Geotechnical Engineering Report – Desert Peak 230-34.5kv Collector Substation, BESS and Transmission prepared by Terracon, February 15, 2022. Fault Hazard Evaluation – Desert Peak BESS Project, prepared by Terracon, January 27, 2022; Technical Memorandum – Limited Geologic/Seismic Review of Materials prepared by Others for the Proposed Desert Peak Energy Center, prepared by Earth Consultants International. February 27, 2022.

VIII. GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Background

Climate change is the variation of earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of greenhouse gases (GHG) is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs (i.e., water vapor, carbon (CO_2), methane (CH_4), and ozone (O_3)) that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Prominent GHGs contributing to the greenhouse effect are CO_2, CH_4, nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs, more than natural ambient concentrations, are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.

Greenhouse gas emissions are generated by both moving and stationary sources, including vehicles, the production of electricity and natural gas, water pumping and fertilizers. State laws such as Assembly Bill 32 (AB 32) and Senate Bill 32 (SB 32) require all cities to reduce greenhouse gas emissions to 1990 levels by the year 2020. SB 32 is the extension of AB 32 which requires the state to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030.

In addition to state laws, the City of Palm Springs adopted a Climate Action Plan (CAP) in May 2013. Figure 1 of the CAP shows the City's emissions projections since 1990. From 1990 to 2010, the emission level dropped from 432,136 to 431,594 tonnes of CO2e, a 0.1% decrease. Based on a 2010 population of 44,552, the 2010 total emissions represented a footprint of 9.7 tons per person. For Palm Springs to maintain its emissions at the statewide target of 1990 levels of CO2e by 2020, it will have to implement emissions reductions of 4,263 tonnes per year, just 1.0% of the forecasted 2020 level.

Discussion of Impacts

a, b) Less Than Significant Impact. The Project will generate most of its GHG emissions during construction and operations. The primary sources of GHGs during construction will be those associated with moving emissions, including approximately 19,134 haul trips associated with earthwork and facilities importing and installation as well as heavy equipment and workers' trips. The amount of greenhouse gases anticipated from the Project would be a small fraction of the levels being considered by the SCAQMD for greenhouse gas significance thresholds and far below those adopted to-date by any air district in the state. As shown in the Table 5 below, GHG emissions associated with the proposed Project would be below SCAQMD threshold levels of significance during construction and operations.

Construction

As discussed under Section III, Air Quality, the proposed Project consists of the construction of a BESS facility to store up to 700 MWe in dispersed arrays of container-based lithium-ion batteries and accompanying inverters. These construction activities would result in short-term GHG emissions associated with operation of construction equipment, employee commute, material hauling, and other ground disturbing activities. There are currently no construction-related GHG emission thresholds for projects of this nature, however, to determine if construction emissions will result in a cumulative considerable impact, construction-related GHG emissions were compared to the SCAQMD's GHG threshold of 10,000 MTCO2e/yr for industrial projects (please see the tiering discussion below).

Table 5
Estimated Annual Construction GHG Emissions (Phase 1 & 2)

Year	CO2	CH4	N2O	CO2e
Metric Tons				
2022	1,203.49	0.10	0.12	1,241.73
2023	1,362.79	0.26	0.05	1,385.26
2024	941.09	0.10	0.07	965.62
2025	1,276.34	0.25	0.05	1,296.61
Total			**4,889.22**	
Annualized emissions over 30 years (metric tons per year)			***81.49***	

The proposed Project will generate 4,889.22± MTCO2e during the 13-month construction period. Annualized over the 30-year life of this facility, this results in an average annual emission of 162.97 MTCO2e/yr. This is well below the SCAQMD threshold for industrial projects and will only occur during the construction period.

Overall, greenhouse gas emissions associated with grading and construction of Project site components will be below the SCAQMD's GHG threshold and will end once the Project is completed.

Operation

The SCAQMD provides a "tiered" test to determine the impact of the development projects.

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 MTCO2e/yr for industrial projects; 3,000 MTCO2e/yr for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

The proposed Project is an energy battery storage facility which would be consistent and compliant with Tier 3. As discussed above in Section III (Air Quality), the Project will store energy during times of low demand, for use during times of high demand. There is, however, on-site energy use associated with operation of the Project. Specifically, the battery storage containers would have thermal management systems to keep the batteries in the optimal operating temperatures. Therefore, the default CalEEMod rates for a refrigerated warehouse were assumed for electricity use for the Project.

Combined Project Phases I & 2 operational GHG emissions would total approximately 3,444.90 MTCO2e/yr. Emissions were calculated by multiplying the energy use by the utility's carbon intensity (pounds of GHGs per megawatt-hour for electricity) for CO2 and other GHGs. Annual electricity emissions were estimated in CalEEMod using the emissions factors for Southern California Edison (SCE), which would be the energy source provider for the Project.

The proposed Project falls within the definition of Tier 3 with an absolute threshold of 10,000 MTCO2e/yr for industrial projects. The Project would not result in increases in population, housing, or other development that would increase energy use, motor vehicle usage or solid waste production, which are currently the primary sources of greenhouse gas (GHG) emissions in the City. The Project will generate negligible (1 trip per day) trips from routine maintenance of the site which would represent a nominal amount of greenhouse gas emissions and a less than significant impact.

Summary

The proposed Project is a utility-scale industrial facility where containers will be used to store energy, condition power for transmission to and from the SCE Devers Substation. The Project will generate no significant operational GHG emissions.

Overall, the proposed Project would be consistent with local and Statewide goals and policies aimed at reducing the generation of GHGs. The proposed Project's generation of GHG emissions would not make a cumulatively considerable contribution to or conflict with an applicable plan, policy, or regulation for the purposes of reducing the emissions of greenhouse gasses. Impacts would be less than significant.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs Climate Action Plan (2013); California Global Warming Solutions Act; CalEEMod Version 2016.3.1; Palm Springs General Plan, 2007; Climate Action Plan; Desert Peak Energy Center Project – Phase I – Air Quality and Greenhouse Gas Emissions Study, January 26, 2022; Desert Peak Energy Center Project – Phase 2 – Air Quality and Greenhouse Gas Emissions Study, January 26, 2022.

IX. HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐

IX. HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Environmental Background

A hazardous material is any material that, due to its quantity, concentration, physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or local implementing agency has a reasonable basis to believe would be injurious to the health and safety of persons, or would be harmful to the environment if released. Other hazards addressed in this section include those associated with a nearby airport's operations, wildland fires and impeding emergency response teams.

Businesses and services in the City of Palm Springs where hazardous materials are used or stored include fuel stations (underground fuel tanks) and automotive service businesses, dry cleaners, schools, medical and dental facilities, and laboratories, among others. Consumer products such as cleaning and maintenance supplies, paints, pesticides, and herbicides are also used and/or stored at retail stores, businesses, and residences. Some of these facilities generate hazardous waste.

There are no active or closed hazardous waste facilities or generating sites within one mile of the proposed Project, according to the California Department of Toxic Substances Control Database; GeoTracker Database. However, according to the hazardous materials memo prepared by the applicant[19] there are currently hazardous materials were being stored within the site. These materials were associated with the operation of existing wind turbines. Releases or suspected releases of these materials to the underlying soil were not encountered by Dudek during their review. Based on information obtained during their assessment, the following recommendations were made.

- If construction is required in the existing on-site chemical storage areas, the chemicals should be moved, protected, or avoided in accordance with best construction practices and federal, state, and local requirements.
- If stained soil is discovered during construction, it should be managed and disposed in accordance with applicable federal, state, and local rules and regulations.
- A survey for asbestos-containing materials and lead-based paint should be conducted prior to the disturbance of any existing buildings.

Project-Related Hazards

Lithium batteries are classified as "*hazardous materials*" and are subject to the Department of Transportation's Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) due to their ignitability, reactivity or toxicity. The Project may also be subject to the Hazardous Materials Transportation Act of 1974, which establishes criteria and regulations regarding the safe storage and transportation of hazardous materials. CFR 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

The proposed Project will include a large number of lithium-ion based batteries; the exact composition of the proposed batteries has not been provided. Lithium-ion battery technology is characterized as having a very high thermal runaway point, resulting in a much-reduced potential for fire. The batteries will contain chemicals and materials that are or have the potential to generate hazardous materials, as discussed below. The Project BESS would be comprised of multiple self-contained, pre-fabricated enclosure battery units, approximately 12 to 15 feet in height, in a series of parallel configurations.

Therefore, based on applicant's materials and assessments conducted for this Initial Study, lithium-ion batteries within the proposed facility have the potential to release hazardous materials. Lithium battery technology is evolving and becoming safer to use in all applications.[20] The individual racks within each battery array cabinet will reportedly contain multiple 3.2-volt battery cells. The overheating and subsequent failure of one lithium-ion battery can cascade into the failure of hundreds of batteries via a thermal runaway event. These events are rare, but can be initiated by short-circuiting, overcharging, heating, or physical damage as can occur in the event of an earthquake or flood. The volume of gases released from burning lithium-ion batteries is proportional to the battery's charge. A fully charged battery will release more gases during a thermal event compared to batteries with less charge. The gases released from the burning batteries include the following:

- Carbon monoxide (an asphyxiant and explosive)
- Carbon dioxide (induces anoxia)

[19] Technical Memorandum – "Hazardous Materials Assessment for the Desert Peak Energy Center prepared by Dudek, August 2021.

[20] McMicken Battery Energy Storage System Event Technical Analysis and Recommendations, as prepared by DNV GL, July 18, 2020.

