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CEC Data Request – Alternatives Response

Potentia–Viridi Battery Energy Storage Project

JUNE 2025

Prepared for:

CALIFORNIA ENERGY COMMISSION

Prepared by:

LEVY ALAMEDA LLC

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1 Introduction

On April 7, 2025, Levy Alameda LLC and Affiliates (Applicant) received a Second Determination of Incompleteness and Request for Information from the California Energy Commission (CEC) for the Potentia-Viridi Battery Energy Storage Project (Project; Docket Number 24-OPT-04) in response to the Applicant's previous submittals. This document responds to the CEC's request and provides further clarification on the topic of Alternatives as it relates to the Project.

2 Alternatives Response

2.1 Data Requests REV 1 DR ALT-1 through REV 1 DR ALT-3

2.1.1 Data Request REV 1 DR ALT-1

REV 1 DR ALT-1. ***Please provide a figure that displays a conceptual site plan for the Reduced Project Alternative (i.e., staff's Reduced Capacity Alternative). This figure should be a large-scale, zoomed-in site map, that clearly shows estimated changes to the site plan for this alternative and revisions to the project site boundaries.***

Response: See Attachment 1 for the Alternative 2 (Reduced Capacity Alternative) conceptual site plan. The Alternative 2 battery energy storage system's (BESS) development footprint was originally identified as 40 acres in Section 4.7 of the application document. The development footprint has subsequently been revised to ensure that design elements that were incorporated into the Proposed Project site plan, many of which have been identified as participating agency requirements following feedback on the original application, are incorporated in the Alternative 2 conceptual site plan. These site changes include:

- Two (2) water tanks were added to the layout to meet requirements identified by the California Department of Forestry and Fire Protection.
- Additional stormwater facilities were added following grading refinements to the Proposed Project site plan that would also apply to Alternative 2.
- Additional access roads along the south side were added to increase site safety by allowing for separate substation access without requiring the entry into the main BESS facility, and additional space was needed between the double access roads for appropriate security fencing.
- Two (2) additional O&M buildings (for a total of three (3)) and additional required O&M area were added per potential BESS manufacturer's requirements.
- The substation area was expanded based on actual design parameters.
- Added additional laydown area(s) to allow for safe maintenance of BESS units through operations and augmentation throughout the project life.
- All above items resulted in an overall expanded footprint, which required additional benching/terracing to reduce earthwork quantities

Following the revisions of the Alternative 2 conceptual site plan the new BESS facility footprint is 55.8 acres (see Attachment 1). Implementation of Alternative 2 would not change the design of the project's gen-tie facility, so the temporary and permanent impacts associated with the Proposed Project gen-tie facility would also apply to Alternative 2. A comparative impact breakdown of the project facilities is provided below in the response to REV 1 DR ALT-2.

2.1.2 Data Request REV 1 DR ALT-2

REV 1 DR ALT-2. ***Please provide a comparative impact table, similar in format to Table 4-1 of the application, that quantifies biological resource impacts for both the proposed project and the Reduced Project Alternative. This should include acreage and type of habitat impacted to facilitate evaluation of whether the alternative would substantially lessen biological impacts.***

Response: See Table 1 below for a comparison of impacts between the Proposed Project and Alternative 2 (revised as discussed above in the response to REV 1 DR ALT-1). Alternative 2 would result in a reduction in the permanent disturbance area associated with the BESS facility but impacts within the Gen-tie Evaluation Area would be the same as the Proposed Project. The total permanent disturbance for the Proposed Project is 60.7 acres (58.8 acres in the Lease Area and 1.9 acres in the Gen-tie Evaluation Area) compared to 57.7 acres for Alternative 2. Temporary disturbance is 6.7 acres for both the Proposed Project and Alternative 2.

