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Description:	The Applicant's first set of responses to the Data Request received from the CEC on February 13, 2026.
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Vaca Dixon Power Center Project (26-OPT-01)

CEC Data Request Response Set #1

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1 Introduction

On February 13, 2026, Vaca Dixon BESS LLC and Arges BESS LLC (Applicants) received a Determination of Incomplete Application and Request for Information from the California Energy Commission (CEC) for the Vaca Dixon Power Center Project (26-OPT-01) in response to the Applicant's application filed on January 14, 2026. The following document provides the Applicant's first set of responses to the Data Requests received from the CEC. Table 1 lists all Data Requests for which a response is provided in Response Set #1.

Table 1 Data Responses Included in Response Set #1

Data Request Resources Area	Data Request Number
Air Quality	AQ-1 through AQ-4
Alternatives	ALT-1, ALT-2
Biological Resources	BIO-1 through BIO-34
Cultural and Tribal Cultural Resources	CUL/TRI-1 through CUL/TRI-12
Executive Summary	ES-1
Greenhouse Gas Emissions (Climate Change)	GHG-1 through GHG-11
Hazardous Materials	HAZ-1 through HAZ-8, HAZ-10
Project Description	PD-1 through PD-3
Noise	NOI-1, NOI-2, NOI-3, NOI-4
Paleontological Resources	PAL-1
Socioeconomics	SOCIO-1, SOCIO-2
Traffic and Transportation	TRANS-1 through TRANS-5
Transmission System Design	TSD-1 through TSD-9
Visual Resources	VIS-1 through VIS-18
Waste Management	WASTE-1

The responses are grouped by individual discipline or topic area and are presented in the same order and with the same numbering provided by the CEC. New or revised graphics, tables, or attachments are provided throughout and as appendices to this document. The responses included in this document are considered complete responses to the corresponding Data Requests.

Table 2 provides a list of all remaining Data Requests received from the CEC that have not been addressed in Response Set #1.

Table 2 Data Responses Not Included in Response Set #1

Data Request Resources Area	Data Request Number
Hazardous Materials	HAZ-9
Land Use	LU-1 through LU-4
Public Health	PH-1 through PH-6
Water Resources	WATER-1 through WATER-3
Worker Safety	WS-1 through WS-22

Supplemental Data Request Response Sets will be provided to the CEC in response to the Data Requests not addressed in this document.

2 Air Quality

2.1 Data Requests DR AQ-1 through DR AQ-4

2.1.1 Data Request DR AQ-1

DR AQ-1

If the emergency diesel generator is planned for use, please provide the manufacturer's specification sheets. The specification sheets must include engine power (brake horsepower), emission rates, exhaust parameters, and the engine's emissions tier.

Response

The project would not include an emergency diesel generator; therefore, no manufacturer specification sheets are applicable for this submittal.

2.1.2 Data Request DR AQ-2

DR AQ-2

If the emergency diesel generator is planned for use, please update the CalEEMod, AERMOD operational-phase modeling results, health risk assessment (HRA) results, and provide the calculation sheet and the revised modeling files as well.

Response

The project would not include an emergency diesel generator. Therefore, no updates to the CalEEMod or AERMOD operational-phase modeling, health risk assessment, or associated calculation sheets and modeling files are required.

2.1.3 Data Request DR AQ-3

DR AQ-3

If the emergency diesel generator is planned for use, please clarify whether an SCR system would be used to decrease the NOx emissions of the emergency diesel generator. If yes, please provide the project's estimated ammonia emissions in pounds per day and tons per year.

Response

The project would not include an emergency diesel generator. Therefore, the use of an SCR system is not applicable, and no ammonia emissions would be generated.

2.1.4 Data Request DR AQ-4

DR AQ-4

Please provide the applicable fugitive dust BMPs consistent with the Solano County General Plan and the YSAQMD Handbook for Assessing and Mitigating Air Quality Impacts.

Response

The following fugitive-dust BMPs are applicable and recommended in the YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* and are consistent with the Solano County General Plan:

- Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Haul trucks shall maintain at least 2 feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Treat accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips or mulch.
- Treat accesses to a distance of 100 feet from the paved road with a 6- inch layer of gravel.

3 Alternatives

3.1 Data Requests DR ALT-1 and ALT-2

3.1.1 Data Request DR ALT-1

DR ALT-1

Per California Code of Regulations, Title 20, Appendix B (f) (1) and Appendix B (f) (2), please provide the following:

a. Please explain why the City of Vacaville identified the three sites shown in application Figure 6-1 (TN 268148) as preferred locations for BESS. Include any information provided by the City regarding these three sites, including anything relevant to surrounding land uses, land use and zoning designations, and City plans for BESS siting in these areas.

b. For the two alternative sites south of I-80 (APNs 0138020080 and 0142050020; APN 0142200040) that are identified in application Figure 6-1 (TN 268148), provide a discussion of the potential feasibility of each site to support the proposed project (e.g., zoning compatibility, available acreage, topography, proximity to transmission corridors, etc.). If a site is considered to be infeasible, provide an explanation of the specific reason for elimination (e.g., zoning incompatibility, sensitive biological or cultural resources, hazards, any engineering obstacles, etc.).

c. Provide a description and a map (preferably with a KMZ file provided) of alternative gen-tie routes to correspond with the two alternative sites south of I-80 that are identified in application Figure 6-1 (TN 268148). In the description of the alternative gen-tie routes, please provide information on right-of-way width required, land use and zoning designations, parcel ownership/easement lease options, and adjacent land uses. If no such route was found to be feasible, please provide details on the justifications for the infeasibility conclusion (e.g., major highway crossings, geologic hazards, sensitive biological or cultural resources, etc.).

Response

a. The Applicant has only publicly available information and has not been provided any non-public information by the City regarding these three sites identified in the City's process. The Applicant has access only to information put into the public administrative record of the City. Nevertheless, based on that publicly available information, the Applicant provides its understanding of the City's publicly stated goals and objectives.

   The City conceptually identified three sites following a suitability analysis conducted to determine which areas located primarily within City limits could support BESS facilities under the draft BESS ordinance prepared by the Community Development Department. The sites were identified during the October 22, 2025, community meeting hosted by the City. As part of this analysis, City staff evaluated potential locations against City-defined criteria included in the draft ordinance, such as maintaining a 300-foot buffer from sensitive receptors, avoiding areas planned for future development (the Northeast Growth Area and the East of Leisure Town Growth Area), and having relatively flat topography that could reasonably accommodate BESS development. The Applicant has only the publicly available information on how the City defined

its objectives, eliminated unsuitable sites based on those criteria, or otherwise filtered its review. Significantly, these are the stated objectives of the City's review of its ordinance project, not the Applicant's basic project objectives.

The Applicant filed this Application with the Commission on January 6, 2026 (TN #: 268142, *et seq*.). Thereafter, during the January 20, 2026, Planning Commission meeting, the City reportedly disclosed that the two sites located south of I-80 were ruled out as a result of the City's preferences. The City's decision to eliminate these two sites south of I-80 were reportedly a result of City updates to the draft ordinance, including the City's decision to increase the City's 300-foot buffer to 500 feet. As of January 20, 2026, the City no longer considers these two sites as among the City's preferred locations for BESS.

With respect to the third site, please see Section 6.2.1 of the Application (TN #: 268148). This section explains why the third, City-identified site is also infeasible, would not avoid or minimize any potentially significant effects, and would likely result in greater potential for significant effects than the Project site.

b. As confirmed above, the City disclosed during the January 20, 2026 Planning Commission meeting that the two sites located south of I-80 (APNs 0138020082 and 0142050020; APN 0142200040) are no longer considered preferred locations for BESS. Accordingly, though initially identified by the City, the City now deems these sites unsuitable to meet the City's objectives with its ordinance. These two locations were nevertheless evaluated as alternative locations for the Project. As summarized below, these two locations were removed from further consideration due to their inability to satisfy most of the Applicant's basic project objectives.

   Among other infirmities, the alternative sites would not allow the Applicant "to develop electricity storage facilities at energy facilities located on a dedicated parcel in the direct vicinity of the VDPP and PG&E Vaca-Dixon Substation, to utilize existing infrastructure and assets while also minimizing potential environmental impacts, including the avoidance and minimization of potential impacts from new transmission lines." (TN 268148, p. 6-1.) For the Vaca Dixon BESS, these sites also fail to provide important benefits, including the ability to "take advantage of existing interconnection capacity and integrate BESS operations with the natural gas-fueled VDPP to optimize project operations and afford the opportunity to avoid and minimize natural gas operations where feasible." (*Id*., p. 6-2) The City-sponsored and eliminated alternatives for the Arges BESS would not "utilize the transmission interconnection capacity available to the BESS at the PG&E Vaca-Dixon Substation." (*Id*.) Moreover, the City-sponsored and eliminated alternatives would not allow the project to "[l]ocate near existing roadways and related infrastructure where available and feasible for construction and O&M access." (*Id*.) With respect to feasibility, the City-sponsored and eliminated sites would not allow the Applicant to "[o]btain site control of a parcel at least 10 acres in size to provide adequate space to allow design flexibility for the Project, including batteries, switchyards, inverters, transformers, stormwater control, access routes, and fencing." (*Id*.) Moreover, given that the City eliminated these sites as part of their newly enacted ordinance, it is likely that these sites would be considered incompatible with local zoning and land use policies.

   The City-sponsored and eliminated sites' locations (approximately 3.5 to 4 miles south of the PG&E Vaca-Dixon Substation) would require longer gen-tie lines through many different properties and uses. Constructing substantially longer transmission infrastructure would not meet Project objectives because of increased cost, greater operational exposure to inclement weather and varied terrain, and reduced system reliability. Because the two sites do not meet

project objectives, are infeasible, do not avoid or minimize potential effects, and are no longer considered by the City itself as suitable BESS locations, the two sites are not within the reasonable range of feasible alternatives to the Project and the location for the Project and thus have been eliminated from further consideration.

c. The two alternative sites identified by the City and subsequently determined to be unsuitable by the City located south of I-80 depicted in Figure 6-1 (TN 268148) were preliminarily evaluated to determine whether feasible gen-tie routes could be developed to interconnect with the PG&E Vaca-Dixon Substation. Both now-rejected locations are approximately 3.5 to 4 miles from the substation, depending on hypothetical routing options, which would require gen-tie lines to extend up to 4 miles. This distance conflicts with a key Project objective to locate near existing roadways and related infrastructure where available and feasible for construction and O&M access. (*Id*.) A gen-tie line of this length would significantly increase construction complexity, linear disturbance area, and long-term O&M requirements. In addition, the ability to obtain site control or secure the necessary easements across multiple intervening private parcels is uncertain at best, given all of the intervening property owners and uses, making it unlikely that a right of way of the required width could be achieved. The inability to obtain site control or secure the necessary easements make these sites infeasible.

   A review of potential alignment options confirmed that any gen tie route extending from these southern locations would have to span several miles of privately owned land with varied land use and zoning designations, again raising infeasibility concerns. These sites have substantial uncertainty related to land access, consistency with local land use, and feasibility of long term operational rights. Due to these limitations, including but not limited to the required gen tie length, the inconsistency with most of the basic Project objectives, and the lack of a feasible or secure right of way, no practicable gen-tie route could be identified for the two alternative sites located south of I-80. Rather than avoiding or minimizing potential impacts, these substantially longer gen tie routes would likely end up with greater impacts and the potential to have significant, unmitigable effects.

   Again, during the January 20, 2026, Planning Commission meeting, the City stated that, consistent with the updated BESS ordinance, the two sites south of I-80 (APNs 0138020082 and 0142050020; APN 0142200040) are no longer considered by the City itself as preferred locations for BESS. This confirms that these sites are infeasible. For these reasons, the two sites and their associated gen-tie options were appropriately eliminated from further consideration as infeasible, unable to avoid or minimize potential effects, potentially having significant effects themselves, and the inability to satisfy most of the Applicant's basic project objectives.

3.1.2 Data Request DR ALT-2

DR ALT-2

Provide information on the applicant's previous attempts to gain site control of the Quinn Road Site. At a minimum, include a summary of negotiations between the applicant and the current landowner, and detail the reasons the site owner has rejected the applicant's attempts to gain site control (either through purchase or lease) of the Quinn Road Site. According to application Section 6.4.2 (TN 268148), the Quinn Road Site (APN 0133060070) is owned by PG&E. If PG&E has a compelling engineering feasibility issue that would prevent siting the project at this location, please enumerate those infeasibility issues in detail.

Response: As explained below, the Applicant was unable to secure site control, meaning the site is both infeasible and would not satisfy most of the Applicant's basic project objectives.

On March 13, 2023, the Applicant submitted to PG&E a 3rd Party Use of Land Application, specifically outlining the intent to lease a portion of PG&E's Vaca-Dixon Substation land (APN 0133060070) for the purposes of trying to gain site control of the Vaca Dixon Power Center Project. On April 21, 2023, PG&E granted permission for the Applicant to conduct non-invasive investigation activities. This permission was extended until January 31, 2024.

The Applicant conducted negotiations with the PG&E Land Division regarding a Lease Option Agreement for the Vaca Dixon BESS facilities in the second quarter of 2023. These negotiations continued for approximately one year, until the second quarter of 2024. The PG&E Land Division coordinated such discussions internally with its Legal department, Electric Generation Interconnection Group (EGI), Substation Engineering Division, and the Vaca-Dixon Substation. This coordination focused attempts to negotiate site control, conditioned on, among other things, PG&E corporate approval and CPUC regulatory approval of the sale or use of this utility property.

In May of 2024, the PG&E EGI instructed the PG&E Land Department to halt all negotiations on the BESS Ground Lease until such time that the Large Generator Interconnection Agreement (LGIA) for Arges had been approved and a PG&E project manager has been assigned to the project. Thereafter, on July 24, 2024, the PG&E Land Division formally suspended all BESS lease negotiations with the Applicant. On October 24, 2024, the PG&E Land Division halted all investigative activities on PG&E's Vaca-Dixon Substation land (APN 0133060070), pending approval from PG&E's EGI. No such approvals have been given to date.

While the early investigations revealed no fatal flaws from an environmental permitting perspective, the BESS Ground Lease negotiations stalled before the technical or engineering information for an application could be collected and reviewed. There are, for example, no geotechnical or other basic investigation reports of sufficient detail upon which to analyze site suitability from a technical or engineering perspective for an application, and the applicant cannot conduct further geotechnical investigations without PG&E's permission or authorization.

In addition to these direct negotiations not reaching fruition, there are substantial potential obstacles to acquiring CPUC regulatory approvals required for PG&E to dispose of any utility property-- even if PG&E was so inclined to discuss further the sell or transfer the property.

Under Public Utilities Code Section 851, an investor owned utility, like PG&E may not "…sell, lease, assign, mortgage, or otherwise dispose of, or encumber the whole or any part of, its railroad, street railroad, line, plant, system, or other property *necessary or useful in the performance of its duties to the public* *** without first having either secured an order from the commission authorizing it to do so for qualified transactions valued above five million dollars ($5,000,000)***." (Public Resources Code Section 851(a); emphasis added.)

Section 851 transfers of real property interests valued at over $5 million require the IOU to file a formal application with the CPUC. A CEQA determination is also required in all such divestitures of property. Section 851 is intended to protect ratepayers, ensure the continued provision of safe and reliable utility service, and maintain regulatory oversight of transactions involving utility assets. Section 851 is interpreted broadly and applies to currently used property and property held for future operational needs. Property is considered "necessary or useful in the performance of its duties to the public" under Public Utilities Code § 851 if it affects a utility's ability to provide safe, reliable, and adequate service, again, either currently or in the future. Significantly, utility property

need not be in current use to be considered "necessary or useful in the performance of its duties to the public." The question of what utility assets are necessary or useful is a factual question.

As the CPUC recently explained in the context of its "Tribal Land Transfer Policy Section 851 Approval Process":

> **Formal Application Process**
>
> The CPUC will require IOUs to file an application for Section 851 transactions valued at over $5 million. The application process is managed by the CPUC's Administrative Law Judge (ALJ) Division. The assigned ALJ will send a Scoping Memo to interested parties to determine whether testimony or evidentiary hearings are necessary to develop a legal record from which a Proposed Decision (PD) can be drafted. The full Commission votes to approve or deny the PD by 3/5 majority vote.
>
> **General Order (GO) 173 Advice Letter (AL) Process**
>
> When seeking approval of less complex or controversial transactions where testimony or hearings are not necessary, Section 851 approvals can be processed under the GO 173 expedited AL process provided: 1) California Environmental Quality Act review is *not* required; 2) the value of the real property is under $5 million; 3) the AL filing is *not* subject to a valid protest. If a valid protest is filed, then IOU must file an application seeking Section 851 approval.[1]

Even where a project is supported by a willing utility seller, there are no statutory deadlines for how long a Section 851 proceeding may take. The Applications are handled through the CPUC's ALJ Division. A Scoping Memo determines whether testimony and evidentiary hearings are required. A CEQA-compliant environmental document must be prepared and subjected to public comment. The Decision is issued through a proposed decision and a vote of the full Commission. Even approved projects are subject to administrative rehearing and, ultimately, judicial review.

In short, under the best of circumstances, the Section 851 process is potentially long and uncertain. These delays are contrary to some of the basic project objectives such as to assist California utilities in meeting obligations under the CPUC's Mid-Term Reliability and other Integrated Resource Planning Procurement requirements.

If, as in this case, the utility is unwilling or unable to designate property as no longer "necessary or useful in the performance of its duties to the public," now or in the future, as evidenced in part by not wanting to consummate a lease or grant some other right to use property, this is some factual evidence that the property is, for the time being, considered "necessary or useful in the performance of its duties to the public." While it is possible that with the utility's cooperation, one could make a case that the property at issue is not necessary or useful in the performance of its duties to the public, now or in the future, the Applicant could not secure such a determination in a timely manner. In the face of these infeasibility issues, given the project's schedule and need to be commercially operational as soon as possible, on February 21, 2025, the Applicant established contact with Thiara-Hilbers, leading to the execution of a Lease Option Agreement for the project's BESS sites.

