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Project Description

This section describes the proposed project, including the project applicant, the Project Site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

Project Applicant

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Project Location

The approximately 95-acre Morro Bay Power Plant property (Project Parcel) (Assessor's Parcel Number [APN] 066-331-046) is located at 1290 Embarcadero south of State Route 1 (SR 1)/Cabrillo Highway and north of Embarcadero in the City of Morro Bay. The Morro Bay Power Plant was operational on the Project Parcel since the 1950s but has been idle since its retirement in 2014. The Project Parcel currently contains the idled power plant building and smokestacks (stacks), Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center. The Project Parcel is surrounded by Pacific Gas and Electric (PG&E) property (switchyards) and State Route 1 (SR 1) to the northeast; the Embarcadero, commercial uses and a marina to the southwest; Morro Creek, a recreational vehicle (RV) park, and temporary lodging facilities (hotel and motel) to the north; and Coleman Park, the Morro Bay harbor walk, and dune habitat associated with Morro Rock beach to the west.

The site of the proposed project (Project Site) covers approximately 43 acres of the 95-acre Project Parcel.[1] The Project Site includes approximately 24 acres located immediately north of the inactive Power Plant building in the northwestern portion of the property. This area is currently vacant but was previously developed with above-ground fuel oil storage tanks. In addition, the Project Site includes approximately 19 acres in the southwestern area of the site that includes the inactive power plant building and three (3) inactive stacks immediately southwest of the power plant building. The Project Site also includes the approximately 2.75-acre driveway that connects the Power Plant building to Quintana Road.

The Project Site is regionally accessible from SR 1, and locally accessible from Main Street, Beach Street, and Embarcadero, or from Main Street and Quintana Road. Figure 1 shows the regional location of the Project Site, Figure 2 shows the location of the approximately 95-acre Project Parcel in its neighborhood context, and the Project Site in its neighborhood context.

Existing Site Characteristics

Current Land Use Designation and Zoning

The Project Site includes approximately 24 acres that are currently vacant but were previously developed with five above-ground fuel oil storage tanks associated with the inactive Morro Bay Power Plant. All five above-ground storage tanks were removed in 2011. The remaining area of the Project Site includes the inactive power plant building and three (3) inactive stacks immediately southwest of the power plant building.

Under Plan Morro Bay, which was adopted by the City of Morro Bay in May 2021 and serves as the City's General Plan and Local Coastal Program (LCP) Land Use Plan (LUP), the Project Site has a land use designation of Visitor Serving Commercial with a Mixed-Use Residential Overlay. The Project Site is currently zoned M-2/PD/I with a Planned Development overlay and Interim Use overlay designation under the City's current Zoning Code.

The Project Site is subject to two land use restrictions, as described below.

PG&E Deed Restriction

The Pacific Gas and Electric Company (PG&E) purchased the Morro Bay Power Plant site in 1951 and constructed the power plant in the early 1950s. In connection with the subsequent sale of the property, PG&E imposed a deed restriction across much of the approximately 95-acre Project Parcel, including the entire Project Site. That deed restriction prohibits developing portions of the power plant site (including the Project Site) for permanent or temporary lodging, hospitals or other health-care facilities, schools, daycare centers for children, parks, playgrounds, or other recreational uses. This deed restriction remains in place today.

[1] Following are definitions for several key terms used in this Project Description:
Project Parcel refers to the approximately 95-acre Morro Bay Power Plant property. Refer to Figure 2.
Project Site refers to the portions of the Project Parcel that would be used for the proposed project. The Project Site covers approximately 43 acres of the 95-acre Project Parcel. Refer to Figure 2.
BESS Site refers to the portions of the Project Site used for construction and operation of the Battery Energy Storage System (BESS) and supporting facilities such as Gen-tie lines and access roads. The BESS Site includes approximately 24 acres of the 43-acre Project Site. Refer to Figure 4.
Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled power plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Figure 8.

Figure 1 Regional Location

Imagery provided by Esri and its licensors © 2021.

Project Location

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Figure 2 Parcel and Project Site Location

Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided by Vistra, 2022.

19-08915 MB, MB BESS EIR
Fig 2-2 Parcel and Project Site

Proposed DTSC Land Use Restriction

In 2006, Pacific Gas and Electric Company entered into a Corrective Action Consent Agreement with the California Department of Toxic Substances Control (DTSC) to address areas of the Project Parcel that were contaminated as a result of past operations at the Morro Bay Power Plant. In October 2021, DTSC released a Revised Statement of Basis for the Morro Bay Power Plant site. In that document, DTSC proposes to impose a land use restriction on areas of the Project Site that previously contained the above-ground storage tanks. This area is referred to as "Area of Concern 1" (AOC 1) in the Revised Statement of Basis. The proposed land use restriction would restrict future land uses in this area to commercial/industrial uses and prohibit future development of the property for permanent or temporary lodging, school, day care centers, recreation, or hospital uses. Figure 3 shows the location of these restrictions on the Project Parcel.

