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Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	263575
Document Title:	CEC Data Request #2 - Cumulative Impact Response
Description:	This document responds to the CEC's 5/19/2025 email regarding cumulative impacts related to the Project.
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Organization:	Dudek
Submitter Role:	Applicant Consultant
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CEC Data Request #2 – Cumulative Impacts Response

Potentia–Viridi Battery Energy Storage Project

MAY 2025

Prepared for:

CALIFORNIA ENERGY COMMISSION

Prepared by:

LEVY ALAMEDA LLC

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TABLES

ATTACHMENT

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1 Introduction

On May 14, 2025, Levy Alameda LLC and Affiliates (Applicant) received an email from the California Energy Commission (CEC) for the Potentia-Viridi Battery Energy Storage Project (Project; Docket Number 24-OPT-04 requesting additional information related to cumulative impacts. This document responds to the CEC's request and provides further clarification on the cumulative projects related to the Project.

2 Cumulative Impacts

2.1 Data Requests Via Email on May 14, 2025

2.1.1 Data Request Regarding Status of Projects included in Cumulative Projects List

DR-1: ***Please verify the (16) CAISO grid connection requests (Alameda County [6], San Joaquin County [10]) are actual projects.***

Response: As discussed in Section 3.2 Cumulative Projects, requests for information were provided to the appropriate agencies that would have knowledge of applicable projects that should be considered in the analysis of cumulative impacts resulting from the project when considered in combination with other closely related past, present, and reasonably foreseeable probably future projects. Table 3-1 summarizes the results of the outreach performed by Levy Alameda, LLC and its consultants.

In cases where the agency providing project information did not provide a specific project location, the applicant made a good-faith effort to provide approximate locations based on publicly available project data. Projects provided by California Independent System Operator (CAISO) are grid connection requests that are assumed to be for projects that are actual projects, although they may be in the early planning stage. Although the exact locations cannot be verified based on the limited information available through CAISO and publicly available information, they have been included in the cumulative analysis throughout the document to the extent that they are relevant to potential cumulative impacts.

Table 3-2, Cumulative Projects is revised below to provide the most up to date known status of cumulative projects at this time of this response.

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
Alameda County Planning				
AC1	PLN 2015-00208	10 Grant Line Road, Livermore, California	Commercial	Approved
AC2	Jess Ranch Compost Project	15850 Jess Ranch Road, Tracy, California	Industrial	Approved

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
Alameda County Planning/CAISO				
AC/CI 1	Sand Hill Wind Repowering Project	Along both the north and south sides of Altamont Pass Road, west of Grant Line Road, along both the east and west sides of Mountain House Road north of Grant Line Road, and on both sides of Bethany Reservoir, west of the Delta-Mendota Canal northwest of Mountain House Road, and southeast of the intersection of Christensen and Bruns Roads.	Energy – Wind Turbine	Approved
AC/CI 2	Mulqueeney Ranch Wind Repowering Project	Both north and south of Patterson Pass Road between 1 to 2 miles north of Tesla Road, and approximately 1 mile south of Interstate 580	Energy – Wind Turbine	~~Unknown~~ Under Construction
CAISO – Alameda County				
Not on Map	Altamont Midway LTD	Location Unknown	Energy – Wind Turbine	Unknown
Not on Map	Jaguar Energy Storage	Location Unknown	Energy – Storage	Unknown
Not on Map	Overlake Storage	Location Unknown	Energy – Storage	Unknown
Not on Map	Palmetto Energy Storage	Location Unknown	Energy – Storage	Unknown
Not on Map	Spectrum Energy Storage	Location Unknown	Energy – Storage	Unknown
Not on Map	Zorin Storage	Location Unknown	Energy – Storage	Unknown
CAISO				
CI 1	KOLA Energy Battery Storage	17950 Midway Road, Tracy, California	Energy – Storage	~~Unknown~~ Under Construction
CI 2	KOLA 2 Energy Battery Storage	17950 Midway Road, Tracy, California	Energy – Storage	Unknown

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
CI 3	Reclaimed Wind	North of Altamont Pass Road approximately 1 mile east of Dyer Road	Energy Wind Turbine	Unknown
CAISO – SJ County				
Not on Map	Noosa Energy Storage	Unknown Location	Energy – Storage	Unknown
Not on Map	Denali Energy Storage	Unknown Location	Energy – Storage	Unknown
Not on Map	Velas	Unknown Location	Energy – Storage	Unknown
Not on Map	Presidio	Unknown Location	Energy – Storage	Unknown
Not on Map	Pathfinder Storage	Unknown Location	Energy – Storage	Unknown
Not on Map	Stirling Bridge	Unknown Location	Energy – Photovoltaic	Unknown
Not on Map	Stirling Bridge 2 ES	Unknown Location	Energy – Storage	Unknown
Not on Map	Zeus BESS	Unknown Location	Energy – Storage	Unknown
Not on Map	Alta Casa Storage	Unknown Location	Energy – Storage	Unknown
Not on Map	Cazadores Storage	Unknown Location	Energy – Storage	Unknown
City of Tracy Planning				
T1	Tracy Hills Phase 1B	Tracy Hills Drive (West of Phase 1A)	Residential	Under Construction
T2	Tracy Hills Phase 2	Tracy Hills Drive (South of I-580)	Residential	Approved
T3	Tracy Hills Phase 5	Lammers Road (Between the Delta Mendota Canal and California Aqueduct)	Residential	Under Review
T4	Westside Specific Plan	Southwest of Lammers Road and 11th Street	Residential	Anticipated
T5	Westside Specific Plan	Southwest of Lammers Road and 11th Street	Commercial	Under Construction
T6	Marriott Courtyard (101 Rooms)	Cordes Ranch - West Parkway Village (International Parkway and I-205)	Hotel	Approved
T7	West Parkway Village Multi-Tenant Building	Cordes Ranch - West Parkway Village (International Parkway and I-205)	Commercial	Approved

