

DOCKETED	
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Project Title:	Vaca Dixon Power Center Project
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Document Title:	Section 5-2_Land Use_VDPC
Description:	This section describes the land uses present in the vicinity of the Project Site, as well as the potential impacts that may result from construction and operation of the Project related to land use.
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5.2 Land Use

This section describes the land uses present in the vicinity of the Vaca Dixon Power Center Project (Project) site, as well as the potential impacts that may result from construction and operation of the battery energy storage system (BESS) Project related to land use. The Project includes two adjacent BESS facilities south of Interstate 80 (I-80) as well as gen-tie connections to the north on the Pacific Gas & Electric (PG&E) Vaca-Dixon Substation property. Section 5.2.1 describes the existing environmental setting. Section 5.2.2 provides an overview of the regulatory setting related to land use. Section 5.2.3 identifies potential environmental impacts that may result from Project construction and operation (including maintenance), as well as mitigation measures that should be considered during Project construction and operation. Section 5.2.4 discusses cumulative impacts. Section 5.2.5 presents laws, ordinances, regulations, and standards (LORS) applicable to land use and the Project. Section 5.2.6 identifies regulatory agency contacts and Section 5.2.7 includes a description of the necessary land use permits required to construct and operate the Project. Section 5.2.8 provides a list of references used in the preparation of this section.

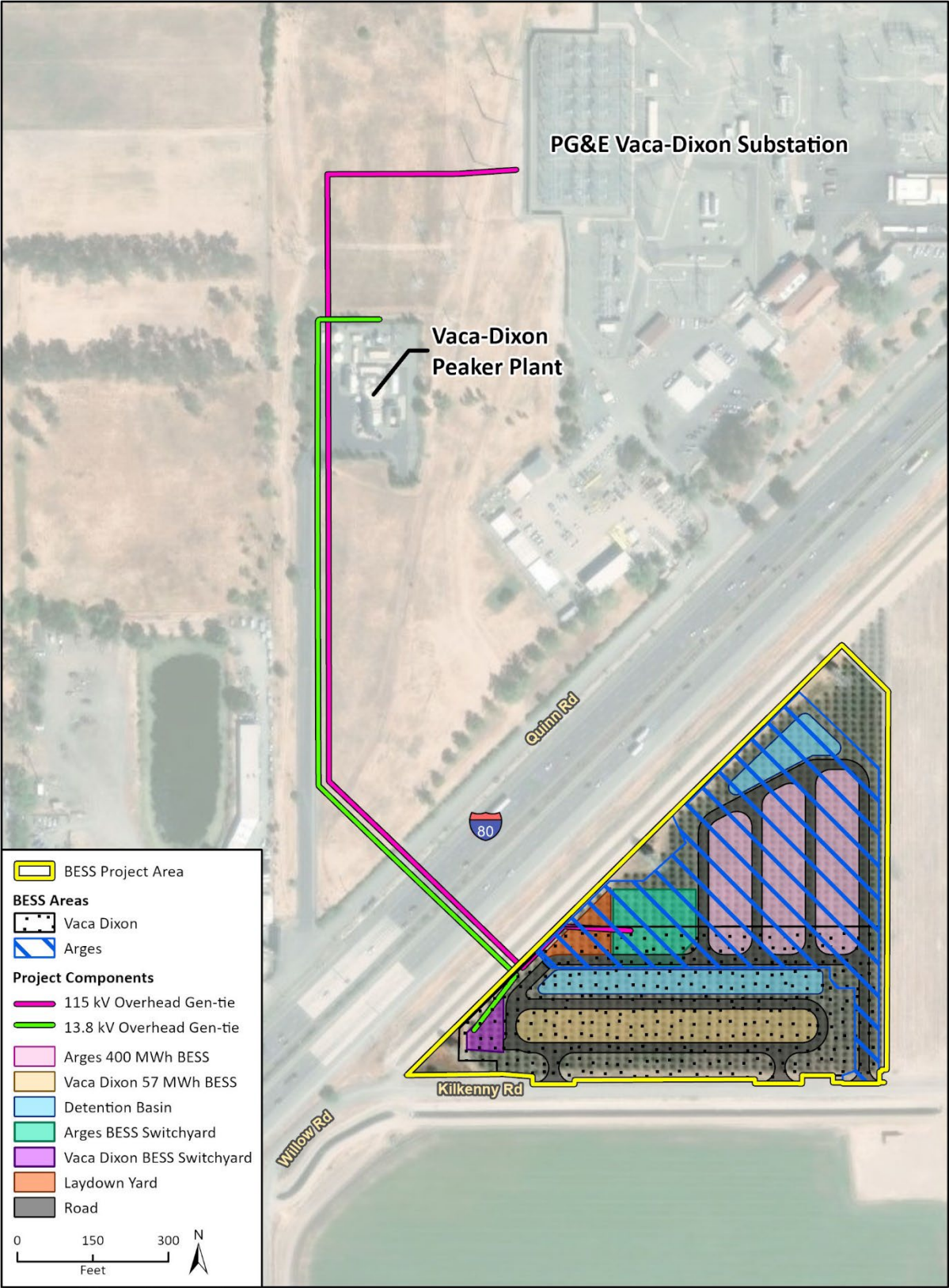
5.2.1 Environmental Setting

The State of California requires that cities and counties adopt comprehensive, long-term general plans for physical development within their jurisdictions. The comprehensive plans include a Land Use Element that establishes a desired pattern of appropriate land use, as well as policies and guidelines for the development of those uses. Local governments and their resource managers use local zoning ordinances, specific plans, and maps to implement a general plan's Land Use Element. In accordance with California Code of Regulations Title 20 Division 2 §1704 Appendix B, this section analyzes areas within one mile of the Project Site. Because both BESS Project components would interconnect to the existing PG&E Vaca-Dixon Substation located approximately 1,000 feet north of the BESS Project Area, areas within one mile of the Project Site encompass a 0.25-mile buffer for the Project's linear facilities (i.e., gen-tie lines). Figure 5.2-1 shows the location of the Project Site and linear gen-tie components.

5.2.1.1 Regional Setting

The City of Vacaville is located in northeastern Solano County, California, approximately 35 miles southwest of Sacramento and 55 miles northeast of San Francisco. Situated on the western edge of the Sacramento Valley and adjacent to the Vaca Mountains, Vacaville encompasses approximately 30 square miles and lies along I-80, a regional transportation corridor connecting the Bay Area to the Central Valley. Solano County, which extends from San Pablo Bay in the west to the Central Valley in the east, covers approximately 910 square miles—830 square miles of land and 80 square miles of water. About 128 square miles, or 14 percent of the county's total area, falls within the boundaries of seven incorporated cities: Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo (County of Solano 2008).

Figure 5.2-1 Project Site and Project Components



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Fig X Project Site and Components_Labels_Portrait

5.2.1.2 Project Location

Most of the Project Site is located within the City of Vacaville, California, on an approximately 10-acre parcel identified as Assessor Parcel Number (APN) 0133-060-060, situated immediately south of I-80. The proposed gen-tie line would also be located in unincorporated Solano County and connect to the existing PG&E Vaca Dixon Substation, facilitating interconnection of the BESS components to the regional transmission grid. The site would accommodate two BESS components: the Vaca Dixon 57 megawatt hour (MWh) BESS occupying approximately 4.25 acres in the southern portion of the BESS site, and the Arges 400 MWh BESS, occupying approximately 5.75 acres in the northern portion of the site.

Surrounding land uses include I-80 and Caltrans-managed right-of-way to the northwest; a PG&E transmission line easement and agricultural land within Vacaville city limits to the east; and Kilkenny Road and agricultural land within unincorporated Solano County to the south. The proposed transmission interconnection (gen-tie) facilities would extend onto a PG&E-owned parcel (APN 0133-060-070), designated as Public/Quasi-Public under the Solano County General Plan and currently developed with PG&E's Vaca-Dixon Substation.

Adjacent land uses along the gen-tie routes within Solano County include a commercial auto body shop and pond to the west and southwest (Urban Commercial designation), undeveloped land and residential backyards along Mills Lane to the west and northwest (designated Urban Residential, Public Open Space, and Public/Institutional), Gibson Canyon Creek to the north, and the PG&E Vaca-Dixon Substation to the east. Beyond the one-mile radius of the Project Site, surrounding land uses include residential neighborhoods to the west; a mix of agricultural, residential, and commercial uses to the east; agricultural and residential areas to the south; and agricultural and renewable energy facilities to the north. The broader area encompasses portions of both the Vacaville city limits and unincorporated Solano County.