[1] https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/bco/tribal/section-851-approval-process-11-12-21.pdf

4 Biological Resources

4.1 Data Requests DR BIO-1 through DR BIO-34

4.1.1 Data Request DR BIO-1

DR BIO-1

Please provide resumes for all personnel who conducted biological resources surveys in support of the application, including experience conducting habitat assessments, species surveys, and aquatic delineations. The resumes should indicate the amount of time spent performing species-specific surveys or monitoring (e.g., hours or days), and references (i.e., contact information for individual(s) that can verify the experience in question and the total time served on each project, who are not employed with the same organization the surveyor currently works for).

Response

Resumes are provided as Appendix DR BIO-1.

4.1.2 Data Request DR BIO-2

DR BIO-2

Per California Code of Regulations, section 1704, (a) (3) (C), please provide working links to the Solano County General Plan, 2008, cited in Section 5-12 (TN 268158) and Appendix Y (TN 268172-1), and the Arid West 2020 Regional Wetland Plant List, 2020, cited in Section 5-12 (TN 268158).

Response

Links for the Solano County General Plan and Arid West 2022 Regional Wetland Plant List are provided below:

- **Solano County General Plan:** https://www.solanocounty.gov/government/resource-management/planning-services/2008-solano-county-general-plan
- **Arid West 2022 Regional Wetland Plant List** (Revised from the 2020 Regional Wetland Plant List to the 2022 Regional Wetland Plant List): https://nwpl.sec.usace.army.mil/static/reports/NWPL%20Cover%20Page%20AW_v3_Revised.pdf

4.1.3 Data Request DR BIO-3

DR BIO-3

Please state whether the project will or will not seek in lieu take authorization under CESA through the CEC's in lieu permitting authority for Swainson's hawk. If seeking take authorization, please provide all the information required in California Code of Regulations, title 14, section 783.2(a) (1) (a) (10).

Response

The Project is not seeking take authorization for Swainson's hawk. No Swainson's hawk nests were observed within the Biological Study Area (BSA) during reconnaissance-level surveys; however, individuals were observed flying over the BSA and may occur temporarily within the BSA while foraging. Potentially suitable foraging habitat within the project site includes non-native annual grassland and perennial rye grass fields within the northern BSA. Project impacts to these vegetation communities include approximately 0.03 acre of permanent impacts and 1.23 acres of temporary impacts to non-native annual grassland; and <0.001 acre of temporary impacts to perennial rye grass fields. Though there is potential for this species to forage throughout the site, these impacts would not result in take of the species or significantly remove suitable Swainson's hawk foraging habitat. Additionally, no Swainson's hawk nests were identified in the project work areas, and no trees suitable for Swainson's hawk nesting will be removed as part of the project; therefore, suitable nesting habitat would not be impacted. Regardless, under Mitigation Measure (MM) BIO-5, one preconstruction survey will be conducted within 0.25-mile of the Project Area to survey Swainson's hawk presence and/or nesting activity. If an active Swainson's hawk nest is found during this survey, a qualified biologist will implement a 500-foot nesting buffer and a biological monitor will be present during construction activities to monitor the bird's behavior while the nest is active. If during nest monitoring the bird(s) exhibit distress and/or abnormal nesting behavior which may cause reproductive failure, the biological monitor shall have the authority to cease Project activities. The CEC and CDFW will be consulted regarding additional avoidance/minimization measures, as appropriate, prior to re-initiating work.

4.1.4 Data Request DR BIO-4

DR BIO-4

Please state whether the project will or will not seek in- lieu take authorization under CESA through the CEC's in lieu permitting authority for western burrowing owl. If seeking take authorization, please provide all the information required in California Code of Regulations, title 14, section 783.2(a)(1)(a)(10).

Response

The Project is not currently seeking take authorization for burrowing owl because suitable habitat within the BSA is minimal, and implementation of recommended avoidance and minimization measures MM BIO-3 (*Pre-construction Biological Surveys and Biological Monitoring*) and MM BIO-4 (*Pre-construction Nesting Bird Survey and Avoidance Buffers*) is expected to adequately reduce impacts and avoid take of the species. Additionally, protocol-level burrowing owl surveys are currently being conducted as of May 2026 in the northern BSA to further assess potential habitat and determine species presence or absence. To date, two breeding season protocol-level surveys have been completed in the northern BSA and habitat conditions observed during these surveys are considered minimally suitable. One ground squirrel complex is present within the southern portion of the northern BSA, however, no burrowing owls or evidence of burrowing owl use has been observed at this complex or elsewhere within the BSA. Following the completion of all four protocol surveys and analysis of the results, a survey report will be submitted to the Project docket for review. Depending on the final survey results, additional minimization measures may be incorporated into the Project to further reduce potential impacts to burrowing owl and take authorization may be requested if warranted.

4.1.5 Data Request DR BIO-5

DR BIO-5

Please state whether the project will or will not seek in- lieu take authorization under CESA through the CEC's in lieu permitting authority for Crotch's bumble bee. If seeking take authorization, please provide all the information required in California Code of Regulations, title 14, section 783.2(a)(1)(a)(10).

Response

The Project is not currently seeking take authorization for Crotch's bumble bee because suitable habitat within the project limits of the southern BSA is minimal and implementation of avoidance minimization measures, specifically BIO-3 (*Pre-construction Biological Surveys and Biological Monitoring*), is expected to adequately avoid take of the species. However, protocol-level Crotch's bumble bee surveys are planned for May/June of 2026 within the northern BSA to further assess potential habitat and confirm species presence/absence. Upon completion of the surveys, a report summarizing the results will be submitted to the Project docket for review. Based on the findings, additional minimization measures may be incorporated into the project to further reduce potential impacts to Crotch's bumble bee or take authorization may be requested if warranted.

4.1.6 Data Request DR BIO-6

DR BIO-6

Please provide a detailed description of all project activities planned within at least 150 feet of all streams, drainages, channels and associated riparian or wetland habitat within the Project Area.

Response

Project activities within 150 feet surrounding these features will include landscaping, gravel surfacing, road surfacing, installation of temporary gen-tie matting, installation of gen-tie poles, and the construction of a detention basin, laydown yard, and Arges and Vaca Dixon BESS, and Arges and Vaca Dixon BESS switchyards. Please refer to Appendix DR BIO-2, illustrating the gen-tie project work areas.

Although the limits of disturbance intersect with aquatic resources regulated under the purview of CDFW, the Project components overlapping these features consist of overhead gen-tie lines which will avoid these resources. Additionally, the associated gen-tie utility poles, and the construction work areas, will be situated to avoid these resources. Therefore, the proposed Project will not result in direct impacts to aquatic resources under the purview of the CDFW.

4.1.7 Data Request DR BIO-7

DR BIO-7

Please state whether the project will or will not seek in- lieu authorization equivalent to a Lake and Streambed Alteration Agreement through the CEC's in lieu permitting authority. If seeking in-lieu authorization, provide the information required in California Fish and Game Code, section 1602(a)(1)(A)-(F).

Response

The Project will not be seeking authorization equivalent to a Lake or Streambed Alteration (LSA) Agreement through the CEC as no part of the Project triggers the requirement to "notify" under Fish and Game Code section 1602. See response to DR BIO-6 for additional information on CDFW-jurisdictional features within the BSA and how they relate to the limits of disturbance for this Project.

4.1.8 Data Request DR BIO-8

DR BIO-8

Please provide complete protocol-level survey reports for western burrowing owl, Crotch's bumble bee, and rare plants, including coverage of the gen-tie route. The survey for western burrowing owl should include a 1,640-foot buffer around all project components (CDFW 2012). Other surveys should include up to a 250-foot buffer, depending on site access and existing development (e.g. paved roads and other developed areas). As staff has not received all relevant survey data for these species, additional data requests may be required upon receipt of the requested information.

Response

Protocol-level surveys for burrowing owl and Crotch's bumble bee were not previously conducted on the northern BSA due to a low quality of suitable habitat to support the species, as documented during reconnaissance-level surveys, and restricted access to the northern BSA. However, protocol-level surveys for burrowing owl and Crotch's bumble bee are currently being conducted in the northern BSA to obtain additional information on habitat suitability and presence/absence. Results of these surveys will be provided to the Project docket upon completion. Protocol survey reports for burrowing owl and Crotch's bumble bee for surveys completed in the southern BSA were included as part of the Project's BRTS (Appendix D and I, respectively).

Buffers for both surveys in the southern BSA were in accordance with the appropriate CDFW protocols. In response to the CEC's mention of the 1,640-foot (~500 meter) buffer around Project components, 1,640-feet is a recommended disturbance buffer distance and is intended solely for burrowing owl nesting sites, if observed, and not a survey buffer, according to the CDFW 2012 protocol. No burrowing owl or burrowing owl nesting sites or Crotch's bumble bee were observed within the southern BSA during protocol surveys.

In addition, a rare plant survey is currently being conducted in the northern BSA. Results of these surveys will be provided to the Project docket upon completion.

4.1.9 Data Request DR BIO-9

DR BIO-9

Please provide a map and GIS data showing the maximal extent of both permanent and temporary impacts associated with construction of the two gen-tie lines, including but not limited to access roads, pull sites, lay-down yards, and permanently graded tower pads.

Response

A map of Project impacts associated with the construction of the gen-tie lines are found in Appendix DR BIO-2. GIS data was submitted to the CEC docket via the file transfer portal. Please refer to Table 3 included in DR BIO-12 for acreage of Project-related permanent and temporary impacts on vegetation communities and land cover types within the BSA, including the gen-tie lines.

4.1.10 Data Request DR BIO-10

DR BIO-10

Provide the total acreage of both permanent and temporary impacts associated with construction of the two gen-tie lines.

Response

There will be approximately <0.01 acre of permanent impacts and 1.28 acres of temporary impacts associated with the construction of the overhead gen-tie lines. Specifically, this includes <0.01 acre of permanent impacts to non-native annual grassland and orchard communities; and temporary impacts of 0.04 acre of developed areas, 0.01 acre of landscaped areas, and 1.23 acres of the non-native annual grassland community. Permanent impacts will result from the installation of the gen-tie poles and temporary impacts will result from temporary work areas to support the construction of the gen-tie poles. A revised figure illustrating vegetation community impacts within the BSA is provided as Appendix DR BIO-2

4.1.11 Data Request DR BIO-11

DR BIO-11

Provide a narrative describing the process of gen-tie line construction including equipment to be used during construction.

Response

The construction of the gen-tie lines will include the installation of concrete pier foundations (approximately 4-8 feet in diameter and 30-40 feet deep), gen-tie structures made entirely of steel, and installation of electrical wiring. The electrical wire (i.e., stringing the gen-tie conductors) installation may require the use of one helicopter. Other equipment that is expected to be used throughout the construction process of the gen-tie lines include but are not limited to a driller/excavator for the foundations, loaders/dump trucks for dirt spots, a bucket and/or boom trucks, a 150-foot crane to lift structures into place, semi-trucks, concrete trucks, pickup trucks, and other small vehicles. Following completion of gen-tie pole installation and conductor stringing, temporarily disturbed areas will be stabilized for erosion control.

4.1.12 Data Request DR BIO-12

DR BIO-12

Provide a table listing the specific acreage of permanent and temporary impacts proposed to result from the project to each of the vegetation community/land cover types shown in Table 5.12-1.

Response: Please refer to Table 3 below for acreage of Project-related permanent and temporary impacts on vegetation communities and land cover types within the BSA.

Table 3 Impacts by Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	Permanent Impacts (acres)	Temporary Impacts (acres)
Non-native Annual Grassland	0.03	1.23
Developed	0.01	0.04
Orchard	8.45	0.79
Agricultural Fields	–	–
Barren/Ruderal	–	–
Landscaped	–	0.01
Open Water	–	–
Perennial Rye Grass Fields	–	<0.01
Fresh Emergent Wetland	–	–
Total	**8.48**	**2.07**

4.1.13 Data Request DR BIO-13

The application does not address the two ponds that are within 1,000 feet of the gen-tie corridor which may provide habitat for California tiger salamander (*Ambystoma californiense*), listed as threatened under CESA and the federal Endangered Species Act (ESA), as well as other aquatic species.

DR BIO-13

Please provide a discussion of the biological resources potentially occurring at the ponds located approximately 220 feet west of the north-south gen-tie corridor and approximately 850 feet north of the east-west gen-tie corridor, particularly their suitability for California tiger salamander and any sampling that has been conducted.

Response

The two ponds are located off-site and were inaccessible to Rincon staff during site visits; therefore, existing site conditions were not acquired, and no wildlife surveys were conducted for these pond features. The NWI classifies the northern pond feature (Pond 1) as "PEM1Cx," indicating that it contains riparian vegetation, is seasonally flooded, and is manmade. The NWI classifies the pond to the west of the BSA (Pond 2) as "PUBHx," indicating that it is a manmade feature, is permanently flooded, and may have some riparian vegetation. Based on aerial review, these features appear to be used for agricultural or stormwater purposes.

As stated in the Project's BRTS, protocol-level wet season sampling for federally listed large branchiopods in the northern BSA, completed by Helm Consulting in 2023/2024, the hydroperiod for seasonal wetland features were documented (Helm Biological Consulting 2024a, 2024b). Specifically, during Helm's first site visit in December of 2023, after a storm event that delivered 1.31 inches of rain, the seasonal wetlands remained dry. After a series of rain events in January and February 2024, the seasonal wetlands were inundated but were dry after six weeks, except for the swale extending north to south in the northern BSA. Helm Consulting (2024a, 2024b) did not

document the presence of California tiger salamander or other amphibian species during these survey efforts, which included dip-net sampling. Of the six basins that were sampled, the swale is the only wetland area that may provide a suitable hydroperiod for California tiger salamander; however, during the surveys by Helm no California tiger salamander larvae, sub-adults, or adults were identified, and therefore not expected to occupy this swale habitat.

A large branchiopod habitat assessment was conducted by Helm Consulting in the southern BSA in 2025, where depressions south of the BESS Project area were identified as potentially suitable habitat (Helm Biological Consulting 2025). These depressions were sampled for large branchiopods throughout the duration of the 2025/2026 wet season. When inundated with water, these depressions may be suitable aquatic habitat for California tiger salamander due to the potential to hold water during the appropriate hydroperiod; however, no large branchiopods, California tiger salamander, or other amphibians were detected in these pools during Helm's aquatic survey efforts. Despite the presence of some habitat features within Agricultural Ditch 1, the high flow velocities likely render it unsuitable for larval occupation and development. Therefore, the ditch does not represent viable breeding habitat for California tiger salamander. The southern BSA is mostly an active plum orchard with persistent human disturbance and is located north and east of highly trafficked roadways. Although there may be suitable aquatic habitat present in this portion of the BSA, these factors would deter this species from entering or moving through the southern BSA to small mammal burrows that would have otherwise been usable for this species. Therefore, in the southern BSA, upland habitat for California tiger salamander, which this species requires for shelter and protection from predators during non-breeding periods, was determined to be absent.

The BRTS determined that "due to the presence of significant movement barriers surrounding the Project area, including I-80 occurring between the northern and southern BSAs, Highway 128 to the north of the Project area, and Kilkenny Road north of the agricultural ditch in the southern BSA, the absence of California tiger salamander being observed during the protocol-level large branchiopod surveys completed by Helm Consulting in 2023/2024; and active row-crop agriculture, development, and a network of heavily populated roadways, California tiger salamanders are not expected to occur in the BSA" which includes portions of Ponds 1 and 2..

Regardless, the Project Applicant has reached out to the landowners of the areas where Pond 1 and Pond 2 exist, asking for permission to access the ponds to survey for California tiger salamander. The Applicant will follow up with the CEC once site access is either obtained to conduct sampling or denied. If access is provided for one or both ponds, surveys will be performed, documented, and docketed.

4.1.14 Data Request DR BIO-14

DR BIO-14

Provide GIS data for the water features as shown in Figure 5.12-4a and for survey areas as shown in Figure 5.12-5.

Response

Revised GIS survey data was submitted to the CEC via the file transfer portal.

4.1.15 Data Request DR BIO-15

DR BIO-15

Please clarify how it was determined that the potential for western burrowing owl to inhabit the northern BSA was low.

Response

As stated in Section 5.12 *Biological Resources*, a habitat assessment for burrowing owl was conducted in the southern portion of the northern BSA on April 21, 2023, by Rincon biologists Kristi Asmus and Cristy Rice. The habitat assessment concluded that suitable habitat for burrowing owl was of low quality due to an absence of 3- to 5-inch-wide burrow openings in the small mammal burrows on site and compacted soil throughout the site that would likely prevent future small mammal burrows. In addition, the site is regularly maintained/mowed for fuel reduction which creates a high level of human disturbance. Although the BSA does not contain suitable burrowing owl habitat, due to previously recorded CNDDB occurrences within 10 miles of the BSA and potential for shortened grasses after mowing events, this species was determined to have a low potential to occur within the northern BSA as opposed to no potential.

Furthermore, a habitat assessment and breeding season protocol surveys are currently being conducted as of May 2026 in the northern BSA. To date, the habitat assessment and two of the four protocol surveys have been completed. The results of the recent habitat assessment differ only slightly from the 2023 habitat assessment in that there are now suitable ground squirrel burrows (with 3- to 5-inch-wide openings) in mounds of dirt located near the southern portion of the swale, though the burrows were concentrated in one small area and are surrounded by hard packed soil. Additionally, the site is regularly maintained/mowed for fuel reduction and reducing for foraging suitability. In addition, no sign of burrowing owl was observed in the northern BSA during either habitat assessment or during any of the additional surveys that took place throughout the site. Therefore, it was determined that it is unlikely that burrowing owls would utilize the BSA for foraging and/or breeding in the northern BSA.

4.1.16 Data Request DR BIO-16

DR BIO-16

Provide a discussion of potential project impacts to western burrowing owl. This discussion should be informed by protocol-level surveys covering the entire project site and gen-tie corridor plus a 1,640-foot radius (CDFG 2012).