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
T8	Chevron Gas Station, Convenience Store, and Car Wash	Cordes Ranch - West Parkway Village (1124 International Parkway)	Commercial	Under Construction
T9	Taco Bell	Cordes Ranch - West Parkway Village (1102 North International Parkway)	Commercial	Under Review
T10	Central Green	Cordes Ranch (West of 5731 Promontory Parkway)	Private Park	Under Construction
T11	Promontory Station	Cordes Ranch (815 International Parkway)	Commercial	Approved
T12	Cordes Ranch Building 13	Cordes Ranch (6050 Promontory Parkway)	Commercial	Under Review
T13	Cordes Ranch Building 18	Cordes Ranch (5070 Promontory Parkway)	Industrial	Under Review
T14	Cordes Ranch Building 28	Cordes Ranch (5390 Promontory Parkway)	Industrial	Under Review
T15	IPC 16 Guard Shack Addition	Cordes Ranch (5051 Promontory Parkway)	Industrial	Under Review
T16	2 Industrial Buildings (Costco Annexation)	16000 West Schulte Road	Industrial	Under Review
T17	Schulte Warehouse/Annexation	16286 West Schulte Road	Industrial	Under Review
San Joaquin County CDD				
SJ1	College Park at Mountain House Specific Plan III	Southwest portion of unincorporated San Joaquin County, approximately 3 miles west of the City of Tracy and northeast of the intersection of I-205 and I-580.	Residential	Approved
SJ2	Mountain House - Tract 3618	22495 S Mountain House Pkwy. Mountain House	Residential	Under Review
SJ3	Mountain House - Tract 4098	125 E Nasergholi Ave, Mountain House	Residential	Under Review
SJ4	Mountain House - Tract 4099	19300 W Grant Line Rd, Tracy	Residential	Under Review

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
SJ5	Griffith Energy Storage Project	APN 209-10-19 in San Joaquin County and APN 99B-7885-002 and 99B-7590-1-3 in Alameda County	Energy -- Storage	Under Review
Caltrans				
CT1	Construct Eastbound Truck Climbing Lane and Retaining walls	County: Alameda Route: 580 Post: R4.7/8.2	Construct truck climbing lane and Retaining walls	Approved
CT2	Pave Gore & Narrow Areas	County: Alameda Route: 580 Post: 0.1/9	Highway worker safety improvements	Approved
CT3	DO	County: Alameda Route: 580 Post: 4.7/4.8	Remove roadway concrete. Install a temporary sheet pile system. Excavate and remove damaged retaining wall. Construct a new retaining wall system. Pave the damaged roadway. Erosion control.	Approved
CT4	Storm Damage - Permanent restoration	County: Alameda Route: 580 Post: 4.3	Backfill with imported material at eroded slope	Approved
CT5	Altamont Rehab Mitigation	County: Alameda Route: 580 Post: 0/7.8	Environmental mitigation for EA 3G590.	Approved
CT6	Install Power Supply	County: Alameda Route: 580 Post: 1.3/6	Establish electric service connection and install lighting along a 4-mile stretch of eastbound I-580	Approved
CT7	Ala -580 Mitigation Project	County: Alameda Route:580 Post: 1.3/6	Mitigation for I-580 safety lighting project	Approved
CT8	10-1E210: I-205/Mountain House Pkwy/International Pkwy Interchange	County: San Joaquin Route: 205 Post: 0.8/2	Interchange improvements	Approved
CT9	LAMMERS RD/ELEVENTH ST I/C	County: San Joaquin Route: 205 Post: 2.6/R5.1	Oversight to construct new interchange	Approved
CT10	10-1E220: I-580/International	County: San Joaquin Route: 580 Post: 12.6/14.3	Interchange upgrades	Approved

Table 3-2. Cumulative Projects

Map No.	Project Name	Project Location	Project Type	Project Status
	Pkwy/Patterson Pass Rd Interchange			
CT11	10-1M570: I-580/Iron Horse Pkwy (Hansen Rd) interchange	County: Sam Joaquin Route: 580 Post: 11.8/12.1	Construct a new interchange at I-580/Iron Horse Parkway.	Approved

Source: Appendix 3.0A

CEQA Guidelines section 15125(a), Environmental Setting, states "an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time of the notice of preparation is published…" In alignment with this requirement, Levy Alameda, LLC is pleased to support the CEC by assisting in the update of the cumulative project list, utilizing publicly available information current at the time of the NOP release date.

2.1.2 Data Request regarding Mulqueeney Ranch Wind Repowering Project

DR: ***Explain why Potentia Viridi BESS is located within the footprint of the Mulqueeney Ranch Wind Repowering Project.***

Response: Mulqueeney Wind Energy, LLC (Mulqueeney Wind), a subsidiary of Brookfield Renewable (Brookfield), is developing the Mulqueeney Ranch Wind Repowering Project (Mulqueeney Ranch Wind Project) on privately owned parcels in the Altamont Pass Wind Resource Area (APWRA). The Mulqueeney Ranch Wind Project would entail the replacement of approximately 518 old generation wind turbines installed in the 1980s with up to 36 new wind turbines.

The Mulqueeney Ranch Wind Project footprint, as shown in the Mulqueeney Ranch Wind Repowering Project Final Subsequent EIR (State Clearing House # 2010082063), comprises 29 parcels extending over 4,600 acres. Ground disturbing activities would occur on a small portion of the overall Mulqueeney Ranch Wind Project area. The Potentia-Viridi BESS Project boundary is located at what was identified as the north-east corner of the Mulqueeney Ranch Wind Project footprint in the EIR (see attached PV BESS-Mulqueeney Wind figure). The Potentia-Viridi BESS Project has secured real estate rights for the Project footprint and have confirmed there are no conflicts in real estate interests. The Mulqueeney Ranch Wind Project will develop a temporary construction staging area, a underground collector line, project substation, and 300' overhead transmission line connecting the substations in the same area the Potentia-Viridi BESS Project gen-tie line is proposed, in the area east of Patterson Pass Road. Wind turbine installation is not proposed within or near the construction staging area. A crossing agreement has been executed between Levy Alameda, LLC and Brookfield to allow both projects interconnection to the Tesla Substation as already approved by PG&E and CAISO.

