



Sonoma County Design Review Committee STAFF REPORT

FILE: PLP22-0025
DATE: May 3, 2023
TIME: At or after 1:35 p.m.
STAFF: Peter Kaljian, Project Planner

A Board of Supervisors hearing on the project will be held at a later date and will be noticed at that time.

SUMMARY

Property Owner: Spencer Bunting / Oxfoot Associates, LLC

Applicant: Mark Turner / Vice President, Energy Storage Development

Address: 3571 Old Adobe Road, Petaluma

Supervisory District(s): 2

APN: 017-130-008

Description: 300 MW battery storage facility on a 17-acre lease area on a 137.77-acre property.

CEQA Review: Initial Study in Process Mitigated Negative Declaration is anticipated

General Plan Land Use: Land Extensive Agriculture (70 acres per dwelling unit)

Specific/Area Plan Land Use: Sonoma Mountain

Ordinance Reference: 26-06-030 Allowed land uses; Public Utility and Renewable Energy Facilities or similar equivalent use as determined by the Director

Zoning: Land Extensive Agriculture (70 acres per dwelling unit), Floodplain, Local Guidelines (Taylor / Sonoma / Mayacamas Design Guideline), Riparian Corridor (50-foot development setbacks / 25-foot agricultural setback), Scenic Resource, Valley Oak Habitat

RECOMMENDATION

This item is for informational and discussion purposes. Design comments will be referred to the BZA for consideration when they consider the Use Permit at a future public hearing.



PROJECT DESCRIPTION

Energy Storage Development has proposed the Borealis Battery Energy Storage Project to be constructed on a portion of LEA zoned land at 3571 Old Adobe Rd. The Project site is located on the western portion of the parcel in an area of the property that the landowner has identified as less conducive to productive crop cultivation. Approximately 10 acres of the 17-acre project site will be fenced to include the battery storage structures and equipment and approximately 1 acre will be separately fenced to contain a new battery storage substation. The substation will contain two main power high voltage transformers up to 30 feet in height and up to six 100-foot-high masts.

The battery storage structures consist of battery containers and power conversion systems (Inverters and Transformers). The battery storage containers would vary in size and height. The project proposal statement indicates they could be up to 20 feet in height. Berms with landscaping and 10 to 12-foot-tall fencing or concrete walls are proposed around the perimeter of the battery storage to screen it from the view from public roads. The applicant and staff seek input on the preliminary design plans to be considered by the BZA at a future hearing.

The balance of the acreage will be utilized for grading, drainage, access and transmission corridors, and a temporary laydown yard for construction. The project involves approximately ten 100-foot-high new distribution towers and lines running from the onsite substation approximately 0.5 miles to connect to the PG&E 115-kilovolt (kV) Lakeville Substation located south across Old Adobe Road from the Project site. The new towers and lines abut existing high-voltage transmission lines running along the eastern edge of the lease area.

PROJECT SITE AND CONTEXT

Background

The 137.77 Acre Property (Lot 4) was created in 1982 (MS 7581) as part of a 4-lot clustered subdivision. The other three lots resulting from this subdivision are each approximately 5-acres in size and are developed with single-family homes located west of the subject parcel and within their respective building envelopes. No building envelope was created on the subject lot 4. A note on the Map requires that all utilities be placed underground. Deviation from this requirement is subject to Planning Director review and approval. The subject parcel has most recently been utilized by Green String Farms, a restorative agriculture farm. The cultural resource report prepared for the project did not find cultural resources on the lease area. However, potential for discovery during construction exists and consultation with local tribes is ongoing.

Area Context and Surrounding Land Uses

The project site is situated on agricultural land situated north of Petaluma Hill Road and the Old Adobe State Park, east of Manor Lane and Adobe Creek, and west of Frates Road. The western edge of the foothills from the Sonoma Mountains are to the east and the Lakeville substation is situated just across Old Adobe Road to the west. The adjacent overhead electrical distribution lines were built in 1957 and expanded in 1982. The site contains a scenic corridor on Old Adobe Road and Frates Road and is designated as a Scenic Landscape Unit.