5.2.1.3 Existing General Plan Designations within One Mile of the Project Site

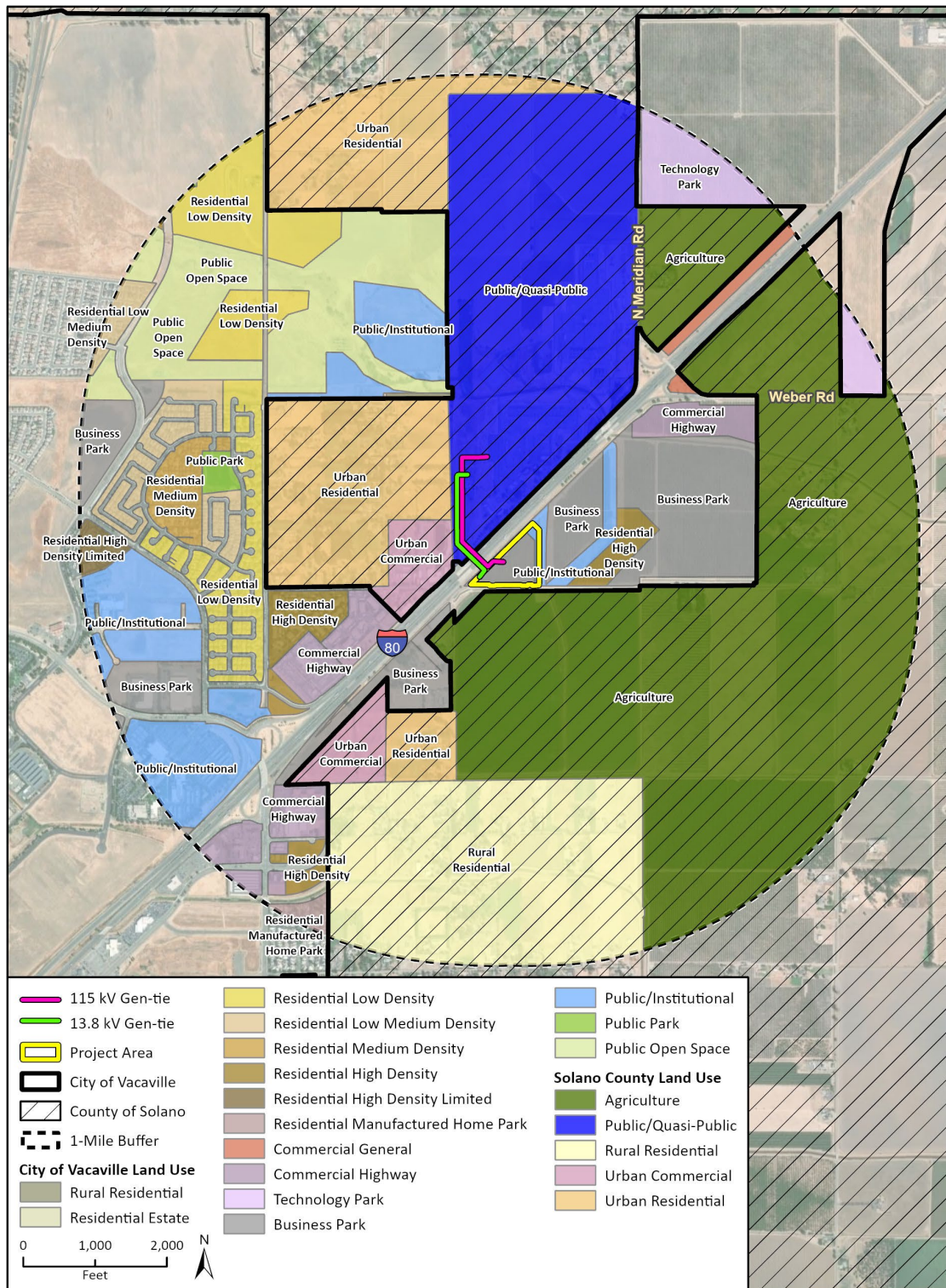
Land use provisions included in every city and county general plan in California reflect the goals and policies that guide physical development of land within their jurisdiction (California State Planning Law, Government Code Section 65302 et seq.). This section describes the land use designations for the Project Site and properties located within one mile of the Project Site, which encompasses both the City of Vacaville and unincorporated Solano County.

Land use designations within one mile of the Project Site are listed in Table 5.2-1. Figure 5.2-2 shows these land use designations for the Project Site and within one mile of the Project Site. The BESS Project Area is designated Business Park under the City of Vacaville General Plan. The gen-tie line routes, located on the PG&E parcel within unincorporated Solano County, are designated Public/Quasi-Public under the Solano County General Plan and are zoned A-20 Intensive Agriculture.

Table 5.2-1 Land Use Designations Within One Mile of the Project Site

Land Use	Description
City of Vacaville	
Rural Residential	This land use designation permits low-density residential development in rural settings.
Residential Low Density	This land use designation permits single-family homes on larger lots.
Residential Low Medium Density	This land use designation permits a mix of single-family homes and small multi-family units.
Residential Medium Density	This land use designation permits townhomes, duplexes, and small apartment complexes.
Residential High Density	This land use designation permits multi-family housing such as apartment buildings.
Residential High Density Limited	This land use designation permits a variety of high-density residential development, including townhouses, condominiums, apartments, and other compatible uses.
Residential Estate	This land use designation permits large-lot single-family homes, often semi-rural in character.
Residential Manufactured Home Park	This land use designation permits mobile and manufactured home communities.
Public Open Space	This land use designation permits natural areas, greenbelts, and undeveloped public land.
Public Park	This land use designation permits recreational parks and public gathering spaces.
Technology Park	This land use designation permits research and development facilities and tech-related office uses.
Business Park	This land use designation permits office centers and light industrial uses.
Commercial General	This land use designation permits a wide range of commercial uses including retail, services, and restaurants.
Commercial Highway	This land use designation permits auto-oriented commercial uses such as gas stations, hotels, and large retail.
Public/Institutional	This land use designation permits schools, government buildings, medical facilities, and utilities.
Solano County	
Public Quasi-Public	This land use designation permits public facilities such as schools, libraries, and government buildings.
Urban Residential	This land use designation permits residential developments of varying densities in urban areas.
Rural Residential	This land use designation permits low-density housing in rural settings.
Urban Commercial	This land use designation permits retail, service, and office uses in urban areas.
Agriculture	This land use designation permits farming, ranching, and other agricultural operations.
Source: City of Vacaville 2015a, 2015b; Solano County 2024a	

Figure 5.2-2 Land Use Designations Within One Mile of the Project Site¹



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Additional data provided by City of Vacaville, 2025; County of Solano, 2025.

25-17651 EPS
Fig X General Plan Land Use

¹The apparent encroachment of the Project Site into the adjacent parcel to the east reflects updated boundary information from an ALTA survey conducted by the applicant. This survey provided a more accurate delineation of the parcel intended for the BESS facility, which differed from the boundaries shown on the City of Vacaville zoning map.

5.2.1.4 Zoning Within One Mile of the Project Site

Table 5.2-2 provides definitions and information about the zoning districts within the Project Site and within one mile of the Project Site, including gen-tie routes.

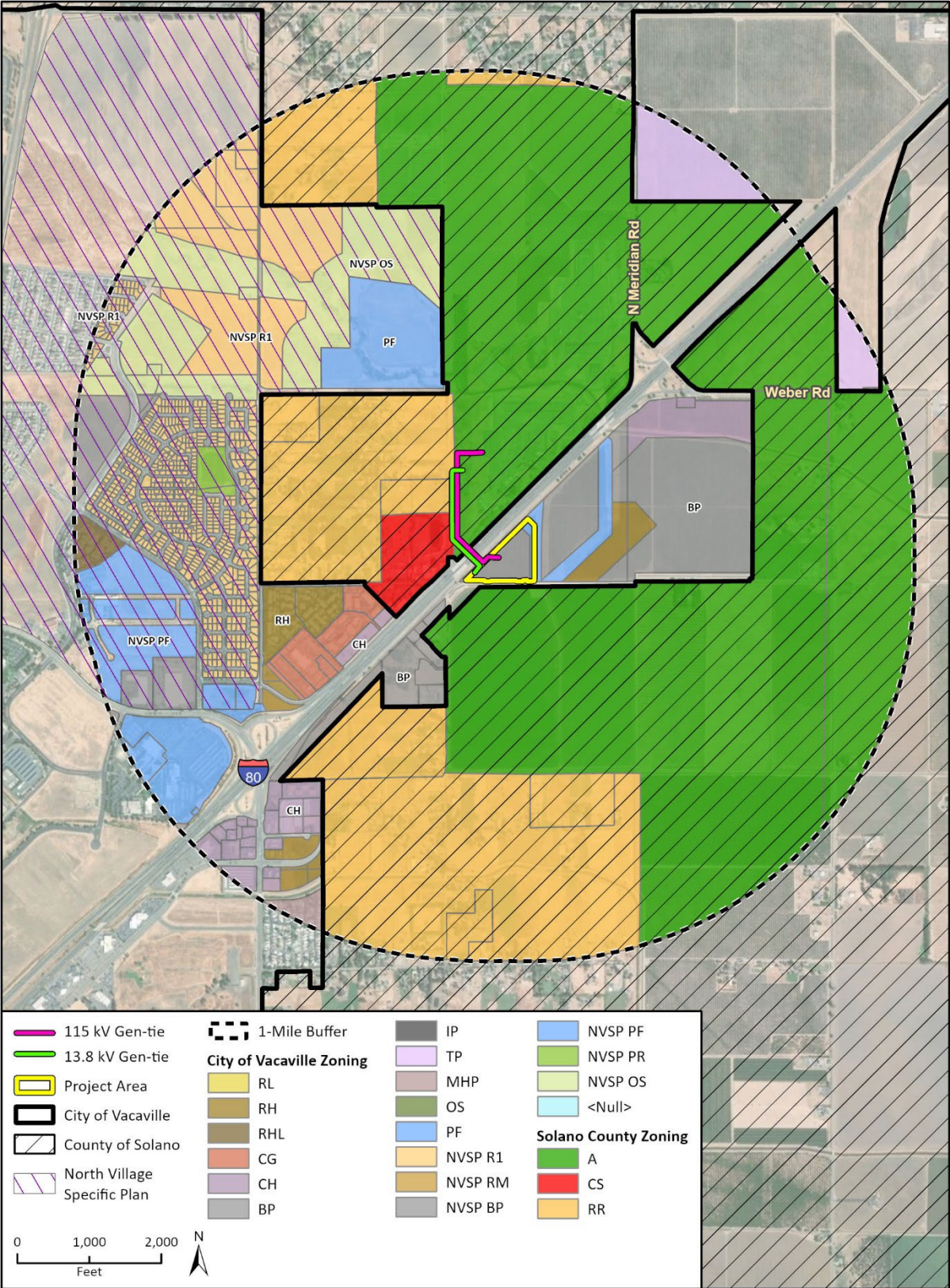
Table 5.2-2 Zone Districts

Zone	Allowable Uses	Size Restrictions
City of Vacaville		
Residential Low (RL)	The RL district is intended to provide for residential development and other compatible uses in a low-density residential neighborhood setting with a variety of lot sizes and architectural styles.	3.1 to 5.0 dwelling units per acre
Residential High (RH)	The RH district is intended to provide for a variety of high-density residential development, including townhouses, condominiums, apartments, and other compatible uses.	20.1 to 30.0 dwelling units per acre
Residential High Limited (RHL)	The RHL district is intended to provide for a variety of high-density residential development, including townhouses, condominiums, apartments, and other compatible uses. This zoning district applies to residential high-density projects located within Nut Tree Airport Compatibility Areas D, Extended Approach/Departure Area, and E, Adjacent to Runway or Final Approach.	20.1 to 24.0 dwelling units per acre
General Commercial (CG)	The CG district is intended to provide for a full range of commercial and supportive uses to meet local and regional demand.	N/A
Highway Commercial (CH)	The CH district is intended to provide areas for retail, commercial, service, and recreational uses adjacent or proximate to the highway and dependent upon highway travel.	N/A
Business Park (BP)	The BP district is intended to provide areas for large-scale, campus-like office and technology development that includes office, research and development, manufacturing, and other large-scale professional uses, along with supportive services and the potential for residential uses.	N/A
Industrial Park (IP)	The IP district is intended to provide areas for a variety of industrial, manufacturing and warehousing uses with compatible uses to support employment areas.	N/A
Technology Park (TP)	The TP district is intended to provide areas for high quality offices, industrial uses, and technology campuses.	N/A
Manufactured Housing Park (MHP)	The MHP district is intended to provide areas for manufactured housing parks, whether lots are rented or leased, or where lots are individually owned.	6.0 to 10.0 dwelling units per acre
Public Facilities (PF)	The PF district is intended to provide areas for the development of public, semi-public, and open space uses that provide services to the community and support existing and new residential, commercial, and industrial land uses, including educational facilities, cultural and institutional uses, health services, parks and recreation, general government operations, utility and public service needs, and other similar and related supporting uses.	N/A
One Family Detached Residential- North Village Specific Plan (NVSP R1)	The NVSP R1 district is intended to provide areas for one family dwellings which do not have more than three paying guests lodging or boarding; swimming pools; temporary subdivision sales office; family day care homes; temporary access of public and private schools by churches and other non-profit community organizations, secondary living units.	3,600 to 8,000 square foot minimum lot size