- Hydrogen fluoride (acutely toxic)
- Fluorine (acutely toxic)
- Phosphoryl fluoride (acutely toxic)
- Phosphorus pentafluoride (acutely toxic)

As noted above, most of the gasses released by lithium-ion batteries are acutely toxic, meaning that they have harmful effects through a single or short-term exposure. These gases have the following immediate impact on human health.

- Chemical burns of eyes, mouth, and skin
- Damage to upper respiratory tract and lungs

Fire Safety, Detection and Suppression
The Project battery/inverter arrays will be primarily oriented in east-west rows and each row will be separated by approximately 10 to 15 feet somewhat isolating one cabinet set from another. The project description states that each enclosure unit would have a fire rating in conformance with local fire authority and County of Riverside standards. The Project will also comply with California Fire Code 2019 as adopted by the City of Palm Springs.[21] The Project's fire protection design will comply with Section 1206 Electrical Energy Storage Systems, which adopts the National Fire Protection Association's Standard for the Installation of Stationary Energy Storage Systems (NFPA 855).[22,23] The BESS technology to be used at the Project site will also include a Battery Management System (BMS) that detects high temperatures at the battery cell or battery module level and automatically shuts down the battery rack. The BESS technology ultimately proposed will be tested prior to installation and will follow manufacturer specifications and any City Fire Marshall recommendations for the spacing of batteries, clearance distances and thermal management and fire suppression, as needed, to further prevent a thermal runaway event.

Each unit will also be equipped with a thermal management system for thermal management of the batteries. The need for and appropriate type of fire suppression will be determined by the Fire Marshall and will comply with applicable state or local code. Power to the thermal management system and lighting would be provided through a connection to the on-site station service transformer with connection lines installed above and/or below ground. The BESS will be unmanned, and operational control would be performed off-site. Operational staff would also perform periodic inspections and maintenance as necessary.

BESS Monitoring and Response
BESS operational control will include 24/7 monitoring, which will be performed off-site through the proposed Supervisory Control and Data Acquisition (SCADA) system. Information that is monitored by the SCADA and associated systems include battery information such as the state of charge, battery health, current, voltage, temperature, and alarm indicators such as fire warning. If there is anomaly or issue with a battery unit, the SCADA and associated remote monitoring systems would immediately alert trained personnel. The facility has the capability to be shut down remotely, if necessary. Local personnel will be present in the immediate area during business hours and responsible and available for in-person emergency response around the clock, if necessary. Personnel will be trained to interact closely with the Project engineering team as needed to achieve resolution of operational issues in a timely and disciplined manner. In the case of a fire, operators will

21 Palm Springs, California Municipal Code. 8.04.500 California Fire Code Adopted.

22 California Fire Code 2019, Section 1206 Electrical Energy Storage Systems. https://up.codes/viewer/california/ca-fire-code-2019/chapter/12/energy-systems#1206

23 NFPA 855: Standard for the Installation of Stationary Energy Storage Systems (2020). Prepared by the National Fire Protection Association. https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=855

coordinate with first responders and fire officials to safely extinguish the fire and will follow local, state, and federal regulations to dispose of any damaged materials.

Discussion of Impacts

a, b) Less Than Significant Impact With Mitigation.

The Project battery and inverter cabinets will be located on concrete piers, steel piles, or aggregate pads. The battery enclosures will come onto the site fully equipped with batteries et al. While the initial construction will involve the delivery and installation of hundreds of cabinets, once placed on the site these facilities will not be moved until batteries are ready for recycling, which will occur off-site. The batteries will be installed in groups and will have a 20-year life. Occasional replacements will be required as batteries fail. The batteries will be electronically monitored 24 hours a day, 7 days a week, with reports transmitted to the applicant's off-site facilities. Transport of these batteries will be limited, and will not occur on a regular basis once the Project is built out. As noted above, transport of lithium batteries is regulated by the US Department of Transportation, and the Project proponent will be required to conform to these regulations.

The Project will result in the storage of a large number of these batteries on the Project site. Potential upset and accident conditions include fire that results from overheating or other electrical fault conditions within the BESS containers, or a fire that spreads to the Project site from an adjacent property. The Project proponent describes the batteries to be used as lithium-ion battery cells the exact composition of which is not known. The Project will be equipped with a constantly operating monitoring system, including temperature sensors. The system will be automated and will alert the project proponent should any issue arise. The proposed Project will also be equipped with an automatic shut-down system.

The City's Fire Department will also impose all appropriate conditions regarding monitoring and the inclusion of fire detection and possible suppression systems, including but not limited to compliance with National Fire Protection Association 855 standard. The system will include an automatic shut-down system for fans that keep the container sealed when the proposed fire extinguishing system is activated. This unmanned utility facility will be visited only periodically by maintenance personnel trained through the Occupational Safety and Health Administration's (OSHA) as required by law.

Other potential upset conditions include intentional or unintentional damage, theft, or vandalism, resulting in damage to the BESS or exposure of the battery system components to the environment. As discussed under the project description, the entire Project site would be fenced for security and to restrict access. A Safety and Security Plan will be submitted to the City prior to installation of batteries and inverters. The Fire and Police Departments will impose conditions of approval for security monitoring and alarm requirements to reduce the potential for vandalism or unauthorized access.

As has been noted in Section VII: Geology and Soils, above, portions of the Project's Phase 1 site are crossed by the active Banning Branch of the San Andreas Fault System, with linear and parallel splays shown on USGS maps. A wide Alquist-Priolo study zone has been delineated through this area. Although the applicant has agreed not to locate batteries, inverters or substations within the seismic setback, a strong earthquake along or in proximity of the Project site has the potential to damage and perhaps breach battery cabinets and causing a battery fire and an uncontrolled release of materials.

Battery Recycling
Lithium batteries have a long useful life and are highly recyclable. These batteries usually last up to 20 years, but eventually their useful lives end.[24] Lithium batteries are potentially a valuable source of recyclable metal and recent evidence indicates that recycled lithium batteries can perform as well or better than new ones. Therefore, all batteries in California that are intended for disposal must be recycled, or taken to a universal waste handler, or an authorized recycling facility. The Project will be required to recycle or dispose of all batteries according to the California Department of Resources Recycling and Recovery guidelines.[25]

Neither is the Project expected to exacerbate risks associated with the hazardous materials currently stored on site in support of wind turbine operations. With the implementation of fire detection and other protective systems, site security measures and State and federal BESS-specific requirements, impacts associated with the release of hazardous materials will be less than significant.

c) **No Impact.** The Desert Hot Springs High School is located approximately 3.6 miles northeast of the Project site. The Project is not anticipated to emit hazardous emissions during operations to affect any surrounding school. No impact is anticipated.

d) **No Impact**. The proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Project is not expected to exacerbate risks associated with the hazardous materials currently stored on site in support of wind turbine operations. The Proposed Project will not create a significant hazard to the public or environment from past contamination. As noted above, there are no known active or closed hazardous waste facilities or generating sites within one mile of the proposed Project, according to the California Department of Toxic Substances Control Database; GeoTracker Database.

e) **No Impact**. As described in Section XI: Land Use, the Project site is located 5.5± miles north of the airport planning area for the Palm Springs International Airport. Existing on-site wind turbines will not be affected by the proposed Project. New facilities will be limited in height with the exception of planned 160-foot steel transmission towers planned along the 16th Avenue corridor. No impact is anticipated.

f) **No Impact**. The proposed Project would not impair implementation of or physically interfere with implementation of an adopted emergency response plan or emergency evacuation plan. The Project site is divided by and has access onto Dillon Road with additional access onto Diablo Road. Multiple routes are available to access or evacuate the Project site. The Project will not alter the circulation pattern in the area, nor change the manner in which emergency evacuations would be conducted. No impact would occur.

g) **No Impact**. According to the City's General Plan, the Project site is not located in a wildfire hazard zone. The Project site is partially vegetated with low-density native and non-native plant cover. The Project site is surrounded by other energy and related industrial uses, with limited residential development west of Diablo Road. There are no wildlands or areas of substantial vegetation vulnerable to wildland fire near the Project site. No impact is anticipated.

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[24] The future of automotive lithium-ion battery recycling: Charting a sustainable course by Linda Gaines (2014)

[25] Batteries - https://www.calrecycle.ca.gov/reducewaste/batteries, Accessed June 2019.

Mitigation Measure:

HAZ-1. The applicant shall confer with the City Fire Marshall and shall provide detailed data, specifications and other information on the BESS system to be assembled on the Project site and shall ensure that system fire hazards, fire detection and suppression, if needed, conform with the most current technological and performance standards for this technology.

HAZ-2. A Safety and Security Plan shall be prepared for the project and will be submitted for City review and approval.

Monitoring:

HAZ-A. Prior to the issuance of BESS construction and installation permits, the City Fire Marshall shall review and approve performance testing and manufacturer requirements and approve the BESS technology.
Responsible Party: Planning Department, Fire Marshall, Applicant, Technology Vendor
Schedule: Prior to approval of BESS technology and issuance of building permits

HAZ-B. Prior to the installation of battery cabinets on any Project phase, the applicant shall submit and secure City approval of the operations Safety and Security Plan.
Responsible Party: Planning Department, Fire Marshall, Applicant, Technology Vendor
Schedule: Prior to approval of BESS technology and issuance of building permits

Sources: Palm Springs General Plan, 2007; California Department of Toxic Substances Control Database; GeoTracker Database, California Water Resources Control Board accessed 2.2.22; "Riverside County Airport Land Use Compatibility Plan Policy Document," March 2005; Hazardous Materials Assessment for the Desert Peak Energy Center, prepared by Dudek. August 30, 2022; Appendix A of Proponent Project Description "Fire Hazard Assessment of Lithium-Ion Battery Energy Storage Systems" prepared for the Fire Protection Research Foundation (Quincy, MA) and prepared by Exponent, Inc. 2016

X. HYDROLOGY AND WATER QUALITY **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Environmental Background

The Project site is located in the service area of the Mission Springs Water District (MSWD), which provides domestic water service from a variety of wells and elevated storage. In addition to rainfall and mountain runoff, regional groundwater is also recharged using Colorado River water that is turned out into upslope spreading ponds from the Metropolitan Water District (MWD) Colorado River Aqueduct that passes through the northwest corner of the valley and is used to recharge groundwater in several parts of the Coachella Valley.