Response

As discussed above in the response to DR BIO-4, survey buffers for biological surveys completed for this Project were in accordance with the appropriate CDFW protocols. The 1,640-foot (~500 meter) buffer is a recommended disturbance buffer distance and is intended solely for burrowing owl nesting sites, if observed, and not a survey buffer, according to the CDFW 2012 protocol.

No burrowing owl or burrowing owl nesting sites were observed within the southern BSA during protocol-level surveys completed in 2025.

Breeding-season protocol level surveys for burrowing owl in the northern BSA were initiated on March 30, 2026, per the CDFW 2012 protocol. Protocol surveys are anticipated to conclude in June 2026. A report with survey results will be submitted to the Project docket upon completion. Given the lack of observations during the focused surveys and other surveys conducted within the BSA, burrowing owl are not expected to occur within the BSA and therefore impacts are not expected. Implementation of recommended avoidance and minimization measures MM BIO-3 (*Pre-construction Biological Surveys and Biological Monitoring*) and MM BIO-4 (*Pre-construction Nesting Bird Survey and Avoidance Buffers*) is expected to adequately reduce impacts and avoid take of the species should they occur within the vicinity of the project.

4.1.17 Data Request DR BIO-17

DR BIO-17

Provide a discussion of proposed mitigation measures which would reduce impacts to western burrowing owl to a level of less than significant, and which would fully avoid impacts if the project does not seek take authorization.

Response

Please see the Applicant's response to DR BIO-4 for additional information on anticipated burrowing owl impacts and additional mitigation measures to further reduce impacts to this species to less than significant. The Applicant is currently not seeking take authorization for this species.

4.1.18 Data Request DR BIO-18

DR BIO-18

Clarify how it was determined that the potential for Crotch's bumble bee to inhabit the northern BSA was low. Provide a discussion of potential project impacts to Crotch's bumble bee. This discussion should be informed by a protocol-level survey covering the entire project site and gen-tie line corridor plus an appropriate survey radius.

Response

As stated in the Project's BRTS, the Xerces Society Bumble Bee Atlas, iNaturalist, and CNDDB were queried to determine if Crotch's bumble bee had been documented within the Project vicinity. The CNDDB documented the nearest sighting of this species approximately 6.6 miles south of the BSA in 2007 (CDFW 2026). iNaturalist documented the nearest sighting approximately 5.6 miles south of the BSA in 2022 (iNaturalist 2026). Based on reconnaissance-level surveys completed in the northern BSA, commonly occurring flowering plants within non-native grassland habitat were observed, in which Crotch's bumble bee may forage, including yellow star-thistle (*Centaurea solstitialis)*, other thistle (*Carduus* spp.), fiddleneck (*Amsinckia* spp.), and vetch (*Vicia* spp.). The northern BSA is mowed regularly for fuel reduction and herbicides are used throughout the site for vegetation removal, therefore, foraging habitat may or may not be present at the time of project construction and plant composition may vary from year to year. The northern BSA did support a low density of small mammal burrows, grass tufts, and other vegetative detritus which may provide potential nesting or overwintering sites for this species. No bumble bees were observed during

reconnaissance-level surveys in the northern BSA, however, no protocol-level surveys were previously completed.

Protocol-level Crotch's bumble bee surveys are planned for May/June of 2026 within the northern BSA to further assess potential habitat and confirm species presence/absence. Upon completion of the surveys, a report summarizing the results will be submitted to the Project docket for review. Based on the findings, additional minimization measures may be incorporated into the project to further reduce potential impacts to Crotch's bumble bee or take authorization may be requested if warranted.

4.1.19 Data Request DR BIO-19

DR BIO-19

Provide a discussion of proposed mitigation measures which would reduce impacts to Crotch's bumble bee to a level of less than significant, and which would fully avoid impacts if the project does not seek take authorization.

Response

Please see the Applicant's response to DR BIO-5 for information on anticipated Crotch's bumble bee impacts and mitigation measures to reduce impacts to this species to less than significant. The Applicant is currently not seeking take authorization for this species.

4.1.20 Data Request DR BIO-20

DR BIO-20

Please revise Appendix Y.K for western pond turtle, which may be inappropriately listed as not expected in the biological study area (BSA). Describe which criteria are used to support a determination of not expected for western pond turtle, including an explanation of why the habitat on-site is not suitable. Please submit a clean and redline and strikethrough version of the revised table.

Response

A clean and revised copy of the updated Potential to Occur (PTO) Table (Appendix Y.K) is provided at Appendix DR BIO-3, based on the current assessment of biological resources within the Study Area.

Though there are aquatic features in the BSA that regularly hold water, such as Agricultural Ditch 1 and Pond 2, these features lack aquatic vegetation for cover and rocks, sticks, etc. that this species prefers for basking. The pond to the north of the northern BSA does contain dense aquatic vegetation (*Typha* spp.), as observed from a distance and using aerial imagery, and therefore may contain/is near basking sites for this species, yet the grassland area within the BSA is heavily disturbed and is not preferrable for egg laying. Additionally, this species was not observed during any of the surveys that have taken place throughout the BSA. Due to a lack of suitable habitat within the BSA and a lack of species' observations during the field surveys, this species is not expected to occur.

Despite this initial determination, the Project Applicant has reached out to the landowners of the areas where Pond 1 and Pond 2 exist, requesting permission to access the ponds to assess

presence/absence and habitat suitability for western pond turtle. The Applicant plans to follow up with the CEC once either access is granted and surveys can proceed or access is denied. If access is provided for one or both ponds, surveys will be performed, documented, and docketed.

4.1.21 Data Request DR BIO-21

DR BIO-21

Provide a discussion of potential project impacts to western pond turtle.

Response

Suitable habitat to support western pond turtle was determined to be absent from the BSA, as discussed in BRTS and expanded upon in response to DR BIO-20. Because the Applicant is still awaiting site access to Pond 1 and Pond 2, habitat in these areas has not yet been further assessed. If provided access, surveys for western pond turtle will be conducted. Following the completion of these surveys and analysis of the results, a survey report will be submitted to the Project docket for review, and an assessment of anticipated Project impacts will be provided.

4.1.22 Data Request DR BIO-22

DR BIO-22

Provide a discussion of proposed mitigation measures which would reduce impacts to western pond turtle to a level of less than significant.

Response

Because western pond turtle are currently not expected to occur on site and therefore no impacts are expected to potentially suitable habitat for this species as a result of this Project, no species-specific mitigation measures have been proposed. However, the existing recommended mitigation measure to conduct a pre-construction biological survey (MM BIO-3) would identify if the species is present within the work areas and the on-site biologist would stop work, capture and relocate the individual, as necessary, and contact the USFWS and CDFW office to determine next steps, and therefore, reduce impacts to less than significant under CEQA.

Furthermore, if access is granted to one or both of the ponds allowing surveys to be completed, survey results will be reviewed and analyzed for additional impacts, if applicable. As such, additional minimization measures may be incorporated into the project to further reduce impacts to western pond turtle to avoid take and/or take coverage may be requested.

4.1.23 Data Request DR BIO-23

DR BIO-23

Please revise Appendix Y.K for western spadefoot, which may be inappropriately listed as not expected in the biological study area (BSA). Describe which criteria are used to support a determination of not expected for western spadefoot, including an explanation of why the habitat on-site is not suitable. Please submit a clean and redline and strikethrough version of the revised table.

Response

This determination was made based on the absence of aquatic amphibians (including western spadefoot) observations during the protocol-level large branchiopod surveys completed for these pools by Helm Consulting in 2023/2024 in the northern BSA, and 2025/2026 in the southern BSA. Additionally, no documented occurrences of western spadefoot have been documented within 10 miles of the Project Area.

4.1.24 Data Request DR BIO-24

DR BIO-24

Provide a discussion of potential project impacts to western spadefoot.

Response

Suitable habitat to support western spadefoot was determined to be absent from the BSA. No western spadefoot, egg masses, or tadpoles were observed during the protocol-level large branchiopod surveys completed by Helm Consulting in 2023-2026 while inspecting each pool occurring within the BSA on multiple site visits. Additionally, no documented occurrences of western spadefoot have been documented within 10 miles of the Project Area and Project activities will avoid documented ephemeral waters within the BSA. Therefore, Project impacts to western spadefoot are not expected.

4.1.25 Data Request DR BIO-25

DR BIO-25

Provide a discussion of proposed mitigation measures which would reduce impacts to western spadefoot to a level of less than significant.

Response

MM BIO-1 (*Construction Worker Environmental Awareness Training and Education Program*), BIO-2 (*Construction Best Management Practices*), and BIO-3 (*Pre-construction Biological Surveys and Biological Monitoring*) included in the BRTS are adequate to avoid/reduce impacts to western spadefoot in the event the species occurs on site; however, western spadefoot are not expected to occur on site.

4.1.26 Data Request DR BIO-26

DR BIO-26

Please revise Appendix Y.K for western red bat, which may be inappropriately listed as not expected in the biological study area (BSA). Please submit a clean and redline and strikethrough version of the revised table.

Response

Trees present in the northern BSA could provide roosting habitat for western red bats, however the trees are too spread out from one another (e.g., canopies are not overlapping) and do not have the

dense canopy necessary for adequate species protection. In addition, the high level of vehicle noise and lighting associated with the adjacent I-80 deters the species from utilizing these trees for roosting/nesting. Active agriculture use in the southern BSA, primarily consisting of a plum orchard within the Project Area, is regularly maintained through activities such as mowing between the rows, tree pruning, fruit harvesting, and pesticide and/or herbicide application. These activities increase the regular disturbance and reduce the prey availability for this species within the southern BSA. Furthermore, only one CNDDB occurrence was recorded within 10 miles of the BSA, approximately 8.4 miles to the north of the Project Area (CDFW 2025) and one iNaturalist occurrence has been recorded approximately 9.5 miles southwest of the BSA (iNaturalist 2026). Lastly, the Project does not include tree removal in the northern BSA. The orchard trees (*Prunus* sp.) in the southern BSA will be removed; however, these trees do not support suitable habitat for the species. Therefore, it was determined that the proposed Project will not result in impacts to the species.

A clean and redline copy of Appendix Y.K is provided as Appendix DR BIO-3.

4.1.27 Data Request DR BIO-27

DR BIO-27

Provide a discussion of potential project impacts to western red bat.

Response

Because it was determined that the western red bat is not expected to occur on site, as discussed in the responses to DR BIO-26, no impacts are anticipated as a result of Project activities.

4.1.28 Data Request DR BIO-28

DR BIO-28

Provide a discussion of all proposed mitigation measures which would reduce impacts to western spadefoot to a level of less than significant.

Response

Though DR BIO-28 asks about proposed mitigation for western spadefoot, the Project Applicant has inferred that the CEC intended for DR BIO-28 to ask about mitigation for western *red bat*, since proposed mitigation for western spadefoot was discussed in DR BIO-25. Therefore, the answer below is related to proposed mitigation for western red bat.

Because no impacts to western red bat are anticipated as a result of Project activities, no mitigation measures specific to red bat have been proposed. However, the implementation of MM BIO-3 (*Pre-construction Biological Surveys and Biological Monitoring*) will allow qualified biologists to identify any individuals during the pre-construction survey, stop work and contact the CEC and CDFW regarding next steps, as necessary.

4.1.29 Data Request DR BIO-29

DR BIO-29

Please revise the Special-Status Species Evaluation Table included as Appendix Y.K for the following species, which may be inappropriately listed as not expected in the biological study area (BSA). Describe which criteria are used to support a determination of not expected for all species, including an explanation of why the habitat on-site is not suitable. Please submit a clean and redline and strikethrough version of the revised table.

- Ferris' milk-vetch (*Astragalus tener* var. *ferrisiae*)
- Alkali milk-vetch (*Astragalus tener* var. *tener*)
- Heartscale (*Atriplex cordulata*)
- Brittlescale (*Atriplex depressa*)
- Pappose tarplant (*Centromadia parryi ssp. parryi*)
- Hispid salty bird's-beak (*Chloropyron molle* ssp. *hispidum)*
- Recurved larkspur (*Delphinium recurvatum*)
- Dwarf downingia (*Downingia pusilla*)
- San Joaquin spearscale (*Extriplex joaquinana*)
- Fragrant fritillary (*Fritillaria liliacea*)
- Carquinez goldenbush (*Isocoma arguta*)
- Heckard's pepper-grass (*Lepidium latipes* var. *heckardii*)
- California alkali grass (*Puccinellia simplex)*
- Two-fork clover (*Trifolium amoenum*)
- Saline clover (*Trifolium hydrophilum*)
- Crampton's tuctoria/Solano grass (*Tuctoria mucronata*)

Response

The plant species listed above were determined to not occur on site primarily based on the grassland areas within the BSA containing mostly non-native species, which likely outcompete the species above, the high amount of human disturbance that occurs on site, and the use of herbicides. There are also no alkali flats or soils within the site that some of these species prefer. Together, these variables reduce the quality of the habitat that may otherwise be "available" for these species. Upon re-review of these species, the Project applicant has only updated the determinations for three species (alkali milk-vetch, brittlescale, and fragrant fritillary) to have a low potential to occur throughout the site, though only in the northern BSA. The active agriculture in the southern BSA does not provide suitable habitat for these species to occur.

Please refer to the revised PTO table (Appendix DR BIO-3) for more information on how these determinations were made. Protocol-level rare plant surveys are currently being conducted as of May 2026 in the northern BSA to further determine presence/absence of these species and to further evaluate potentially suitable habitat. Following the completion of these surveys and analysis of the results, a survey report will be submitted to the Project docket for review.

4.1.30 Data Request DR BIO-30

DR BIO-30

Please provide discussion of potential project impacts to rare plants which may be impacted by the project.

Response

The BSA is significantly disturbed by routine mowing, human presence, development, active agriculture and the use of herbicides. In addition, non-native species dominate within the grassland habitats that comprise the majority of the northern BSA. These conditions substantially reduce habitat quality in areas where special-status plant species might otherwise occur.

Within the northern BSA, herbicide use has resulted in most vegetation outside of the swale being absent or dead. Because the disturbance footprint for the gen-tie lines is located outside of the swale, there is minimal, if any, vegetation left to be impacted by Project activities. As such, impacts to special-status plant species in the northern BSA are not expected.

Similarly, special-status plant species are not expected to occur within the southern BSA due to the active agriculture use, ongoing human disturbance and routine application of herbicides/pesticides. As a result, impacts to special-status plant species within the southern BSA are not expected.

4.1.31 Data Request DR BIO-31

DR BIO-31

Please provide a discussion of proposed mitigation measures which would reduce impacts to rare plants which may be impacted by the project to a level of less than significant.

Response

Special status plant species are not expected to occur within the Project area; therefore, construction of the proposed Project is not anticipated to result in impacts to special status plants, and no mitigation measures are required.

Focused surveys are being conducted within the northern BSA as of May 2026 now that full site access has been obtained. Although not expected, should special-status plants be observed during those surveys, potential project impacts to those species will be assessed and minimization measures may be incorporated into the Project to reduce impacts to those populations.

4.1.32 Data Request DR BIO-32

DR BIO-32

For clarity in the public record, please include the rare plant survey in a revised Table 5.12-2.

Response

The 2024 rare plant survey and associated details have been included as part of the revised Table 5.12-2 (Appendix DR BIO-4). This survey table will be updated upon the completion of the various surveys discussed above.

4.1.33 Data Request DR BIO-33

DR BIO-33

Provide a discussion of proposed off-site habitat mitigation for burrowing owl and Swainson's hawk to reduce impacts to these species' habitat to a level of less than significant.

Response

Offsite mitigation is not currently proposed for burrowing owl and Swainson's hawk. Permanent loss of 0.03 acre of grassland foraging habitat for these species is not considered significant, as the barren/ruderal areas within the BSA will still be available for both species during all stages of construction and transmission towers will still be present, if Swainson's hawks choose to use them for nesting and/or hunting perches. The addition of the overhead gen-tie lines would not prevent these species from using the grassland area in the northern BSA. Temporary direct impacts to foraging habitat would be less than significant under CEQA due to the ample foraging habitat found within and near the Project Area, and the small acreage of the Project Area and anticipated Project impacts. As such, no take of these species is anticipated, and therefore no offsite habitat mitigation was deemed necessary.

4.1.34 Data Request DR BIO-34

DR BIO-34

Provide copies of any initial correspondence with state and federal resource agencies, including but not limited the Central Valley Regional Water Quality Control Board (RWQCB).

Response

Meeting minutes from the September 17, 2024, pre-coordination meeting with the United States Fish and Wildlife Service was included as Appendix M of the Biological Resources Technical Study, submitted to the CEC on January 6, 2026. The proposed Project Applicant did not meet with the Central Valley Regional Water Quality Control Board (RWQCB), as no Project impacts are expected for RWQCB jurisdictional features.

5 Cultural and Tribal Cultural Resources

5.1 Data Requests DR CUL/TRI-1 through DR CUL/TRI-12

5.1.1 Data Request DR CUL/TRI-1

DR CUL/TRI-1

Subsection 5.1.1.3 (Ethnographic Setting) does not emphasize the ethnographic setting within 5 miles of the proposed project, as required by Appendix B (g) (2) (a). Although Subsection 5.1.1.3 correctly identifies the Patwin as the aboriginal inhabitants of the project vicinity, it fails to mention that a prominent Patwin village, Ululato, was located about 5 miles from the project site (see Johnson 1978, Figure 1). Please revisit the sources cited in Subsection 5.1.1.3 and summarize ethnographic information relevant to a 5-mile radius from the proposed project.

Response

Section 3.2.2 of the Cultural Resources Technical Report and subsection 5.1.1.3 of the application have been revised to include a discussion of the village of Ululato (possibly CA-SOL-425/H). The updated confidential Appendix I Cultural Resources Technical Report will be uploaded to the Project docket concurrent with submittal of this response set.