The construction schedule provided in the Mulqueeney Ranch Wind Project Subsequent Final EIR anticipated construction to commence in 2021 and occur over a 7-month period (Alameda County

2020). Due to delays, it was unknown during the drafting of the cumulative project list when the Mulqueeney Ranch Wind Project would actually begin construction.

The Mulqueeney Ranch Wind Project commenced construction in April 2025 and is anticipated to conclude November 2025 (7-month construction schedule). The Potentia-Viridi BESS Project is anticipated to begin construction no earlier than 4th Quarter 2026, after issuance of all necessary permits and approvals. Further, it is assumed the Mulqueeney Ranch Wind Project will conclude construction and subsequent restoration of the collector line and temporary construction staging area prior to the commencement of construction on the Potentia-Viridi BESS Project. Since the Mulqueeney Ranch Wind Project has started construction after the initial Opt-In Application for the Potentia-Viridi BESS Project, the cumulative analysis for each resource topic is updated below to reflect cumulative impacts resulting from the construction of the Mulqueeney Ranch Wind Project.

Section 3.1 Air Quality – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be completed by the time construction of the Potentia-Viridi Project begins. No additional impacts would occur beyond those previously analyzed in the Opt-In Application and the Potentia-Viridi BESS Project would still implement PDF-AQ-1 and MM-AQ-1 to ensure that the Project would not contribute to a cumulative impact to air quality and greenhouse gas impacts.

Section 3.2 Biological Resources – Revise text as follows:

3.2.4 Cumulative Effects

Cumulative effects on biological resources because of past, present, and reasonably foreseeable future actions, in combination with the Project, would mainly result from loss of habitat and habitat disturbance and degradation. A cumulative impact refers to a project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the facility (Public Resource Code [PRC] Section 21083; 14 CCR 15064[h], 16065[c], 15130, and 15355). As with the proposed Project, each of the cumulative projects presented in Chapter 3, Environmental Analysis, Table 3-2, Cumulative Projects, would be subject to a variety of statutes and administrative frameworks that require mitigation for impacts on biological resources. As such, the analysis presented herein is conducted qualitatively and in the context that the cumulative projects would fully mitigate any impacts to biological resources.

As of May 2025, a portion of the gen-tie line area has been cleared, compacted, and graded as part of the Mulqueeney Ranch Wind Project's staging area and underground gen-tie corridor. Area south of the Tesla Substation has also been cleared for the Kola BESS Project. It is assumed that the Mulqueeney Ranch Wind Project obtained all necessary Federal, State, and local permits required to clear the staging area and, as part of those permit requirements, would be required to restore these disturbed areas back to pre-construction conditions. Construction activities of the Mulqueeney Ranch Wind Project would be complete prior to the commencement of construction of the Potentia-Virdi BESS Project. As such, a conservative analysis that the Potentia-Viridi Project would disturb native areas that would need to be restored was assumed for this cumulative analysis.

Special-status Species

The proposed Project would result in the permanent loss and temporary disturbance of grassland habitat for special-status wildlife as discussed in Section 3.2.3, including upland and dispersal habitat for California tiger salamander, nesting habitat for grassland and ground-nesting birds, foraging habitat for raptors, western burrowing owl, and tricolored blackbird. Other cumulative projects considered also impact similar vegetation communities, resulting in a net regional loss of grassland habitat. Without mitigation and conservation planning, cumulative effects to these species may result in population declines and reduced genetic viability. The framework of the EACCS provides regional conservation planning and coordinated avoidance, minimization, and mitigation for covered species, which reduces potential cumulative impacts.

With implementation of mitigation measures identified in Section 3.2.5 (Avoidance and Minimization Measures), including avoidance of direct take of protected species and preservation of offsite grassland habitat, the project would not make a cumulative contribution to significant cumulative impacts on biological resources in the region.

Aquatic Resources

Cumulative impacts to wetlands and other waters of the U.S. and/or State could alter regional and downstream hydrology. Proposed impacts to Patterson Run include installation of a new stormwater basin outfall and a low-water crossing. These impacts are small and would not alter the flow of water through the system. Additionally, the impacts would be fully mitigated with preservation of similar habitat as described in Section 3.2.5 (Avoidance and Minimization Measures). Thus, the project would not result in cumulatively considerable contribution to the regional loss of wetlands and waters functions and values.

Wildlife Corridors and Habitat Connectivity

As described in Section 3.2.1 (Affected Environment), the region provides important connectivity between larger habitat blocks. Cumulative development could impair landscape permeability and increase the risk of wildlife vehicle collisions. The proposed Project is located in close proximity to existing development and roadways and will not introduce additional roadways. Wildlife movement would be preserved in the open grassland to the south, west, and north of the Study Area. By grouping development at the Tesla Substation, potential cumulative impacts to wildlife movement are thereby reduced. Clustering development in this fashion maintains potential wildlife movement corridors in the surrounding hills and drainages. Thus, development and implementation of the project would not result in cumulative impacts to wildlife corridors and habitat connectivity.

Section 3.3 Cultural Resources – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be completed by the time construction of the Potentia-Viridi Project begins. No additional impacts would occur beyond those previously analyzed in the Opt-In Application and the Potentia-Viridi BESS Project would still implement MM-CUL-1 and MMCUL-2 to ensure that the Project would not contribute to a cumulative impact to archaeological resources and human remains.