Direction	Land Uses
North	LEA B6 60, LEA B6 60 Z, F2 LG/MTN RC50/50 SR VOH
South	PF, SR VOH
East	LEA B6 60 Z, RC50/25 SR VOH
West	PF, F2 LG/MTN RC50 SR VOH

Significant Applications Nearby

There is currently a battery storage project (Frates BESS PLP22-0005) proposed on a property approximately a half mile south on the west side of the PG&E substation. The Frates BESS project is proposed on a parcel encumbered by an open space contract. The subject project site does not contain an open space easement.

Access

This project proposes access from an existing gated entrance along Old Adobe Road adjacent to the existing high voltage powerline easement.

Wildfire Risk

According to the Wildland Fire Hazard Area map in the Sonoma County General Plan, the project site is located in a State Responsibility Area (SRA) and is designated as a High Fire Hazard Severity Zone. High Fire Zones are generally wildland areas supporting medium to high fire behavior and roughly average burn probabilities. Strong north-east “Santa Ana” winds, typical in Sonoma County, can increase the severity of wildland fire in the fall months. During fire season, gradient winds are generally out of the south/southwest at 5-10 mph, strengthening to 10-15 mph in the late afternoon. These prevailing wind conditions are not unique to the project site.

All construction projects must comply with County Fire Safe Standards (Sonoma County Municipal Code Chapter 13), including but not limited to, installing fire sprinklers in buildings, providing emergency vehicle access, and maintaining a dedicated fire-fighting water supply on-site. Other code-required fire safe standards relate to fuel modification, defensible space, road naming, and addressing. In addition, because the project is within an SRA, all future construction onsite will need to comply with State Fire Code standards, which among other items require maintaining and managing vegetation and fuels around buildings and structures.

Application of County and State fire safe standards reduces the project’s potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires to a less than significant level.

Water/Wastewater/Utilities

Water tanks for fire suppression as well as landscaping and a single employer restroom are proposed to be installed on-site and initially filled by a water trucking company. To maintain water levels, an agreement to use the onsite well outside of the lease area has been made between the applicant and owner.

Agricultural Conditions/Land Encumbrances/Contracts

The 17-acre lease area’s currently under use as a farm with row crops, though this area has been identified as the least productive portion of the 137.77-acre farm.

Farmland Category: Farmland of Local Importance



Sonoma County Permit and Resource Management Department
 2550 Ventura Avenue Santa Rosa CA 95403-2859 (707) 565-1900
www.PermitSonoma.org



Other Environmental Conditions

Environmental concerns will be addressed upon completion of the Initial Study.

Project History

The table below summarizes key project milestones and events.

Date	Project Event/Milestone
9/22/2022	Application
2/8/2023	Completeness
3/29/2023	Neighborhood meeting
9/30/2022 & 1/6/2023	Referral to prominent agencies (if applicable)
In Progress	Cultural/Historical Consultation Requests and response (if applicable)
In Progress	CEQA (NOP if applicable, noticing, consultation, close of comment period)
4/21/2023	Notice

ANALYSIS

General Plan and Area Plans

The following General Plan and Area Plan policies are applicable to the project:

GOAL PF-2: Assure that park and recreation, public education, fire suppression and emergency medical, and solid waste services, and public utility sites are available to the meet future needs of Sonoma County residents.

Objective PF-2.10: Locate and design public utility transmission, distribution, and maintenance facilities to minimize adverse effects on natural and scenic resources.

Policy PF-2w Encourage consolidation of multiple utility lines into common utility corridors wherever practical.

Policy LU-4d: Assure that physical services and infrastructure will accommodate the projected amount of growth authorized by the Land Use Element...

Policy LU-11b: Encourage all types of development and land uses to use alternative renewable energy sources and meaningful energy conservation measures.