5.1.2 Data Request DR CUL/TRI-2

DR CUL/TRI-2

The application does not address the potential for tribal cultural resources to occur within the project area in the regional summary as required by Appendix B (g) (2) (a). Although CEQA lead agencies are ultimately responsible for determining whether a proposed project would cause impacts to tribal cultural resources (as Section 5.3.1.2 of the application states), this does not preclude attempts by others to assess the potential for tribal cultural resources to occur in a project area. Moreover, CEQA provides sufficient definitions for what kinds of resources may constitute a tribal cultural resource at Public Resources Code, sections 21074(a)(1) and 21074(b)–(c). Please add a discussion of the potential for tribal cultural resources to occur within the project area.

Response

Section 5.3.1.2 of the Opt-In Application and Section 6.5 of Cultural Resources Technical Report have been updated to address the potential for the project to impact Tribal Cultural Resources. The discussion is based solely on information gathered by the applicant's consultant and does not include any information that may have been or will be collected as part of the government-to-government consultation that will occur between the CEC and consulting Tribes.

5.1.3 Data Request DR CUL/TRI-3

DR CUL/TRI-3

The intensive pedestrian survey boundaries are unclear in the Confidential Cultural Resources study (Campbell-King et al. 2025). Please provide a figure depicting the archaeological survey coverage of the project area and survey buffers as required by Appendix B (g) (2) (C). In accordance with the guidance from OHP (1990, p. 10) specified by Appendix B (g) (2) (C), please use the Allendale, California, topographic quadrangle for the base map and set the scale at 1:24,000. Supply supplementary figures if 1:24,000 scale does not permit clear delineation of survey boundaries, project boundaries, and survey strategy.

Response

Rincon has prepared an updated map with United States Geological Survey topographic basemap depicting the Cultural Resources Study Area, with the Project Area and Project components included for reference, as well as built environment and archeological survey areas, with related buffers. Please refer to Figure 3 in the updated report.

5.1.4 Data Request DR CUL/TRI-4

DR CUL/TRI-4

A copy of the applicant's request to the Native American Heritage Commission (NAHC), and any written or oral responses were not included in the technical study. Please provide the NAHC request and any written or oral responses as required by Appendix B (g) (2) (D) (i), Appendix B (g) (2) (D) (ii) and Appendix B (g) (2) (D) (iii).

Response

A copy of documentation relating to NAHC outreach (SLF Search) is provided in Appendix B of the updated Cultural Resources Technical Report, which will be uploaded to the Project docket concurrent with submittal of this response set.

5.1.5 Data Request DR CUL/TRI-5

DR CUL/TRI-5

The application does not present a table that identifies each agency with jurisdiction present in the project area as required by Appendix B (i) (1) (B). Please add a table that identifies each agency with jurisdiction present in the project area.

Response

Table 5.1-3 of Section 5.1.6 has been updated to include the local and state agencies with jurisdiction in the project area.

5.1.6 Data Request DR CUL/TRI-6

DR CUL/TRI-6

The applicant's Confidential Cultural Resources study (Campbell-King et al. 2025) does not include copies of Department of Parks and Recreation (DPR) 523 forms for resources identified in DR CUL/TRI - 9 in accordance with Appendix B (g) (2) (C) and Appendix B (g) (2) (C) (iii). Please provide all missing forms and a list of all DPR 523 prepared for and included in Appendix C of the technical report for clarity.

Response

Copies of DPR 523 forms for recorded resources within the CRSA are included in Appendix C of the updated Cultural Resources Technical Report, which will be uploaded to the Project docket concurrent with submittal of this response set.

Please see below for a list of DPR forms prepared and provided in Appendix C:

Vaca-Dixon Substation- update (P-48-002041 – encompasses P-48-002072, P-48-002072, P-48-002073, P-48-002074, P-48-002075, P-48-002076)

- Drum-Cordelia Transmission Line (extant components of) - update (P-48-002080/CA-SOL-543H)
- Former Gibson Canyon Creek Wastewater Treatment Plant
- Gibson Canyon Creek Channel (segments of)
- Solano Irrigation District (Kilkenny Canal Laterals) 4-C and 4-C-1
- Ellsworth Road (segment within CRSA)
- 5131 Ellsworth Road
- Mills Lane (entire road is within CRSA)
- 6984 and 6988 Mills Lane
- 7016 Mills Lane
- 7038 Mills Lane
- 7046 Mills Lane
- Quinn Road – Segment within CRSA north of and parallel to I-80 Freeway
- 5111-5115 and 5119 Quinn Road
- Willow Road (segment within CRSA)
- 6795 Willow Road
- 6829 Willow Road
- 6861 Willow Road

In some cases, resources in the CRSA were previously recorded for the Cultural Resources Inventory Report for the Corby Battery Energy Storage System Project and did not require additional recordation for this study; therefore, those DPRs are included in Appendix D of the updated Cultural Resources Technical Report.

5.1.7 Data Request DR CUL/TRI-7

DR CUL/TRI-7

The Confidential Cultural Resources study (Campbell-King et al. 2025) does not include a copy of Appendix D. In addition, the document referenced, the Cultural Resources Inventory Report for the Corby Battery Energy Storage System Project in Solano County, California (ICF 2024), has been updated and replaced by a February 2025 Cultural Resources Inventory Report for the Corby Battery Energy Storage System Project in Solano County, California. This report and confidential appendices are on file at CEC Cultural Resources Unit as DayZenLLC 2025e – DayZenLLC (TN 263360). NextEra Repeated Request For Confidentiality - Corby BESS Updated Cultural Resources Report. Docketed May 27, 2025. Please update all findings accordingly.

Response

Rincon accessed the updated report for the Corby Battery Energy Storage System Project through coordination with CEC and has incorporated relevant findings into the updated Cultural Resources Technical Report for the Vaca Dixon Power Center Project. The updated Corby Battery Energy Storage System Project report and related DPR 523 Series forms are provided in Appendix D of the updated Cultural Resources Technical Report for the Vaca Dixon Power Center Project.

5.1.8 Data Request DR CUL/TRI-8

DR CUL/TRI-8

The Confidential Cultural Resources study (Campbell-King et al. 2025) refers to a residence at 5310 Kilkenny Road as not eligible to the CRHR under Status Code 6Z. This finding has been updated by CEC staff in a DPR 523 Update as eligible to the CRHR in accordance with Status Code 3CS. This DPR 523 Update is on file at CEC Cultural Resources Unit. Please revise and update the current cultural resource technical study.

Response

Rincon has incorporated the updated finding regarding 5310 Kilkenny Road into the updated Cultural Resources Technical Report. Related DPRs provided by CEC and CEC's consultant, Aspen Environmental Group, are included in Appendix D with other documentation related to the Corby Battery Energy Storage System Project report.

5.1.9 Data Request DR CUL/TRI-9

DR CUL/TRI-9

Preliminary research conducted by CEC staff suggests that select 45+ year old built environment features, primarily linear features, were not identified during the field surveys presented in Confidential Cultural Resources study (Campbell-King et al. 2025) as required by Appendix B (g) (2) (C). If any of these features are confirmed to be 45+ years in age, please conduct additional architectural surveys, add them to the Cultural Resources Study, record them on the appropriate DPR 523 forms as necessary, and evaluate them for significance under the California Environmental Quality Act (CEQA). ICF CB #'s referenced below refer to ID numbers assigned by

ICF in the updated February 2025 Cultural Resources Inventory Report for the Corby Battery Energy Storage System Project in Solano County, California. As noted in DR CUL/TRI-11, this report is on file at CEC Cultural Resources Unit. Linear features not included in the Confidential Cultural Resources study (Campbell-King et al. 2025) include but are not limited to the following.

- Byrnes Road (ICF – CB 17)
- Weber Road (ICF - CB 18)
- N. Meridian Road (ICF - CB 20)
- Kilkenny Road (ICF - CB 19)
- Quinn Road – North of and parallel to I-80 Freeway
- Ellsworth Road
- Willow Road
- Solano Irrigation District Lateral 4-C (ICF - CB 16)
- Solano Irrigation District Lateral 4-D (ICF - CB 25)
- Irrigation Channel at N. Meridian (ICF –CB 23)
- Irrigation Channel At Mills Lane (ICF – CB 27)
- Irrigation Channel West of Vaca-Dixon Substation (ICF - CB 24)

Response

Rincon incorporated findings for all resources that were studied for the Corby Battery Energy Storage System Project and were located within the CRSA for the Vaca Dixon Power Center Project. Additionally, Per CEC's request, Rincon conducted additional aerial photograph and map review, as well as research of Solano County and City of Vacaville property data to determine whether additional age-eligible built environment resources, or resources less than 45 years old with exceptional significance were located in the CRSA. Rincon conducted an additional built environment survey within the CRSA on April 7, 2026. Rincon prepared DPR 523 Series forms for Ellsworth Road, Quinn Road, and Willow Road, and Mills Lane, as well as the property at 6795 Willow Road. Two potentially age-eligible irrigation ditches were identified in the CRSA through desktop review; however, these apparent resources were unable to be observed through survey from accessible areas and were therefore acknowledged in the updated report but not evaluated.

5.1.10 Data Request DR CUL/TRI-10

DR CUL/TRI-10

Based on a Google Earth review of the Cultural Resources Study Area (CRSA) map depicted as Figure 3 of the Confidential Cultural Resources study (Campbell-King et al. 2025), CEC staff believe that additional non-linear 45+ year old buildings and structures may be present within the existing CRSA and/or within a newly defined Built Environment Study Area. By way of example, Parcel 12, a consultant designator for multiple Solano County assessor parcels, is identified as having been surveyed.

However, a Google Earth review of this parcel depicts a small building is located in the extreme southeast corner of the parcel. This building appears on various historic aerials. This building may be associated with the former Gibson Canyon Creek Wastewater Treatment Plant, which is recommended as not eligible to the NRHP and CRHR, but a DPR 523 form or discussion of this

building was not located for this building feature in TN12449 (Confidential Appendix F). Please resurvey this parcel and others as necessary following consultation of historic aerials for the CRSA.

Response

To resolve this data request, Rincon conducted additional background research within the CRSA, updated and expanded mapping of the CRSA and related resources and has included DPR forms for all recorded resources, including the former Gibson Canyon Creek Wastewater Treatment Plant, as Appendix C to the updated Cultural Resources Technical Report.

5.1.11 Data Request DR CUL/TRI-11

DR CUL/TRI-11

Multiple properties within the CRSA less than 45 years in age were apparently surveyed although no specific documentation or evaluations are provided regarding these properties apart from a statement that none are of exceptional significance. Please provide a table with address and parcel numbers for these properties so that conformance with Appendix B (g) (2) (C) can be confirmed.

Response

Rincon has included an expanded explanation of background research and survey methodology, as well as Table 3 in the updated Cultural Resources Technical Report, which lists properties within the CRSA that were found to be vacant or to contain only built environment resources less than 45 years in age. These properties were found to not possess exceptional significance and were excluded from further study.

5.1.12 Data Request DR CUL/TRI-12

DR CUL/TRI-12

After consulting the updated February 2025 Cultural Resources Inventory Report for the Corby Battery Energy Storage System Project in Solano County, California (DR CUL/TRI-8), and conducting new surveys as necessary (DR CUL/TRI-9 and DR CUL/TRI-10), please include a updated map in accordance with Appendix B (g) (2) (C) (iv) at a scale of 1:24,000 (U.S. Geological Survey topographic quadrangle) depicting the locations of all previously known and newly identified cultural and tribal cultural resources compiled through the research required by Appendix B (g)(2)(B) and Appendix B (g)(2)(C) (ii), and in accordance with Appendix B (g) (2) (C).

Response

For the updated report, Rincon prepared Table 1: Known Cultural Resources, Table 2: Built Environment Properties 45 Years or Older Identified Within Cultural Resources Study Area, as well as Figure 6: Previously Recorded Resources Within 1.0-Mile Search Radius, and Figure 7: Resources Recorded in CRSA to document previously recorded and newly identified resources in the CRSA.

6 Executive Summary

6.1 Data Requests DR ES-1

6.1.1 Data Request DR ES-1

DR ES-1

Please provide a full-page color photographic reproduction depicting the visual appearance of the Vaca Dixon BESS and Arges BESS site prior to construction, and a full-page color simulation of the site, after construction. These documents should clearly show the project site, including all main project components before and after, from a close vantage point. An aerial or "bird's eye view" is recommended.

Response

Full page color photographic reproduction of the Project site existing conditions and proposed conditions is included in Appendix DR VIS of this Data Request Response Set. The full set of figures includes detailed photographic reproductions of the BESS facilities and gen-tie lines. An aerial view has been included.

7 Greenhouse Gas Emissions (Climate Change)

7.1 Data Requests DR GHG-1 through DR GHG-11

7.1.1 Data Request DR GHG-1

DR GHG-1

Please estimate the annual indirect GHG emissions (metric tons of CO_2e [$MTCO_2e$]) resulting from energy losses due to transmission and charging/discharging cycles. Please include assumptions that account for the degradation of round-trip efficiency over the project lifetime in the calculation of indirect GHG emissions.

Response

Based on the initial configuration of 21 batteries at the Vaca Dixon BESS, with the addition of 8 more batteries between the initial year and year 17, and a 57-MW total system, GHG emissions from losses due to transmission and charging/discharging cycles would be 2,535 $MTCO_2e$ in the initial year and 5,394 $MTCO_2e$ in year 17. For the Arges BESS, with the initial configuration of 100 batteries and addition of 28 more batteries between the initial year and year 17, and a 100-MW total system, GHG emissions from losses due to transmission and charging/discharging cycles would be 4,448 $MTCO_2e$ in the initial year and 8,825 $MTCO_2e$ in year 17. This assumes a 4.27 percent annual loss from transmission and distribution, 20 to 35 percent loss from charging and discharging, and a 1.3 percent loss from self-discharge of batteries.[2,3] This assumes the pollutant intensity factor for CO_2, CH_4 and N_2O are stagnant over the 17 years, resulting in a conservative estimate of GHG emissions. Assuming the pollutant intensity factor reduces as renewables increase to 100 percent through 2045, GHG emissions from the same losses in year 17 would be 53 $MTCO_2e$ and 86 $MTCO_2e$, for Vaca Dixon BESS and Arges BESS, respectively. See Appendix DR GHG for calculations.

7.1.2 Data Request DR GHG-2

DR GHG-2

Please estimate the annual indirect GHG emissions (metric tons of CO_2e) from auxiliary loads, such as BESS cooling. Please include assumptions that account for the BESS efficiency degradation over the project lifetime in the calculation of indirect GHG emissions.

Response

For Vaca Dixon BESS, the initial configuration is 21 batteries with the addition of 8 more between the initial year and year 17 to account for battery efficiency degradation and still assuming full power capacity. GHG emissions from auxiliary loads would result in calculated indirect GHG

[2] California Energy Commission 2025. California Electrical Transmission Lines. https://data.ca.gov/dataset/california-electric-transmission-lines

[3] ERPI 2021. *Greenhouse Gas Emissions Accounting for Battery Energy Storage Systems.*

emissions of 1,029 $MTCO_2e$ in the initial year and 1,418 MT CO_2e in year 17. This assumes the pollutant intensity factors for CO_2, CH_4 and N_2O are stagnant over the 17 years. Assuming the pollutant intensity factor reduces as renewables increase to 100 percent through 2045, GHG emissions from the same losses in year 17 would be 10 $MTCO_2e$.

For Arges BESS, the initial configuration is 100 batteries with the addition of 28 more between the initial year and year 17 to account for battery efficiency degradation and still assumes full power capacity. GHG emissions from auxiliary loads would result in indirect GHG emissions of 4,652 $MTCO_2e$ in the initial year and 6,134 MT CO_2e in year 17. This assumes the pollutant intensity factors for CO_2, CH_4 and N_2O are stagnant over the 17 years. Assuming the pollutant intensity factor reduces as renewables increase to 100 percent through 2045, GHG emissions from the same losses in year 17 would be 46 $MTCO_2e$. See Appendix DR GHG for calculations.

7.1.3 Data Request DR GHG-3

DR GHG-3

If the BESS would be charged by the grid, please calculate the indirect GHG emissions associated with charging from the grid and displaced GHG emissions with discharging to the grid. Provide assumptions for the number of hours annually that the BESS could be charged by the grid, the GHG emission intensity factor from the electrical grid during charging and discharging considering carbon neutrality by 2045, and the efficiency degradation over the project lifetime in the calculation of indirect GHG emissions.

Response

The Vaca Dixon Power Center system would be charged by the grid. Indirect GHG emissions associated with charging from the grid are calculated to be 7,776 MT CO_2e per year for Vaca Dixon BESS and 13,642 MT CO_2e per year for Arges BESS, assuming the pollutant intensity factor does not change from the 203.983 lbs/MWh for CO_2 2028 and 2029 forecasts, 0.033 lbs/MWh for CH_4 and 0.004 lbs/MWh for N_2O.The pollutant intensity factors are taken from the CalEEMod model version 2022.1 for Pacific Gas and Electric. This assumes that the Vaca Dixion BESS batteries charge 4 hours per day for a total of 83,220 MWh per year and 146,000 MWh per year for Arges BESS. Efficiency degradation is accounted for through the addition of new batteries to maintain the annual MWhs available. Assuming the pollutant intensity factor reduces as renewables increase to 100 percent through 2045, annual GHG emissions from Vaca Dixon BESS charging from the grid would reduce to 76 MT CO_2e annually in year 17 with average annual GHG emissions equaling 3,926 $MTCO_2e$. The Arges BESS charging from the grid would reduce to 134 MT CO_2e annually in year 17 with average annual GHG emissions equaling 6,888 $MTCO_2e$. See Appendix DR GHG for calculations.

7.1.4 Data Request DR GHG-4

DR GHG-4

Please provide a copy of the spreadsheet file(s) containing the emissions calculations performed for DR GHG-1, DR GHG-2, and DR GHG-3 with live, embedded calculations.

Response

A spreadsheet with emissions calculations is provided as electronic transmission Appendix DR GHG.