Groundwater for municipal use comes from the upper portion of the Whitewater River Subbasin of the Coachella Valley Groundwater Basin (Basin 7-21 in CDWR Bulletin 118). Table 1 of the Engineer's Report on Water Supply and Replenishment Assessment - East Whitewater River Subbasin Area of Benefit (2014-2015) shows that the estimated groundwater storage capacity of the Whitewater River Subbasin is 28,800,000 AF.

Flood Control Facilities and Designations

Average annual rainfall is low, about 5 inches, but the Project vicinity can be subject to short-duration, high-intensity storms that can quickly fill local drainages. There are no flood control facilities in the Project vicinity that could affect or be affected by the proposed Project. The site is located on

a large gently sloping alluvial fan emanating from mountains to the northwest. Flows are intercepted farther downstream and are ultimately conveyed to the Whitewater River south of US Interstate-10 and the Union Pacific Railroad lines.

The proposed Project site and the areas surrounding it are subject to City requirements relating to flood control. The site is also located within the regulatory district of Riverside County Flood Control (RCFC), which also provides such services to the City. The City and RCFC implement standard requirements for construction within flood zones, retention of storm flows where applicable, and participate in the National Pollution Discharge Elimination System (NPDES) to protect surface waters from pollution.

The site is located in FEMA Zone X, an area of minimal flood hazard (Appendix B). Although the site is not located within a FEMA special flood hazard area (SFHA), it is located in the 100-year California Department of Water Resources (DWR) "Awareness Floodplain," which means without specific depths and other flood hazard data, this area is possibly prone to flooding.

Existing Conditions

The Project site is located on a gently sloping alluvial plain formed by the confluence of intersecting alluvial fans emanating from surround hills and canyons. The site is subject to storm flows due to its location on an active desert alluvial fan and near a concentrated flow path. Four watersheds contribute flow to the site and all four are within the Whitewater River watershed.

The generally southeasterly-flowing intermittent streams and washes fan out from the San Bernardino Mountains in the northwest with one stream bisecting the southwestern corner and one continuing from the Phase 1 site and bisecting the northwestern and southeastern portions of the Phase 2 site. The National Wetland Inventory (USFWS 2021) depicts the same riverine features and an additional riverine feature continuing from the Phase 1 site and bisecting the Phase 2 site north to south.

The southern drainage flows from northwest to southeast through the southwestern corner of the Phase 2 site, is an ephemeral wash originating from the northwest. Flows continue southeast off of the Phase 2 site until their confluence with Garnet Wash. The western drainage is comprised of braided, ephemeral features that flow northwest to southeast and originate in the Painted Hills to the northwest. From Painted Hills the flows continue southeast, flowing under State Route (SR) 62, and then continuing southeast approximately 1.73 miles, where flows are directed south by the SCE Devers Substation.

An additional undercrossing of an access road to the substation is located directly north of the Project site. Flows continue south through the Phase 1 site before crossing Dillon Road and enter onto the Phase 2 site where they continue for approximately 0.5 miles southeast before dissipating as sheet flow. Directly north of the Phase 1 site is the approximately 148±-acre SCE substation which consists of mostly of graded and compacted soils with gravel or paved cover.

On the northern and northwestern edge of the substation is a barrier armored with riprap, assumed to divert, and disrupt southeasterly flow from the westernmost contributing watershed. A culvert is located on the eastern portion of the Phase 1 site which collects flow from the northwest and conveys it east under Melissa Lane. It is assumed that the drainage area contributing to this culvert outfall is primarily the graded, compacted pad on the northeastern portion of the Phase 1 site.

Surface Water Quality

Urban development affects the water quality of regional surface waters. Runoff from storm water can transport pollutants that collect on the ground surface and affect water quality of receiving streams, rivers, and channels. As discussed above, there are several local and regional flood control facilities within the City, which drain into the Whitewater River and ultimately the Salton Sea.

Ultimate development of the site will result in the construction of a battery energy storage facility. The Project's potential impacts to Hydrology and Water Quality are discussed below.

Discussion of Impacts

a) **Less Than Significant Impact.** Pollutants of concern during construction and operation include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. The Project site is located in the Whitewater River watershed where all water providers are required to comply with Regional Water Quality Control Board standards for the protection of water quality. The Project will also be required to comply with National Pollutant Discharge Elimination System (NPDES) regulations, which minimize the pollutant load associated with urban runoff, including the preparation of site-specific Water Quality Management Plans for surface waters. As a condition of approval, the Project proponent will be required to provide a Water Quality Management Plan (WQMP), which will include Best Management Practices (BMP) for the treatment of storm flows for the proposed Project. These will include the proposed swale, located adjacent to the parking area on the north end of the Project.

MSWD is required to meet water quality requirements in its production and delivery of domestic water. The proposed battery storage facility will be a nonheritable structure with no domestic water use and sewerage discharge. The imposition of conditions of approval, local, state and federal standard requirements and the requirements of law will assure that the Project will not violate any water quality standards or waste discharge requirements. Impacts are expected to be less than significant.

b) **Less Than Significant Impact.** The proposed Project is a battery energy storage facility which would use water for construction purposes but will generate essentially no long-term demand for either potable or non-potable water. There will be no landscaping or associated irrigation.

The proposed Project is consistent with the land use designation of the General Plan. MSWD works with the City of Palm Springs and its other jurisdictions and regularly updates its Urban Water Management Plan. The Project site's planned use was considered in future water demand projections and analysis, which found that the local purveyor has sufficient supply to accommodate growth now and in the future, with the implementation of a number of conservation strategies. Furthermore, as an unmanned utility facility, the proposed Project will demand no water following completion of the facilities.

c-i) **Less Than Significant Impact.** The Project site sits on a gently sloping alluvial plain and is crossed by numerous braided streams described above. The Project plan largely avoids existing drainages and makes provision for the use of riprap and comparable slope protection to avoid and minimize streambed erosion. Materials to be introduced to the site include poured in place concrete and crushed aggregate, as well as riprap size rock materials at key locations. On-site stormwater intercepts will be lined with crushed aggregate to avoid and minimize erosion of runoff from these facilities. Adherence to City requirements, including WQMP best management practices, will ensure the Project site design will not result in erosion or siltation on- or off-site.

c, ii-iii) Less Than Significant Impact. As described above, the Project design largely avoids and minimizes encroachments into existing drainages; however, up to 0.23 acres of ephemeral drainages potentially regulated by the USACE, CDFW and RWQCB would be impacted. As such, regulatory permits in the form of a 404 Nationwide Permit authorization from USACE, 1602 Streambed Alteration Agreement from CDFW, and 401 Water Quality Certification from the RWQCB would be obtained to mitigate for potential impacts. Additionally, the project would harden certain areas with riprap and crushed aggregate where erosion might otherwise occur during larger storm events. Much of the developed portions of the site will be compacted earth and crushed aggregate which will also serve to reduce runoff from the Project. Compliance with City requirements and securing regulatory permits will ensure that the Project will not generate or contribute runoff that would result in flooding either on- or off-site, or exceed the capacity of the stormwater systems or provide substantial additional sources of polluted runoff.

Therefore, the Project will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Neither would the Project create or contribute runoff that will exceed the capacity of any existing or planned stormwater drainage systems, nor will it create substantial additional sources of polluted runoff.

c-iv) Less Than Significant Impact The proposed Project has been designed to avoid and minimize encroachment into any of the braided ephemeral streams that cross the development site. With the exception of hardening of some existing channel slopes with riprap to avoid and minimize erosion, the Project will not impede or redirect flood flows.

d) No Impact. The Project site is not located in the vicinity of a water body. No hazard from dam failure, tsunami or seiche is possible. The threat of flooding on the site is limited and proposed development will occur outside of established and mapped drainages. No impact is anticipated.

e) Less Than Significant Impact With Mitigation. As discussed above, the proposed Project will be required to comply with all applicable water quality standards and will implement a WQMP approved by the City and the Regional Water Quality Control Board for both construction activities and long-term operation of the site. The management of Project development will include adherence to a variety of programmatic and Project-specific measures that will ensure that pacts to surface and groundwater quality are less than significant. Also, post-development, the Project's expected water demand will minimal or nil and will result in less than significant impacts to any groundwater management plan.

Mitigation Measures:

No new, specific mitigation measures are required beyond programmatic mitigation associated with permitting and plan review. The proposed stormwater design for the Phase 1 site incorporates riprap to serve as energy dissipation placed along the upstream and downstream boundaries of the development areas where flow is anticipated. Energy dissipation and armoring along the upstream development area boundaries should reduce erosion and scour potential in those areas.

The Phase 2 site incorporates riprap on the upstream end of the development areas and 5-foot-deep retention basins on the downstream end. Increased runoff rates will be slowed by a combination of retention basins and energy dissipation devices in the form of riprap downstream of the development areas. In the areas where grading will alter the flow path, it is expected that flow will infiltrate or gradually migrate into existing drainage patterns downstream. The following measures will further ensure that surface and ground water quality will not be compromised by the Project development or operation.

