State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Central Region 1234 East Shaw Avenue Fresno, California 93710 (559) 243-4005

GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



Governor's Office of Planning & Research

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September 2, 2022

STATE CLEARING HOUSE

Jeremy Shaw, Planner
Fresno County, Development Services and Capital Projects Division
2220 Tulare Street, Sixth Floor
Fresno, California 93721
jshaw@fresnocountyca.gov
(559) 600-4207

Subject: Notice of Preparation (NOP) – Environmental Impact Report (EIR) No.

8189, CUP No. 3734, Key Energy Storage, LLC Project (Project)

SCH No.: 2022070414

Dear Mr. Shaw:

The California Department of Fish and Wildlife (CDFW) received a NOP from Fresno County for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code. While the comment period may have ended, CDFW would appreciate if you will still consider our comments.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statue for all the people of the State (Fish and G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

PROJECT DESCRIPTION SUMMARY

Proponent: Key Energy Storage, LLC

Objective: The Project proposes to construct and operate the Key Energy Storage Project (Project) on approximately 208 acres in unincorporated Fresno County. The Project would include development of an energy storage system facility and associated on-site support facilities including a substation, inverters, collector lines, fencing, access roads, supervisory control and data acquisition (SCADA) system, and other ancillary facilities or equipment. The energy storage facility is anticipated to consist of lithium-ion batteries with the potential to store approximately three (3)- gigawatt (GW) of energy. The Project would also include a 500-kilovolt (kV), 0.3-mile long overhead generation tie line (gen-tie line), which would extend north to the adjacent Pacific Gas and Electric (PG&E) Gates Substation on an approximately 208-acre portion of three parcels totaling approximately 318-acres AE-40 (Exclusive Agricultural, 40-acre minimum parcel size) Zone District.

Location: The Project site is in unincorporated Fresno County, approximately 11.5-miles east of the City of Coalinga, approximately 7.5 miles north of the City of Avenal, California, and approximately 0.4 miles west of Interstate 5. The Project site is located southwest of the PG&E Gates Substation along West Jayne Avenue. (Assessor Parcel Numbers [APNs] 085-040-36S, 085-040-37S, and 085-040-58S).

The Fresno County General Plan land use designation for the Project site is Agriculture. The entire Project site is designated as Prime Farmland that is covered by Williamson Act Contracts.

Timeframe: Buildout of the Project would occur in phases, with Phase I expected to come online in 2025, and Phase 2 expected to come online by 2026. After that, Phases 3 and 4 are expected to come online between 1 to 3 years after the previous phase, based on the region's increasing demand for energy storage. The timing of when phases would be online is approximate.

COMMENTS AND RECOMMENDATIONS

The NOP indicates that the Environmental Impact Report (EIR) for the Project will consider potential environmental effects of the proposed Project to determine the level of significance of the environmental effect and will analyze these potential effects to the detail necessary to make a determination on the level of significance. The EIR will also identify and evaluate alternatives to the proposed project. When an EIR is prepared, the specifics of mitigation measures may be deferred, provided the lead agency commits to mitigation and establishes performance standards for implementation.

Special-status species have been documented in the Project area per the California Natural Diversity Database (CNDDB), these include, but are not limited to, the Federally endangered and State threatened San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened Swainson's hawk (*Buteo swainsoni*), and the State species of special concern burrowing owl (*Athene cunicularia*), and American badger (*Taxidea taxus*).

San Joaquin kit fox (SJKF)

SJKF occurrences have been documented within the Project area approximately 3.5-miles to the east, along the California Aqueduct (CDFW 2022). The Project has the potential to temporarily disturb and permanently alter suitable habitat for SJKF and directly impact individuals if present during construction, recharge, and other activities.

SJKF den in a variety of areas such as right-of-ways, agricultural and fallow/ruderal habitat, dry stream channels, and canal levees, and populations can fluctuate over time. SJKF are also capable of occupying urban environments (Cypher and Frost 1999). SJKF may be attracted to the Project area due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground disturbance. SJKF will forage in fallow and agricultural fields, which are present in the Project area, and utilize streams and canals as dispersal corridors. Project information states that a swale and two ponding basins will be created within Project limits. As a result, there is potential for SJKF to occupy all suitable habitat within the area near West Jayne Avenue to the east of Interstate 5 and the surrounding area.