7.1.5 Data Request DR GHG-5

DR GHG-5

If any emergency diesel generator is planned for use, what other technologies or fuel alternatives to diesel for the backup generators would be explored and why would they not be pursued?

Response

The project would not include an emergency diesel generator; therefore, no alternative technologies or fuel options for backup generation are evaluated.

7.1.6 Data Request DR GHG-6

DR GHG-6

Would the project applicant explore the procurement of renewable diesel and/or carbon offsets as a means of demonstrating consistency with the State of California's goal of carbon neutrality? If not, why not?

Response

The project would not include an emergency generator; therefore, the procurement of renewable diesel or the use of carbon offsets for generator-related emissions is not applicable.

7.1.7 Data Request DR GHG-7

DR GHG-7

Please describe how the project would comply with the SF_6 phase-out provisions.

Response

New SF6-insulated equipment must be phased out according to voltage class, short-circuit rating, and configuration. New equipment with a voltage rating less than or equal to 38 kV, including above- and below-ground installations, must be acquired and in service before 2031, with earlier deadlines for equipment with higher short-circuit ratings to meet the phase out requirements. New equipment rated greater than 38 kV up to 145 kV must be phased out between 2025 and 2028, and equipment rated greater than 145 kV up to 245 kV must be phased out between 2027 and 2031, depending on short-circuit capacity. All new equipment with a voltage rating greater than 245 kV must use alternative solutions to SF6 usage. Consistent with the new technology that allows for alternative solutions to SF6 usage, the Vaca Dixon BESS will not be using SF6. The Arges BESS would use SF6, which would be in compliance with the SF6 phase-out provisions. The Arges BESS falls in the 145 to 245 kV capacity range and is greater than 63 kA short-circuit rating. Therefore, the phase-out date for adding new equipment would be January 1, 2031, and the project would be operational by 2029. Therefore, even with the use of SF6, the Arges BESS is consistent with the SF6 phase-out schedule. The Vaca Dixon BESS would not incorporate SF6 at all; therefore, it is consistent with the phase-out provisions.

7.1.8 Data Request DR GHG-8

DR GHG-8

Please include the applicable mitigation measures for Construction-Related GHG Emissions from the YSAQMD Handbook for Assessing and Mitigating Air Quality Impacts.

Response

The YSAQMD's Handbook for Assessing and Mitigating Air Quality Impacts identifies several measures for reducing emissions from construction equipment that would limit GHG emissions. These include limiting equipment idling to no more than five minutes; using Tier 4 engines; and modernizing the equipment fleet with cleaner repowers and newer engines. In addition to these mitigation measures, contractors would avoid wasteful energy consumption to help reduce unnecessary fuel use, which would minimize construction-related GHG emissions.

7.1.9 Data Request DR GHG-9

DR GHG-9

Please provide a description of the cooling system design for the battery energy storage system and confirm the identity of the refrigerant proposed or provide the identity of refrigerant that the BESS cooling system will use.

Response

The project will use the BTMS950-ESA10 Energy Storage Liquid cooling unit in the BESS containers. The system circulates a liquid coolant through a closed system using a plate heat exchanger, radiator, and/or a positive temperature coefficient heater to regulate the battery's temperature. This 95kW unit uses refrigerant R513A.

7.1.10 Data Request DR GHG-10

DR GHG-10

If the refrigerant proposed differs from that analyzed in CalEEMod (listed as R-404A), provide an estimate of annual refrigerant leakage, reported as carbon dioxide equivalent (CO_2e) emissions, from the cooling system proposed for the project.

Response

The proposed refrigerant for the Vaca Dixon Power Center project is R513A which has a GWP of 631. The applicant is not using R404A for the BESS. Leakage from the Vaca Dixon BESS system is estimated at 26 MT CO_2e per year using the R513A refrigerant (CalEEMod estimation; included as Appendix DR GHG) rather than the 162 MT CO_2e per year reported using the R404A refrigerant. Leakage from the Arges BESS system is estimated at 47 MT CO_2e per year using the R513A refrigerant (CalEEMod estimation; included as Appendix DR GHG) rather than the 290 MT CO_2e per year reported using the R404A refrigerant.

7.1.11 Data Request DR GHG-11

DR GHG-11

Please demonstrate how the use of any refrigerant(s) proposed for BESS cooling would comply with the Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning and Other End-Uses. If not, please propose an alternative refrigerant, and provide updated annual refrigerant leakage estimates, reported as carbon dioxide equivalent (CO_2e) emissions, associated with the newly proposed refrigerant.

Response

California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10 Climate Change, Article 4, the Prohibition on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary air-conditioning, and Other End Uses prohibits refrigerants with a GWP of 750 or greater. The Vaca Dixon Power Center BESS project will use coolant R513A which has a GWP of 631 and therefore complies with this prohibition.

8 Hazardous Materials Handling

8.1 Data Requests DR HAZ-1 through DR HAZ-10

8.1.1 Data Request DR HAZ-1

DR HAZ-1

Provide an updated Phase I ESA with discussions and conclusions related to the potential presence of residual concentrations of insecticides, pesticides or herbicides on the subject property.

Response

The Phase I ESA (Appendix DR HAZ) was updated to include a discussion in Section 4.1.1, *Subject Property History*, noting that, based on the historical agricultural use of the property, residual concentrations of organochlorine pesticides (OCPs) may be present in shallow soils. There was no visual evidence of large-scale herbicide or pesticide storage, such as aboveground storage tanks or chemical storage sheds, in the historical aerial photographs reviewed as part of the assessment. In addition, no hazardous materials, including herbicides, fertilizers, or pesticides, were observed during the site visit (Section 5.3.2, *Hazardous Substances*). The updated Phase I ESA concluded that potential residual concentrations of OCPs in shallow soils do not represent a significant environmental concern or a recognized environmental condition for the proposed use of the property as a BESS.

8.1.2 Data Request DR HAZ-2

DR HAZ-2

Provide quantities for all hazardous materials that would be used or stored on site. If exact quantities are not currently known, please provide an estimated quantity. Please also provide information on storage location and the type of storage container for all hazardous materials that would be used and stored on site.

Response

Table 5.9-1, originally included in Chapter 5.9 Hazardous Materials, has been updated to include additional quantities of hazardous materials anticipated to be used or stored on site and the storage location and type of container. The revised table is included below as Table 4.

8.1.3 Data Request DR HAZ-3

DR HAZ-3

Provide a discussion of the toxicity of all hazardous substances that would be used or stored on site, including the lithium ion/iron phosphate batteries and liquid battery electrolyte.

Response

Table 5.9-3, originally included in Chapter 5.9 Hazardous Materials, has been updated to include the toxicity, reactivity and flammability for the lithium-ion batteries and is provided below. “Lithium-ion batteries” has been added as the last line item of the table. The revised table is included below as Table 6.

8.1.4 Data Request DR HAZ-4

DR HAZ-4

Provide the quantities, use and location information, chemical inventory information and toxicity, reactivity and flammability information for motor oil, coolant, mineral oil, and lubricants referred to in the application Section 5.9.1.2.

Response

Table 5.9-2, originally included in Chapter 5.9 Hazardous Materials, has been updated to include the requested material use and location information. In addition, Table 5.9-2, originally included in Chapter 5.9 Hazardous Materials, has been updated to include chemical inventory information and toxicity, reactivity and flammability information. The revised table is included below as Table 5.

8.1.5 Data Request DR HAZ-5

DR HAZ-5

Provide a discussion of refueling practices during construction and operation. How often would the construction diesel fuel storage tank be refilled and what measures would be taken to prevent leaks and spills during refueling? What measures would be taken to prevent leaks/spills when vehicle and equipment maintenance occurs onsite?

Response

A 1,000 to 3,000-gallon diesel storage tank would be used during construction. Refueling of the tank would occur once per month. The site construction team would implement simple fueling and maintenance practices to prevent spills and ensure compliance. All deliveries and refueling would occur in designated, attended areas with secondary containment, bonding and/or grounding, and overfill protection incorporated. Spill kits would be kept on site. Equipment and vehicle maintenance would be restricted to a bermed, impermeable area. Drip pans and absorbents would be utilized to minimize the potential of fluid spills; all used fluids and wastes would be collected in labeled containers and removed by licensed haulers. Routine inspections, delivery and maintenance logs, and spill reporting procedures would be required. All Project personnel would complete initial and refresher Spill Prevention, Control, and Countermeasure (SPCC) training. The Project safety representative would oversee implementation, incident response, recordkeeping, and regulatory notifications.

8.1.6 Data Request DR HAZ-6

DR HAZ-6

Please clarify if a Risk Management Plan (RMP) will be prepared for the project and if so, provide additional detail about preparation and implementation of the RMP.

Response

There will not be an RMP for this project as no regulated substances, as defined by California's Health and Safety Code Section 25531, would be used during construction. A revised version of Section 5.10 Worker Safety, removing reference to the RMP will be submitted in conjunction with the worker safety data request responses.

8.1.7 Data Request DR HAZ-7

DR HAZ-7

Provide additional discussion and details on plans, practices, procedures and/or proposed mitigation measures that would reduce the impact of hazardous materials use and potential for leaks and spills during construction and operation. Please include details for each proposed plan or practice that includes at a minimum how and when each would be applied during construction and operation, an outline of the information that would be included in each plan, including any standard language regarding spill control and cleanup, and how preparation and implementation of the plans shall be confirmed.

Response

The applicant would implement a comprehensive hazardous materials management program during construction and operation to minimize the potential for leaks, spills, and releases. The program would include a SPCC and Spill Response Plan, a Stormwater Pollution Prevention Plan (SWPPP), fueling and refueling procedures, vehicle and equipment maintenance protocols, battery storage system leak and thermal event procedures, an emergency response framework, and associated training, inspection, and audit programs. All plans would be prepared prior to construction mobilization, implemented throughout construction, and maintained or updated during operation, as applicable.

Spill Prevention and Response

An SPCC and Spill Response Plan would be prepared prior to the first fuel delivery or introduction of equipment containing bulk fluids and would remain in effect during construction and operation. The plan would include facility diagrams showing tank locations, containment features, storm drains, and discharge routes; secondary containment design and capacities; spill kit locations and required supplies; step-by-step spill response actions; waste collection, storage, and disposal procedures; notification and reporting thresholds; and post-event investigation and corrective action processes. Standard spill response language requires immediate isolation of the area, safe shutdown of the source if feasible, deployment of containment materials, notification of the Site Safety Representative, cleanup using spill kits, collection and disposal of contaminated materials by approved hazardous waste contractors, and regulatory notification when thresholds are exceeded.

Implementation would be confirmed through inspections, delivery and dispensing logs, documented spill responses, and post-spill third-party review and plan updates, as needed.

Stormwater Protection and Best Management Practices

A SWPPP would be issued prior to grading and other soil-disturbing activities and would remain active during the rainy season and for all construction activities, with controls maintained during operation near fueling or maintenance areas as needed. The SWPPP would identify disturbed areas, BMP locations, erosion and sediment controls, inlet protection, and measures to prevent runoff of hydrocarbons from fueling and maintenance areas. The plan would establish inspection, maintenance, reporting, and monitoring requirements tailored to seasonal conditions and storm events. Implementation would be verified through routine visual inspections before rain events, monthly SWPPP inspections, storm event reports, and retained logs.

Fueling and Equipment Maintenance Controls

Fueling and refueling procedures would apply to all bulk fuel deliveries and mobile refueling events associated with construction equipment, vehicles, and generators. Procedures would designate fueling zones and hours, require attended fueling only, and establish bonding and grounding requirements, overfill prevention measures, spill pans or drip trays, delivery acceptance checklists, equipment and hose inspections, nozzle auto-shutoff use, and no-smoking policies. Vendor requirements and loading/unloading protocols would also apply. Compliance would be confirmed through maintained delivery logs.

Vehicle and Equipment Maintenance Controls

Maintenance protocols would govern all field maintenance activities, including oil changes, hydraulic servicing, and repairs. Protocols would require use of designated maintenance areas or pads, impermeable surfaces or berming where applicable, washwater controls, personal protective equipment (PPE), drip pans, absorbents, and closed waste capture systems with discharge to the ground or storm drains prohibited. Requirements would address waste storage, labeling, manifesting, and disposal for oils, solvents, and filters, as well as hot work controls, lockout and tagout procedures, and ventilation expectations where applicable. Implementation would be verified through maintenance logs, waste manifests, routine housekeeping inspections, and compliance audits.

Battery/Energy Storage Leak and Thermal Event Procedures

Battery or cell leak and thermal event procedures would apply during installation, commissioning, and operation and would be implemented immediately upon any release event. Procedures would address immediate safety actions, including isolation and evacuation as appropriate; use of containment materials, PPE, and spill kits; notification of the Site Safety Representative, authority having jurisdiction, vendor original equipment manager, and regulatory agencies; documentation and photo collection; and quarantine, testing, inspection, and corrective actions prior to return to operation. Implementation would be confirmed through drills, vendor coordination, event logs, and corrective action tracking.

Training, Inspections, and Compliance Verification

Hazardous materials training would be provided to all staff and subcontractors at mobilization, with refresher training conducted annually or following procedural changes. Training would cover SPCC

requirements, fueling procedures, spill response, battery handling basics, PPE, and responder roles. Ongoing compliance would be verified through daily visual checks at delivery and maintenance locations, weekly walkthroughs, monthly audits, and post-incident or third-party reviews as needed. Records would include training attendance logs, inspection reports, delivery logs, waste disposal manifests, corrective action documentation, vendor verification, and regulatory notification logs.

8.1.8 Data Request DR HAZ-8

DR HAZ-8

Provide a discussion of the explosion risk of the project components and the BESS container controls to reduce explosion risk and/or consequences (such as flammable gas monitoring and ventilation or deflagration panels).

Response

BESS enclosures would be equipped with an explosion control system that employs an automatic approach integrating gas detection devices, ventilation system, and operational safeguards. Each enclosure would house two gas detectors specifically designed to detect flammable gases (e.g., hydrogen (H_2), hydrocarbons) typically released during lithium-ion battery thermal runway. The detectors would be calibrated to activate at a threshold of 10% lower flammable limit (LFL). Exhaust ventilation would be triggered upon gas detection, which would activate one exhaust fan to remove flammable gases from the enclosure. Operational controls would include several actions triggered by gas detection; upon alarm, charging/discharging processes would halt, off-gassing valves would open, and exhaust ventilation would be activated.

8.1.9 Data Request DR HAZ-9

DR HAZ-9

Provide a discussion on whether a lithium battery fire at the project BESS site would result in the closure of nearby I-80, and other nearby access roads. Would the fire at the BESS have smoke visibility, or inhalation risks that could result in the closure of I-80 and surrounding local access roads? What actions could be implemented to reduce this risk of potential impacts to motorists?

Response

The response to this data request will be provided in CEC Data Request Response Set #2.

8.1.10 Data Request DR HAZ-10

DR HAZ-10

Provide a discussion of actions that the project could implement to reduce the probability of lithium battery fires during transportation of batteries to and from the project site and actions to reduce the impact of such fires (if they occur) to motorists.

Response

Transportation of batteries to and from the Project site would be completed by licensed contractors who would be responsible for complying with all applicable State and federal laws and regulations. Batteries would be delivered to the Project site in California Department of Transportation (DOT)-certified vehicles and in compliance with all applicable requirements of the DOT, California Highway Patrol, and California Department of Motor Vehicles. Batteries would be securely attached to the interior structure of delivery trucks and would not be transported in combination with other materials.

Table 4 Revised Table 5.9-1 Use and Location of Hazardous Materials

Chemical Name	Use/Purpose	Quantity – Vaca Dixon BESS	Quantity – Arges BESS	On-Site Storage Location	State	Type of Storage Container	Project Phase
513A Refrigerant	BESS coolant	477 pounds	2,270 pounds	Each battery enclosure	Gas	NA	Construction and/or O&M
Adhesives	Construction and O&M	Less than 5 gallons	Less than 5 gallons	Control House HazMat Storage Locker	Liquid, Solid	Small useable containers (4 oz)	Construction and/or O&M
Diesel No.2	Fueling Equipment	380 gallons	380 gallons	300 gallons in a reserve supply and 80 gallons on the power generator	Liquid	Tanks	Construction
Ethylene glycol solution	BESS – glycol coolant	1,365 gallons	6,500 gallons	Each battery enclosure	Liquid	NA	Construction and/or O&M
FK-5-1-12	Fire Suppression Agent	1,186 pounds	2,372 pounds	Each battery enclosure	Gas	NA	Construction and O&M
Hydraulic fluid (FR3 natural ester fluid)	Construction and Periodic Maintenance	950 gallons	950 gallons	Various Mobile Equipment	Liquid	Vehicle tanks	Construction and O&M
Liquid Battery Electrolyte	Construction and O&M	5,880 gallons	44,800 gallons	Battery modules	Battery modules	Battery modules	Construction and/or O&M
Lithium-ion batteries	Construction and O&M	884,200	4,420,00000 pounds	Battery modules	Solid	Battery modules	Construction and/or O&M
Transformer oil (Soybean Oil)	O&M	11,130 gallons	26,650gallons	Each inverter	Liquid	Inverters and GSU	O&M
Propane	Construction	120 pounds	120 pounds	Various equipment, propane storage cage	Gas	Portable tanks	Construction
Sealants	Construction and O&M	Less than 5 gallons	Less than 5 gallons	Control House HazMat Storage Locker	Liquid	NA	Construction and/or O&M

BESS: Battery Energy Storage System

NA: Not applicable - Materials would be brought on-site as needed and removed at the end of day O&M: Operation & Maintenance

Table 5 Revised Table 5.9-2 Chemical Inventory, Description of Hazardous Materials On-site, and Reportable Quantities

Trade Name	Chemical Name	CAS Number	Maximum Quantity On-site – Vaca Dixon BESS	Maximum Quantity On-site – Arges BESS	CERCLA SARA RQ [a]	RQ of Material as Used On-site [b]	EHS TPQ [c]	Regulated Substance TQ [d]	Prop 65
513A refrigerant	Mixture	Mixture	476.7 pounds	2,270 pounds	–	–	–	–	No
Adhesives	Various	Various	Less than 5 gallons	Less than 5 gallons	–	–	–	–	No
Diesel No. 2	Diesel No. 2	68476-34-6	380 gallons	380 gallons	–	–	–	–	No
Ethylene glycol solution	Ethylene glycol solution	107-21-1	1,365 gallons	6,500 gallons	–	–	–	–	Yes
Hydraulic fluid (FR3 natural ester fluid)	FR3	None	950 gallons	950 gallons	42 gallons [e]	42 gallons [e]	–	–	No
Liquid Battery Electrolyte	Mixture	Various	5,880 gallons	44,800 gallons	--	--	--	--	No
Lithium-ion batteries	Lithium-ion batteries	Various	884,200 pounds	4,420,000 pounds	–	–	–	–	No
Soybean oil	Soybean oil	8001-22-7	11,130 gallons	13,250 gallons	42 gallons [e]	42 gallons [e]	–	–	No
Propane	Propane	74-98-6	120 pounds	120 pounds	–	–	–	–	No
Sealants	Various	Various	Less than 5 gallons	Less than 5 gallons	–	–	–	–	No
Sulfur hexafluoride (SF6)	Sulfur hexafluoride	2551-62-4	NA	64 pounds	–	–	–	–	No

[a] RQs are for a pure chemical, per CERCLA SARA (ref. 40 CFR Section 302, Table 302.4). Releases equal to or greater than the RQ must be reported. Under California law, any amount that has a realistic potential to adversely affect the environment and human health or safety must be reported.