HYD-1: Hazardous Materials Business Plan HMBP

The Project applicant shall prepare and maintain a Hazardous Materials Business Plan HMBP, as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code. The Hazardous Materials Business Plan all required information shall be submitted to the California Environmental Reporting System at http://cers.calepa.ca.gov/ for review and approval.

a. The Hazardous Materials Business Plan shall:
    1. Delineate hazardous material and hazardous waste storage areas;
    2. Describe proper handling, storage, transport, and disposal techniques, including which routes will be used to transport hazardous materials;
    3. Describe methods to be used to avoid spills and minimize impacts in the event of a spill;
    4. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction;
    5. Establish public and agency notification procedures for spills and other emergencies including fires; and
    6. Include procedures to avoid or minimize dust from existing residual pesticide and herbicide use that may be present on the site.
b. The Project proponent/operator shall provide the Hazardous Materials Business Plan to all contractors working on the Project and shall ensure that one copy is available at the Project site at all times.

HYD-2.: Project Plan Review

Prior to finalizing the hydraulic design and engineering plans for project improvements, said plans shall be reviewed and approved by City to ensure that these improvements do not interfere with or adversely affect downstream drainage capacity or the ability of City to manage and maintain these facilities.

HYD-3.: NPDES Requirements

The proposed Project shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES).

HYD-4.: General BMPs

The implementation of BMPs during construction activities shall ensure that erosion and siltation from earthmoving and other construction activities is limited. Exposed soil from excavated areas, stockpiles, and other areas where ground cover is removed shall be stabilized by wetting or other approved means to avoid or minimize the inadvertent transport by wind or water. Temporary construction BMPs considered and incorporated into the Project, as appropriate, would include:

- Soil stabilization (erosion control) techniques such as on-going site watering, soil binders, etc.;
- Sediment control methods such as detention basins, silt fences, and dust control;
- Contractor training programs;
- Material transfer practices;
- Waste management practices such as providing designated storage areas and containers for specific waste for regular collection
- Concrete washout slurry shall be discharged and disposed of in an approved manner
- Site cleaning/tracking control practices;
- Vehicle and equipment cleaning and maintenance practices; and
- Fueling practices.

HYD-5.: Stormwater Pollution Prevention Plan

The construction contractor shall implement a City-approved (SWPPP) during construction of the proposed Project. The SWPPP shall identify specific best management practices (BMPs) that will be implemented during Project construction. BMPs implemented as a part of the Project will ensure that the Project meets the requirements of the California State Water Resources Control Board NPDES Construction General Permit.

Construction-related erosion and sediment controls, including any necessary stabilization practices or structural controls, shall be implemented at and in all potentially affected drainages. General structural practices may include, but are not limited to, silt fences, earth dikes, drainage swales, sediment traps, reinforced soil retaining systems, temporary or permanent sediment basins and flow diversion.

Temporary erosion and sediment control measures shall be installed during or immediately after initial disturbance of the soil, maintained throughout construction (on a daily basis), and reinstalled until replaced by permanent erosion control structures or final grading and other site disturbances are complete. In addition, the following specific actions shall be taken to ensure that impacts are less than significant.

a) The construction shall be avoided within the limits of identified waterways as depicted on the Jurisdictional Delineation Report prepared for this Project, except as authorized by federal, state or local permits.
b) Protect inlets and outlets of culverts from construction material intrusions using temporary berms to prevent drainage incision, erosion, and sedimentation.
c) Erosion control measures appropriate for on-the-ground conditions, including percent slope, length of slope, and soil type and erosive factor, shall be implemented.
d) Temporary erosion controls such as straw bales and tubes, geotextiles and other appropriate diversion and impounding materials and facilities shall be properly maintained throughout construction (on a daily basis) and reinstalled (such as after backfilling) until replaced with permanent erosion controls or restoration is complete.
e) Where jurisdictional waters are adjacent to or within the construction area, the contractor shall install sediment barriers along the edge of the construction right-of-way to contain spoil and sediment within the construction area and limit discharge into jurisdictional areas or waters.
f) Ensure that all employees and contractors are properly informed and trained on how to properly install and maintain erosion control BMPs. Contractors shall require all employees and contractors responsible for supervising the installation and maintenance of BMPs and those responsible for the actual installation and maintenance to receive training in proper installation and maintenance techniques.
g) Project scheduling will include efficient staging of the construction that minimizes the extent of disturbed and destabilized work area, and reduces the amount of soil exposed and the duration of its exposure to wind, rain, and vehicle tracking.
h) The use of a schedule or flow chart will be incorporated to lay out the construction plan and will allow proposed Project improvements to proceed in a manner that keep water quality control measures synchronized with site disturbance, paving and other construction activities.

i) The sequencing and time frame for the initiation and completion of tasks, such as site clearing, grading, excavation, concrete lining and other construction, shall be planned in advance to ensure minimization of potential impacts.

HYD-6.: Petroleum BMPs

To prevent petroleum products from contaminating soils and surface and ground water resources, the following BMPs shall be implemented:

a) Construction equipment and vehicles shall be properly maintained to prevent leakage of petroleum products.
b) Vehicle maintenance fluids and petroleum products shall be stored, and/or changed in staging areas established at least 100 feet from delineated streams and other drainages. These products must be discarded at disposal sites in accordance with state and federal laws, rules, and regulations.
c) Drip pans and tarps or other containment systems shall be used when changing oil or other vehicle/equipment fluids.
d) Areas where discharge material, overburden, fuel, and equipment are stored shall be designed and established at least 100 vegetated (permeable) feet from the edge of delineated streams.
e) Any contaminated soils or materials shall be disposed of off-site in proper receptacles at an approved disposal facility.
f) All erosion control measures shall be inspected and repaired after each rainfall event that results in overland runoff. The Project contractor shall be prepared to deploy and maintain erosion control BMPs associated with the Project.
g) Existing culverts shall be carefully maintained in place in order to ensure that they function properly. Considerations include: maintenance of inlet and outlet elevations, grade, adequate compacted material cover, and inlet/outlet protection.

Monitoring:

No additional monitoring required. Standard programmatic reviews will ensure monitoring and reporting.

Sources: Palm Springs General Plan 2007; Hydrology and Hydraulic Study – Desert Peak Energy Center Phase 1 & 2, prepared by Dudek, January 2022; Technical Memorandum "Desert Peak Energy Center – Hydrology and Water Quality CEQA Analysis, prepared by Dudek, January 28, 2022.

XI. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Environmental Background

The proposed Project is located at the northern extreme of the corporate limits of the City, with a small portion extending north of Ave 16 and into lands under the jurisdiction of Riverside County. The subject lands are designated "Industrial" on the City General Plan and "Energy Industrial" on the City Zoning Map. Surrounding development is limited to scattered low density single-family development located immediately west of the Project's Phase 1 and across Diablo Road. These County lands are designated for Very Low Density Residential (County General Plan (1 du/ac)).

Lands west of Phase 2 of the Project are designated "Rural Desert", which allows for minimum 10-acre lots and allows limited animal keeping, agriculture, recreational, renewable energy uses including solar, geothermal and wind energy uses, as well as associated uses required to develop and operate these renewable energy sources, compatible resource development (which may include the commercial extraction of mineral resources with approval of SMP), and governmental and utility uses. These lands are currently developed with utility-scale wind turbines.

As described under Biological Resources, above, the City of Palm Springs is a signatory to the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). New disturbances outside the boundaries of the CVMSHCP Conservation Areas (CAs) are subject to payment of a development impact fee, which is collected by the City on behalf of the Coachella Valley Conservation Commission (CVCC), which implements the CCVMSHCP. These fees are meant to fund the Plan's implementation, including conservation land acquisitions elsewhere in the Plan area.

a) **No Impact**. The proposed Project would not result in the physical division of any established community or neighborhood. The site is surrounded primarily by vacant desert and energy-related industrial Projects, including wind turbines, solar PV systems, a natural gas-fired electric power "peaker" plant and the SCE Devers Substation. A very low density, mostly undeveloped residential neighborhood is located west of the Phase 1 site and Diablo Road. The Project will not encroach into nor divide any existing or planned residential neighborhood.

b) **Less Than Significant Impact With Mitigation**. The proposed Project is largely consistent with both the City's General Plan land use and Zoning designations for these properties. One exception is the proposed development of batteries and inverters within 100-feet of an active fault trace (see General Plan Safety Element[26] The Project is also located outside of

[26] Palm Springs General Plan Safety Element 2007. Policy SA1.5 Disallow the construction of buildings designed for human occupancy within 50 feet of an active fault and prevent new critical, sensitive, and high-occupancy facilities from being located within 100 feet of a potentially active fault.

the boundaries of the Palm Springs International Airport Land Use Compatibility Plan (ALUCP). All Project activities will be conducted pursuant to the City's Municipal Code requirements and standards to avoid any conflict with any land use plan, policy, or regulation. The energy storage use qualifies as a Utility Installation and is subject to approval of a Conditional Use Permit (CUP). As discussed in the Hazards and Hazardous Materials section above, the Project will have less than significant impacts related to public health and safety. No Project-related land use and planning impacts are expected.

Mitigation Measures:

LUP-1. Pursuant to Mitigation Measure GEO-1 and related measures set forth in this Initial Study, BESS facilities, including batteries, inverters and substations, shall be removed from the identified seismic setback and shall be placed no closer than 100 feet from any mapped fault trace.

Monitoring:

LUP-A. Prior to the issuance of grading or building permits, the applicant shall submit for City approval final Project design and engineering reflecting removal of all previously proposed Project facilities located within the Anderson setbacks established by previous trenching and seismic evaluations. Final plans shall delineate relocated improvements and the subject set back line. In no instance shall BESS facilities be located within 100-feet of any mapped fault trace.
Responsible Party: City, Developer, Project Geologist
Schedule: Prior to approval of construction plan set or issuance of grading permits.