Section 3.4 Geological Hazards and Resources – Revise text as follows:

3.4.4 Cumulative Effects

The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3.1, Cumulative Projects, have the potential to result in cumulative impacts to geologic hazards and resources when considered together with the Project. Risks related to geological hazards and resources are typically localized in nature because they tend to be site-specific and related to on-site geotechnical constraints. Cumulative projects were chosen based on proximity to the proposed Project. Other projects include residential, commercial, and industrial development. The majority of the cumulative projects would involve both construction and operational activities. These selection factors are appropriate in the context of geological hazards and resources cumulative impacts because generally there needs to be a direct nexus and similar geologic conditions for a synergistic impact to occur, such as site modifications at nearby projects combining to destabilize soils. Currently, there is not a known existing significant cumulative impact related to geological hazards and resources within this geographic scope.

As discussed above, like much of California, the Project site is a seismically active area. All areas of Alameda County are considered seismically active, to a lesser or greater extent depending on their proximity to active regional faults. Impacts of the proposed Project would be cumulatively considerable if the Project, in combination with related projects, would result in significant cumulative impacts. However, the effects of the cumulative projects are not of a nature to cause cumulatively significant effects from geological hazards, soil erosion, and resources impacts, because such impacts are site-specific and would only have the potential to combine with impacts of the proposed Project if they occurred in the same location. Some components of the Mulqueeney Ranch Wind Repowering Project would overlap with the Project's proposed gen-tie line alignment.

All planned projects in the vicinity of the proposed Project, including the Mulqueeney Ranch Wind Repowering Project, are subject to environmental review and would be required to conform to CBC requirements. With implementation of mitigation measures and other grading and building requirements, the proposed Project would not contribute to cumulative impacts for geological hazards and resources or related events because the proposed Project and other cumulative projects in the area would be required to demonstrate compliance with local, state, and federal building and safety standards. As a result, cumulative impacts related to geological hazards and resources would not be cumulatively considerable.

Section 3.5 Hazardous Materials Handling – Revise text as follows:

3.5.4 Cumulative Effects

As defined by Public Resources Code Section 21083; Title 14 CCR, Sections 15064 [h], 15605 [c], 15130 and 15355, a cumulative effect refers to a proposed project's incremental effect paired with closely related past, present, and reasonably foreseeable future projects whose impacts compound or increase the incremental effect of the proposed project.

Similar to other potential impacts, such as those related to geology and soils, risks related to hazards and hazardous materials are typically localized in nature because they tend to be related to on-site existing hazardous conditions and/or hazards caused by a project's construction or operation. Cumulative projects were chosen based on proximity and similarity to the proposed Project. These

selection factors are appropriate in the context of hazards and hazardous cumulative impacts because generally there needs to be a direct nexus and similar hazard for a synergistic impact to occur, such as hazardous materials from multiple sites being carried into the same river via stormwater runoff. Currently, there is not a known existing significant cumulative impact related to hazards or hazardous material within this geographic scope.

The proposed Project and other ~~related~~ nearby infrastructure projects, including the Mulqueeney Ranch Wind Repowering Project, may involve the storage, use, disposal, and transport of hazardous materials to varying degrees. Impacts from these activities are anticipated to be less than significant, because similar projects would also comply with federal, state, and local regulations and policies. For example, all of the identified projects would be required to implement safety measures and precautions necessary to minimize any potential disturbance of hazardous materials and prevent the creation of additional hazards that cannot be mitigated or contained properly. This would include the development of safety plans such as emergency operation plans, transportation contingency plans, and hazardous materials business plans. Furthermore, other storage facilities ~~would~~ may also be equipped with secondary containment and fire suppressant technology to lessen the impacts of potential battery fires. In light of all of the evidence provided here, cumulative impacts related to hazards would be less than significant.

Section 3.6 Land Use – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be compatible with the existing Williamson Act contract and construction would be completed by the time construction of the Potentia-Viridi BESS Project begins. No land use conflicts would occur. No additional impacts would occur beyond those previously analyzed in the Opt-In Application.

Section 3.7 Noise – Revise text as follows:

3.7.4 Cumulative Effects

Construction

While there are a number of existing and planned development projects, as listed in Chapter 3, Environmental Analysis, Table 3-1, Cumulative Projects, of the PEA, in the shared vicinity of the Project, noise emission attributed to Proposed Project construction propagating toward the surrounding community is predicted to attenuate to sound exposure levels that are compliant with FTA standards. The Mulqueeney Ranch Wind Repowering Project would complete construction prior to the commencement of construction activities for the Proposed Project. Therefore, no noise accumulation would occur from the Proposed Project's construction activities happening concurrently with Mulqueeney Ranch Wind Project's construction activities. Because ~~operations~~ construction noise from other projects in the studied vicinity would similarly diminish with distance and other environmental effects (e.g., intervening terrain and/or structures, as well as acoustical absorption from porous ground surfaces and the atmosphere), the opportunity for a "cumulatively considerable" effect would be very unlikely.

Furthermore, potential construction noise associated with one or more of these other projects from the Table 3-1 cumulative list would be temporary and, on that basis, correspondingly exhibit a low likelihood of a cumulatively considerable effect at a noise-sensitive receiving land use near the Proposed Project. Additionally, such construction activities for these other projects in the vicinity, if and when they occur, would be held to the same applicable County and/or City standards with respect to construction noise

thresholds; and, like operation noise emanating from an active land use, such construction noise attenuates rapidly with distance and due to intervening natural or artificial topography and related effects.

For both above reasons, cumulative construction noise impacts for the Proposed Project would not be cumulatively considerable.