Surrounding Land Uses

The Project Site is surrounded by Morro Creek, an RV park, and temporary lodging facilities (a hotel and motel) to the north; Coleman Park, the Morro Bay harbor walk, and dune habitat associated with Morro Rock beach to the west; the Embarcadero, commercial uses, and a marina to the southwest; commercial and residential development to the south; and the PG&E switchyard to the east.

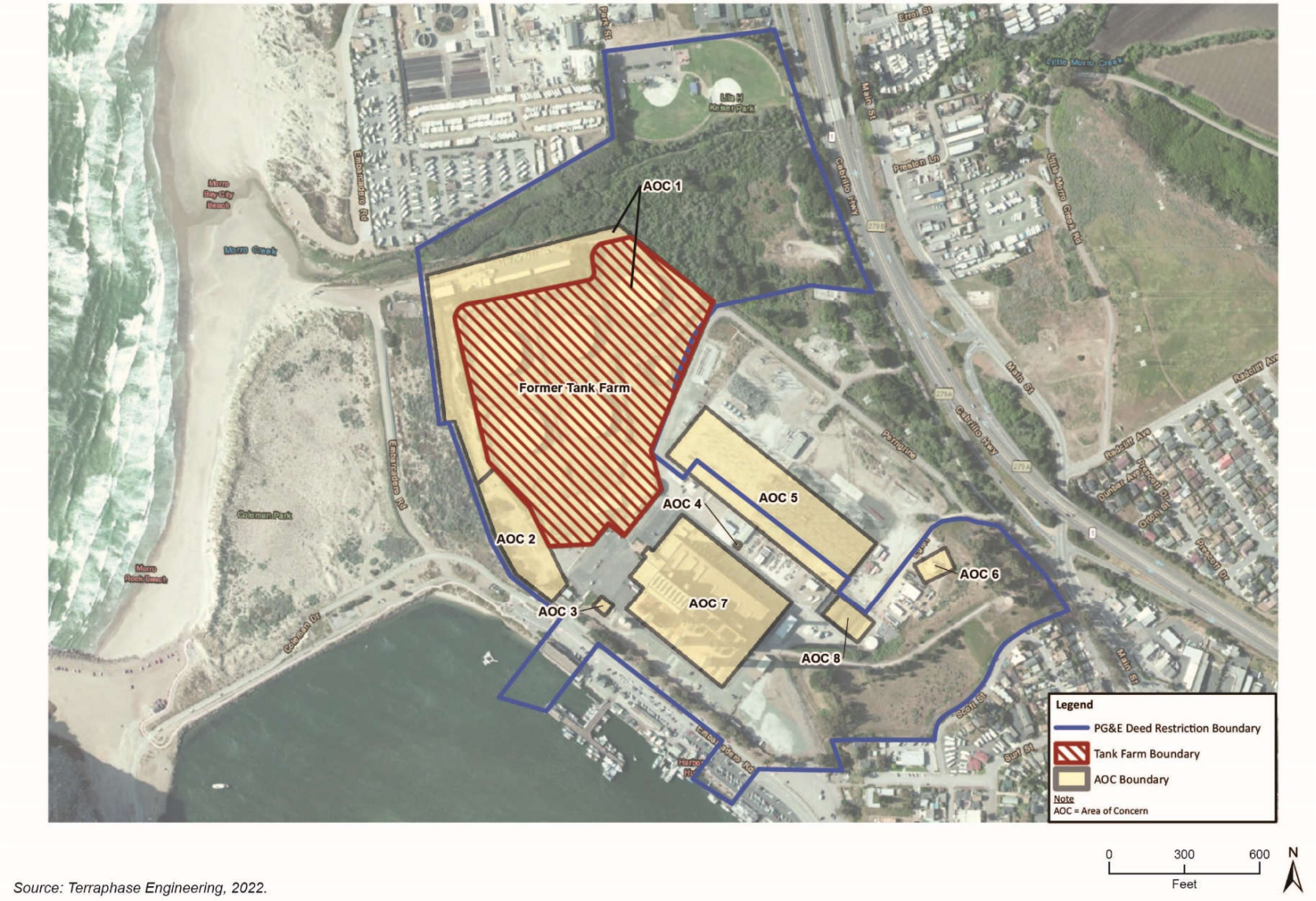
Project Background

Battery storage is used to store energy during off-peak hours when energy usage/demand is lower and dispatch stored energy on an as-needed basis during peak demand hours. This technology reduces the amount of fossil fuels consumed during peak hours and maximizes usage of energy from renewable sources such as wind and solar facilities that may not be able to produce energy during times of peak demand.