Habitat loss resulting from land conversion to agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). The proposed Project area has supported areas of high suitability habitat per CNDDB records (CDFW 2022). The Project area is within this remaining highly suitable habitat, which is otherwise intensively managed for agriculture. Therefore, subsequent ground-disturbing activities have the potential to significantly impact local SJKF populations.

For all Project-specific components including construction and land conversion, CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for SJKF. CDFW recommends during the biological surveys and technical analysis in support of the projects CEQA document assessing presence/absence of SJKF by having qualified biologists conducting surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. CDFW also recommends following the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (USFWS. 2011).

SJKF detection warrants consultation with CDFW to discuss how to avoid take or, if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

Swainson's Hawk (SWHA)

Based on aerial photography and CNDDB occurrences (CDFW 2022), SWHA have the potential to forage within the Project vicinity. SWHA have been observed near the California Aquaduct several miles to the northeast of the proposed Project site. Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance (CDFW 2016). Zapato Chino Creek is located approximately 2.8-miles west of the proposed Project site, and per Google aerials this ephemeral creek appears to have large enough trees to support nesting activities, in addition, the surrounding agricultural crops near the Project site may provide foraging habitat. The Project as proposed will involve noise, groundwork, and movement of workers that could affect nests in the vicinity of the Project and has the potential to result in nest abandonment, significantly impacting local nesting SWHA. To evaluate potential impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000)

during biological studies conducted in support of the projects CEQA document. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

If ground-disturbing Project activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional preactivity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation. CDFW recommends a minimum no-disturbance buffer of ½ mile be delineated around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

CDFW recommends compensation for the loss of SWHA foraging habitat to reduce impacts to SWHA foraging habitat to less than significant based on CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG, 1994), which recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites with the amount of habitat compensation dependent on nest proximity. In addition to fee title acquisition or a conservation easement recorded on property with suitable grassland habitat features, mitigation may occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat.

In addition, CDFW recommends that in the event an active SWHA nest is detected during surveys and the ½-mile no-disturbance buffer around the nest cannot feasibly be implemented, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is warranted to comply with CESA

Burrowing Owl (BUOW)

BUOW have been observed approximately 4-miles from the Project site (CNDDB 2022). BUOW inhabit open grassland or adjacent canal banks, rights-of-way, vacant lots, etc., containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Review of Google aerial imagery and Google Streetview (2021) indicates that a portion of the Project site contains agriculture in the form of orchards/groves in the middle area of the Project site, but the northern-most portion of the Project area has been cleared and contains piles of previous orchard trees. The ground in this area appears to be tilled/disturbed at the time the Streetview images were taken. The southern-most property appears to be disturbed grassland per review of aerial photos.

Potentially significant direct impacts associated with subsequent construction activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project site is bordered by agriculture and what appears to be disturbed habitat/grassland. There are solar panels to the north of the Project site (across W. Jayne Avenue), and to the southwest. Therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

CDFW recommends that a qualified biologist conduct a habitat assessment during biological studies in support of the projects CEQA document, to determine if the Project area or its vicinity contains suitable habitat for BUOW, along with assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, the California Burrowing Owl Consortium (CBOC) and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

^{*} meters (m)

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

American Badger (AMBA)

AMBA are known to occur in the vicinity of the Project site (CDFW 2022). Badgers occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e. ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). The Project site may support these requisite habitat features. Therefore, the Project has the potential to impact AMBA. Without appropriate avoidance and minimization measures for AMBA, potentially significant impacts associated with ground disturbance from construction activities include direct mortality or natal den abandonment, which may result in reduced health or vigor of young.

Habitat loss is a primary threat to AMBA (Gittleman et al. 2001). The proposed Project would rezone a currently agricultural/open space area to an energy storage facility that would consist of lithium-ion batteries with the potential to store approximately three (3)-gigawatt (GW) of energy. The Project would also include a 500-kilovolt (kV), 0.3-mile long overhead generation tie line (gen-tie line), and thus would result in a high degree of land conversion and potential habitat fragmentation. As a result, ground-disturbing activities have the potential to significantly impact local populations of AMBA.