Operation

While there are a number of existing and planned projects, as listed in Table 3-2 (Cumulative – Reasonably Foreseeable, Approved, and Pending Projects) in Section 3.0, Environmental Analysis ~~of the PEA~~, in the shared vicinity of the Project, aggregate noise from operating Proposed Project features (e.g., inverter/transformers, battery storage container cooling systems, and the collector substation) propagating toward the surrounding community is predicted to attenuate to a sound level that is compliant with County standards at the nearest sensitive receptor and beyond. Because operations noise from other projects, including the Mulqueeney Ranch Wind Project, would similarly diminish with distance and other environmental effects (e.g., intervening terrain and/or structures, as well as acoustical absorption from porous ground surfaces and the atmosphere), the opportunity for a "cumulatively considerable" effect as received by a noise-sensitive land use common to one or more of these projects and the Project would be very unlikely.

For the above reasons, cumulative noise impacts for the Proposed Project would not be cumulatively considerable.

Section 3.8 – Paleontological Resources – Revise text as follows:

3.8.4 Cumulative Effects

The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3-2, Cumulative Projects, would be limited to the geographic scope of the potential cumulative paleontological resources impacts due to the immediate vicinity of ground-disturbing activities that would occur during the Project's construction. As of May 2025, a portion of the gen-tie line area has been cleared, compacted, and graded as part of the Mulqueeney Ranch Wind Project's staging area and underground gen-tie corridor. Area south of the Tesla Substation has also been cleared for the Kola BESS Project. It is assumed that the Mulqueeney Ranch Wind Project obtained all necessary Federal, State, and local permits required to clear the staging area and, as part of those permit requirements, would be required to restore these disturbed areas back to pre-construction conditions. Construction activities of the Mulqueeney Ranch Wind Project would be complete prior to the commencement of construction of the Potentia-Virdi BESS Project. As such, a conservative analysis that the Potentia-Viridi Project would disturb native areas that would need to be restored was assumed for this cumulative analysis.

As required for all planned projects in the vicinity of the proposed Project are subject to environmental review and would be required to comply with local, state, and federal laws. Additionally, with implementation of mitigation measures and other grading and building requirements, the proposed Project would not contribute to cumulative impacts for paleontological resources or related events because the proposed Project and other cumulative projects in the area, including the Mulqueeney Ranch Wind Project, would be required to demonstrate compliance with local, state, and federal laws, ordinances, and

regulations. As a result, cumulative impacts related to paleontological resources would not be cumulatively considerable.

Section 3.9 Public Health – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be completed by the time construction of the Potentia-Viridi Project begins and no new sensitive receptors are being constructed near the Project site. No additional impacts would occur beyond those previously analyzed in the Opt-In Application.

Section 3.10 Socioeconomics – Revise text as follows:

3.10.4 Cumulative Effects

Cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed Project (Public Resources Code Section 21083; Title 14, California Code of Regulations, Sections 15064[h], 15065[c], 15130, and 15355).

The analysis presented in the foregoing sections demonstrated that the Project by itself would have beneficial to insignificant impacts on Alameda County and the study area over the construction and operations phases. Over the construction period, while employing a small worker population, the Project contributes to the overall output of the regional economy and generates revenues for local and state governments. This is combined with insignificant impacts on utilities and other public infrastructure and services.

In comparison to the Project-only outcomes, cumulative impacts refer to the combined effects of all projects in the study area, with overlapping construction schedules as the proposed Project. Taken together, these projects could intensify demands on local agencies and community resources. While population and housing impacts from just the Project are estimated to be insignificant for the overall study area, the presence of other construction projects in the proposed Project's vicinity might add pressure on communities closest to the Project site. Other local construction projects requiring non-local labor might have a cumulative impact on temporary housing supply in the area. The Mulqueeney Ranch Wind Project would employ a similar workforce to the proposed Project, however the Mulqueeney Ranch Wind Project is anticipated to conclude construction prior to commencement of construction for the proposed Project and therefore is not anticipated to have a negative effect on the local workforce or to require nonlocal workforce to meet the labor demand resulting in increased pressure on the local temporary housing supply in the area. While the extent of ~~this~~ impacts from adding non-local workers to the local workforce is not known, this study estimates the availability of about 6,000 rental units within the study area (45-min commute shed). Since most workers are anticipated to already live in the study area, sufficient housing would be available to house workers from multiple projects. Other kinds of cumulative socioeconomic impacts are also unlikely because the Project's effects on housing, schools, and public services would be negligible.

Section 3.11 Soils – Revise text as follows:

3.11.4 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the

incremental effect of the proposed project (Public Resources Code §21083; Title 14, California Code of Regulations, §15064[h], 15065[c], 15130, and 15355).

Risks related to soils are typically localized in nature because they tend to be related to on-site conditions or conditions caused by a project's construction. Cumulative projects that would have the potential to be considered in a cumulative context with the proposed Project's incremental contribution, and that are included in the analysis of cumulative impacts relative to soils, are identified in Chapter 3, Environmental Analysis, Table 3-1, Cumulative Projects. Cumulative projects were chosen based on proximity to the proposed Project. Other projects include residential, commercial, and industrial development. The majority of the cumulative projects would involve both construction and operational activities. Nearby cumulative projects are appropriate in the context of soils cumulative impacts because generally there needs to be a direct nexus and similar soil conditions for a synergistic impact to occur, such as site modifications at nearby projects combining to destabilize soils. Currently, ~~there is not a known existing significant cumulative impact related to soils within this geographic scope.~~the Mulqueeney Ranch Wind Project is the only nearby project that could combine with the proposed Project to have a cumulatively considerable impact to soils due to its overlap in ground disturbance and shared soil conditions.