Sources: Palm Springs General Plan 2007 (Figure 2-2); City's online Zoning Map http://www.palmspringsca.gov/home/showdocument?id=26522; Ordinance No. 1933 and 1935; Palm Springs International Airport Land Use Compatibility Plan; Riverside County Airport Land Use Compatibility Plan (RCALUCP); Riverside County Airport Land Use Compatibility Plan Project Review, https://www.riversideca.gov/planning/pdf/2008-forms/ALUC-Compatibility-Plan-Project-Review.pdf, Accessed March 2019.

XII. MINERAL RESOURCES **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Background

Eroding hills and mountains surrounding the Coachella Valley have filled the valley with significant amounts of silt, sand, gravel and cobble. Currently, there is only one active sand-and-gravel mining operation (Garnet plant; MRZ-1) within the City, which has been operational since 1966. No existing sand or gravel operations occur in the vicinity of the Project site. The Project site is located in an MRZ-3 resource zone, which is defined as areas containing mineral deposits the significance of which cannot be evaluated from existing data.

Discussion of Impacts

a, b) **No Impact**. In the General Plan (2007) and the mineral lands classification by the state, the Project site and surrounding area is designated as Mineral Zone MRZ-3, which indicates an "*area containing mineral deposits; however, the significance of these deposits cannot be evaluated from available data*." The subject site occurs on an expansive alluvial plain with relatively small drainages crossing it in a series of braided streams.

The Project site does not contain or lie immediately adjacent to a known mineral resource that would be of value to the region or the state. According to the United States Geological Survey Mineral Resources On-Line Spatial Data map, the nearest site holding a mineral resource of importance is the Garnet Plant, which is located more than 6 miles northeast of the Project site. As the Project would not result in the loss of availability of a known mineral resource of value or the Garnet Plant, no impact would occur.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan, 2007 (Figure 5-3); Mineral Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region, A Special Report by California Department of Conservation Division of Mines and Geology (1988).

XIII. NOISE **Would the project result in:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

XIII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Background

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." The main sources of noise include road traffic, aircraft, railroads, construction, industry, noise in buildings, and consumer products.[27]

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA would result in permanent cell damage. To protect the residents, the City of Palm Springs has established goals, policies, and programs in its General Plan to limit and reduce the effects of noise intrusion on sensitive land uses and to set acceptable noise levels for varying types of land uses. The City has also adopted Municipal Section Code 8.04.220 to limit construction related noise effects.

The Project site is located in a largely undeveloped area of the northwestern Coachella Valley and in an area that has seen limited residential development but extensive energy and energy-related development, including large-scale wind turbines, solar PV arrays and numerous substations. The area also hosts a natural gas-fired electric power "peaker" plant that is used to help meet peak power demand. The closest sensitive receptors are located west of the Project site and Diablo Road. The Project site lies outside the area of influence of the Palm Springs International Airport. Four short-term sound pressure measurements were made, including two adjacent to homes on the west side of Diablo Road. The Leq(dBA) measurements were all less than 60 dBA.

City Noise Standards

Figure 8-2 in the General Plan shows the local noise standards/thresholds. Acceptable exterior noise levels for industrial development is 75 dBA CNEL. That does not include construction related noise levels as construction activities generate temporary noise and are acceptable within certain time periods. The City has established Municipal Code Section 8.04.220, which limits construction activity to between 7 a.m. to 7 p.m. on weekdays and 8 a.m. to 5 p.m. on Saturdays. No construction activity is permitted on Sundays and holidays.

27 EPA Clean Air Act Title IV - Noise Pollution.

Project Noise Effects

The Project will consist of approximately 728 battery containers, each with two (2) "silenced" Bard externally-mounted air-conditioning units. Manufacturer data indicates that each sound-attenuated ("silenced") Bard unit (model W72AA) exhibits 51.2 dBA Leq at a distance of 5 feet. For comparison purposes, without the noise silencing on the return air and supply air ducts, the Bard unit demonstrates a noise level of 62 dBA Leq at 5 feet (Bard 2017). Per the Project designs, the noise prediction model includes inverters that will feature noise control upgrades (e.g., close-fitting enclosure surrounding the inverter cabinet, with sound-attenuated ventilation ports) yielding 12 dB of broad-band sound reduction.

Discussion of Impacts

a) **Less Than Significant Impact.** A noise impact analysis was conducted for this project[28]. The Project site is currently largely vacant and developed with scattered utility-scale wind turbines. The main noise source in the area is vehicular traffic on adjacent roadways (Dillon Road and Diablo Road). The surrounding area mainly consists of industrial energy developments and vacant lands with the nearest sensitive receptors being homes on the west side of Diablo Road.

During construction, noise-generating sources would include site preparation, excavation, grading, the pouring of concrete foundations, the installation of pre-fabricated containers, and related activities. The proposed Project site in proximity to sensitive receptors; however, once construction is completed they will not experience significant noise-level increases during or following Project construction. Also, Project construction would be subject to City standards regarding the timing of construction activities, as discussed above.

During operation, the battery energy storage system would store and discharge electrical energy from and to the grid in an electrochemical process. The primary source of noise from the battery storage system would be from the power control system (PCS) enclosure ventilation fans and battery storage module thermal management systems described above. The batteries and inverters make very little noise and would be fully enclosed. When operating at full power, the ventilation fans and thermal management systems would cycle on and off, generating noise levels typical of such systems on other industrial and commercial buildings in the area surrounding the Project site.

At buildout, the Project's operational vehicle mix and land use activities will be comparable with existing industrial noise levels in the surrounding area. Traffic levels and associated noise will not increase beyond that forecast in the General Plan at build out. Noise generated by employees periodically maintaining the site is expected to be less than that generated at an industrial development and will not exceed City standards.

Overall, the proposed industrial development will be compatible with surrounding land uses, and operational noise impacts are not expected to exceed acceptable industrial noise standards. The proposed Project is not expected to result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. Less than significant impacts are expected.

[28] Desert Peak Energy Center Project – Noise Technical Study prepared by Dudek. October 7, 2021.

b) **Less Than Significant Impact.** Construction of the Project would generate ground-borne construction vibration during site clearing and grading activities. Project construction would generate varying degrees of ground vibration, depending on the construction procedures and the construction equipment used. The construction activities that typically generate the most severe vibrations, such as blasting and impact pile driving, would not occur for the Project. Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated.

Based on the vibration data provided by Federal Transit Administration, vibration velocities from operation of construction equipment would range from approximately 0.003 to 0.089 inches per second peak particle velocity (PPV) at 25 feet from the source of activity. This range would be well below the City's standard of 0.01 inches per second root-mean-square (RMS). The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Given that the nearest sensitive receptor is located more than 200 feet away, construction vibration will have no or very limited impact on sensitive receptors.

c) **No Impact**. As discussed in Section XI (Land Use), the Project site is located outside of the Palm Springs International Airport area of influence. The Project site is designated as Industrial-Energy in the City's General Plan Land Use. The proposed Project will result in an unmanned utility facility which will be visited only periodically be people for maintenance. The Project will not expose residents or employees to significant noise from airport operation.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan 2007; Google Earth Pro 7.3.1.4507; Noise Technical Study – Desert Peak Energy Center Project, prepared by Dudek, February 25, 2022.

XIV. POPULATION AND HOUSING **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

XIV. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Background

Southern California Association of Governments has projected that the City of Palm Springs will have a population of 56,900 in 2040. These numbers also assume that there will be 31,300 households. Employment is also projected to increase up to 45,800 jobs.

Discussion of Impacts

a, b) **No Impact**. Construction and operation of the proposed Project would not displace any existing housing or people. Many of the Project components will be constructed and assemble off-site and will be shipped to the site for installation. Construction crews will be specialists in grading, concrete and steel erection, and electrical engineering. Once constructed, the Project will require limited staff maintenance and no on-site staffing will be required. The Project site is used and zoned for industrial uses and development. Therefore, no impact would occur as a result of the proposed Project.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan 2007; 2016-2040 RTP SCS by Southern California Association of Governments (Appendix – Demographics and Growth Forecast).

XV. PUBLIC SERVICES Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☒	☐	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Environmental Background

Fire Protection: The Project site is located in an area where the Palm Springs Fire Department provides fire, paramedic, and emergency services. Provisions of the Fire Code are also enforced by the City's Fire Department. That department also reviews plans for the new development, coordinates disaster preparedness programs, weed abatement, inspections, and the Hazardous Materials Business Program.

Fire Station 3 is the nearest fire station, which is located at 590 E Racquet Club Rd, Palm Springs, approximately 4.85 miles southeast of the Project site. Station No. 3 has a service area that extends from east to Gene Autry Trail, south at Tachevah Canyon Drive, north to the city limits and west at City Limits. The City Fire Department processes fire plan applications and issues a variety of permits.

Also in proximity is Desert Hot Springs Fire Station No. 36 located 2.5± travel miles north of the Project site. The Cities of Palm Springs and Desert Hot Springs have a mutual aid agreement.

Police Protection: The Project site is located in an area where the Palm Springs Police Department offers response service, criminal investigation, traffic enforcement, and preventive patrol. The nearest police station is the Palm Springs Police Department, which is located at 200 S Civic Drive, approximately 1.58 miles northwest of the Projects site.

Schools: The Project site is located with the Palm Springs Unified School District's (PSUSD) jurisdiction. The nearest public school is Desert Hot Springs High School at 65859 Pierson Boulevard, Desert Hot Springs, approximately 3.2± miles northeast of the Project site.