CDFW recommends that a qualified biologist determine if suitable habitat for AMBA is present within or immediately adjacent to the Project site. If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for AMBA and their requisite habitat features (dens) to evaluate potential impacts resulting from ground- and vegetation-disturbance. Avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

II. Editorial Comments and/or Suggestions

Nesting Birds: The Project site contains and is adjacent to habitat that provides nesting habitat for birds. CDFW encourages that Project implementation occur during the bird non-nesting season. However, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes sections referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct an assessment of nesting habitat during biological surveys in support of the project's CEQA document, and then repeated as pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. Prior to initiation of Project activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Pesticide and Rodenticide Use: Project information includes potential use of rodenticides. The Project has the potential to temporarily and permanently impact biological resources through the use of pesticides. The United States Environmental Protection Agency (USEPA) regulates pesticides at the Federal level and the California Department of Pesticide Regulation (DPR) regulates pesticides at the State Level. The use of pesticides, including anticoagulants and their potential for secondary poisoning to

native species, is a significant concern. According to Baker (2018), "pesticides can indirectly impact wildlife through reduction of food resources and refuges, starvation due to decreased prey availability, hypothermia, and secondary poisoning". CDFW recommends the CEQA document address and fully analyze the use of pesticides, including the risk of secondary poisoning to native species caused by the use of rodenticides. CDFW recommends the CEQA document include a measure that requires the use of herbicides, rodenticides, or fertilizers on the Project area to be restricted to those approved by USEPA and DPR.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the project's CEQA document be used to develop and modify the project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, remaining impacts to sensitive biological resources should be mitigated to reduce impacts to a less than significant level, if feasible.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the project, even if those impacts are relatively small (i.e. less than significant). CDFW recommends cumulative impacts be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area identified and utilized for this analysis is advised. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist Fresno County Department of Public Works and Planning in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (https://www.wildlife.ca.gov/Conservation/Survey-Protocols). If you have any questions, please contact Kelley Nelson, Environmental Scientist, at the address provided on this letterhead, or by electronic mail at Kelley.Nelson@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Innu Furanti
Annee Ferranti for Julie A. Vance
Regional Manager

ec: Patricia Cole (patricia_cole@fws.gov)
United States Fish and Wildlife Service

LITERATURE CITED

CDFW. 2022. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS. Accessed August 12, 2022.

SJKF Literature Citations

Cypher and Frost 1999

- Cypher, B. L., S. E. Phillips, P. A. Kelly, 2013. Quantity and distribution of suitable habitat for endangered San Joaquin kit foxes: conservation implications. Canid Biology and Conservation 16(7): 25–31.
- USFWS. 2011. Standard recommendations for the protection of the San Joaquin kit fox prior to or during ground disturbance. United States Fish and Wildlife Service, January 2011.

SWHA Literature Citations

- CDFG. 1994 Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) November 8, 1994.
- CDFW. 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- Swainson's Hawk Technical Advisory Committee (SWHA TAC). 2000.

 Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, May 31, 2000.

BUOW Literature Citations

- California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.
- Gervais, J.A., D.D. Rosenberg, and L.A. Comrack. 2008. Burrowing Owl (Athene cunicularia) in Shuford, W.D. and T. Gardali, editors.

AMBA Literature Citations

Gittleman, J. L., S. M. Funk, D. MacDonald, and R. K. Wayne, 2001. Carnivore conservation. Cambridge University Press, Cambridge, United Kingdom.

Zeiner, D. C., W. F. Laudenslayer, Jr, K. E. Mayer, and M. White. 1990. California's Wildlife Volume I-III. California Department of Fish and Game, editor. Sacramento, CA, USA.

Pesticides/Rodenticides Citations

Baker, A. 2018. A review of the potential impacts of cannabis cultivation of fish and wildlife resources. California Department of Fish and Wildlife, Sacramento, California.