[b] RQ for materials as used on-site. Since some of the hazardous materials are mixtures that only contain a percentage of an RQ, the RQ of the mixture can be different than for a pure chemical. For example, if a substance only contains 10 percent of a reportable chemical and the RQ is 100 pounds, the RQ for that material will be (100 pounds)/(10%) = 1,000 pounds.

[c] EHS TPQ (ref. 40 CFR Part 355, Appendix A). If quantities of EHS materials equal to or greater than the TPQ are handled or stored on-site, they must be registered with the local Administering Agency (i.e., Solano County Environmental Health – CUPA/Hazardous Materials and Waste Program).

[d] TQ is from Title 19 CCR Section 2770.5 (state) or Title 40 CFR Section 68.130 (federal).

[e] State RQ for oil spills that will reach California state waters [CA Water Code Section 13272(f)] Notes:

– No reporting requirements. The chemical has no listed threshold under this requirement.

Table 6 Revised Table 5.9-3 Toxicity, Reactivity, and Flammability of Hazardous Substances Stored On-site

Hazardous Material	Physical Description	Health Hazard/Toxicity	Reactivity and Incompatibilities	Flammability [a]
513A refrigerant	Colorless gas, faint ethereal odor	Liquid can cause burns similar to frostbite	None	Nonflammable
Adhesives	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Diesel No. 2	Oily, light liquid	May be carcinogenic	Strong oxidizers, acids	Flammable
Ethylene glycol solution	Viscous, colorless liquid	May cause skin, eye, and respiratory tract irritation	Strong oxidizers, strong acids, strong bases, aldehydes	Combustible
Hydraulic fluid (FR3 natural ester fluid)	Light green liquid	Minimal irritation or no effect	Strong oxidizers, Strong Alkali	Combustible
Liquid Battery Electrolyte	Clear, colorless liquid	May cause skin, eye, and respiratory tract irritation	Strong oxidizers, strong acids,	Flammable
Lubricants	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Soybean oil	Colorless or yellow oil	May be fatal if swallowed or enters airways	Strong oxidizers	Combustible
Propane	Colorless, odorless gas	Liquid can cause burns similar to frostbite	Strong oxidizers	Flammable
Sealants	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Sulfur hexafluoride (SF6)	Colorless, odorless gas	Can displace oxygen and cause rapid suffocation	None	Nonflammable
Lithium-ion batteries	Battery product	Aquatic chronic toxicity; may be carcinogenic	Not considered reactive under normal conditions at ambient temperature; incompatible with combustible materials, organic chemicals, strong acids, reducing substances, strong oxidizers, and chemically active metals.	Flammable

[a] In accordance with Caltrans regulations, under 49 CFR Section 173: flammable liquids have a flash point less than or equal to 141°F; combustible liquids have a flash point greater than 141°F

Source: Data were obtained from Material Safety Data Sheets.

9 Project Description

9.1 Data Requests DR PD-1 through DR PD-3

9.1.1 Data Request DR PD-1

DR PD-1

Please add dimensions (including heights) to the substation elevation drawing and the four illustrative elevation drawings presented in the Project Plan Set (TN268166-2). Also, please add the gen-tie pole heights to Figures 2-11 through 2-14 presented in the Project Description (TN 268145).

Response

Revised substation elevation drawings and typical gen-tie structure drawings, revised to include height, are included as Appendix DR PD-1. Revised illustrative drawings are included in the revised Appendix P.

9.1.2 Data Request DR PD-2

DR PD-2

Please identify any project components that would be constructed and/or operated by PG&E required for the project. This should include identifying the point of change of ownership (POCO) if not the same as the first point of interconnect and a description of any PG&E construction activities including a list of any applicable avoidance and minimization measures.

Response

No network updates were identified for the Vaca Dixon BESS facilities by CAISO. For the Arges BESS facilities, required updates are included in Attachment 10 of the CAISO Cluster 14 Phase II Interconnection Study Report, submitted to the CEC with a confidential request

9.1.3 Data Request DR PD-3

DR PD-3

Please provide a description of the augmentation plan including a general description of the construction activities that are anticipated to occur as part of these augmentation activities including but not limited to trenching, number of vehicle trips, number of deliveries, use of cranes, etc.

Response

The site will be constructed accounting for expected state of health degradation of the BESS per Original Equipment Manufacturer (OEM) guidance. Initial design includes an overbuild margin so that augmentation is not anticipated until year 5–6, with 2–3 augmentations expected over the Project life to restore capacity as battery cells age. To facilitate future augmentations, the initial

build will reserve physical space, conduit, pad extensions, and routing (spare MV/ DC trenches, pullboxes, and cableways) for container placement and cable terminations. As shown on the Site Layout (Figures 2-4 through 2-6 originally submitted in Section 2 Project Description), future augmentation areas have been designated for both the Vaca Dixon 57 BESS on the eastern portion of the layout and for the Arges BESS on the northern portion of the layout. The augmentation areas will be graded and generally development-ready following the initial construction of the BESS projects, thereby reducing construction impacts during augmentation activities. It is anticipated that periodic augmentation events will typically involve 15-20 workers and last for up to approximately 4-6 weeks. An average of 10 truck deliveries per day are expected during augmentation events.

Planned construction activities for future augmentation events include: site grading and pad extension works, foundation pours or anchor installations for additional containers and transformers, setting battery containers, MV/DC cable pulling and terminations, transformer and PCS installation, protection and metering integration, commissioning and functional testing, and final paving/restoration. Typical equipment and vehicles required for these activities will include: excavators and skid steers, mobile cranes (for BESS container and PCS setting), forklifts and telehandlers, flatbed heavy-haul trucks and roll-backs, cable reels and winches, vacuum/pulling trailers, concrete trucks and pumps, welders and mobile fabrication stands, aerial lifts or personnel lifts, hydro-vac or trenchers (if excavation near existing utilities), and water trucks/compaction equipment for site preparation.

By planning spacing, access roads, laydown areas, and raceway capacity at the outset, future augmentation work can proceed with minimal rework, reduced civil impact, and faster commissioning. Construction impacts will be temporary and similar to those described and analyzed for the initial BESS project construction. No significant impacts are expected to occur associated with augmentation events. Following construction, no changes to operational procedures or activities are anticipated associated with the augmentation events.

10 Noise

10.1 Data Request DR NOI-1 through NOI-4

10.1.1 Data Request DR NOI-1

DR NOI-1

Provide the location of the single-family residence that is 95 feet west of the gen-tie area or confirm that this distance from the gen-tie area is measured to the nearest residential property line and not the nearest residential structure.

Response

The single-family residence on Mills Lane is Sensitive Receptor "R-5" in Figure 5.3-1. The placemark is on the actual residence, but the property line is to the east, within 95 feet of the gen-tie line construction, which is the distance to which construction noise was analyzed.

Language in Section 5.3.1.2 has been reproduced below to provide clarifying edits regarding the locations of Sensitive Receptors in Figure 5.3-1:

The Project Site is in the vicinity of sensitive receptors identified in the Vacaville General Plan, the Solano County General Plan and in CEC's requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B). The closest noise-sensitive receptors identified to the gen-tie area include the single-family residence~~s~~ (Sensitive Receptor R-5) in Solano County approximately 95 feet to the west of the nearest property line and approximately 790 feet to the nearest residential building on the property. The closest noise-sensitive receptors to the BESS Project Area in the City of Vacaville include ~~a~~ single-family residences (Sensitive Receptors R-2 and R-3) approximately 950 feet southwest of the southwest corner of the BESS Project Area, and multi-family residences (Sensitive Receptor R-4) approximately 1,250 feet to the west of the southwest corner of the BESS Project Area. The nearest sensitive receptor~~s~~ to the BESS Project Area in Solano County is a ~~are~~ single-family residence~~s~~ (Sensitive Receptor R-5) approximately 1,050 feet north of the edge of the northern boundary of the Project Area and a single-family residence (Sensitive Receptor R-1) approximately 1,950 feet to the east of the southeast corner of the BESS Project Area. The closest vibration-sensitive receptors include the commercial building approximately 160 feet to the west of the gen-tie installation area and 370 feet northwest of the northern boundary of the BESS Project Area. Sensitive receptor locations shown in Figure 5.3-1.

10.1.2 Data Request DR NOI-2

DR NOI-2

Provide the following:

a. The 25-hour noise measurement data taken nearby receptor R- 1 (July 17-18, 2025).
b. The 24-hour noise measurement data taken nearby receptor R- 5 (May 11-12, 2023).

Response

Refer to Appendix DR NOI-1 to show 25-hour measurement data from July 17-18, 2025 (LT-1 and LT-2), in addition to the 24-hour measurement data from May 11-12, 2023 (LT-1).

10.1.3 Data Request DR NOI-3

DR NOI-3

Provide a revised RCNM calculation that includes a heavy-duty helicopter as part of the "Electrical Wire Installation and Finish Grading" construction phase.

Response

Refer to Appendix DR NOI-2 for updated RCNM calculation which includes heavy-duty helicopter.

10.1.4 Data Request DR NOI-4

DR NOI-4

Provide an RCNM calculation for the "Gen-Tie Installation" construction phase.

Response

Refer to Appendix DR NOI-2 for updated RCNM calculation which includes gen-tie installation phase.

11 Paleontological Resources

11.1 Data Requests DR PAL-1

11.1.1 Data Request DR PAL-1

DR PAL-1

Provide an evaluation of the paleontological sensitivity of geologic map units within two miles of the project, specifically of Holocene Alluvial Fan Deposits, Holocene Natural Levee Deposits, and the Pliocene Tehama Formation. An evaluation of the paleontological sensitivity of artificial fill and water is not needed.

Response

Holocene alluvial fan deposits and Holocene natural levee deposits are found north, south, and east of the Project. These geologic units consist of poorly consolidated, poorly to moderately bedded gravel, sand, and silt (Dawson 2009). Holocene-aged geologic units are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources. Therefore, they are considered to have low paleontological sensitivity per the Society of Vertebrate Paleontology (SVP) paleontological sensitivity scale (SVP 2010).

The Tehama Formation is mapped east of the Project, and its closest surficial exposure is approximately 1 mile northeast of the Project. The Tehama Formation consists of poorly consolidated, gray to maroon, sandstone, siltstone, tuff, and conglomerate (Dawson 2009). This geologic unit is Pliocene in age and has produced numerous paleontological resources including horse (*Equus*, *Pliohippus*), dog (*Canis, Borophagus*), ground sloth (*Megalonyx*), rodents, reptiles, and plants (University of California Museum of Paleontology 2026). Given this fossil-producing history, the Tehama Formation has high paleontological sensitivity per the SVP paleontological sensitivity scale (SVP 2010).

12 Socioeconomics

12.1 Data Requests DR SOCIO-1 and DR SOCIO-2

12.1.1 Data Request DR SOCIO-1

DR SOCIO-1

Provide the following:

1. Projected Solano County revenues; and
2. Most recent City of Vacaville revenues.

Response

Solano County projected revenues are provided below in Table 7.

Table 7 Solano County General Fund Sources (FY 2025-2026)

Financing Source Classification	2025-2026 Adopted	Share of Total Financing
Taxes	$256,884,490	68%
Licenses, Fees, and Permits	$10,310,180	3%
Fines, Forfeitures, and Penalties	$1,985,500	1%
Revenue from Use of Money/Prop	$6,909,632	2%
Intergovernmental Revenue State	$7,990,987	2%
Intergovernmental Revenue Federal	$6,700	0%
Other Intergovernmental Revenue	$4,938,662	1%
Charges for Services	$66,710,067	18%
Misc. Revenue	$12,680,699	3%
Other Financing Sources	$423,956	0%
From Reserve	$9,818,500	3%
Total Financing Sources	**$378,659,373**	**100%**

Source: Appendix DR SOCIO

The City of Vacaville's most recent revenues are provided below in Table 8.

Table 8 Vacaville General Fund Sources, Most Recent and Projected

General Fund Revenue Account	2023-2024 Actual Budget	2023-2024 Share of Total Financing	2024-2025 Projected EOY	2024-2025 Share of Total Financing	2025-2026 Proposed Budget	2025-2026 Share of Total Financing
Property Tax	$38,895,000	28%	$42,031,000	28.0%	$42,310,000	29.2%
Sales Tax	$27,903,000	20%	$31,217,000	20.8%	$27,506,000	19.0%
Measure M	$22,589,000	16%	$24,894,000	16.6%	$21,349,000	14.7%
Other taxes	$24,938,000	18%	$25,570,000	17.0%	$26,018,000	17.9%
Intergovernmental	$2,800,000	2%	$2,925,000	2.0%	$2,767,000	1.9%
Departmental fees and charges	$13,732,000	10%	$13,043,000	8.7%	$12,558,000	8.7%
Other revenues	$2,004,000	1%	$1,943,000	1.3%	$1,531,000	1.1%
Transfers in	$7,635,000	5%	$8,370,000	5.6%	$10,925,000	7.5%
Total Financing Sources	**$140,496,000**	**100%**	**$149,993,000**	**100%**		**100%**

Source: Appendix DR SOCIO

12.1.2 Data Request DR SOCIO-2

DR SOCIO-2

Provide the most recent projected unemployment rate of the region affected by the construction and operation of the project, or if this data is unavailable, provide an explanation.

Response

The California Employment Development Department (EDD) publishes monthly county-level unemployment rates. The most recent reported unemployment rate is 5.2 percent for Solano County as of December 2025 (not seasonally adjusted) (Employment Development Department, accessed 2026). The EDD does not publish official projections of county-level unemployment rates for jurisdictions such as Solano County. The EDD statewide annual average unemployment rate projections are 5.4 percent in 2025, 5.3 percent in 2026 and 4.7 percent in 2027 (Employment Development Department, 2026).

13 Traffic and Transportation

13.1 Data Requests DR TRANS-1 through DR TRANS-5

13.1.1 Data Request DR TRANS-1

DR TRANS-1

The vehicle miles traveled (VMT) discussion dismisses construction-related VMT. Given that the site would generate approximately 200 trips per day during construction, including 100 truck trips, and many of those trips would be long- distance (due to the remote location), provide the basis for concluding it is not relevant. The question of relevance also relates to the duration of the construction phase, which is not identified in the transportation section. Please identify CEQA guidelines that support any conclusion regarding the relevance of construction- related VMT.

Response

Construction-related trips would occur only temporarily during the construction period and would not result in permanent changes to travel behavior, land use patterns, or long-term transportation system performance. CEQA Guidelines Section 15064.3(b) specifies that VMT analysis pertains to automobile travel, defined as on-road passenger vehicles (i.e., cars and light trucks). Heavy-duty construction trucks and off-road construction equipment are not considered "automobile" trips for purposes of evaluating VMT significance under CEQA. Construction worker and vendor trips, which qualify as passenger-vehicle trips, would also occur only temporarily and would fall below the County's 110 daily-trip VMT threshold.[4] Because construction activities do not generate new long-term land uses, induce population growth, or alter the roadway network, they do not contribute to ongoing or operational VMT within the City. Therefore, construction-related trips are not considered relevant to the determination of a significant transportation impact based on VMT.

13.1.2 Data Request DR TRANS-2

DR TRANS-2

Please document the City of Vacaville's and/or Solano County's VMT thresholds of significance. If VMT thresholds have not yet been established/adopted by the City or County, please reference the significance thresholds outlined in the Governor's Office of Land Use and Climate Innovation (LCI) Technical Advisory on Evaluating Transportation Impacts in CEQA.

Response

As discussed on page 5.4-13 of the AB 205 application, the City of Vacaville is in the process of updating its transportation impact thresholds to incorporate vehicle miles traveled (VMT) as the metric for evaluating transportation impacts under CEQA. Solano County's VMT thresholds of significance are documented in the County's Road Development Standards and Land Development Requirements, Appendix A.2, VMT Policy. Solano County's screening threshold of 110 daily vehicle

[4] As discussed under Impact TRA-2, construction of the Project would generate up to approximately 100 one-way truck trips per day (50 round trips), as well as up to 40 worker round trips and 10 vendor round trips.

trips is applied to determine whether a project may result in a potentially significant VMT impact. Solano County's screening threshold is consistent with the Governor's Office of Land Use and Climate Innovation (LCI) Technical Advisory on Evaluating Transportation Impacts in CEQA.

13.1.3 Data Request DR TRANS-3

DR TRANS-3

Please provide the weight and load limitations of each study area roadway.