Parks: Approximately 1,517 acres of land is dedicated for open space in the City. The nearest park to the Project site is Victoria Park located at 2744 N Vía Miraleste, Palm Springs, a community park featuring a playground, covered picnic tables, green space & scenic mountain views and located approximately 4.8± miles south of the site. The nearest Desert Hot Springs park is the Guy J. Tedesco Park located at 12-800 W Arroyo Dr and being a neighborhood park with recreational amenities.

Discussion of Impacts

a) **Less Than Significant Impact With Mitigation.** The Project battery enclosure unit will have a fire rating in conformance with local fire authority and County of Riverside standards. Each unit will also be equipped with a thermal management system to moderate battery temperature. Power to the thermal management system and lighting will be provided through a connection to the on-site station service transformer with collector lines installed above and/or below ground. The BESS will be unmanned, and operational control will be performed off-site. Operational staff will also perform periodic inspections and maintenance as necessary. Please see Section IX: Hazards and Hazardous Materials for more discussion regarding fire safety and prevention measures.

The Project site would be served by the Palm Springs Fire Department. The City of Palm Springs Fire Department has a staff of about 18 firefighting personnel available during each 24-hour period, which should accommodate the marginal increase in service demand resulting from the Project. The Project will be an unmanned utility facility containing lithium-ion batteries with a well-documented potential for thermal runaway. Nonetheless, the Project is not expected to create a significant demand for service. Fire personnel should be able to reach the site within a 5±-minute response time. Access to the Phase 1 and 2 development sites is available from Dillon Road and Melissa Lane. Several drives provide property access via from existing public roadway network.

To reduce the impact to the fire department, the Project proponent will be required to pay the City's development impact fees. The Fire Department will review the Project site plans and the types of facilities, including batteries, to be used in the Project, to ensure it meets applicable fire standards and regulations. The Project will also be required, because of the nature of the use, to construct specific fire suppression systems as prescribed by local, State and federal standards for the storage of lithium batteries, and will be continually monitored via an electronic monitoring system. These components of the Project are already proposed by the applicant and detailed information on battery types and fire detection and other protective systems to be used have been provided as a part of the application package.

An emergency response plan will also be required to be kept on file, and the Fire Department will regularly inspect facilities to assure adherence to all requirements. No construction of new or expanded fire services or facilities are required for the proposed Project. Overall, less than significant impacts are anticipated.

b) **Less Than Significant Impact**. Security for the proposed Project is largely already in place, with 6-foot chain link and barbed wire along portions of the existing perimeter fence. Project plans call for additional fencing and security gates at each battery/inverter array and at Project substations. Security monitoring equipment and lighting are also planned. The Project site would be served by the Palm Springs Police Department. There may be a heightened potential for materials theft during Project construction; however, with on-site security during that period and with City police response, the Project's function as an attractive nuisance and impacts on city law enforcement are expected to be less than significant. The Project site is currently within the service area for emergency responders and proposed Project

activities are not anticipated to result in an increase in calls for service or create the need for new or expanded service. Impact mitigation fees would be paid as required. Overall, less than significant impact is anticipated.

c-e) No Impact. Many of the Project components will be constructed and assemble off-site and will be shipped to the site for installation. Construction crews will be specialists in grading, concrete and steel erection, and electrical engineering. No new household formation is expected to result from project construction or operation. Post-construction, the Project will not generate a significant number of new jobs; security and monitoring are to be conducted remotely. The proposed unmanned utility facility and its absence of a residential component precludes any increases in population or household formation, or increased demand for schools, parks, or other public facilities. Therefore, the proposed Project would have no impact on these services.

Mitigation Measures:

PS-1. The applicant shall prepare and submit to the City Fire Marshall final, detailed specifications for proposed battery arrays and other equipment that have the potential to contribute to a fire threat. Applicant information will also detail all aspects of the Project fire detection and suppression system, as well as equipment and facilities meant to prevent battery and other types of fires, as well as chemical releases.

Monitoring:

PS-A. Prior to the issuance of grading or other development permits, the fire detection and suppression system plans, program and specifications shall be submitted to and approved by the City Fire Marshall.
Responsible Party: City Planning, City Fire Marshall, Applicant
Schedule: Prior to the issuance of grading or other development plans

Sources: Palm Springs Fire Department; "Palm Springs Fire Department Service Report, 2013": Tables 5-1 and 5-3, Palm Springs General Plan, 2007; "Palm Springs Parks and Recreation Master Plan Draft," March 2014.

XVI. RECREATION **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
	☐	☐	☐	☒

XVI. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

Environmental Background

As discussed above, approximately 1,517 acres of land is dedicated for open space in the City. The nearest park to the Project site is Victoria Park located at 2744 N Via Miraleste, Palm Springs, a community park featuring a playground, covered picnic tables, green space & scenic mountain views and located approximately 4.8± miles south of the site. The nearest Desert Hot Springs park is the Guy J. Tedesco Park located at 12-800 W Arroyo Dr and being a neighborhood park with recreational amenities.

Discussion of Impacts

a, b) No Impact. The proposed Project does not include new housing or significant permanent job creation, and would not generate any population growth. Therefore, the Project would not result in increased demand for parks or recreational services. There are no existing recreational uses of the Project site. Accordingly, the proposed Project would have no impact on recreation resources.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan 2007; 2016-2040 RTP SCS by Southern California Association of Governments (Appendix – Demographics and Growth Forecast).

XVII. TRANSPORTATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

XVII. TRANSPORTATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

Environmental Background

The Project site is located north and south of Dillon Road between Diablo Road and its extension on the west and Melissa Lane and its extension on the east. Access to the Project site will be provided through a series of driveways on Dillon Road, Melissa Lane and Diablo Road, which can also be used for emergency access.

The City's acceptable Level of Service (LOS) for major roadway and intersections operation is LOS D or better. The proposed Project will have no effect on current or future traffic volumes on these roadways.

The Project site is partially developed with utility-scale wind turbines and associated facilities. Traffic generation trip rates were derived from ITE Trip Generation Manual, 9th edition and Palm Springs General Plan. For this Project, the Utilities land use category was used to calculate the daily trip rates.

The potential impacts of the proposed Project on Transportation/Traffic are discussed below.

Discussion of Impacts

a) No Impact.

Existing Traffic Conditions

The site is currently developed with utility-scale wind turbines and associated facilities. Existing roadways in the vicinity of the Project site are operating at LOS A consistent with the relative low traffic volumes on these roadways. While there may be temporary impacts along the subject roadways during construction, these impacts will be temporary, intermittent and will end once construction is complete.[29]

Construction Phase Project Trip Generation

An analysis of average daily trips associated with project construction were evaluated as a part of the air quality and greenhouse gas impact analysis.[30] Project Phase 1 construction

[29] General Plan Buildout Forecast 2025 Arterial Daily Level of Service (Page 24-19)

[30] Phase 1 and Phase 2 Desert Peak Energy Center Air Quality and Greenhouse Gas Emissions Studies. January 2022.

workers and vendors will generate an estimated daily average of 250 one-way trip (500 round-trips), while Phase 2 construction workers and vendors will generate approximately 304 one-way or 604± average daily round-trips. It is important to note that each phase will be constructed in sequence; therefore, the Phase 1 trips and Phase 2 trips are not combined.

The lion's share of construction traffic will be haul truck trips, which have been calculated in the aggregate and will be occurring across the approximately 17 months of construction for each phase. Over this period, Phase 1 will generate approximately 21,498 haul trips. Distributed to workdays across the 17-month construction period, Phase 1 haul trips would average 58.5 daily trips. Construction of Phase 2 will take approximately 17 months and will generate about 14,848 haul trips or an average of 40.3 daily trips.

In summary, construction of Phase 1 will generate approximately 558 average daily trips, while Phase 2 construction will generate approximately 644 average daily trips. Again, note that these Phase 1 and 2 average daily trip volumes will occur in sequence.

Construction-related travel is expected to occur mainly on US Interstate-10, Indian Canyon Drive, Highway 62 and Dillon Road (23,000 AADT at US I-10). With the exception of US I-10, these are low-volume roadways and project traffic will have a very limited and less than significant impact on roadway capacities. US I-10 has much higher volumes (82,000 AADT in 2020) but also much larger capacity and is also expected to be less than significantly impacted by project construction traffic, which will be temporary and short-term.

Post-Construction Project Trip Generation

Vehicle trip rates were derived from the Institute of Transportation Engineers (ITE) 9th Edition Trip Generation, an ITE Informational Report. For analysis purposes, the Utilities (ITE Land Use Code 170) trip rate is used to define the proposed Project which is anticipated to generate a net total of 1 trip-end per day which only includes 1 PM peak hour trip. The proposed Project is anticipated to generate negligible trips during either AM or PM peak hours as shown below.

Trip Generation Results – Previous Use **									
Land Use	**ITE**	**Units**	**AM Peak Hour**			**PM Peak Hour**			**Daily**
			In	Out	Total	In	Out	Total	
Utilities	170	TSF	NA	NA	0	45%	55%	1	**1**
Trip generation estimates for the proposed use are based on average rates contained in the ITE 9th Edition Trip Generation Report (Online calculator).									

As shown above, the proposed Project is expected to introduce a negligible number of new trips on Dillon Road. Therefore, and when compared to a traditional industrial land use which was planned for the site in the General Plan's circulation analysis, the Project will have no impact on the City's circulation systems.

Public Facilities Along Dillon Road

Currently, Dillon Road is not built out to its full General Plan width. There are no bike lanes or any other multi-modal facilities located along this or other Project roadways; however, bicycle facilities are proposed along it in the Palm Springs Active Transportation Plan.