Table 1. Comparison of Impact Areas for the Proposed Project and Alternative 2 (Reduced Capacity Alternative)

Project Area Component	Description	Proposed Project (Acres)	Alternative 2 (Acres)
Lease Area	Permanent Disturbance, BESS	58.8	55.8
	Access, Lease Area	10.3	13.3
	Lease Area Total	*69.1*	*69.1*
Gen-tie Evaluation Area	Permanent Disturbance, Gen-tie including PG&E	1.9	1.9
	Temporary Disturbance, Gen-tie including PG&E	6.7	6.7
	Corridor including Access (200-foot wide corridor plus 50 feet on either side for construction access)	13.8	13.8
	No Access, No Disturbance (assessed for environmental resources)	10.3	10.3
	Gen-Tie Evaluation Area Total	*32.7*	*32.7*
	Total Project Area	**102**	**102**

As described in the project's Biological Technical Report (Section 5), habitat within the Project Area is characterized as one vegetation community and an ephemeral channel. Implementation of Alternative 2 would result in a 3-acre reduction in the upland vegetation community habitat (wild oats and annual brome grassland) and no change to potential aquatic habitat, as the ephemeral channel is within the Gen-tie Evaluation Area.

The comparison of project alternatives provided in Table 4-1 of Chapter 4 (Alternatives) of the original application has been revised for Biological Resources in Table 2 below. The revisions are based on the revised Alternative 2 BESS permanent disturbance area, the relatively minor difference in permanent disturbance area between the Proposed Project and Alternative 2; the consideration that gen-tie facilities, and impacts to the ephemeral drainage would be the same for both alternatives; and potential wildlife impacts related to noise, light, collision, and electrocution would be similar due to the similarity in the alternatives (discussed under REV 1 DR ALT-1).

Table 2. Comparison of Proposed Project to Alternative 2 (Reduced Capacity Alternative) for Biological Resources

Issue Area	Proposed Project	Alternative 2
Construction Impacts to Sensitive Vegetation	LTSM	=
Construction Impacts to Special-Status Plant Species	LTSM	=
Construction Impacts to Special-Status Wildlife Species	LTSM	▼[1]
Construction Impacts to Wildlife Corridors	LTS	=
Construction Impacts to Wetlands and WOTUS	LTSM	=
Operation Impacts Noise and Light	LTSM	=
Operation Impacts Collision and Electrocution Hazard to Wildlife	LTS	=
Operation on Special Status Species Plants	NI	=
Operation impacts to sensitive and special-status wildlife species noise	LTS	=
Operation impacts to sensitive and special-status wildlife species lighting and habitat	LTS	=
Operation to Wetlands and WOTUS	LTS	=
Cumulative	LTS	=

Notes:
▲ Alternative is likely to result in greater impacts to issue when compared to Proposed Project.
= Alternative is likely to result in similar impacts to issue when compared to Proposed Project.
▼ Alternative is likely to result in reduced impacts to issue when compared to Proposed Project.
NI = no impact; LTS = less than significant without mitigation; LTSM = less than significant with mitigation measures; SU = potentially significant and unavoidable impact.
[1] Alternative 2 would result in a 3-acre reduction in potential special-status wildlife species habitat impacts, though both impacts from the Proposed Project and Alternative 2 are less than significant with mitigation measures.

Construction of Alternative 2 would result in a 3-acre reduction in impact to potential special-status wildlife species habitat, though impacts to special-status wildlife species from both the Proposed Project and Alternative 2 are less than significant with mitigation measures. The project site consists of and is bounded by nonnative grassland on three sides. The reduction of the project footprint by three acres in Alternative 2 would not result in a significant change in availability of migratory corridors or nursery sites in the grassland. Big tarplant (*Blepharizonia plumosa*) was the only special-status plant species identified within the Project Area (specifically the Gen-tie Evaluation Area),but would be avoided in both the Proposed Project and Alternative 2. Construction impacts to sensitive vegetation communities would be identical between the alternatives because no sensitive communities were identified within the Lease Area.