Although construction and decommissioning activities have the potential to result in erosion on the Project site, adherence to the construction SWPPP, DESCP, recommendations in the geotechnical report (Appendix 3.4A), and County of Alameda grading and building requirements would mitigate erosion impacts to less-than-significant levels. Other cumulative scenario projects, including the Mulqueeney Ranch Wind Project, would be required to adhere to similar requirements, thereby minimizing cumulative scenario erosion impacts. Specifically, all planned projects in the vicinity of the proposed Project would be subject to environmental review and would be required to conform to the Alameda County grading ordinance. With implementation of mitigation measures and other grading and building requirements, the proposed Project would not contribute to cumulative impacts for soils or soil erosion. Impacts of the proposed Project would be cumulatively considerable if the Project, in combination with related projects, would result in significant cumulative impacts. ~~However, the effects of the cumulative projects are not of a nature to cause cumulatively significant effects from soils impacts, because such impacts are site-specific and would only have the potential to combine with impacts of the proposed Project if they occurred in the same location.~~ As a result, cumulative impacts related to soils would be less than significant.

Section 3.12 Traffic and Transportation – Revise text as follows:

- *3.12.4 Cumulative Effects*

The geographic scope for cumulative transportation impacts includes the same roadways and intersections analyzed for the existing conditions. The Cumulative (2027) condition represents a short-term horizon period (less than 5 years) when the Project is under construction, and where the peak construction period would occur. The peak hour traffic forecasts for the Year 2027 have been projected by increasing the traffic volumes by an annual growth rate of 2 percent and adding traffic volumes generated by additional projects in the area. After correspondence with the County's Planning Department, it was determined that there were a limited number of applicable cumulative projects due to the rural nature of the area, and because the analysis is focused on a specific period during peak construction traffic. There were no cumulative projects identified that would have a peak construction period that overlaps with the Project construction; therefore, no additional cumulative projects were added in the analysis. The Mulqueeney Ranch Wind Project is currently being constructed and is anticipated to be completed before construction on the

proposed Project commences. The Kola Battery Energy Storage System Project (Phase 2) is proposed to be constructed adjacent to the Project site, however, Project construction is anticipated to occur after construction of the proposed Project is complete. A summary of the cumulative analysis is provided below.

Impact 3.12-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less-than-Significant Impact with Mitigation. The Project site's circulation system does not contain pedestrian, bicycle, public transportation, or airport facilities. Due to the existing railroad bridge, the rail line south of the site does not conflict with vehicular traffic. Therefore, the Project would have no contribution to cumulatively considerable impacts related to pedestrian, bicycle, transit, or rail facilities.

Cumulative Traffic Generation and Distribution

The Cumulative peak hour traffic volumes are presented in Figure 12 of Appendix 3.12A and the Cumulative plus Project traffic volumes are shown on Figure 13 of Appendix 3.12A.

Intersection LOS with Construction Traffic

Table 3.12-3 summarizes the results of the intersection analysis for the AM and PM peak hours for the Cumulative (2027) condition, with and without the Project. As shown in the table, three of the study intersections are forecast to operate below acceptable levels of service under Cumulative (2027) conditions with the peak period of construction traffic added. The Midway Road and Patterson Pass Road intersection (#1) would degrade to LOS E during the PM peak hour, the North Midway Road and Patterson Pass Road intersection (#2) would degrade to LOS E during the PM peak hours, and the I-580 westbound ramps at Patterson Pass Road (#5) would degrade to LOS F during the AM peak hour. To minimize impacts to these intersections, the Traffic Management Plan should include measures such as restricting worker arrivals and departures during peak hours during the peak construction phase.

Additionally, review of current California Department of Transportation (Caltrans) District 10 projects indicated that extensive improvements are planned under the I-580/International Parkway/Patterson Pass Interchange project, which modifies the existing compact diamond (Tyler L-1) interchange into a Diverging Diamond Interchange (DDI). The current schedule identifies the interchange project completion date of August 2026[1]. As the proposed Project is expected to start construction in 2027, the new DDI interchange would be in place prior to construction, and the interchange deficiencies noted above would be improved. Should the proposed Project begin construction prior to the completion of the DDI interchange, some TMP measures may not be applicable, as further detailed in the TMP (Appendix D).

[1] The current schedule is posted on Caltrans District 10 Current Project website, which identifies a project completion date of April 2025. An email was sent to District 10 Public Affairs on November 5, 2024, to confirm the posted schedule, and after additional coordination, email communication with City of Tracy Public Works on November 22, 2024, provided an updated project completion date of August 2026.
https://dot.ca.gov/caltrans-near-me/district-10/district-10-current-projects/I-580-international-pkwy-patterson-pass-interchange

Table 3.12-3. Cumulative (2027) Weekday Peak Hour Intersection LOS (with and without Project)

No.	Intersection	Traffic Control[1]	Cumulative (2027)				Cumulative (2027) plus Peak period Construction				Change in Delay (Sec.)		Threshold Exceeded?	
			AM Peak		PM Peak		AM Peak		PM Peak					
			Delay[2]	LOS[2]	Delay[2]	LOS[2]	Delay[2]	LOS[2]	Delay[2]	LOS[2]	AM	PM	AM	PM
1	Midway Rd./Patterson Pass Rd.	OWSC	16.6	C	25.3	D	25.2	D	**36.4**	**E**	8.6	16.3	No	**Yes**
2	N. Midway Rd./ Patterson Pass Rd.	OWSC	17.1	C	22.7	C	25.6	D	**37.3**	**E**	8.5	14.6	No	**Yes**
3	Midway Rd./Patterson Pass Rd.	OWSC	8.3	A	10.6	B	8.3	A	12.7	B	0.0	2.1	No	No
4	I-580 EB Ramps/ Patterson Pass Rd.	Signal	21.3	C	20.4	C	55.9	E	26.6	C	34.6	6.2	No	No
5	I-580 WB Ramps/ Patterson Pass Rd.	Signal	71.8	E	18.3	B	**98.2**	**F**	24.4	C	26.4	6.1	**Yes**	No

Source: Appendix 3.12A.
Notes:
1 TWSC = two-way stop control.
2 Delay in seconds per vehicle; highest movement delay is reported for TWSC intersections; LOS = Level of Service.
Bold: Exceeds County's threshold.