The City of Palm Springs is served by the SunLine Transit Agency for bus transit services. Currently, the subject site is not served by SunLine. However, since the site will not be manned, bus service will not be required.

Summary
Overall, the proposed Project would result in no impacts to any applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system of the City.

b) **No Impact**. Senate Bill 743 (SB 743) requires amendments to the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts.[31] Particularly within areas served by transit, those alternative criteria must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (Public Resources Code Section 21099(b)(1).) Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

The City of Palm Springs has established guidelines for Vehicle Miles Travelled (VMT) impact for CEQA compliance. The VMT assessment has been prepared in accordance with methodology established in the City of Palm Springs.[32] The guidelines identify the following screening criteria to determine if a presumption of a non-significant transportation impact can be made based on the facts of the Project. These include (1) Local-serving retail uses less than 50,000 square feet; (2) Small projects generating less than 110 trips per day, including 10,000 square feet of office use, or 15,000 square feet of light industrial use, or 63,000 square feet of warehousing.

As discussed above, and based on the City's VMT thresholds, the proposed Project is expected to have no impact on traffic flows and Level of Service standards as Project peak hour traffic volumes will be minimal and less than those analyzed by the City in its General Plan EIR. Therefore, no impact is anticipated.

c, d) **No Impact**. Access to the Project site will be provided via US Interstate-10 and/or State Highway 62, and Dillon Road, Diablo Road and Melissa Lane

Prior to construction, both the Fire Department and Police Department will review the Project site plan to ensure safety measures are addressed, including site and emergency access and geometric design. Therefore, the proposed Project will not result in inadequate emergency access or increase hazards due to a geometric design feature.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan 2007; Active Transportation Plan (ATP) 2016 by CVAG; SunLine Transit Agency Website; Caltrans Highway Traffic Census 2020.

[31] Transportation Impacts (SB 743) by Governor's Office of Planning and Research (OPR), http://opr.ca.gov/ceqa/updates/sb-743/, Accessed April 2019.

[32] City of Palm Springs Traffic Impact Analysis Guidelines prepared by Fehr and Peers. 2020.

XVIII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental Background

As discussed in Section V (Cultural Resources), Section 15064.5 of the CEQA Guidelines generally defines a historic resource as a resource that is: (1) listed in, or determined to be eligible for listing in the California Register of Historical Resources (California Register); (2) included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code); or (3) identified as significant in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code). Section 15064.5(a)(3)(D) of the CEQA Guidelines generally defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important in prehistory or history." Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community.

The Coachella Valley has been home to Native Americans for millennia. They lived in three small groups: the Pass Cahuilla of the Beaumont/Banning area; the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains; and the Desert Cahuilla from the Coachella Valley. The Cahuilla Indians occupied the region for several centuries, leaving numerous cultural resources.

Phase 1 Resources

A records and literature search indicate that 28 cultural resources have been recorded within 1.0-mile (1608 m) of the Project area of potential effect (APE), four of which were identified within the Project APE. And consisting of consist of three historical isolates and one prehistoric isolate. The historic isolates consist of two steel, flat top beverage can with church-key openings and two rotary-opened sanitary cans. The prehistoric isolate consists of an isolated chalcedony flake. The four cans were originally identified in the northernmost portion of the APE along the dirt road that extends east/west south of Devers Substation. The chalcedony flake was identified in the eastern portion of the site.

Phase 2 Resources
A records and literature search conducted on the Phase II property identified 50 previous cultural investigations conducted within 1.0-mile of the Project APE. Of these 50 resources, ten previous studies overlap portions of the Project APE. The records search also indicated that 36 cultural resources have been recorded within 1.0-mile of the Project APE. Of these 36 cultural resources, two were identified within the Project APE and were determined to consist of two historical isolates.

The Native American Heritage Commission (NAHC) conducted a search of the Sacred Lands File for a 1-mile radius surrounding the Project APE; the Sacred Lands File search failed to indicate the presence of Native American cultural resources in the immediate Project APE.

A pedestrian cultural resource survey of the Project APE was conducted. The site consists largely of undeveloped desert landscape with cleared legacy wind turbine construction pads and surrounding existing wind turbines, well-established dirt and paved roads, and several laydown yards located near the proposed overhead generation tie-line (gen-tie line) along Melissa Lane. There are also large patches of graded and leveled soils. Research indicates that none of the structures within the Project APE are older than 50 years and no built environment features were recorded. In summary, the results of the pedestrian survey were negative for cultural resources.

The proposed Project's impacts on Tribal Cultural Resources are described below.

Discussion of Impacts

a-i, ii) Less Than Significant Impact With Mitigation. As discussed in Section V, Cultural Resources, 36 previous studies have been conducted in the Project vicinity. The Project site was included in two previous studies and no cultural and archaeological resources were identified within the current Project boundaries.

The City initiated tribal consultation pursuant to AB-52, and contacted those tribes that have requested to be included in the consultation process. As of this writing, the City has not received any requests for consultation from local or regional tribes. To protect potential sub-surface tribal cultural resources, Mitigation Measures V-1 is included in Section V to reduce potential impacts to less than significant levels, consistent with the findings of the cultural resource investigation. With implementation of this mitigation measure, impacts associated with Tribal resources will be reduced to less than significant levels.

Mitigation Measures:

TCR-1 A qualified archaeological (and Tribal monitor if requested) shall be on site during all earth moving activities. The monitors shall be empowered to stop and redirect activities, should a resource be identified. All construction work occurring within 100 feet of a resource find shall immediately stop until the monitors can evaluate the significance of the find and determine whether additional study is warranted. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f), California PRC Section 21082), the monitors may record the find and allow work to continue. If the monitors determine that the discovery is significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, or data recovery) may be warranted as determined by the monitors. Also see Section V, Cultural Resources.

Monitoring:

TCR-A The Project monitors shall prepare a report documenting monitoring activities. The monitoring report shall be submitted to the City within 30 days of completion of excavation and/or grading activities.
Responsible parties: Project proponent, Project monitors, Planning Department.
Schedule: Within 30 days of completion of monitoring activities.

Sources: Palm Springs General Plan, 2007; Cultural Resources Inventory Report for the Desert Peak Energy Center – Phase I prepared by Dudek in June 2021; Cultural Resources Inventory Report for the Desert Peak Energy Center Project - Phase II prepared by Dudek in January 2021.

XIX. UTILITIES AND SERVICE SYSTEMS **Would the project:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

XIX. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Background

Domestic Water

As discussed in Section X (Hydrology and Water Quality), the Project site is located in the area which is served by the Mission Springs Water District (MSWD), which provides domestic water service from a variety of wells and elevated storage. In additional to rainfall and mountain runoff, regional groundwater is also recharged using Colorado River water that is turned out into upslope spreading ponds from the Metropolitan Water District (MWD) Colorado River Aqueduct that passes through the northwest corner of the valley and is used to recharge groundwater in several parts of the Coachella Valley.

Groundwater for municipal use comes from the upper portion of the Whitewater River Subbasin of the Coachella Valley Groundwater Basin (Basin 7-21 in CDWR Bulletin 118). Table 1 of the Engineer's Report on Water Supply and Replenishment Assessment - East Whitewater River Subbasin Area of Benefit (2014-2015) shows that the estimated groundwater storage capacity of the Whitewater River Subbasin is 28,800,000 AF.

Wastewater Treatment Provider

The MSWD is the provider of sanitary sewer service within its service area. The District is the responsible agency designated by State statutes, mandates, rules, and regulations to notify property owners that sewers are available to the property. If a sewer lateral is available to a property it is the owner's responsibility to connect to the sewer. MSWD operates the Horton Wastewater Treatment Plan, which is located approximately 4.25 miles east of the Project and has a capacity of approximately 3.8 million gallons per day. The nearest sewer collection line is located more than three miles to the east.

Flood Control Facilities

As discussed in Section X (Hydrology and Water Quality), the Project area has an average rainfall of 3 inches per year. The City is subject to short duration rainfall events which can generate significant amounts of surface water. Several major flood control facilities occur within the City to control surface runoff during storm events. The Riverside County Flood Control and Water Conservation District (RCFCWCD) builds and maintain regional flood-control structures within the City. There are no flood control facilities in the vicinity that serve or protect the subject Project site.

Solid Waste

Palm Springs Disposal Service (PSDS) serves the Project area for solid waste disposal. Solid waste collected by PSDS is transported to the Edom Hill Transfer Station (City of Cathedral City), from where, waste is trucked to Lamb Canyon Sanitary Landfill in Beaumont or Badlands Landfill in Moreno Valley. These landfills are owned and operated by Riverside County.

Electricity
Electric power services to the City of Palm Springs including the Project site is provided by Southern California Edison (SCE). SCE's facilities include high-voltage transmission lines rated between 55 and 500 kilovolts (kv), lower-voltage distribution lines rated below 55 kv, and substations which "step down" voltage so that power can be distributed to individual homes and businesses. SCE's largest transmission lines pass through the Coachella Valley and portions of the Project site. SCE also has numerous distribution lines and substations throughout its service area. While the proposed Project will result in some power demand, its primary function is to store and discharge power from and to the grid via the adjacent SCE Devers Substation. The Project's limited on-site power needs will be provide by on-site connections to the grid. The Project will have a net benefit integrating renewable energy sources to the electric grid. There will be no adverse impacts to the electric power grid.

Natural Gas
Natural gas to the City of Palm Springs including the Project site is provided by the Southern California Gas Company (SoCalGas). The Project will generate no demand for natural gas service.

Telecommunications
The Project site is located within the Frontier Communications service area which provides high-speed internet, video, TV and phone services. Telecommunication services are currently provided to the Project vicinity, as well as cellular service.