Effects of noise and light during construction and operation of Alternative 2 would be similar in nature and duration to the Proposed Project as a reduction in project size of 3 acres would not substantially alter the

type or duration of noise and light sources. Similarly, collision and electrocution risks would not be substantially different between the alternatives.

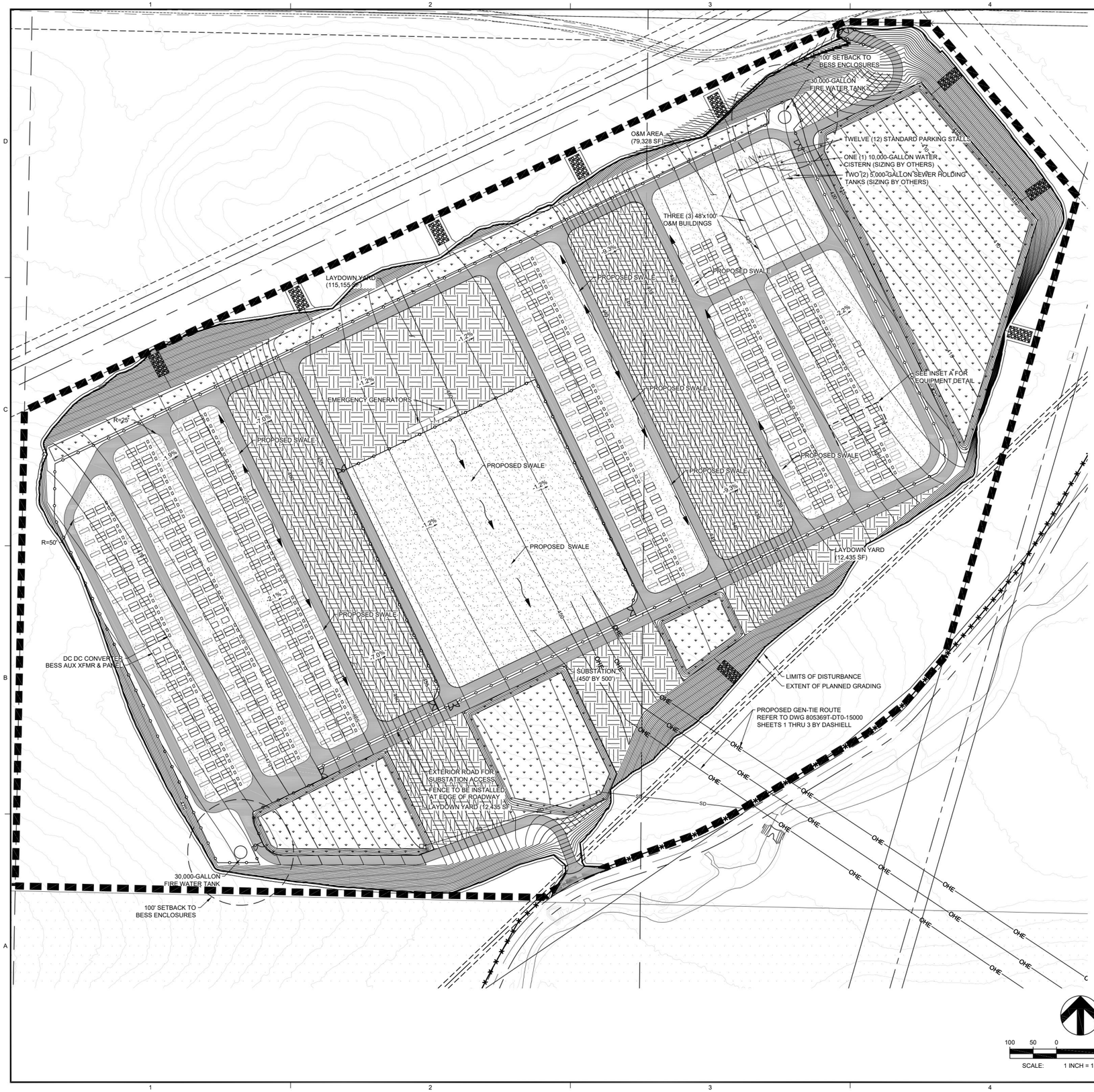
2.1.3 Data Request REV 1 DR ALT-3

REV 1 DR ALT-3. ***Please identify whether access to the transmission line corridor could be achieved through an existing driveway to avoid the proposed low water crossing, and clarify any associated changes to impacts on aquatic resources.***

Response: The proposed low-water crossing of Patterson Run is necessary to both the Proposed Project and Alternative 2 to ensure a permitted access is available during construction and operations. An alternate route is being considered for gen-tie access but has not been fully acquired to date and would be subject to a separate access agreement, representing a potential project execution risk if an agreement were not secured or were not available during the full life of the project. Because the Opt-In certification process requires identification of all potentially needed permits in advance of certification, it is critical that this crossing is included in the project description for planning and permitting purposes. Additionally, the alternative access drive provides an important secondary emergency ingress or egress route option during construction or operation of the project.