California has taken action to advance energy storage, including through the 2010 passage of Assembly Bill (AB) 2514, which encourages the creation of battery energy storage projects, and the resulting 2013 California Public Utilities Commission (CPUC) decision to set a target for investor-owned utilities to procure 1,325 MW of cost-effective energy storage by 2024. There are currently several large BESS facilities located throughout California and several more are planned or under construction. The applicant developed and operates the 400-MW BESS at Moss Landing, in Monterey County.

Regarding the planned BESS component of the project, in October 2021 the California Department of Toxic Substances Control (DTSC) proposed imposing a Land Use Covenant and Soil Management Plan for those portions of the site that contained the previously removed fuel oil tank farm (i.e., the proposed location of the BESS; refer to Figure 2). This restriction would limit the former tank farm area to primarily industrial uses and places restrictions on the movement of soil materials in this area.

Figure 3 Land Use Restrictions



Source: Terraphase Engineering, 2022.

Project Characteristics

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System (BESS) on approximately 24 acres of the Project Site (BESS Site), (2) demolition and removal of the existing Power Plant building and stacks, and (3) adoption of a Master Plan that would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial.

Construction and Operation of the BESS

Of the 43 acres included in the Project Site, approximately 24 acres (BESS Site) would be used for construction and operation of the BESS. The PG&E Deed Restriction and Proposed DTSC Land Use Restriction identified above cover the entirety of the BESS Site. The BESS would provide power to utility customers by interconnecting to the existing PG&E switchyard located east of the Project Parcel and Project Site. The BESS would operate year-round to store and discharge electricity to support demand on the power grid and improve grid reliability.

The proposed BESS includes three enclosed buildings with fire protection systems to house the batteries. Each building would contain approximately 2,400 battery racks and be surrounded by approximately 60 Power Conversion Systems (PCSs) composed of inverters and transformers to convert the direct current to alternating current. The PCSs would be located on concrete pads outside the buildings. The BESS would also include three substations with transformers, a transmission line (Gen-tie) connecting to the existing deadend structures on the southwestern side of the existing PG&E switchyard (the final structures before the connection with the substation), water supply system improvements, and internal access roads. The battery energy storage, PCSs, and substation components are each further described below. Figure 4 presents the proposed locations of these facilities on the approximately 24-acre BESS Site. Figure 5 shows the elevations of the proposed buildings. Figure 6 shows typical battery energy storage system components. Table 1 summarizes the characteristics of the BESS component of the proposed project.

Table 1 Project Characteristics

Address	1290 Embarcadero, Morro Bay, California 93442
APN	066-331-046
Parcel Acreage	95 acres
BESS Site Acreage	24 acres
Demolition Site Acreage	19 acres
Battery Storage Buildings (3)	91,000 sf, 30 feet tall (2 stories)
Power Conversion Systems (approx. 180)	300 sf
Substations (3)	49,704 sf, 30 feet tall
Control House (1)	1,200 sf, 15 feet tall