Zone	Allowable Uses	Size Restrictions
Multi-Family Residential (NVSP RM)	The NVSP RM district is intended to provide areas for duplexes, town homes, townhome/flat combinations, condominiums and apartments	2000 square foot minimum lot size per unit
Business Park – North Village Specific Plan (NVSP BP)	The NVSP-BP district is intended to provide areas for a broad range of business uses, including administrative, professional, financial, office, biotechnical, engineering, design, and manufacturing.	N/A
Public Facilities - North Village Specific Plan (NVSP PF)	The NVSP-PF district is intended to provide areas for a broad range of government, institutional, educational, and assembly uses, typically on large sites.	Minimum two acres
Private Recreation - North Village Specific Plan (NVSP PR)	The NVSP-PR district is intended to provide an area for a private swim club.	Minimum two acres
Open Space - North Village Specific Plan (NVSP OS)	The NVSP-OS district is intended to provide areas for corporation, maintenance, and storage yards; stormwater management, noise, odor, and agricultural buffers, and riparian and botanical preserve areas; passive recreational uses and interpretive facilities which are compatible with preservation of wetlands and riparian habitat; wells and pump stations and other similar utility facilities; and trails.	N/A
Solano County		
Exclusive Agriculture (A)	Crop production and grazing; agricultural processing uses; animal facilities and operations; agricultural housing; single-family residential developments; animal facilities; recreational, educational, and public assembly uses; retail and office uses; tourist uses; public service uses; commercial uses; infrastructure uses	20-acre to 40-acre minimum parcel size
Commercial Services (CS)	Public assembly uses; retail uses; commercial uses; communication, infrastructure, and service uses.	N/A
Rural Residential (RR)	Crop production and grazing, residential uses, churches, nursing homes, agricultural retail uses, kennels, communication, infrastructure, and public service uses	2.5-acre to 5-acre minimum parcel size
Source: City of Vacaville 2015; County of Solano 2025a		
N/A = not applicable		

The BESS Project Area is zoned as Business Park. As described in Chapter 14.09 of the City of Vacaville’s Municipal Code, the “BP” Zoning District is intended to provide areas for large-scale, campus-like office and technology development that includes office, research and development, manufacturing, and other large-scale professional uses, along with supportive services and the potential for residential uses. While BESS facilities are not currently listed as permitted or conditionally permitted uses in this zoning district, the CEC’s exclusive siting authority under AB 205 allows it to approve the Project regardless of local zoning conflicts. The gen-tie line, located within unincorporated Solano County, crosses areas zoned Exclusive Agriculture (A), which allows utility infrastructure such as transmission lines with a Use Permit under Chapter 28.21 of the County’s Zoning Ordinance. Figure 5.2-3 shows the zoning designations within the Project Site and within one mile of the Project Site.

Figure 5.2-3 Zoning Designations



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Additional data provided by City of Vacaville, 2025; County of Solano, 2025.

25-17851 EPS
Fig X Zoning

5.2.1.5 Physical Land Uses within One Mile of the Project Site

Residential

There are no residential properties within the Project Site. However, the land to the south and west within one mile of the Project Site contains several residential areas. The nearest residences to the Project Site include:

- A single-family residence on Willow Road located approximately 0.18-mile south of the BESS Project Area.
- The Quinn Crossing Apartment buildings are located northwest of the I-80 on Quinn Road, approximately 0.25-mile southwest of the Project Site.
- Single-family residences located on Ellsworth Road approximately 0.30-mile west of the BESS Project Area.
- Single-family residential development is located on Kilkenny Road approximately 0.35-mile east of the BESS Project Area.
- Single-family residences located on Mills Lane located approximately 0.20 mile west and northwest of the gen-tie routes.

Commercial

There are no commercial businesses or offices within the Project Site; however, there are several commercial areas located on land within one mile of the Project Site, primarily concentrated in the City of Vacaville. These commercial businesses include hotels, plant nurseries, restaurants and breweries, automotive shops, and automotive dealerships. The nearest commercial uses to the Project Site include:

- Several automotive businesses, including L&M Auto Body, Factory Outlet Trailer Sales, Corvette Express, Habibs Auto Body and Paint Shop, and Quintero's Auto Sales, are located at 5151 Quinn Road, approximately 450 feet west of the Project Site and within 50 feet of the gen-tie routes.
- The Palm Island Nursery Outlet, El Rancho Nursery, and the Rock Shop are located at 5119 Quinn Road, approximately 880 feet southwest of the Project Site.
- Cal Roofing Systems, a roofing contractor, is located at 7005 Mills Lane, approximately 0.37-mile northwest of the Project Site and within 1,100 feet of the gen-tie routes.

Industrial

There are no industrial uses located on land within one mile of the Project Site. The nearest industrial uses to the Project Site are buildings located adjacent to I-505 approximately 1.5 miles west of the Project Site, including Northbay Logistics Center, Amazon warehouses, Matheson, Mariani Packing Company, Vacaville Insulation Warehouse, and Corbi Plastics, LLC.

Recreational

There are no parks or recreational areas within the Project Site; however, there are parks and recreational areas located to the west and southwest within one mile of the Project Site. The nearest park and recreational areas to the Project Site include:

- Corderos Park, an outdoor park facility with a grass field and playground area, located on Parkside Drive approximately 0.7-mile west of the Project Site.

- Vacaville Indoor Sports Complex, an indoor recreational facility with indoor soccer fields located at 3777 Vaca Valley Parkway approximately 0.85-mile southwest of the Project Site.

Open Space

Under Section 65560 of the California State Government Code, open space is defined as any parcel or area of land or water that is essentially unimproved and devoted to an open-space use, and that is designated on a local, regional, or state open space plan as any of the following: open space for the preservation of natural resources, open space used for the managed production of resources, open space for outdoor recreation, or open space for public health and safety.

A portion of land within one mile of the Project Site has been zoned Open Space by the City of Vacaville. This area, located approximately 0.5-mile northwest of the Project Site, extends westward and ends east of I-505.

Scenic

The California Department of Transportation does not identify any designated or eligible state scenic highways within the vicinity of the Project Site. The closest designated state scenic highway, State Route 160, is located approximately 22 miles east of the Project Site and is not visible from the Project Site (California Department of Transportation 2018). However, the County designates the portion of I-80 adjacent to the Project Site and traversed by the proposed gen-tie lines as a Scenic Roadway (County of Solano 2008).

Natural Resource Protection

The Project Site and land within one mile of the Project Site are not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan (California Department of Fish and Wildlife 2023). A draft Solano County Habitat Conservation Plan has been in the process of development since September 2001; however, this plan has not yet been adopted (Solano County Water Agency 2024) and the City of Vacaville is not an identified participant.

Natural Resource Extraction

The Project Site and land within one mile of the Project Site do not contain natural resource extraction facilities such as mines or timberland production facilities, forested areas, or known mineral resources (O'Neal and Gius 2018).

Educational, Child Care, Nursing Homes

There are no educational facilities within the Project Site. However, one private educational facility, the Academy of 21st Century Learning, is located within one mile of the Project Site approximately 0.94-mile southwest of the Project Site. One nursing home is located approximately 0.6-mile west of the Project Site and Graceful Living Care Homes located approximately 0.6-mile west of the Project Site. There are no childcare facilities within one mile of the Project Site.

Religious

There is one religious facility, North Hills Christian Church, within one mile of the Project Site, located approximately 0.8-mile southwest of the Project Site.

Cultural and Historic

Section 5.1, *Cultural Resources and Tribal Cultural Resources*, provides a discussion of the cultural and historic resources at the Project Site and within one mile of the Project Site.

Unique Land Uses

This assessment has identified no unique land uses within one mile of the Project Site. The Project Site is not located on a prohibited site identified in Public Resources Code section 25527, which includes a state, regional, County, or city park; wilderness, scenic, or natural reserve, area for wildlife protection, recreation, historic preservation; or natural preservation area. Similarly, consistent with Public Resources Code Section 25527, there are no estuaries in an essentially natural and undeveloped state on the Project Site. The Project is not located on a site designated by the San Francisco Bay Conservation and Development Commission as identified in Public Resources Code Section 66645(b). The Project Site is not located in the coastal zone.