Roadway Operations with Construction Traffic

Table 3.12-4 presents the Cumulative and Project-added ADT on the regional roadways near the site, including the percentage of truck trips. The percent increase in both total daily ADT and truck ADT with the Project-added traffic would be minimal on I-580 and on Patterson Road, south of the Union Pacific Railroad. Under the Cumulative conditions, the Project-related increase in traffic would range from 0.6 percent to 1.7 percent on these road segments.

Construction traffic could cause a substantial traffic increase on Patterson Pass Road, west of Midway Road. The increase in construction trips would range from 10.5 percent of total ADT to a 637.5 percent increase in truck traffic on this segment of Patterson Pass Road. The substantial increase in construction traffic, especially during the AM and PM peak commute hours, could potentially cause degradation of traffic operation on this local road segment. However, the construction activities would be temporary and would be managed through implementation of a Traffic Management Plan, which would reduce the impact of increased traffic on Patterson Pass Road to a less-than-significant level.

Table 3.12-4. Estimated Cumulative (2027) Construction Trips on Regional Roadways (Peak Construction Period)

Roadway	Cumulative (2027) AADT	Total Project AADT/Percentage Change	Cumulative (2027) Truck AADT	Project Truck AADT/Percentage Change
I-580, west of Patterson Pass Road	43,054	165/0.4%	8,764	64/0.7%
I-580, east of Patterson Pass Road	49,948	170/0.3%	8,867	64/0.7%
Patterson Pass Road, south of Union Pacific Railroad	7,555	105/1.4%	47	0/0.0%
Patterson Pass Road, west of Midway Road	7,614	480/6.3%	65	159/244.6%

Notes: AADT = Annual Average Daily Traffic.
1 Volume obtained from Caltrans Traffic Census Program, 2021.
2 Volume provided from average daily traffic (ADT) counts conducted on February 15, 2024

With implementation of MM-TRANS-1, the Project would not create any inconsistency or conflict with an applicable plan, ordinance or policy that establishes measures of effectiveness, and therefore would not contribute to a cumulatively considerable impact. Impacts would be less than significant.

Impact 3.12-2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)

No Impact. The Project would not conflict or be inconsistent with CEQA Guidelines section 15065.3, subdivision (b), and therefore would not contribute to any cumulatively considerable VMT-related impact. Therefore, no impact would occur.

Impact 3.12-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-than-Significant Impact. The Project would not introduce incompatible uses or design features, such as changes to public roads or intersections. Transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment and the Project would implement hazardous waste transportation requirements that would minimize the potential for an accidental release of hazardous materials to occur. The Project would implement a Traffic Management Plan to minimize potential traffic impacts during construction. Therefore, the Project would not contribute to any cumulatively considerable impact involving hazards due to a design feature or incompatible uses or transport of hazardous materials and impacts would be less than significant.

Impact 3.12-4: Would the project result in inadequate emergency access?

Less than Significant. Construction activities would occur on the Project site and no full road closures in the public right-of-way or driveway closures are anticipated that would impact adopted emergency access or response plans. As part of the Traffic Management Plan, the contractor would follow standard construction practices and ensure that adequate on-site circulation and access is always maintained for all users. Therefore, the Project would have a **less–than-significant** contribution to cumulatively considerable impacts to emergency access.

No Impact. The site access requirements for operations and maintenance activities would be designed in accordance with Alameda County Fire Department Standards. As such, there would be **no cumulative impact** to emergency access.

Impact 3.12-5: Would the project result in significantly increased hazards associated with Project related hazardous materials to be transported to or from the Project site?

Less-than-Significant Impact. Transportation of hazardous substances would occur with DOT-approved personnel and trucking/transport equipment and the Project would implement hazardous waste transportation requirements that would minimize the potential for an accidental release of hazardous materials to occur. Therefore, the Project would have a less-than-significant contribution to any cumulatively considerable impact involving hazards due to a design feature or incompatible uses or transport of hazardous materials.

Section 3.13 Visual Resources – Revise text as follows:

3.13.4 Cumulative Effects

Less-than-Significant Impact with Mitigation. The cumulative scope includes projects that would introduce new industrial or residential uses into agricultural and undeveloped landscapes encountered by sensitive viewers (residents and travelers) who would have exposure to multiple impacted viewsheds within the Project region. The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3.1, Cumulative Projects, have the potential to result in cumulative impacts to aesthetic resources when considered together with the Project. The proposed Project would not have a significant, adverse effect on a scenic vista, nor would it substantially damage scenic resources. The visual simulations prepared for the Project demonstrate that implementation would result in less than significant impacts resulting from light

and glare and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings with the incorporation of MM-VIS-1, MM-VIS-2, and MM-VIS-3.

The existing industrial appearance within the viewshed of the PG&E Tesla substation, from which multiple lattice transmission towers of varying heights extend with the transmission lines visible against the sky, dominates the foreground. Wind turbines associated with the Altamont Pass Wind Resources Area are also visible. The Mulqueeney Ranch Wind Project would add a project substation at the western exterior boundary of the PG&E Tesla Substation and collector lines would be located underground in the vicinity of the PG&E Tesla Substation and the proposed Project. The underground collector lines would not add to permanent visual effects and the project substation would add a minimal visual effect that would be consistent with the overall industrial nature of the existing viewshed. The City of Tracy includes not only residential development but also industrial and commercial developments. This development has resulted in the degradation of the largely agricultural and undeveloped landscape. The implementation of the proposed Project, when added to the impacts of past, present, and future industrial development within a rural landscape, has the potential to result in potentially significant cumulative impacts to visual resources. Implementation of MM-VIS-1, MM-VIS-2, and MM-VIS-3 would be implemented to reduce Project contributions to cumulative impacts, reducing the impact to less than significant. Additionally, due to the Project location and surrounding terrain and site-specific nature in which light and glare is experienced, the Project's less-than-significant impact related to light and glare could not combine with impacts from other facilities. All projects would be required to comply with Title 24 BUG requirements, which would reduce the potential for light trespass, as well as applicable federal, state, and local laws and ordinances related to visual resources. Therefore, the Project's impact on visual resources would not cause or contribute to a significant adverse cumulative impact with the incorporation of mitigation.