Response

Solano County generally uses roadway load limitations that match California state standards, with a maximum gross vehicle weight of 80,000 pounds, 20,000 pounds per single axle, and 34,000 pounds per tandem axle. There are some exceptions in the County but none of the exceptions are located in the Project's traffic analysis study area (Solano County 2025)[5].

13.1.4 Data Request DR TRANS-4

DR TRANS-4

Please estimate the average length of worker trips that would be generated during project construction, and the basis for those estimates.

Response

Based on the default assumptions built into CalEEMod, the average length of construction worker trips is estimated to be 11.7 miles. CalEEMod applies this trip length as a standardized parameter for construction-related worker travel in the absence of project-specific commute data, reflecting typical regional commute distances documented in travel surveys used during model development. Because no project-specific information suggests that construction worker commuting patterns for this project would differ from CalEEMod defaults, the model's default worker trip length of 11.7 miles is used as the basis for estimating construction worker vehicle miles traveled (VMT).

13.1.5 Data Request DR TRANS-5

DR TRANS-5

On page 5.4-1 of Section 5.4.1, there is reference to a temporary closure of Quinn Road and portions of I-80 during gen-tie construction. Provide the expected duration of this closure.

Response

The temporary closure of Quinn Road and limited portions of I-80 required for gen-tie construction would be brief and intermittent. Such closures would occur no more than twice over the duration of construction and would be limited to a few hours per occurrence. Installation of a heavy rope net across the construction area would occur during nighttime hours and may not require a full highway closure as the net would prevent construction materials or debris from entering the roadway. After

[5] Solano County. 2025. Public Map – Bridges and Road Restrictions. https://solanocountygis.com/portal/home/item.html?id=6b50495558b14ce5b596d257e5ae10c5

construction aerial work is complete, net removal would also occur at night and would be expected to take two hours. These brief closures would be scheduled during off-peak traffic periods to minimize disruption and would be coordinated in advance with the appropriate agencies, including Caltrans and local jurisdictions. No extended or multi-day closures are anticipated.

14 Transmissions System Design

14.1 Data Requests DR TSD-1 through DR TSD-9

14.1.1 Data Request DR TSD-1

DR TSD-1

Please provide a table that identifies state and federal laws, standards, and regulations such as CPUC GO 95, GO 128, GO 131-E, NFPA, NERC, FERC and other relevant regulations; as they pertain to the project's electrical facilities such as substation and generator tie-line. Confirm project's conformance with these regulations.

Response

State and federal laws, standards, and regulations applicable to the Project's electrical facilities and the Project's conformance with them are included in Table 9 below.

14.1.2 Data Request DR TSD-2

DR TSD-2

Please discuss the CPUC GO 128 standard in reference to the project's underground construction facilities, such as grounding, duct banks and underground conductor clearances. Also discuss project's compliance with CPUC's GO 95, 128 and 131-E standards as they pertain to the substation, grounding, transmission lines and other related facilities.

Response

The Project's compliance with the California Public Utilities Commission (CPUC) General Orders 95, 128, and 131-E standards as they pertain to Project facilities is included in Table 9 below. CPUC General Order 128 regulates the construction of underground electric supply and communications systems.

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Table 9 DR TSD-1 and TSD-2 Laws, Ordinances, Regulations, and Standards (LORS) Applicable to Electrical Facility Design and Construction

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Conformity
Federal	North American Electric Reliability Corporation (NERC) Standards	To improve the reliability of regional electric transmission systems, NERC, which is overseen by the Federal Energy Regulatory Commission, developed a transmission vegetation management program for all transmission lines operated at 200 kilovolts (kV) and above, and to lower voltage lines designated by the Regional Reliability Organization as critical to the reliability of the regional electrical system.	N/A	This program would not apply to the Project as the Project would involve installation of a 115 kV gen-tie line and a 13.8 kV gen-tie line.
Federal	NERC FAC-001-3: Facility Connection Requirements	To avoid adverse impacts on the reliability of the Bulk Electric System, Transmission Owners and applicable Generator Owners must document and make Facility interconnection requirements available so that entities seeking to interconnect will have the necessary information.	Confidential Appendix E	This standard would be applicable to PG&E but not the Applicant. The Phase II Interconnection Study was conducted to ensure compatibility with this standard.
Federal	NERC FAC-002-3: Facility Interconnection Studies	Each Transmission Planner and each Planning Coordinator shall study the reliability impact of: (i) interconnecting new generation, transmission, or electricity end-user Facilities and (ii) materially modifying existing interconnections of generation, transmission, or electricity end-user Facilities.	Confidential Appendix E	The Phase II Interconnection Study was conducted to ensure compatibility with this standard.
Federal	NERC-001-4: Facility Interconnection Requirements	Requires Transmission Owners—and certain Generator Owners—to document and make available interconnection requirements for generation, transmission, and end-use facilities.	Confidential Appendix E	The Phase II Interconnection Study was conducted to ensure compatibility with this standard.
Federal	National Fire Protection Association (NFPA) Standards	The NFPA sets standards for the installation of stationary energy storage systems and standards on explosion protection by deflagration venting.	Section 2.1 and Section 5.17	The Project would be designed in compliance with NFPA Standards, including NFPA 855 which sets standards for the installation of stationary energy storage systems, and NFPA 68 or 69 which set standards to protect against deflagration.
Federal	29 Code of Federal Regulations (CFR) 1910.95, 29 CFR 1926.52, and CFR 1926.101 (OSHA regulations)	Regulates on-site noise.	Impact NOI-1	The Project would not result in on-site noise levels in exceedance of OSHA regulations.
Federal	Clean Water Act, 1972, including amendments	Regulates stormwater and non-stormwater discharges from construction and industrial activities.	Impact SOI-1	The Project would comply with the requirements of the Clean Water Act, including amendments, through NPDES compliance.
Federal	Migratory Bird Treaty Act (MBTA) (16 U.S.C. §703 et seq.)	Protects specified non-game migratory birds, including nests and eggs.	Section 2.2 and Section 5.12.1	The Project transmission facilities would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006) where feasible to reduce collision hazards for avian species.
State	California Public Utilities Commission (CPUC) General Order 95	The CPUC regulates construction of overhead electric lines.	N/A	The Project would involve installation of overhead gen-tie lines, which would connect to the existing 13.8/115 kV generation step up transformer at the existing CalPeak Power – Vaca Dixon Peaker Plant and to the PG&E Vaca-Dixon Substation. However, since the Applicant is not a public utility pursuant to California Public Utilities Code section 216, CPUC General Orders are not applicable to Project facilities constructed and/or operated by the Applicant. New connections made at the existing Vaca-Dixon Substation and all Project components that are the responsibility of PG&E would be built according to General Order 95, as applicable.
State	CPUC General Order 128	The CPUC regulates the construction of underground electric supply and communications systems.	N/A	The Project would involve underground cables in a duct bank to connect the two BESS facilities, as well as underground 13.8 kV and 34.5 kV feeder cables collected at the BESS switchyards and underground electrical conductors connecting the BESS enclosures to the power conversion systems. However, since the Applicant is not a public utility pursuant to California Public Utilities Code section 216, CPUC General Orders are not applicable to Project facilities constructed and/or operated by the Applicant.
State	CPUC General Order 131-E	The CPUC regulates the planning and construction of electric generation, transmission line facilities and substations located in California.	N/A	The Project would involve installation of gen-tie lines, which would connect to the existing 13.8/115 kV generation step up transformer at the existing CalPeak Power – Vaca Dixon Peaker Plant and to the PG&E Vaca-Dixon Substation. However, since the Applicant is not a public utility pursuant to California Public Utilities Code section 216, CPUC General Orders are not applicable to Project facilities constructed and/or operated by the Applicant. The connections to the existing Vaca-Dixon Substation and all Project components that are the responsibility of PG&E would be built according to General Order 131-E, as applicable.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Conformity
State	CPUC General Order 165	General Order 165 establishes requirements for inspection of electric distribution and transmission facilities owned and operated by public utilities not contained in a substation. Utilities must perform "Patrol" inspections, defined as a simple visual inspection of utility equipment and structures that is designed to identify obvious structural problems and hazards, including wildfire hazards, at least once per year for each piece of equipment and structure.	N/A	The Project would involve installation of gen-tie lines, which would connect to the existing 13.8/115 kV generation step up transformer at the existing CalPeak Power – Vaca Dixon Peaker Plant and to the PG&E Vaca-Dixon Substation. However, since the Applicant is not a public utility pursuant to California Public Utilities Code section 216, CPUC General Orders are not applicable to Project facilities constructed and/or operated by the Applicant. The connections to the existing PG&E Vaca-Dixon Substation and all Project components that are the responsibility of PG&E would be constructed and operated in conformance with these orders, including CPUC vegetation management and clearance requirements (GO 95, GO 165, and GO 166) as well as the portions of the Public Resources Code that identify clearance requirements.
State	Porter Cologne Water Quality Control Act	The Water Quality Control Plan for the Central Valley Region sets forth beneficial use objectives and water quality standards for the Project site.	Impact WAT-1 Impact WAT-4	The Project would comply with water quality standards and would not conflict with beneficial uses set forth in the Central Valley Region Basin Plan.
State	Title 8, California Code of Regulations (CCR), General Industrial Safety Orders, Article 105, Control of Noise Exposure	Regulates on-site noise.	Impact NOI-1	The Project would not result in on-site noise levels in exceedance of Cal/OSHA regulations.
State	2025 California Building Code: Chapter 1 Chapters 16/16a Chapters 17/17a Chapters 18/18a Appendix J	Defines acceptable design criteria for structures with respect to seismic design and load bearing capacity.	Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7	Project grading and construction would comply with seismic recommendations provided by a professional engineer in accordance with CBC requirements.
State	Table 18-1-B of the Uniform Building Code (ICC 1994)	Regulations for soils and foundations, including standards for defining expansive soils	Impact SOI-2	Project construction would comply with soil and foundation recommendations in accordance with Uniform Building Code requirements.
State	California Building Standards Code (CCR Title 24, Part 2, Chapters 18 and 18A) (2022)	Sets the requirements for general building design and construction	Impact SOI-2	Project construction would comply with building and design recommendations in accordance with CBC requirements.
State	Alquist Priolo Earthquake Fault Zoning Act	Identifies areas subject to surface rupture from surface faults.	Impact GEO-1 Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7	The Project does not include components located within a mapped Alquist-Priolo Earthquake Fault Zone.
State	Seismic Hazards Mapping Act	Identifies secondary seismic hazards including liquefaction and seismically induced landslides.	Impact GEO-1 Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7	The Project is not located in a seismic hazard area and thus would conform with requirements set forth in the Seismic Hazards Mapping Act.
Local	Solano County Code of Ordinances: Chapter 6.3 Chapter 31	Identify building and construction requirements to reduce hazard potential that are applicable to all new construction, including the Project.	Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7	The Project would adhere to the standards within Chapter 6.3 and Chapter 31 and obtain all necessary permits prior to construction.
Local	Solano County Municipal Code Section 28.77.10	Provides general development requirements for industrial land uses, including those preventing glare and light pollution.	Impact VIS-4	The Project would minimize impacts related to new sources of light and glare through adherence with County Code lighting standards and restrictions.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Conformity
Local	Solano County General Plan Policy RS.P-36	Encourages reduced light pollution and preservation of nighttime views.	Impact VIS-4	The Project would minimize impacts related to new sources of light and glare through adherence with County Code lighting standards and restrictions.
Local	City of Vacaville Municipal Code Section 14.09.240.110	Enforces general land use and development performance standards, including those preventing glare and light pollution.	Impact VIS-4	The Project would minimize impacts related to new sources of light and glare through adherence with County Code lighting standards and restrictions.
Local	City of Vacaville Municipal Code: Chapters 14.19, 14.26, 14.27, 14.28	Requirements for grading activities, soil disturbance, and runoff control; mandates for erosion prevention measures, stormwater management, and agricultural land preservation	Throughout the Opt-In Application	The Project would conform to applicable City of Vacaville soil-related policies by implementing grading controls, erosion prevention measures, stormwater management practices, and agricultural land preservation consistent with Municipal Code requirements.
Local	City of Vacaville Municipal Code: Division 15.20	Identify building and construction requirements to reduce hazard potential that are applicable to new construction, alteration, repairs, relocations, or reconstruction, including the Project.	Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7	The Project would adhere to the standards within Division 15.20 and obtain all necessary permits prior to construction.
Local	Solano County General Plan: Policy HS.P-12 Policy HS.P-18 Policy RS.P -33	These policies aim to minimize the loss of life, injury, and property damage due to seismic and geologic hazards and preserve mineral resources.	Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7 Impact GEO-9	The Project would minimize the loss of life, injury, and property damage by complying with seismic and geologic hazard recommendations provided by a professional engineer in accordance with CBC requirements. No significant mineral resources are located within the Project site.
Local	Solano County Multi-Jurisdictional Hazard Mitigation Plan	Provides actions and strategies to reduce or eliminate long-term risks caused by natural disasters, including earthquakes and slope failure.	Impact GEO-1 Impact GEO-2 Impact GEO-3 Impact GEO-4 Impact GEO-5 Impact GEO-6 Impact GEO-7	The Project would minimize the loss of life, injury, and property damage from natural disasters by complying with seismic and geologic hazard recommendations provided by a professional engineer in accordance with CBC requirements.
Local	City of Vacaville General Plan: Safety Element Policy SAF-P1.1-SAF-P1.12	These policies aim to minimize the loss of life, injury, and property damage due to seismic and geologic hazards and preserve mineral resources.	Impact GEO-2 Impact GEO-3 Impact GEO-5 Impact GEO-6 Impact GEO-7 Impact GEO-9	The Project would minimize the loss of life, injury, and property damage by complying with seismic and geologic hazard recommendations provided by a professional engineer in accordance with CBC requirements. No significant mineral resources are located within the Project site.

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14.1.3 Data Request DR TSD-3

DR TSD-3

Please provide the details of the project's interconnection with the CalPeak Power Vaca Dixon Peaker Plant site and include one-line diagram of the proposed setup within the substation. Show all relevant equipment ratings of the circuit breakers, transformers, generator tie-line and line ratings.

Response

The Vaca Dixon 57 MWh BESS will connect to the existing 13.8/115 kV generation step up (GSU) transformer at the existing CalPeak Power - Vaca Dixon Peaker Plant (VDPP) on the PG&E parcel via a new overhead 13.8 kV line from the proposed BESS switchyard to the low side of the VDPP GSU transformer to the north. A one-line diagram of the proposed setup of the Project's interconnection with the VDPP is included in Appendix DR TSD.

14.1.4 Data Request DR TSD-4

DR TSD-4

Discuss the rating of the 115kV/13.8kV transformer at the CalPeak Power Vaca Dixon Peaker Plant and how it might affect the project's transmission capacity.

Response

The Vaca Dixon 57 MWh BESS will utilize the existing 13.8/115 kV GSU transformer at the existing VDPP to step up/down the project power through the existing thermal plant gen tie line to the 115 kV Vaca-Dixon Substation. The Vaca Dixon 57 MWh BESS rating is lower than the full rating of the existing 13.8/115 kV GSU transformer. The transformer will not have an effect on the Vaca Dixon 57 MWh BESS project transmission capacity. The Vaca Dixon 57 MWh BESS and existing VDPP will not be operated in parallel, and the current VDPP output will be unchanged as well.

14.1.5 Data Request DR TSD-5

DR TSD-5

Please provide the details of the project's interconnection with the PG&E's Vaca-Dixon Substation and include one-line diagram of the proposed setup within the substation. Show all relevant equipment ratings of the circuit breakers, transformers, generator tie-line and line ratings.

Response

The Arges 400 MWh BESS plans to interconnect to PG&E's Vaca-Dixon Substation via a new overhead 115 kV gen-tie to be constructed from the Arges 400 MWh BESS switchyard at the BESS Project area south of I-80 to PG&E's Vaca-Dixon Substation to the north. A one-line diagram of the proposed setup of the Project's interconnection with PG&E's Vaca-Dixon Substation is included in Appendix DR TSD.

14.1.6 Data Request DR TSD-6

DR TSD-6

Provide the width of the generation tie-line's right of way along with diagram clearly showing it in relation to the existing and proposed electrical facilities. Please also include the height of the transmission poles and their conformance with the Federal Aviation Authority's height requirements.

Response

The generation tie-line right-of-way at the I-80 crossing would be approximately 70 feet wide, as shown in Figure 5. Transmission poles will be between approximately 45 feet and 100 feet tall. The poles on the north and south sides of the I-80 crossing are planned to be 95 feet tall. Federal Aviation Administration (FAA) Part 77 – Safe, Efficient Use, And Preservation of The Navigable Airspace (49 CFR Part 77) establishes standards and notification requirements for objects that may impact navigable airspace. Per 49 CFR Part 77.9, construction of structures taller than 200 feet above ground level requires a notice filed with the FAA. Additionally, FAA standards and Advisory Circular 70/7460-1L generally require any temporary or permanent structure, including appurtenances, that exceeds an overall height of 200 feet above ground level to meet the requirements to be marked and/or lighted. Because the structures are less than 200 feet tall, notification to the FAA and marking and lighting requirements would not apply, and the Project would be in conformance with FAA height requirements.

14.1.7 Data Request DR TSD-7

DR TSD-7

The applicant provided the Appendix A of the Cluster 14 Interconnection Study Report only. Please provide the entire California ISO Cluster 14 Phase II Interconnection Study Report including all the appendices and attachments especially Appendix G, Appendix H, Appendix I and Attachment 8.

Response

The entire California ISO (CAISO) Cluster 14 Phase II Interconnection Study Report including Appendix H, Appendix I, Appendix J, and Attachment 8 were submitted to CEC with a confidential request.

14.1.8 Data Request DR TSD-8

DR TSD-8

Please include a list of all the transmission upgrades required by CAISO for this project. Provide the most recent Generator Interconnection Reassessment Study Report if it is available.

Response

No transmission updates were identified for the Vaca Dixon BESS facilities by CAISO. For the Arges BESS facilities, required updates are included in Attachment 10 of the CAISO Cluster 14 Phase II Interconnection Study Report, submitted to the CEC with a confidential request. A Generator Interconnection Reassessment Study Report for the Project is not available.