Agricultural Use

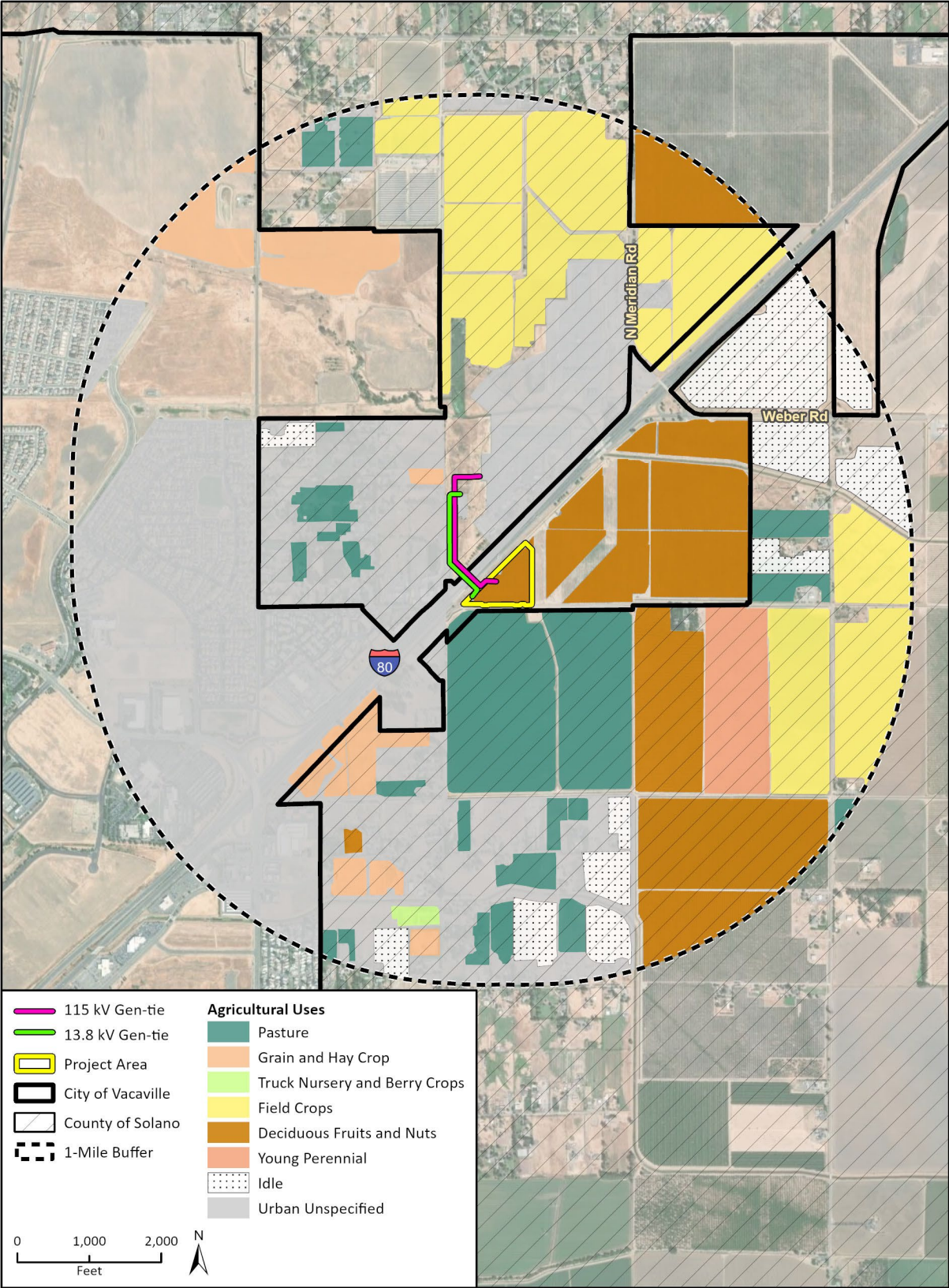
Crops Within One Mile of the Project Site

The BESS Project Area is currently used for agriculture and contains a deciduous fruit orchard, as identified on the 2021 Statewide Crop Mapping Dataset prepared by the California Natural Resources Agency. As of July 8, 2025, the BESS Project Area was planted with French prune trees. Other agricultural lands within one mile of the Project Site support a variety of crops, including deciduous fruits and nuts, field crops, grain and hay crops, truck nursery and berry crops, and young perennials. Livestock pastureland is also present within one mile of the Project Site(California Department of Water Resources 2024). Table 5.2-3 summarizes the different agricultural uses located within one mile of the Project Site. Table 5.2-3 is based on a 2021 Statewide Crop Mapping Dataset prepared by the California Natural Resources Agency. The 2021 Statewide Crop Mapping Dataset was most recently updated in April 2023 and represents the most recently available spatial data on irrigated agriculture. Crop types and acreages are subject to change from year to year, and a single year is not representative of long-term average agricultural use of the area. Figure 5.2-4 shows the locations of crops supported within one mile of the Project Site.

Table 5.2-3 Cropland by Acreage Within One Mile of the Project Site

Agricultural Use	Acreage
Deciduous Fruits and Nuts	300
Field Crops	308
Grain and Hay Crops	132
Truck Nursery and Berry Crops	4
Young Perennial	53
Source: California Natural Resources Agency 2024	

Figure 5.2-4 Agricultural Uses Within One Mile of the Project Site



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Additional data provided by CRNA, 2025.

25-17851 EPS
Fig X Agricultural Uses

Important Farmland

The California Department of Conservation (DOC) developed categorical definitions of important farmlands for land inventory purposes, which are applied within the DOC's Farmland Mapping and Monitoring Program (FMMP). Important farmlands provide the best opportunity for agricultural production. Land within one mile of the Project Site contains land which is classified within the DOC's FMMP as the following (DOC 2025a):

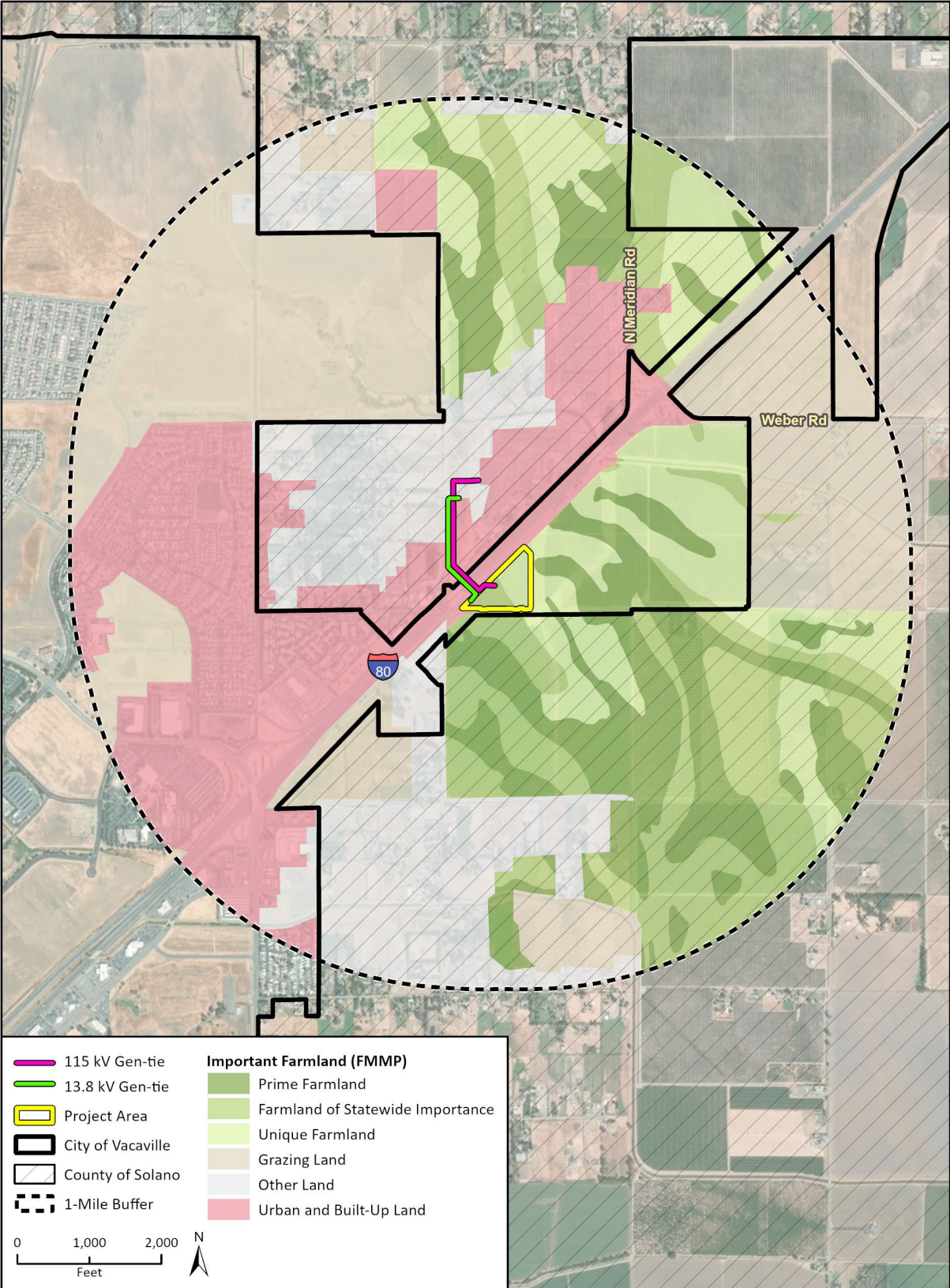
- **Prime Farmland:** Irrigated land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance:** Irrigated land similar to Prime Farmland that has a good combination of physical and chemical characteristics for the production of agricultural crops. This land has minor shortcomings, such as greater slopes or less ability to store soil moisture than Prime Farmland. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
- **Unique Farmland:** Lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Urban and Built-Up Land:** Urban and Built-Up land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
- **Grazing Land:** Land on which existing vegetation is suited for the grazing of livestock.
- **Other Land:** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Figure 5.2-5 shows 2020 FMMP designations within one mile of the Project Site. The 2020 FMMP designations represent the most recently available FMMP designations published by DOC. As shown in Figure 5.2-5, the BESS Project Area is located on Unique Farmland and Farmland of Statewide Importance. Project gen-tie routes located on the PG&E parcel do not traverse farmland.

Williamson Act Contract Lands

The California Land Conservation Act of 1965 authorizes local governments to contract with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. Resource managers refer to these contracts as Williamson Act contracts. The minimum term for a Williamson Act contract is ten years. Figure 5.2-6 shows the locations of parcels subject to a Williamson Act contract within one mile of the Project Site. As shown therein, the BESS Project Area and gen-tie routes are not located on lands subject to a Williamson Act contract.