Section 3.14 – Waste Management – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be completed by the time construction of the Potentia-Viridi Project begins. No additional impacts would occur beyond those previously analyzed in the Opt-In Application.

Section 3.15 Water Resources – Revise text as follows:

3.15.4 Cumulative Effects

The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3-1, Cumulative Projects, have the potential to result in cumulative impacts to water resources when considered together with the Project.

Drainage and Water Quality

Risks related to drainage and water quality can be cumulative in nature because runoff from any given site comingles with runoff from downstream project sites. Cumulative projects were chosen based on projects located within the same watershed as the Project, which is the Old River watershed. Other projects include residential, commercial, and industrial development. The majority of the cumulative projects would involve both construction and operational activities. The PG&E Tesla Substation, located immediately east of the Project site, would be the primary potential driver of cumulative drainage and water quality impacts, as would the Mulqueeney Ranch Wind Project.

Although construction and decommissioning activities have the potential to result in erosion and incidental spills of petroleum products and hazardous substances on the Project site, adherence to the construction SWPPP, DESCP (Appendix 2A), CWA Section 401 Certification, and County of Alameda grading requirements would mitigate erosion and incidental spills of hazardous substances related impacts to less-than-significant levels. Other cumulative scenario projects would be required to adhere to similar requirements, thereby minimizing cumulative scenario water quality impacts. Specifically, all planned projects in the vicinity of the proposed Project would be subject to environmental review and would be required to conform to the Alameda County grading ordinance and Construction General Permit, thus minimizing cumulative construction related impacts.

With respect to operations, increased runoff at cumulative project sites would similarly be subject to requirements of the Alameda County Stormwater Technical Guidance Manual, which would minimize post-construction stormwater quality impacts and stormwater runoff velocities, thus eliminating the potential for cumulative flooding and erosive scour of sediments. Therefore, with compliance with local regulations and implementation of stormwater management measures, the Project would not cause or contribute to a cumulatively significant impact to hydrology and water quality.

Groundwater Supply

Cumulative impacts to groundwater supply could occur if Project activities would contribute to overdraft conditions in the Livermore Valley Groundwater Basin. However, Zone 7 utilizes the Main Basin of the Livermore Valley Groundwater Basin as a storage facility via recharging the basin with surface water and extracting only the volume of water that has been recharged. Zone 7 uses groundwater banking agreements with agencies located in Kern County (Semitropic Water Storage District and Cawelo Water District) to store excess water available from the SWP during wet periods and then recovers it for delivery when SWP allotment is curtailed by droughts or disruptions. In addition, this groundwater basin is managed in accordance with a 2017 Groundwater Management Program, which was approved by the California DWR in 2019 as an alternative to a SGMA related GSA. Other related projects utilizing the Livermore Valley Groundwater Basin as a source of water supply would similarly be subject to the requirements of the Groundwater Management Plan and Zone 7 groundwater banking agreements. As a result, the proposed Project, in combination with related cumulative projects, would not cause or contribute to a cumulatively significant impact to groundwater supply.

Section 3.16 Worker Health and Safety – No changes to the impacts analysis would be necessary and no additional impacts would occur beyond those previously analyzed in the Opt-In Application.

Section 3.17 Wildfire – No changes to the cumulative analysis would be necessary as construction on the Mulqueeney Ranch Wind Project would be completed by the time construction of the Potentia-Viridi Project begins. No additional impacts would occur beyond those previously analyzed in the Opt-In Application.

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Attachment 1

PV BESS-Mulqueeney Wind Figure

NextEra Energy Substation

PG&E Tesla Substation

UNION PACIFIC RR

Patterson Pass RdCR 2063

9451 9452 9454 9455 9456

PMM1 PMM2 PMM3

Submitted to:
Alameda County Planning Department
224 West Winton Avenue, Room 111
Hayward, CA 94544
Contact: Andrew Young
510-670-5400

Submitted by:
Mulqueeney Wind Energy, LLC
200 Liberty Street, 14th Floor
New York, NY 10281
Contact: Dave Hurd
519-980-2206

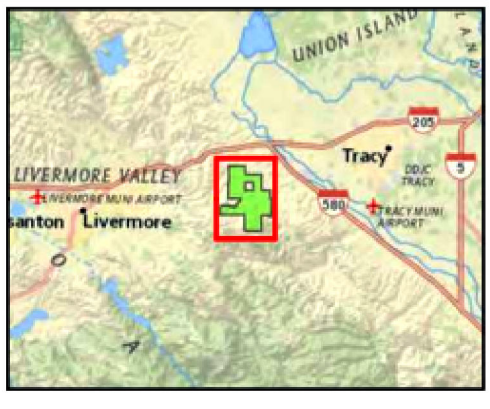
Project Boundary

Project Components
- Wind Turbine Generator
- Turbine Pad
- Proposed MET Mast
- Radius Improvement
- Crane Path
- Electrical Collection System

- Existing Access Road-Widen and Resurface
- Existing Access Road-Regrade and Widen
- New Access Road
- Proposed Project Substation
- Temporary Construction Facility

Existing Infrastructure
- Existing Temporary MET Mast (to be removed)
- Existing Transmission

Potentia-Viridi BESS Project Boundary



SOURCE: ICF 2019;

DUDEK

0 1,000 2,000 Feet

PV Bess - Mulqueeney Wind

Potentia-Viridi BESS Project