14.1.9 Data Request DR TSD-9

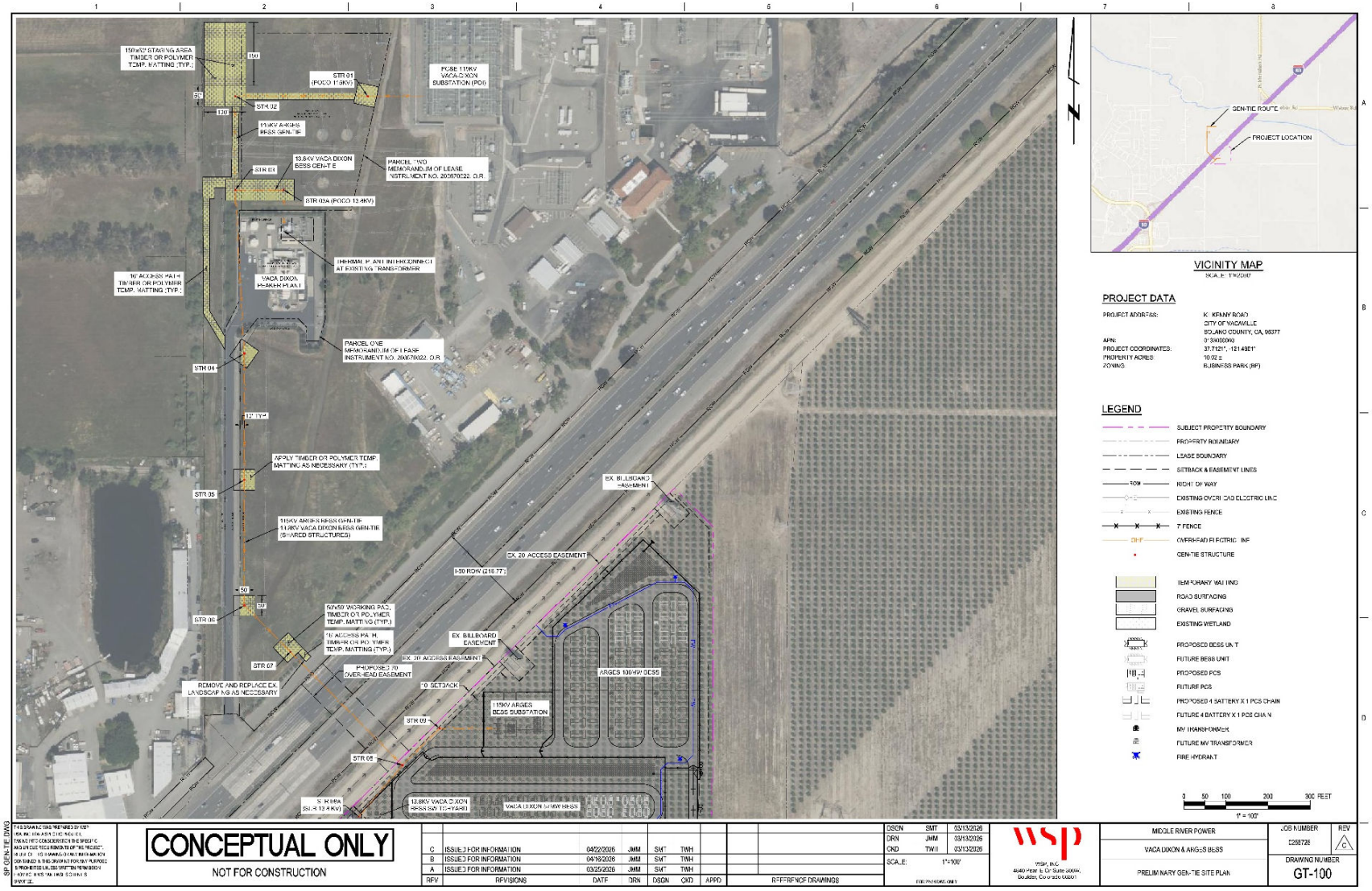
DR TSD-9

Please provide ampacity of each generator tie-line, along with details about its temperature dependent ratings.

Response

The gen-tie lines were evaluated according to Institute of Electrical and Electronics Engineers (IEEE) 738: Standard for Calculating the Current-Temperature Relationship of Bare Overhead Conductors. The 115 kV gen-tie line to be constructed from the Arges 400 MWh BESS switchyard to PG&E's Vaca-Dixon Substation would be 477 kilo circular miles (kcmil) 26/7 Hawk aluminum conductor steel reinforced (ACSR) rated at 212 degrees Fahrenheit maximum operation temperature. Summer ampacity would be 709 amps and winter ampacity would be 926 amps. The 13.8 kV gen-tie line to be constructed from the Vaca Dixon 57 MWh BESS switchyard to the VDPP GSU transformer would be twin-bundle 1590 kcmil 54/19 Falcon ACSR rated at 212 degrees Fahrenheit maximum operating temperature. Summer ampacity would be 2,948 amps and winter ampacity would be 3,862 amps. Figure 1 shows the preliminary gen-tie site plan.

Figure 1 Preliminary Gen-Tie Site Plan



15 Visual Resources

15.1 Data Request DR VIS-1 through VIS-18

15.1.1 Data Request DR VIS-1

DR VIS-1

Please establish an additional KOP (#5) on eastbound Kilkenny Road at approximately Lat: 38.395249°; Long: - 121.923032°. The viewpoint should be just under the proposed span of I-80, and the view should be to the northeast to capture the central portion of the project site including substation facilities and BESS enclosures. Also, provide the necessary analysis, supporting information, and visual simulation(s). Simulation(s) of the proposed landscaping should include one year of growth as required by CEC regulations. An additional simulation may include the conceptual landscaping at a later stage of maturity.

Response

Additional KOP 5 has been incorporated into the Visual Resources discussion; existing project conditions at KOP 5 are shown in Figure 5.5-8a of revised Section 5.5 Visual Resources and simulated project conditions (including proposed landscaping) at KOP 5 are included in Figure 5.5-8b. Discussion of the visual change at KOP 5 is included in Table 5.5-2, and in Impact VIS-3.

15.1.2 Data Request DR VIS-2

DR VIS-2

Please establish an additional KOP (#6) on northbound I-80 at approximately Lat: 38.396138°; Long: -121.923391°. The view should be to the east to capture portions of the Arges BESS Switchyard and Arges 400 MWh BESS. Also, provide the necessary analysis, supporting information, and visual simulation(s). Simulation(s) of the proposed landscaping should include one year of growth as required by CEC regulations. An additional simulation may include the conceptual landscaping at a later stage of maturity.

Response

Additional KOP 6 has been incorporated into the Visual Resources discussion; existing project conditions at KOP 6 are shown in Figure 5.5-9a and simulated project conditions (including proposed landscaping) at KOP #6 are included in Figure 5.5-9b. Discussion of the visual change at KOP 6 is included in Table 5.5-2, and in Impact VIS-3.

15.1.3 Data Request DR VIS-3

DR VIS-3

Please provide a discussion of the measures proposed to mitigate adverse aesthetic/visual impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.

Response

Mitigation Measures VIS-1 (Surface Treatment Plan) and VIS-2 (Lighting Plan) have been included and discussed throughout Section 5.5.3.2.

15.1.4 Data Request DR VIS-4

DR VIS-4

As required by the above cited CEC Regulations, please prepare and submit a map of scenic resources within 5 miles of the project site. Include any scenic resource in an adopted federal, state, county, or city government planning document, plan, or regulation. Include any natural features or objects such as a geologic distinguishing characteristic (e.g., laccolith), geomorphologic feature (e.g., gorge), or other terrain feature (e.g., a water body, open space, or a tree recognized for its aesthetic, botanical, and ecological value or age, rarity, and size). Also include any man-made features or objects that embody elements of architecture or engineering that represent significant innovation or are unique. At a minimum, the map and discussion should include designated scenic resources within the City of Vacaville, designated scenic roadways, and General Plan agricultural reserve overlay areas that seek to maintain scenic agricultural landscape resources along the I-80 corridor and extending out to 5 miles from the project site.

Response

A map depicting scenic resources within 5 miles of the Project has been included as Figure 5.5-1. While the map provided in response to DR VIS-4 (Figure 5.5-1) illustrates the location of scenic resources in a 5-mile vicinity, analysis of Project impacts to these resources was already provided in the discussion for Thresholds VIS-1, VIS-2, and VIS-3. Cross references to the newly-created map have been added for reference.

15.1.5 Data Request DR VIS-5

DR VIS-5

Please explain the extent to which the project eliminates or obstructs the public view of any of the scenic resources that are identified in response to **DR VIS-4**.

Response

While the map provided in response to DR VIS-4 (Figure 5.5-1) illustrates the location of scenic resources in a 5-mile vicinity, analysis of Project impacts to these resources was already provided in the discussion for Thresholds VIS-1, VIS-2, and VIS-3. Cross references to Figure 5.5-1 have been added to the discussion for reference.

15.1.6 Data Request DR VIS-6

DR VIS-6

Please prepare and submit new project visual simulations for existing KOPs 2, 3, and 4 that illustrate the conceptual landscaping plan at one year after completion of construction, and number those images as Figures 5.5-4b, 5.5-5b, and 5.5-6b, respectively.

Response

New project visual simulations have been prepared for existing KOPs 2, 3, and 4 that illustrate conceptual landscaping at one year after the completion of construction. Due to the additional map provided in response to DR VIS-4 (Figure 5.5-1), visual simulations for KOP 2 are provided as Figures 5.5-5b and 5.5-5c, simulations for KOP 3 are provided as Figures 5.5-6b and 5.5-6c, and simulations for KOP 4 are provided as Figures 5.5-7b and 5.5-7c.

15.1.7 Data Request DR VIS-7

DR VIS-7

Please retain but re-number the existing simulations (existing Figures 5.5-4b, 5.5-5b, and 5.5-6b) as Figures 5.5-4c, 5.5- 5c, and 5.5-6c, respectively, and specify the time to vegetative maturity (after construction) that is illustrated in the existing simulations.

Response

Due to the additional map provided for DR VIS-4 (Figure 5.5-1), the numbering of all figures has shifted accordingly. All existing figures have been retained and new ones added as requested, and they are numbered in accordance with the order they are mentioned in the document (Figures 5.5-5c, 5.5-6c, and 5.5-7c). The figures with visual simulations specify the time to vegetative maturity depicted in the simulation.

15.1.8 Data Request DR VIS-8

DR VIS-8

Please prepare and submit new project visual simulations for the two newly requested KOPs 5 and 6 (see **DR VIS-1** and **DR VIS-2**) illustrating the conceptual landscaping plan at one year after completion of construction, and number those images as Figures 5.5-7b and 5.5-8b (and including their companion existing view images as Figures 5.5-7a and 5.5-8a), respectively.

Response

Due to the additional map provided for DR VIS-4 (Figure 5.5-1), the numbering of all figures has shifted accordingly. New KOPs 5 and 6 and their visual simulations have been added as requested and are numbered in accordance with the order they are mentioned in the document (KOP 5 in Figures 5.5-8a and 5.5-8b; KOP 6 in Figures 5.5-9a and 5.5-9b).

15.1.9 Data Request DR VIS-9

DR VIS-9

Provide to the CEC project manager electronic files of stand-alone, high-resolution (i.e., minimum 600 dots per inch output), KOP existing view and simulation images that are capable of being printed at 11" x 17".

Response

Standalone, high-resolution images of all simulation images are included in the revised Appendix P.

15.1.10 Data Request DR VIS-10

DR VIS-10

Please add the gen-tie pole diameters to Table 5.5-1 in Section 5.5 of the application.

Response

Pole diameters have been added to Table 5.5-1.

15.1.11 Data Request DR VIS-11

DR VIS-11

Please provide a project-specific conceptual landscape design plan that also details how the proposed plantings will effectively screen project facilities and the time frames involved. Please also provide documentation that demonstrates the plan's conformance with the City of Vacaville municipal code and/or Solano County government code. Also, please provide documentation that reports consultation(s) with the appropriate city/county agencies.

Response

The Project-specific Landscape Plan is provided as Appendix DR VIS-2, and sheet LP-102 provides a description of how proposed plantings will effectively screen the Project. Landscaping is proposed as screening for the BESS site only, which lies within the City of Vacaville jurisdiction. No landscaping is proposed along the Gen-Tie lines located within unincorporated Solano County. Review of the landscape plan would be a component of the Conditional Use Permit (CUP) and Building Permit review processes, as formal consultation with the City of Vacaville on the landscape plan was not requested during preparation of the Project Opt-In Application.

Consistency with City of Vacaville Requirements Related to Landscape Design Plan

The City of Vacaville has adopted the State Model Water Efficient Landscape Ordinance as a local ordinance, referred to as the Vacaville Water Efficient Landscape Ordinance, codified in Vacaville Municipal Code Chapter 14.27.

An approximately 20-foot wide landscape strip would be developed along the northwestern boundary of the site along I-80 as well as the southern boundary of the site along Kilkenny Road. The proposed plantings were selected to provide screening between the BESS site and travelers

along I-80 and Kilkenny Road. The plant species would consist of native, drought tolerant species commonly found throughout Solano County and would not draw attention from the casual observer, while providing some aesthetic appeal and visibility screening of the BESS structures and surrounding fenceline. As the Landscaping Plan specifies drought-tolerant and native vegetation, consistent with the indigenous, historic ecosystem, and does not include a permanent irrigation system, the State of California's Model Water Efficient Landscape Ordinance does not apply. Therefore, the project would comply with City of Vacaville Municipal Code requirements pertaining to landscape design plans.

15.1.12 Data Request DR VIS-12

DR VIS-12

Please add to the project-specific conceptual landscape design plan information that details the type of plant and/or tree species and their location and the quantity, size, spacing at installation/planting, expected growth rates, and expected heights at one year, five years, and maturity. Also provide the specifications of the proposed irrigation system components and their locations.

Response

The Project-specific Landscape Plan is provided as Appendix DR VIS-1, and it includes details on plant species, location, quantity, size (1 year, 5 years, and mature), spacing, and irrigation.

15.1.13 Data Request DR VIS-13

DR VIS-13

Please add to the project-specific conceptual landscape design plan the calculated total pervious surface amount for the project site as well as the surface to be replaced, the new surface, and the total area to be landscaped.

Response

The Project-specific Landscape Plan is provided as Appendix DR VIS-1, and sheet LP-102 includes the landscape layout, calculated total pervious planting area (28,000 square feet), and proposed surface types. Surface treatments and a discussion of existing and proposed impervious and pervious surfaces are also included in previously-submitted Appendices C (Project Plan Set) and D (Hydrology and Stormwater Management).

15.1.14 Data Request DR VIS-14

DR VIS-14

Please augment the existing lighting plan with a discussion of the control of reflectance from exterior surfaces off site that conforms with the city municipal code or county government code.

Response

The updated Lighting Plan is provided as Appendix DR VIS-2 and includes notes regarding reflectance control in adherence with City and County code.

15.1.15 Data Request DR VIS-15

DR VIS-15

Please augment the existing lighting plan with a discussion of the luminaire design that specifies whether the proposed luminaires are full cutoff, semi cutoff, or non-cutoff. Also indicate whether the luminaires have the International Dark-Sky Association Fixture Seal of Approval to the extent feasible consistent with safety and security considerations or not. Also, tie the provision of the lighting plan to a new mitigation measure to be added to the application, the purpose of which is to address the potentially significant visual impact of uncontrolled night lighting.

Response

The updated Lighting Plan is provided as Appendix DR VIS-2, and drawing E18-00-00 contains notes specifying that lighting fixtures will be full cut-off and that exterior fixtures are intended to carry the International Dark-Sky Association seal of approval where such fixtures are reasonable available and compatible with the operational and durability requirements of the facility. New mitigation measure VIS-2 (Lighting Plan) includes provisions for a lighting plan to include the details requested in DR VIS-14, DR VIS-15, and DR VIS-16.

15.1.16 Data Request DR VIS-16

DR VIS-16

Please augment the existing lighting plan with a discussion of reflectance including the intensity of the specular reflectance from the exterior surface of the project's large buildings, structures, and major equipment offsite to the surrounding area (e.g., the light reflected from the shiny surface).

Response

The updated Lighting Plan is provided as Appendix DR VIS-2 and includes notes regarding reflectance control.

15.1.17 Data Request DR VIS-17

DR VIS-17

Please provide Mitigation Measure VIS-1, and in each reference to MM VIS-1 in Table 5.5-3, please explain exactly how implementation of MM VIS-1 will minimize impacts with respect to the specific LORS.

Response

Mitigation Measure VIS-1 and VIS-2 are incorporated throughout the analysis discussion in Section 5.5.3.2 and included in Table 5.5-3.

15.1.18 Data Request DR VIS-18

DR VIS-18

Identify each agency with jurisdiction to issue applicable permits and/or approvals, but for the exclusive authority of the CEC, pertaining to the required project-specific, conceptual, outdoor lighting control and management plan and project-specific conceptual landscape design plan.

Response

But for the exclusive authority of the CEC, the Solano County Department of Resource Management (Planning Services Division) would have jurisdiction to issue a CUP and the Solano County Department of Resource Management (Building and Safety Services Division) would have jurisdiction to issue a Building Permit for the Project. Lighting plan and landscape plan review would be components of the CUP and Building Permit review processes; however, no standalone permits or approvals would be required for Project lighting or landscaping.

16 Waste Management

16.1 Data Request DR WASTE-1

16.1.1 Data Request DR WASTE-1

DR WASTE-1

Please provide the contact details for "Environmental Health Services Division" in Table 5.11-5.

Response

Contact details for the Environmental Health Services Division, Hazardous Materials Section (Certified Unified Program Agency) are as follows:

Trey Strickland, Environmental Health Manager
675 Texas Street
Suite 5500
Fairfield, California 94533
707-784-6765
HazMat@SolanoCounty.gov