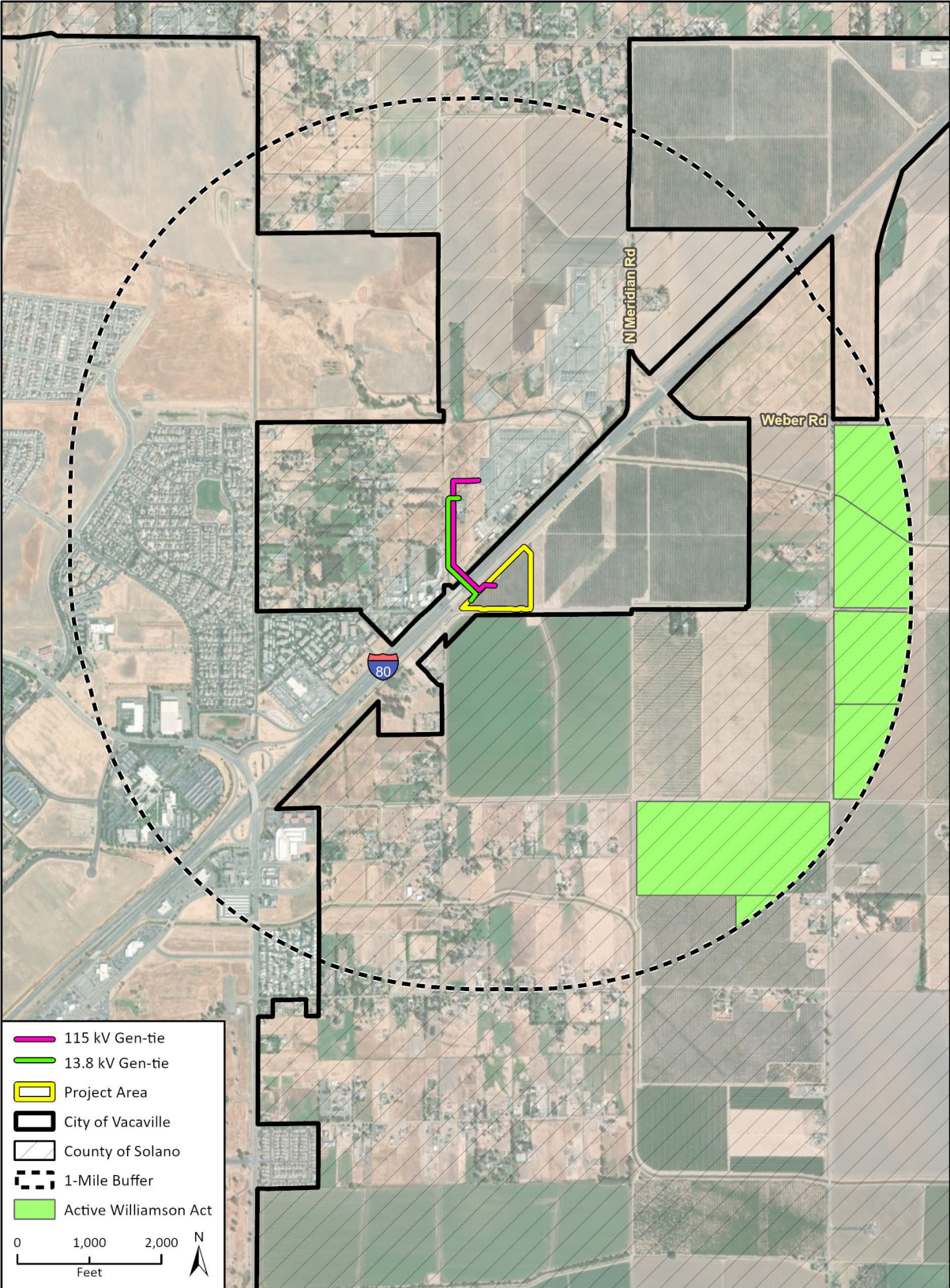
Figure 5.2-5 Farmland Designations Within One Mile of the Project Site



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Additional data provided by CA Department of Conservation, 2025.

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Fig X Farmland Designations

Figure 5.2-6 Existing Williamson Act Contracts Within One Mile of the Project Site



5.2.1.6 *Other Applicable Planning Documents*

The Project is located within Compatibility Zone D of the Travis Air Force Base Airport Influence Area, as defined in the Travis Air Force Base Land Use Compatibility Plan adopted by the Solano County Airport Land Use Commission (Solano County 2024b). The Travis AFB LUCP is therefore an applicable planning document for this Project and has been considered in the design and permitting strategy. No other adopted planning documents, such as Habitat Conservation Plans or Natural Community Conservation Plans, apply to the Project Site.

5.2.1.7 *Recent Proposed Zone Changes and General Plan Amendments*

There are no recently proposed zone changes or general plan amendments within one mile of the Project Site.

Table 5-1 of Section 5, *Environmental Analysis*, provides a list of recent and proposed projects requiring discretionary review in proximity to the Project Site, including proposed General Plan Amendments and zone changes. As shown in Figure 5-1 of Section 5, *Environmental Analysis*, there are cumulative projects that involve a General Plan Amendment or rezoning; however, these projects do not occur within one mile of the Project Site.

5.2.2 Regulatory Setting

Federal, state, and local LORS related to land use were reviewed for applicability to the Project. These are detailed in Section 5.2.5, Laws, Ordinances, Regulations, and Standards.

5.2.3 Impact Analysis

The following subsections discuss the potential direct and indirect impacts related to land use from construction and operation (including maintenance) of the Project.

5.2.3.1 *Methodology*

This impact analysis is based on a review of existing City of Vacaville and Solano County land use and zoning designations, as well as policies within the City's General Plan. In addition, FMMP maps and existing Williamson Act contracts were reviewed to determine the extent to which the Project would result in the conversion of agricultural land to non-agricultural use, as well as to determine compatibility with existing Williamson Act contracts.

5.2.3.2 *Impact Evaluation Criteria*

The potential for impacts to land use were evaluated using the criteria described in Appendix G of the California Environmental Quality Act (CEQA) Environmental Checklist (Appendix G of the CEQA Guidelines). Specific to land use and agricultural resources, the Project would have a significant impact if it would:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act Contract; and/or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Impact LU-1

Threshold: Would the Project physically divide an established community?

No Impact. The Project BESS facility would be constructed on a 10-acre site currently occupied by a French prune orchard within the City of Vacaville. The Project Site is surrounded by I-80 and utility infrastructure to the north and west, agricultural land and Kilkenny Road to the south, and PG&E transmission facilities to the east. The surrounding area is characterized by low-density development, utility corridors, and agricultural uses, and does not contain a cohesive or established residential community that could be physically divided by the Project. The proposed BESS facilities and associated transmission infrastructure would not introduce barriers to movement, access, or connectivity between neighborhoods. Therefore, the Project would not physically divide an established community, and no impact would occur under CEQA.

Impact LU-2

Threshold: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Consistent with the Opt-In Application process, the CEC will review the Project for consistency with applicable land use plans, policies, and regulations adopted to avoid or mitigate environmental effects. Assembly Bill 205 (Chapter 61, Statutes of 2022) expands the CEC's authority under the Warren-Alquist Act to include non-fossil-fueled energy facilities such as BESS and provides a streamlined certification pathway for eligible projects.

The Project Site is located within the City of Vacaville's Northeast Growth Area and is designated as Business Park under the City's General Plan. While BESS facilities are not currently listed as permitted or conditionally permitted uses in this zoning district, the CEC's exclusive siting authority under AB 205 allows it to approve the Project regardless of local zoning conflicts.

The Project also includes gen-tie transmission lines that cross I-80 and extend into unincorporated Solano County to interconnect with the existing PG&E Vaca-Dixon Substation. These gen-tie facilities are located on a PG&E-owned parcel designated as Public/Quasi-Public under the Solano County General Plan. This designation is consistent with the existing and proposed utility infrastructure uses, including the PG&E substation and associated facilities. Adjacent land uses in Solano County include Urban Commercial, Urban Residential, Public Open Space, and Public/Institutional designations, which are compatible with the continued and expanded use of the site for utility infrastructure.

The gen-tie route was selected to minimize environmental and land use impacts by co-locating 13.8 kilovolt (kV) and 115 kV conductors on shared monopole structures and following a compact alignment that avoids sensitive land uses and parallels an existing private road over most of its

distance. The Project's transmission facilities are consistent with Solano County's General Plan goals to support infrastructure development that enhances energy reliability and sustainability.

As part of the Opt-In Application process, the CEC will coordinate with the City of Vacaville, Solano County, and Caltrans to allow for the Project to be reviewed in accordance with applicable safety and environmental standards. Therefore, the Project would not result in a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Table 5.2-4 outlines the Project's consistency with key policies from the City's General Plan, demonstrating alignment with applicable local planning objectives. Table 5.2-5 outlines the Project's consistency with key policies from the County's General Plan.

Table 5.2-4 Project Conformity with the City of Vacaville General Plan

Policy	Consistency
Land Use Element	
Policy LU-P2.4: Preserve agricultural lands through conservation easements or mitigation.	Consistent. The Project would include Mitigation Measure AG-1, which would require preservation of farmland at a 1:1 ratio through conservation easements or in-lieu fees, consistent with Vacaville Municipal Code Division 14.28. As stated in Section 5.2, <i>Agricultural Resources</i> , this measure would promote permanent protection of agricultural lands elsewhere in the region to offset any conversion resulting from the Project.
Policy LU-P5.2: Encourage development that supports long-term sustainability and minimizes environmental impacts.	Consistent. The Project would support California's clean energy goals by providing battery energy storage infrastructure that would reduce reliance on fossil fuels and improve grid reliability. As described in Section 5.6, <i>Energy</i> , the Project would contribute to long-term sustainability by enabling renewable energy integration and reducing greenhouse gas emissions.
Policy LU-P12.3: Provide compatible transitions between urban development and adjacent agricultural uses.	Consistent. The Project would be sited adjacent to existing utility infrastructure and would minimize disruption to surrounding agricultural lands. As described in Section 5.2, <i>Agricultural Resources</i> , the Project would use overhead transmission infrastructure to avoid additional farmland conversion and would maintain a buffer between development and adjacent agricultural uses.
Policy LU-P18.1: Guide interim development in the Northeast Growth Area to preserve land for future job-generating uses.	Consistent. The Project would be located in the Northeast Growth Area and would support utility-scale infrastructure that aligns with long-term employment and energy reliability goals. As described in Chapter 2, <i>Project Description</i> and Section 5.6 <i>Socioeconomics</i> , the Project would not preclude future job-generating uses and would contribute to regional energy infrastructure needed to support economic development.
Conservation and Open Space Element	
Policy COS-P1.1: Protect and enhance natural habitats and biological resources.	Consistent. Section 5.12, <i>Biological Resources</i> , evaluates the Project's potential impacts on sensitive habitats and wildlife movement. The Project Site consists of previously disturbed land adjacent to existing energy infrastructure. The Project includes avoidance and minimization measures such as pre-construction surveys and biological monitoring to reduce impacts on natural resources.