Attachment 1

Reduced Capacity Alternative Conceptual Site Plan



ABBREVIATIONS

ESS	ENERGY STORAGE SYSTEM
PCS	POWER CONVERSION SYSTEM
POI	POINT OF INTERCONNECTION
XMFR	TRANSFORMER

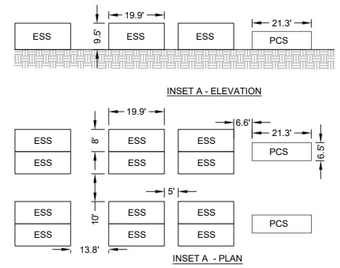
LEGEND

- GRAVEL ACCESS ROAD
- GRAVEL
- STORMWATER/ LID AREA
- LAYDOWN AREA
- OTHER
- GRADING LIMIT
- LIMITS OF DISTURBANCE

SYSTEM SUMMARY	
ESS TYPE*	SOLBANK
ESS QUANTITY	864
PCS UNITS	144
BATTERY CAPACITY	400 MW/1600 MWH
BESS YARD	12.1 ACRES
PROJECT SUBSTATION	5.4 ACRES
ACCESS ROADS	7.7 ACRES
LAYDOWN YARD	11.5 ACRES
O&M AREA (INCLUDING BUILDINGS)	1.8 ACRES
STORMWATER AREAS**	9.0 ACRES
STORMWATER OUTFALL	0.6 ACRES
OTHER***	5.4 ACRES
TOTAL DISTURBED AREA***	55.8 ACRES

NOTE:
- * ESS TYPE LISTED WAS USED FOR PRELIMINARY DESIGN/DIMENSIONS. EXACT TECHNOLOGY TO BE SELECTED DURING FUTURE DESIGN PHASE
- ** PRELIMINARY STORMWATER TREATMENT AND STORAGE SIZING BASED ON ALAMEDA COUNTY STANDARDS
- *** INCLUDES SLOPED AREAS TO GRADING DAYLIGHT AND 6' BUFFER TO LIMITS OF DISTURBANCE

FIRE NOTES:
1) FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET.
2) INTERNAL RADII = 25' MINIMUM FOR INTERIOR ROADS. INTERNAL RADII = 50' MINIMUM FOR OUTER LOOP.



UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

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POTENTIA-VIRIDI BATTERY ENERGY STORAGE SYSTEM

LEVY ALAMEDA, LLC

NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	5/5/25	REV 2
1	1/17/25	REV 1

PROJ. NO.	232059
DRAWN	LB
CHECKED	RB
DATE	7/15/24

SHEET TITLE:

SITE PLAN - ALTERNATIVE

SHEET NO:

C-1.0A

SHEET OF 7