The potential impacts of the proposed Project are discussed below.

Discussion of Impacts

a,c) No Impact.

Domestic Water
The proposed Project will generate a very limited demand for domestic water. Construction will require trucking water to the site for use during grading, excavation and other construction activities. Once completed, Project-related water demand will be de minimis and limited to human consumption. There will be no on-site staff at the facility and no domestic water facilities are needed. Therefore, the Project will not require or result in the relocation or construction of new or expanded water facilities.

Wastewater Treatment
The proposed Project will not permanently house staff on site. would result in the construction of an energy storage facility which will not include habitable structures, bathrooms or other sewer facilities. During construction portable toilets will be used and serviced on site and will be removed once construction is completed. Portable toilets may be provided on-site post-construction for visiting maintenance staff and will be maintained and discharged in accordance with County Health Department rules and regulations. Therefore, the Project will not impact MSWD's capacity or facilities.

Flood Control Facilities
The subject property is crossed by a numerous braided streams that pass through these lands in a roughly northwest-southeast manner. There are no local or regional flood control facilities located in proximity of the development site. Development of the project will require the grading and manufacture of large pads for placement of the battery and inverter arrays. The Project proposes construction of stormwater intercept/retention basins at the low end of each of these development sub-areas. These basins will be hardened with gravel, riprap and/or concrete, as deemed appropriate to resist scour and contain storm runoff. No of-site flood control or other drainage management facilities are proposed, and the Project will not result in the construction or relocation of such facilities.

Electricity

The Project will result in the development of a battery energy storage facility which would charge/discharge up-to 700 megawatts (MWe) of energy using a BESS consisting of containers equipped with racks for battery storage. The BESS system will be connected to the existing SCE Devers substation via one new gen-tie circuit to be located on poles within an existing transmission corridor paralleling Ave 16 just south of the Devers Substation. While the proposed Project will result in some power demand, its primary function is to store and discharge power from and to the grid via the adjacent SCE Devers Substation. The Project's limited on-site power needs for miscellaneous auxiliary power will be provided by on-site connections to the grid. The Project will have a net benefit to the integration of renewable sources, including wind and solar. There will be no adverse impacts to the grid or electric power supplies.

Natural Gas

No natural gas would be used for industrial process, power generation, cooking or space or water heating at the site. The Project will generate no new demand for natural gas or associated infrastructure. The use of natural gas and related facilities is not proposed, and the Project will not result in the construction or relocation of such facilities.

Telecommunications

The Project site is located within the Frontier Communications service area which provides high-speed internet, video, TV and phone services. Telecommunication services are currently provided to the Project vicinity, including residential service to the west. Cellular service is available from a variety of providers and there is cell service to the site. The project will require incoming fiber optic infrastructure and will be coordinated with the local provider.

b) **Less Than Significant Impact.** The Project will require water for construction purposes, including soil moisturizing and condition during site grubbing and grading, soils hydro-consolidation and compaction, and the mixing concrete. No landscaping is proposed for this Project and there will be no manning of on-site personnel. Sanitary portable toilet will be used, if necessary. Once construction is completed there will be little or no demand for on-site water. Therefore, the Project will have sufficient water supplies to serve its needs. Inasmuch as the Project will not generate an ongoing water demand, the Project will not be affected by any reasonably foreseeable future development during normal, dry and multiple dry years.

d) **Less Than Significant Impact.** The site is served by the Palm Springs Disposal Service; however, the Project grading contractor is expected to be responsible for removal and proper disposal of waste materials associated with site development. To the greatest extent practicable, recycling of concrete, metals and other materials are anticipated. Once construction is completed, there will be no on-going waste stream affecting haulers or landfill capacity. Therefore, the Project will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals

e) **No Impact**. The proposed unmanned utility facility will generate a construction and packaging materials waste stream during construction. Many of these materials, including waste concrete, pallets, steel, wire and other metal waste materials will all be recycled in conformance with local, county, state and federal requirements. Through established programs, thee Project will comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan 2007; Palm Springs Disposal Website; Project Description- Desert Peak Energy Center prepared by Dudek. January 2022.

XX. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Environmental Background

The Project site is located in the state of California where a typical wildfire season ranges from mid-summer to mid-autumn. Climate change is considered a key driver of wildfires. Warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt create longer and more intense dry seasons that increase moisture stress on vegetation and make forests more susceptible to severe wildfire.

As wildfire threats in the region have worsened over the last two years, wildfire response, preemptive fire prevention, and vegetation management to reduce fire severity and contain erratic wildfire have been intensified. Recently, Governor Newsom has declared a State of Emergency on Wildfires to protect the state from another catastrophic wildfire season.[33] The subject property is located outside of historic wildland fires, the neatest being associated with lands in the foothills of the San Bernardino and San Jacinto Mountains. There are no severe fire hazard zones in proximity of the Project site. On-site vegetation is very low.

Discussion of Impacts

a-d) **No Impact**. Within the City of Palm Springs corporate limits, only the foothills of the San Jacinto Mountains are designated as "very high fire hazard severity zone (VHFHSZ)," which are located 2.50± miles southwest of the Project site.[34] No impact is anticipated due to the distance of the nearest VHFHSZ.

There are no emergency response or evacuation plans established by any jurisdiction for the subject property. Based upon to very low vegetation levels and other site circumstances, there are no on-site conditions, including aspects of slope, prevailing winds or other factors, that would exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The Project proposes the installation and maintenance of on-site, facilities-specific fire systems and, where appropriate, fire suppression systems. These facilities are primarily designed to prevent and/or minimize the potential for battery or other types of electrical fires that could be associated with the proposed Project. Also please see Section IX: Hazards and Hazardous Materials for discussion around project design measures minimizing the potential for fire risk.

There are no upslope burn areas that could contribute to significant flooding -related runoff or debris flows or expose people or structures to significant risks, including downslope or downstream flooding or landslides.

Mitigation Measures:
None required.

Monitoring:
None required.

Sources: Palm Springs General Plan, 2007; California Fire Hazard Severity Zone Map; Project Description- Desert Peak Energy Center, prepared by Dudek. January 2022.

33 Community Wildfire Prevention & Mitigation Report (2019), Prepared by California Department of Forestry and Fire Protection.

34 California Fire Hazard Severity Zone Map.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Less Than Significant Impact With Mitigation Incorporated.

Biological Resources

The Project site is located within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan and is outside of any designated Conservation Area as established by that Plan. Biological resources on the site are typical of those found in creosote desert scrub communities, and to a lesser degree those found desert dry wash habitat. The Project site does not contain any wildlife corridors or biological linkage areas. The Project site is partially developed land with wind turbines and related energy infrastructure.

No endangered species are expected to occur on the Project site. The developer will be required to pay a development mitigation fee for any new disturbance that results from development of the Project. This fee helps to offset impacts from development by funding the acquisition of suitable habitat elsewhere for permanent conservation. In addition, the Project will be required to conduct pre-construction MBTA and burrowing owl surveys, to ensure that impacts to protected avian species are kept at less than significant levels.

Therefore, pre-construction surveys will be required to avoid impacts to nesting birds covered by the MBTA and to burrowing owl. In addition, the site is subject to payment of the CVMSHCP Mitigation Fee to mitigate potential impacts to covered species under the Plan.

The proposed Project will not significantly reduce fish or wildlife habitat or otherwise adversely impact a fish or wildlife species. The construction of the Project has the potential to impact Burrowing owl and nesting birds, but the mitigation measures included in this document will reduce those impacts to less than significant levels.

Cultural Resources

The Project site does not contain any historic resource. However, the Project site is within the ACBCI Tribal traditional use area. Due to the traditional land use and cultural ties of the Project area, the Project site is a sensitive area and potentially contains sub-surface archaeological resources. Therefore, a mitigation measure and monitoring program are included in this Initial Study to assure that impacts associated with cultural resources remain less than significant.

b) **Less Than Significant Impact**. The subject property has been in use as a wind farm for several years and portions are developed with turbines and associated infrastructure. The proposed Project is consistent with the development envisioned for this area of the City in its General Plan and its impacts are individually limited and not cumulatively considerable. The Project involves development of an energy storage facility which will not intensify land use in the area beyond what was envisioned in the City's General Plan. All environmental impacts that could occur as a result of the proposed Project would be less than significant, and when viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, would not result in cumulatively significant impacts.

c) **Less Than Significant Impact**. With the implementation of the City's Municipal Code, Uniform Fire Code, industry standards for battery storage systems, and other standard regulations and requirements of law, the proposed Project will not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. Overall, all potential impacts are expected to remain at less than significant levels.

Appendix A
(Available on City website)

Air Quality and GHG Emissions Studies
Phase I and Phase 2
January 2022

Appendix B
(Available on City website)

Biological Resources Assessment
Phase I & 2
March 2021 and August 2021

And

Coachella Valley Multiple Species Habitat Conservation Plan
Consistency Analysis
September 2021

Appendix C

Cultural Resources Inventory Report
June 2021

CONFIDENTIAL

Appendix D
(Available on City website)

Hydrology and Hydraulic Study
Phase I & 2
January 2022

Hydrology and Water Quality CEQA Analysis Memo
January 2022

Appendix E
(Available on City website)

Geotechnical Engineering Report
February 2022

Appendix F
(Available on City website)

Hazardous Materials Assessment
for the
Desert Peak Energy Center
August 2021

Appendix G
(Available on City website)

State Aquatic Resources Delineation Report
Phase 1
August 2021

State Jurisdictional Waters Delineation Report
Phase 2
December 2020

Appendix H
(Available on City website)

Technical Memorandum

Noise Technical Study
October 2021