Policy	Consistency
Policy COS-P9.1: Reduce greenhouse gas emissions through land use and energy strategies.	Consistent. Section 5.7, <i>Air Quality</i> , demonstrates that the Project would reduce greenhouse gas emissions by enabling renewable energy integration and reducing reliance on fossil fuel peaker plants. The Project's BESS would store excess renewable energy and discharge during peak demand periods, supporting regional climate goals and reducing emissions consistent with the City's sustainability objectives.
Policy COS-P10.1: Promote renewable energy and energy storage technologies.	Consistent. The Project includes two BESS components totaling 457 megawatt-hour (MWh) (Vaca Dixon 57 MWh and Arges 400 MWh), directly supporting the City's goal to promote energy storage technologies. These systems would enhance grid reliability, facilitate renewable energy use, and reduce peak load emissions, aligning with the City's climate and energy policies.
Policy COS-P13.1: Minimize water use and protect water quality.	Consistent. Section 5.13, <i>Water Resources</i> , confirms that the Project would use minimal water during construction and operation, primarily for dust suppression and landscaping. The Project would implement best management practices (BMPs) to prevent erosion and protect water quality, including stormwater pollution prevention measures and spill containment protocols.
Policy COS-P2.1: Protect scenic resources such as ridgelines, hillsides, creeks, and open space areas.	Consistent. Section 5.5, <i>Visual Resources</i> , concludes that the Project would not impact designated scenic resources. The Project Site would be located in a flat, semi-urbanized area adjacent to existing PG&E infrastructure and would not be visible from scenic ridgelines or open space areas. Visual simulations confirm that the Project would not obstruct views of natural features.
Policy COS-P2.2: Minimize visual impacts of new development through site planning, landscaping, and building design.	Consistent. Section 5.5, <i>Visual Resources</i> , includes a visual impact assessment using Federal Highway Administration methodology and key observation point simulations. The Project would incorporate low-profile equipment, neutral finishes, and perimeter fencing to minimize contrast with the surrounding landscape. Lighting would be shielded and directed downward to reduce glare and nighttime visibility.
Policy COS-P2.3: Preserve views of natural features from public roadways and open spaces.	Consistent. Section 5.5, <i>Visual Resources</i> , confirms that the Project would not obstruct or degrade views of natural features from public roadways. The Project's location and design avoid interference with views of the Vaca Mountains and surrounding agricultural lands. Visual simulations demonstrate that the Project, including the gen-tie facilities would be visually compatible with the setting.
Transportation and Circulation Element	
Policy TR-P3.1: Maintain acceptable levels of service (LOS) at intersections and roadways.	Consistent. Section 5.4, <i>Traffic and Transportation</i> , confirms that the Project would generate minimal vehicle trips during construction and operation, including limited employee visits and equipment deliveries. The Project would not exceed thresholds requiring a traffic impact study and would not degrade level of service at nearby intersections or roadways.
Public Safety Element	
Policy SAF-P5.7: Require Fire Department review of all development applications.	Consistent. The Project would include coordination with the Vacaville Fire Department and implementation of a Fire Protection and Prevention Plan. This plan would outline fire safety measures, emergency access, and equipment specifications to confirm compliance with local fire code and safety standards.

Policy	Consistency
Policy SAF-P7.12: Ensure resilient communication systems for emergency response.	Consistent. The Project would include emergency response planning and utility coordination to promote operational reliability. Backup communication protocols and coordination with local emergency services would be incorporated into the Project's Hazardous Materials Business Plan and Worker Safety Plan (Sections 5.9 and 5.10).
Policy SAF-P8.1: Minimize risks from seismic hazards and ground failure.	Consistent. Section 5.16, <i>Geological Hazards</i> , confirms that the Project would not be located within a fault zone and has undergone geotechnical review. The Project would be constructed in accordance with California Building Code seismic design standards to promote structural stability and minimize risks from ground shaking or liquefaction.
Policy SAF-P9.1: Reduce wildfire risk through defensible space and fire-safe design.	Consistent. Section 5.9, <i>Hazardous Materials Handling</i> , confirms that the Project would not be located in a high or very high fire hazard severity zone. The Project would include fire-safe design features such as setback buffers, non-combustible materials, and emergency access routes, consistent with defensible space requirements.
Park and Recreation Element	
Policy PR-P1.7: Provide private recreational amenities for new residential development.	Consistent. As a non-residential energy infrastructure facility, the Project would not result in population growth or demand for recreational amenities. Therefore, it would not affect the existing ratio of parkland to residents in Vacaville.
Policy PR-P2.4: Require payment of park development impact fees for new development.	Consistent. As a non-residential project, the Project would not generate new residential units or population growth. It would not trigger park development impact fees under City policy.
Policy PR-P2.8: Require annexation into a park maintenance district for new residential development.	Consistent. The Project would not include residential development and would not require annexation into a park maintenance district. It would not affect parkland maintenance obligations or funding.
Source: City of Vacaville 2015	

Table 5.2-5 Project Conformity with the Solano County General Plan

Policy	Consistency
Land Use Element	
Policy LU.P-6: Retain existing land uses within municipal service areas until annexed to a city.	Consistent. The Project would continue the use of Public/Quasi-Public utility infrastructure on APN 133-060-070, consistent with existing land use designations and County jurisdiction. No change in land use designation would be proposed.
Policy LU.P-31: Require that all development within the airport influence areas of public and military airports complies with the Airport Land Use Commission compatibility policies and criteria as set forth in the airports' land use compatibility plans.	Consistent. The Project Site would not be located within the Nut Tree Airport influence area, but would be within Compatibility Zone D of Travis Air Force Base (County of Solano 2024b). The Project would not fall under the list of Projects that are required to be reviewed by the Airport Land Use Commission for the Nut Tree Airport (County of Solano 1988). Because the Project would not exceed 200 feet in height no additional review is required from the Airport Land Use Commission. Compatibility Zone D of the Travis Air Force Base does not prohibit any uses.

Policy	Consistency
Resources Element	
Policy RS.P-1: Protect and enhance the county's natural habitats and diverse plant and animal communities, particularly occurrences of special-status species, wetlands, sensitive natural communities, and habitat connections. Actions to enhance or restore habitat areas should not cause adverse impacts to airports, including Travis Air Force Base.	Consistent. The gen-tie portion of the Project would be located in previously disturbed areas and would avoid sensitive habitats. Section 5.12, <i>Biological Resources</i> , confirms that the Project would include pre-construction surveys and best management practices to protect biological resources.
Policy RS.P-5: Protect and enhance wildlife movement corridors to ensure the health and long-term survival of local animal and plant populations. Preserve contiguous habitat areas to increase habitat value and to lower land management costs.	Consistent. The gen-tie portion of the Project would be located adjacent to existing infrastructure and would not obstruct any mapped wildlife movement corridors. Section 5.12, <i>Biological Resources</i> , provides analysis of the Project's impacts on wildlife habitat.
Policy RS.P-6: Protect oak woodlands and heritage trees and encourage the planting of native tree species in new developments and along road rights-of-way.	Consistent. The gen-tie portion of the Project would avoid oak woodlands and heritage trees. Section 5.12, <i>Biological Resources</i> , confirms that no such resources are present within the gen-tie alignment.
Policy RS.P-33: The County shall preserve, for future use, areas with important mineral resources by preventing residential, commercial, and industrial development that would be incompatible with mining practices to the extent feasible.	Consistent. The gen-tie portion of the Project would not be located in an area with known mineral resources or active extraction operations. No conflict with mineral resource preservation would occur.
Policy RS.P-37: Protect the visual character of designated scenic roadways.	Consistent. Section 5.5, <i>Visual Resources</i> , details that the Project, including the overhead gen-tie lines, would be visible from a County-designated scenic roadway, I-80. As noted, in Section 5.5.3, changes to visual character would be mitigated through the implementation of screening fences and landscaping around Project BESS facilities. Additionally, there are several existing transmission lines crossing I-80 which connect to the PG&E Vaca-Dixon Substation in the vicinity of the proposed gen-tie crossing. The proposed gen-tie crossing at I-80 would be consistent with the visual character of existing infrastructure in the vicinity.
Policy RS.P-38: Identify and preserve important prehistoric and historic structures, features, and communities.	Consistent. Section 5.1, <i>Cultural Resources and Tribal Cultural Resources</i> , confirms that the gen-tie portion of the Project would not impact known historic or prehistoric resources and would include cultural resource surveys.
Policy RS.P-40: Consult with Native American governments to identify and consider Native American cultural places in land use planning.	Consistent. Section 5.1, <i>Cultural Resources and Tribal Cultural Resources</i> , confirms that the Project would include consultation with Native American tribes regarding the gen-tie alignment.
Policy RS.P-49: Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.	Consistent. The Project would alter the existing VDPP generating facility adding battery energy storage capabilities alongside its current technology. This would provide the PG&E system with a new energy storage capability.
Policy RS.P-54: Reduce Solano County's reliance on fossil fuels for transportation and other energy-consuming activities.	Consistent. The Project would help balance electricity generation from renewable sources, such as wind and solar, with electricity demand by storing excess generation and delivering it back to the grid when demand exceeds real-time generation supply.