Policy LU-11j: Support efforts and partnerships with agencies, organizations and other jurisdictions that improve technology for reducing dependence on nonrenewable resources, harmful chemicals, and manufactured substances that accumulate in nature, and activities that harm life sustaining ecosystems.*

Policy PF-2t: Review proposals for new transmission lines or acquisition of easements for new transmission lines for consistency with GP 2020 policies. Request wherever feasible that such facilities not be located within designated Community Separators or biotic resource areas. Give priority to use of existing utility corridors over new corridors.



Policy PF-2w: Encourage consolidation of multiple utility lines into common utility corridors wherever practicable.

GOAL OSRC-2. Retain a rural, scenic character in Scenic Landscape Units with very low intensities of development.

Avoid their inclusion within spheres of influence for public service providers.

Objective OSRC-2.1. Retain a rural, scenic character in Scenic Landscape Units with very low intensities of development. Avoid their inclusion within spheres of influence for public service providers.

Policy OSRC-2b. Avoid commercial or industrial uses in Scenic Landscape Units other than those that are permitted by the agricultural or resource land use categories.

Policy OSRC-15d: Incorporate energy facility siting policies into the Sonoma County Development Code that would:

- 1) Define accessory renewable energy systems as those designed to primarily serve on-site energy demand, and commercial renewable energy facilities as providing energy for offsite use.
- 2) Allow accessory renewable energy systems close to the end energy users in all zoning districts where visual and other environmental impacts can be mitigated.
- 3) Allow commercial renewable energy facilities on lands designated for commercial, industrial, resource or public use. Avoid in agricultural areas mapped as Prime, Statewide or Unique Farmlands, and areas designated as Scenic and Biotic Resources. Limit their use to a compatible scale in rural residential, and agricultural areas.

Zoning

The table below summarizes the development standards that apply to the site as outlined in the Sonoma County Zoning Ordinance, the existing and proposed development, and whether the project is consistent with the Zoning Ordinance. Inconsistencies with the Zoning Ordinance are discussed below.

Standard	Ordinance	Existing Condition	Proposed Project
Lot Area	70 acres	137.77 acres	120.77-acre farm, 17-acre BESS
Land Use	LEA	Farm	Utility infrastructure and Farmland
Front Setback	30 feet	Not Applicable	150 feet
Side Setback	10 feet	Not Applicable	100 feet
Rear Setback	20 feet	Not Applicable	110 feet
Height	50 feet	Not Applicable (Excludes existing 100 ft transmissions towers)	30 ft (Excluding 100 ft Transmissions towers)
Lot Coverage %	49%	100% farm	This project would use approximately 12.4%



Public Utility and Energy Generation Facilities are designated as a conditional use within Land Extensive Agricultural zoning per Sonoma County Code Sec. 26-06-030.

The facility is subject to compliance with the SR Scenic Landscape Unit requirements to minimize grading, utilize landscape screening, and place utilities underground where economically practical,

Other Development Regulations or Guidelines

Subdivision Map

The subdivision map creating the subject parcel includes a note that all utilities be underground unless otherwise reviewed and approved by the Director.

Taylor/Sonoma Mountain Guidelines

The guidelines are intended for residential development but parallel General Plan policies calling for public utility facilities to be located and designed to minimize impacts to Scenic Resources.

NEIGHBORHOOD/PUBLIC COMMENTS

Comments regarding safety concerns have been received. However, no public comment regarding the design of the project has been received at this time.

RECOMMENDATIONS

Staff Recommendation

Staff Recommends the Design Review Committee provide Design direction on preliminary plans based on General Plan and Area Plan policies and Scenic Landscape Unit Zoning calling for facilities to be compatible in scale and design.

ATTACHMENTS

- Att 1 Borealis Visualization Package
- Att 2 Site Plan Proposal
- Att 3 Borealis Preliminary Site Plan
- Att 4 Borealis Elevations
- Att 5 Borealis Acoustical Assessment
- Att 6 Borealis Visual Impact Assessment