Policy	Consistency
Policy RS.P-58: Require the siting of energy facilities in a manner compatible with surrounding land uses, including Travis Air Force Base, and in a manner that will protect scenic resources.	Consistent. The gen-tie portion of the Project would be sited adjacent to existing utility infrastructure and would be compatible with surrounding land uses. The Project would be located within Compatibility Zone D of Travis Air Force Base, which does not prohibit any uses. Section 5.5, <i>Visual Resources</i> , confirms that scenic resources would be protected.
Policy RS.P-65: Require the protection of natural water courses.	Consistent. Section 5.13, <i>Water Resources</i> , confirms that the gen-tie portion of the Project would avoid natural watercourses and implement erosion control and stormwater BMPs.
Policy RS.P-66: Together with the Solano County Water Agency, monitor and manage the county's groundwater supplies.	Consistent. Section 5.13, <i>Water Resources</i> , confirms that the gen-tie portion of the Project would use minimal water and would not adversely affect groundwater supplies.
Policy RS.P-71: Ensure that land use activities and development occur in a manner that minimizes the impact of earth disturbance, erosion, and surface runoff pollutants on water quality.	Consistent. Section 5.13, <i>Water Resources</i> , confirms that the gen-tie portion of the Project would implement erosion control measures and a Stormwater Pollution Prevention Plan to minimize runoff and protect water quality.
Policy RS.P-72: Preserve riparian vegetation along county waterways to maintain water quality.	Consistent. Section 5.12, <i>Biological Resources</i> , confirms that the gen-tie portion of the Project would avoid direct impacts to riparian areas and preserve existing vegetation through BMPs and construction setbacks.
Public Health and Safety Element	
Policy HS.P-5: Appropriately elevate and flood proof developments for human occupancy within the 100 -year floodplain for the profile of a 100 -year flood event.	Consistent. The gen-tie portion of the Project would be located outside of designated 100-year floodplains. Section 5.13, <i>Water Resources</i> , confirms that the Project would implement stormwater BMPs and grading plans to manage runoff and avoid flood risk.
Policy HS.P-12: Require new development proposals in moderate or high seismic hazard areas to consider risks caused by seismic activity and to include project features that minimize these risks.	Consistent. Section 5.16, <i>Geological Hazards and Resources</i> , confirms that the gen-tie alignment is not located in a moderate or high seismic hazard zone. Transmission structures would be engineered to withstand seismic activity.
Policy HS.P-13: Review and limit the location and intensity of development and placement of infrastructure in identified earthquake fault zones.	Consistent. No fault zones would intersect the gen-tie alignment. Section 5.16, <i>Geological Hazards and Resources</i> , confirms that the gen-tie portion of the Project would avoid mapped fault zones and includes geotechnical design features to promote safe infrastructure placement.
Policy HS.P-17: Restrict the crossing of ground failure areas by new public and private transmission facilities, including power and water distribution lines, sewer lines, and gas and oil transmission lines.	Consistent. The gen-tie alignment would avoid mapped areas of liquefaction and ground failure. Section 5.16, <i>Geological Hazards and Resources</i> , confirms that monopole foundations would be designed to maintain stability in variable soil conditions.
Policy HS.P-26: Minimize the risks associated with transporting, storing, and using hazardous materials through methods that include careful land use planning and coordination with appropriate federal, state, or County agencies.	Consistent. Section 5.9, <i>Hazardous Materials Handling</i> , and Section 5.11, <i>Waste Management</i> , confirm that hazardous materials associated with the gen-tie portion (e.g., lubricants, fuels) would be managed in accordance with federal and state regulations. No long-term storage of hazardous materials would occur in Solano County.
Policy HS.P-27: Work to reduce the health risks associated with naturally occurring hazardous materials such as radon, asbestos, or mercury.	Consistent. The Phase I ESA (Appendix G) found no naturally occurring hazardous materials such as radon, asbestos, or mercury within the gen-tie alignment.

Policy	Consistency
Policy HS.P-44: Minimize health impacts from sources of toxic air contaminants, both stationary (e.g., refineries, manufacturing plants) as well as mobile sources (e.g., freeways, rail yards, commercial trucking operations).	Consistent. Section 5.7, <i>Air Quality</i> , confirms that construction of the gen-tie portion would use Tier 4 equipment and implement dust control measures to minimize emissions. No stationary sources of toxic air contaminants would be located in Solano County.
Policy HS.P-48: Consider and promote land use compatibility between noise-sensitive and noise-generating land uses when reviewing new development proposals.	Consistent. Section 5.3, <i>Noise</i> , confirms that construction noise from the gen-tie portion would be temporary and mitigated through limited hours. Operational noise would be minimal and compatible with surrounding land uses.
Policy HS.P-50: Ensure that development in the vicinity of the Travis Air Force Base or the Rio Vista or Nut Tree airports is compatible with existing and projected airport noise levels.	Consistent. The gen-tie portion is located within Compatibility Zone D of Travis Air Force Base, which does not prohibit any uses. Section 5.3, <i>Noise</i> , confirms that the Project would not result in conflicts with airport noise contours.
Policy HS.P-52: Minimize noise conflicts between current and proposed land uses and transportation networks by encouraging compatible land uses around critical areas with higher noise potential.	Consistent. Section 5.3, <i>Noise</i> , confirms that the gen-tie portion would not result in substantial transportation-related noise impacts. Construction traffic would be temporary and managed to avoid sensitive receptors.
Transportation and Circulation Element	
Policy TC.P-11: Maintain and improve the current roadways and highway system to meet recommended design standards set forth by the County, including streets that also carry transit and nonmotorized traffic.	Consistent. Section 5.4, <i>Traffic and Transportation</i> , confirms that the gen-tie portion of the Project would utilize existing access roads and require an encroachment permit for crossing I-80. Construction traffic would be managed to avoid degradation of local roadways, and no permanent changes to transit or nonmotorized routes are proposed.
Public Facilities and Services	
Policy PF.P-2: Require new development and redevelopment to pay its fair share of infrastructure and public service costs.	Consistent. The Applicant would pay applicable development impact fees and utility connection fees for the gen-tie portion of the Project, as required by Solano County and relevant service providers unless determined exempt.
Policy PF.P-39: Identify and require incorporation of fire protection and emergency response measures in the review and approval of new projects.	Consistent. As described in Chapter 2, <i>Project Description</i> , the gen-tie portion of the Project, located in Solano County, would be covered under the Project's Fire Protection and Prevention Plan, which shall include coordination with emergency responders, installation of fire suppression systems, and access provisions for Dixon Fire Protection District personnel.
Policy PF.P-50: Locate, design, and construct transmission lines in a manner that minimizes disruption of natural vegetation, agricultural activities, scenic areas, and avoids unnecessary scarring of hill areas.	Consistent. The gen-tie portion of the Project would be located on a parcel containing the existing PG&E Vaca-Dixon Substation, in Solano County. As described in Chapter 2, <i>Project Description</i> , the BESS facilities would be interconnected with the Vaca-Dixon Substation. As described in Impact LU-4, the portion of the Project Site within Solano County does not contain Farmland and therefore the Project's transmission lines would not disrupt agricultural activities. As stated in Chapter 2, <i>Project Description</i> , there are no scenic areas within one mile of the Project Site; therefore, the Project's transmission lines would not disrupt scenic areas. As described in Section 5.16, <i>Geological Hazards and Resources</i> , the Project Site and surrounding area is relatively flat; therefore, the Project's transmission lines would avoid unnecessary scarring of hill areas. As described in Section 5.12, <i>Biological Resources</i> , the Project's transmission lines would not result in substantial impacts related to natural vegetation. See the previous discussion under "Policy RS.P-37: Protect the visual character of designated scenic roadways" regarding the gen-tie crossing of I-80.

Policy	Consistency
Park and Recreation Element	
Policy 1A. The County shall work with and assist local agencies and districts in identifying and protecting significant regional recreation resources.	Consistent. The Project would be constructed on a parcel with existing electric infrastructure and would not encroach on or result in the loss of recreational areas.
Objective 2: Ensure that there are at least ten (10) acres of regional and local parkland per each 1,000 persons.	Consistent. The gen-tie portion of the Project would not result in residential development or population growth and would therefore not affect the ratio of parkland to residents in Solano County.
Source: County of Solano 2008	

As described above, the Project would not conflict with a plan, policy, or regulation identified to avoid or mitigate an impact on the environment. Therefore, no impact would occur.

Impact LU-3

Threshold:	Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
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No Impact. A draft Solano Habitat Conservation Plan has been in the process of development since September 2001; however, this plan has not yet been adopted (Solano County Water Agency 2024). The Project Site is not located within any adopted local, regional, or State conservation planning areas. Therefore, no impact would occur.

Impact LU-4

Threshold:	Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
Threshold:	Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

Potentially Significant Impact. The portion of the Project within the City of Vacaville would be constructed on a 10-acre site, currently occupied by an active French prune orchard. According to the DOC’s FMMP, this site is designated as Unique Farmland and Farmland of Statewide Importance. Development of the BESS facilities would result in the permanent conversion of mapped Farmland to non-agricultural use, directly impacting agricultural productivity and land designated for farming. The portion of the Project Site within unincorporated Solano County does not contain agricultural land or any active agricultural activities.

Under CEQA Guidelines Appendix G and Public Resources Code Section 21095, the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is considered a significant environmental impact. Furthermore, the City of Vacaville’s Agricultural and Avian Foraging Habitat Impact Mitigation Program (Municipal Code Division 14.28) requires mitigation for such conversions. This includes either:

- Preserving agricultural land through conservation easements, or
- Paying an in-lieu fee to support farmland acquisition and protection by the Solano Land Trust, typically at a 1:1 mitigation ratio.

Although the Project is being reviewed under the AB 205 Opt-In process, which grants the California Energy Commission exclusive siting authority and may override local land use controls, Vacaville's farmland mitigation policies remain relevant to the CEQA analysis and for informing mitigation strategies.

The Project would result in the direct and irreversible conversion of active farmland within the City of Vacaville to industrial use and may contribute to indirect pressures on surrounding agricultural lands. These impacts are considered potentially significant, and mitigation consistent with local and state policy would be required to reduce the effect to a less than significant level.

Mitigation Measures

AG-1 Agricultural Land Preservation

Prior to the issuance of a grading permit, the Applicant shall be required to preserve agricultural land with productivity comparable to the total acreage of Farmland of Statewide Importance and Unique Farmland on the Vaca Dixon Power Center Project Site that is being converted to non-agricultural use, in perpetuity. The CEC shall require the Applicant to complete one of the following options to prevent a net loss of agricultural land:

- **Conservation Easement:** The Applicant shall provide land to enter into a perpetual agricultural conservation easement or other farmland preservation mechanism granted to a qualifying entity approved by the City of Vacaville, such as the Solano Land Trust. The preserved land shall be of equal acreage and comparable or superior soil quality to the farmland converted by the Project. The easement shall be located within Solano County and comply with The City of Vacaville's General Plan Policy LU-P2.4 and Municipal Code Division 14.28.001.040(D).
- **In-Lieu Fee Payment:** The Applicant shall make a one-time in-lieu payment to a qualifying entity approved by the City of Vacaville, such as the Solano Land Trust, to fund the future acquisition and permanent protection of agricultural land of equal acreage and comparable quality. The payment amount shall be based on the cost of acquiring conservation easements, plus administrative and endowment costs, as determined by the City's adopted fee schedule and supporting fee study.
- **Enhanced In-Lieu Fee Payment:** The Applicant may elect to make a one-time in-lieu payment equal to 110 percent of the standard fee amount to support the future acquisition of agricultural land through a perpetual conservation easement or other preservation mechanism, consistent with Municipal Code Division 14.28.001.040(E).
- **Combination Approach:** The Applicant may implement a combination of the above options, provided the total mitigation acreage equals the acreage of farmland converted by the Project.

The Applicant shall submit proof of the recorded conservation easement(s), deed restriction(s), or payment of the in-lieu fee to the City of Vacaville Community Development Department prior to the issuance of a grading permit.

Significance After Mitigation

Implementation of Mitigation Measure AG-1 would offset the permanent conversion of Unique Farmland and Farmland of Statewide Importance within the Project Site by ensuring preservation of agricultural land of equal acreage and comparable quality within the City of Vacaville. Through either conservation easements or in-lieu fee payments, the measure aligns with local policy and creates a pathway for long-term farmland protection. As a result, impacts to agricultural resources would be reduced to a less-than-significant level under CEQA.

Impact LU-5

Threshold:	Would the Project conflict with existing zoning for agricultural use, or a Williamson Act Contract?
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No Impact. The Project BESS facility would be located on a parcel that is currently zoned for Business Park uses and located in the Northeast Growth Area. Although the site is actively used for agriculture (a French prune orchard), it is not zoned for agricultural use, and therefore the Project would not conflict with existing agricultural zoning.

Additionally, the Project Site is not under a Williamson Act contract, and no portion of the proposed development would occur on land enrolled in the California Land Conservation Act. The nearest parcel under Williamson Act contract is located approximately 0.6 mile southeast of the Project Site and would remain unaffected by Project construction or operation. The Project would not require access through, infrastructure placement on, or modification of any Williamson Act lands, nor would it introduce incompatible land uses adjacent to contracted parcels that could interfere with their continued agricultural viability.

As such, the Project would not conflict with existing zoning for agricultural use or any Williamson Act contract, and there would be no impact under CEQA.

5.2.4 Cumulative Impacts

Impacts of the Project would be considered cumulatively considerable if they would have the potential to combine with other past, present, or reasonably foreseeable projects to become significant. A list of closely related past, present, and reasonably foreseeable projects are provided in Table 5-1 of Section 5, *Environmental Analysis*. However, as described within Impact LU-1 through Impact LU-5, the Project would result in no impacts related to the division of an established community, conflicts with a land use plan, conflicts with a Habitat Conservation Plan or Natural Community Conservation Plan or conflicts with a Williamson Act contract. However, the Project would result in the conversion of approximately 10 acres of actively cultivated Farmland of Statewide Importance and Unique Farmland to non-agricultural use through construction of BESS facilities.

This conversion would contribute to a cumulative loss of farmland in the region, particularly within the City of Vacaville's Northeast Growth Area, where other urban and infrastructure projects have similarly displaced agricultural land. When considered alongside other development trends in Solano County and the broader region, the Project's incremental impact may be cumulatively considerable with respect to farmland conversion. Implementation of Mitigation Measure AG-1, which requires preservation of agricultural land at a 1:1 ratio through conservation easements or in-lieu fee payments consistent with Vacaville Municipal Code Division 14.28, would reduce the

Project's contribution to this cumulative impact. With implementation of Mitigation Measure AG-1, the Project's contribution to cumulative farmland loss would not be considerable.

5.2.5 Laws, Ordinances, Regulations, and Standards

This section lists and discusses the land use LORS that apply to the Project. Consistent with the CEC's Application for Certification requirements, all plans and policies applicable to the Project are summarized below. As discussed above, the Project Site is within both the City of Vacaville and unincorporated Solano County. Table 5.2-6 summarizes the LORS relevant to the Project.

Table 5.2-6 LORS Applicable to Land Use

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
State	California Environmental Quality Act	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible.	Throughout this Opt-In Application	The Project's approval by the CEC would comply with CEQA, as required by the CEC's Opt-In Application process.
State	Warren-Alquist Act (Public Resources Code Section 25000 et seq.)	Legislation that created and gives statutory authority to the CEC.	Impact LU-2	The Project would conform with the Warren-Alquist Act, as required by the CEC's Opt-In Application process.
State	California Lands Conservation Act (Williamson Act)	Preserves agricultural land and encourages open space preservation and efficient urban growth.	Impact LU-5	The Project would not be located on a parcel subject to a Williamson Act contract.
Local	City of Vacaville General Plan (2015)	Comprehensive long-range plan to serve as the guide for the physical development of the City.	Throughout this Opt-In Application	The Project would be consistent with the policies of the City of Vacaville General Plan (2025).
Local	City of Vacaville Zoning Ordinance	Establishes zoning districts governing land use and the placement of buildings and district improvements.	Throughout this Opt-In Application	BESS facilities aren't listed as permitted uses in the applicable zoning district; however, AB 205 grants the CEC authority to approve the Project despite local zoning conflicts.
Local	Solano County General Plan (2008)	Comprehensive long-range plan to serve as the guide for the physical development of the County.	Impact LU-2	The Project would be consistent with the policies of the Solano County General Plan (2008).

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Local	Solano County Zoning Ordinance	Establishes zoning districts governing land use and the placement of buildings and district improvements.	Impact LU-2	The Project is permitted within the A-20 zone with a Use Permit based on the provisions set forth in Chapter 28.21 of the County's Municipal Code.

5.2.5.1 Federal LORS

Because the Project Site is located on private lands within the State of California and in the City of Vacaville and Solano County, there are no federal laws and regulations concerning land use that apply to the construction and operation of the Project.

5.2.5.2 State LORS

California Environmental Quality Act

CEQA requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible. Appendix G of the CEQA Guidelines includes recommended criteria for evaluating potential impacts related to land use.

Warren-Alquist Act and Assembly Bill 205

The Warren-Alquist Act provides the CEC with jurisdictional authority over the construction and operation of thermal power plants and related facilities, establishing CEC certification in lieu of any otherwise required state and local permits and superseding any otherwise applicable state or local policies, laws, regulations and ordinances. AB 205 (Chapter 61, 2022) expands CEC's authority under the Warren-Alquist Act to establish a new certification program for eligible non-fossil-fueled power plants and related facilities to optionally seek certification from the CEC, using emergency rulemaking authority provided by AB 205.

California Land Conservation Act (Williamson Act) and Government Code Section 51238(a)(1)

The California Land Conservation Act of 1965, commonly known as the Williamson Act, was enacted to encourage preservation of agricultural lands and encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to create an agricultural preserve and agree to keep their land in agricultural production (or another compatible use) for at least 10 years.

5.2.5.3 *Local LORS*

City of Vacaville General Plan and Zoning Ordinance

Each California city and County government's General and Specific Plan (California State Planning Law, Government Code Section 65302 et seq.) include land use provisions that reflect the goals and policies that guide the physical development of land in their jurisdiction. The City of Vacaville's Planning Services Department is responsible for enforcing the City's General Plan and zoning ordinance. The Project Site is situated on a parcel designated as Business Park under the City's General Plan. While BESS facilities are not currently listed as permitted or conditionally permitted uses in this zoning district, the CEC's exclusive siting authority under AB 205 allows it to approve the Project regardless of local zoning conflicts. The Project's consistency with the County's General Plan and Zoning Ordinance is discussed under Impact LU-2.

Solano County General Plan and Zoning Ordinance

Each California city and county government's General and Specific Plan (California State Planning Law, Government Code Section 65302 et seq.) include land use provisions that reflect the goals and policies that guide the physical development of land in their jurisdiction. The Solano County's Planning Services Department is responsible for enforcing the County's General Plan and zoning ordinance. The County permits utility-scale renewable energy uses in areas designated Exclusive Agriculture with a Use Permit based on the provisions set forth in Chapter 28.21 of the County's Municipal Code. CEC's exclusive permitting authority under AB 205 allows it to approve the Project without requiring a Use Permit from Solano County. The Project's consistency with the County's General Plan and Zoning Ordinance is discussed under Impact LU-2.

Solano County Battery Energy Storage Systems Ordinance Development

On January 23, 2024, the County Board of Supervisors adopted interim Ordinance No. 2024-1852-U as an urgency measure implementing a moratorium which prohibited the development of new BESS systems within unincorporated Solano County for a 45-day period. On February 27, 2024, the County Board of Supervisors approved the extension of Ordinance No. 2024-1852-U, which extended the original moratorium by a period of 22 months and 15 days (County of Solano 2024c). The extension of the moratorium is intended to allow Planning Services Division staff the time to develop land use standards for BESS facilities that ensure public safety, health, and welfare. The Planning Services Division is currently engaging stakeholders and the public for input and guidance in this process.

5.2.6 Agencies and Agency Contact

CEC review and approval of this Opt-in Application would satisfy compliance with land use consistency requirements. As previously mentioned, due to the exclusive jurisdiction of the CEC, no other land use permits from other agencies are required for the Project.

5.2.7 Permits and Permit Schedule

The Applicant and CEC would collaborate with the City of Vacaville's Planning Services Department and the Solano County Planning Services Department on review of this Opt-in Application to confirm compliance with City of Vacaville and Solano County land use designations and requirements. Because of the exclusive jurisdiction of the CEC, no other land use permits are required for the Project.

5.2.8 References

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