sf = square feet

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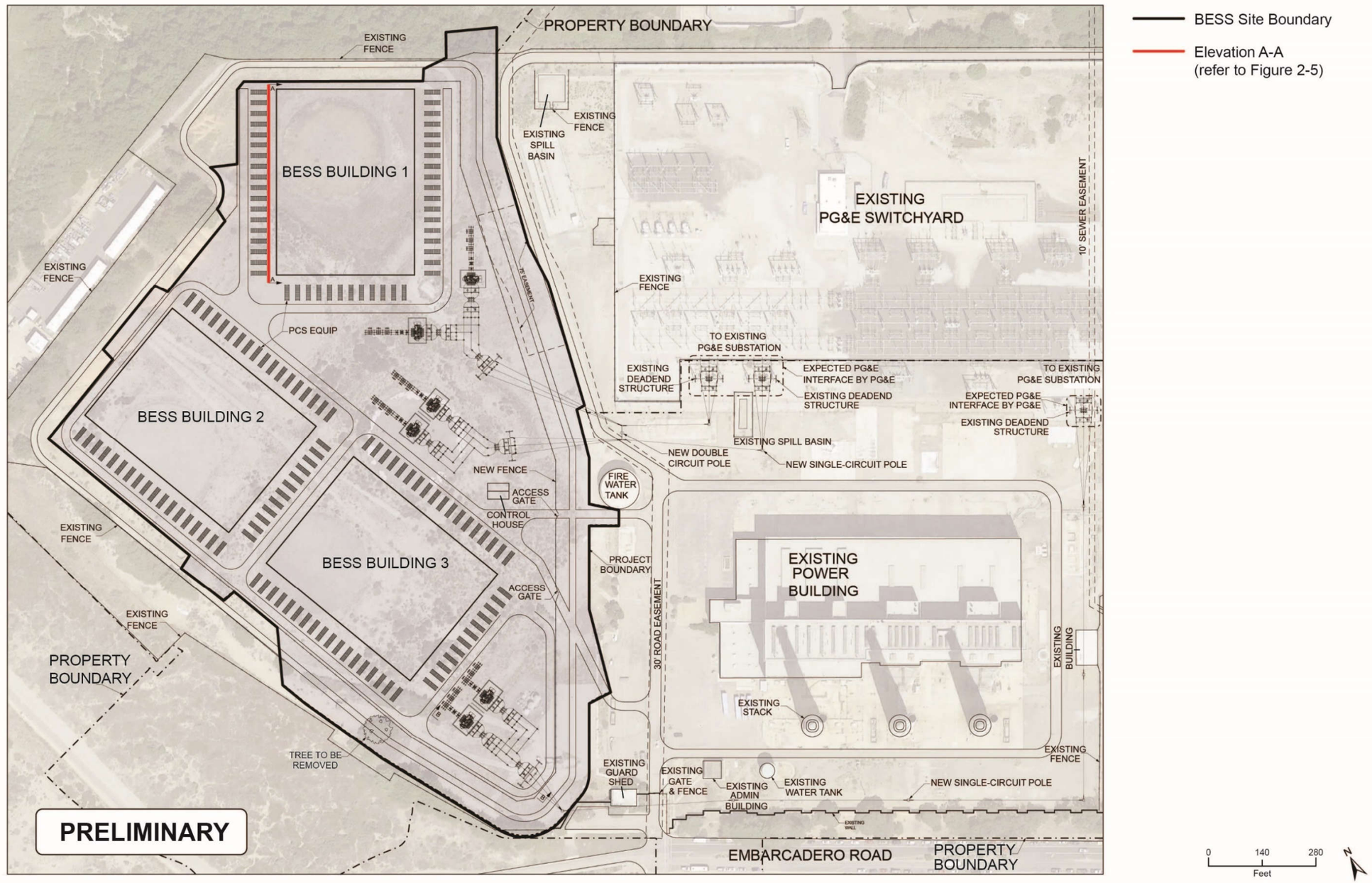
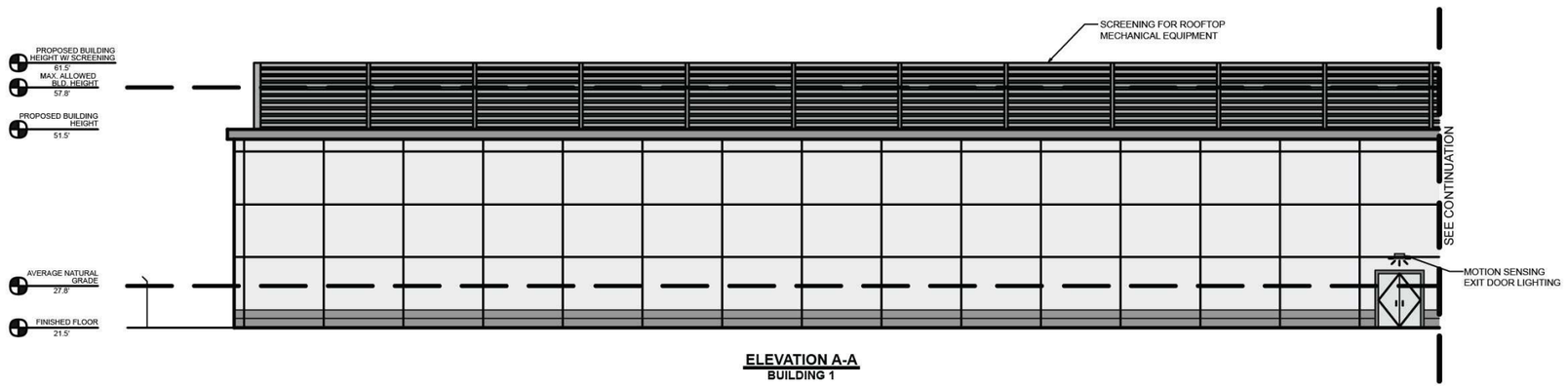
Figure 4 BESS Site Plan



Source:Sargent & Lundy, 2020.

Figure 5 Building Elevations



Source: Sargent & Lundy, 2021.

Figure 6 Example BESS Components

Battery Energy Storage

Power Conversion System

Substation

Source: Vistra, 2018 and 2021.

Battery Energy Storage

The BESS would be installed in three (3) two-story buildings.

Buildings

Each building would be approximately 350 feet by 260 feet, for a total building area of 91,000 square feet (sf) (refer to Figure 4). The buildings would be two stories and 30 feet in height. Additional equipment installed on the roof of the buildings may extend up to an additional 2-6 feet in height; this equipment would be screened from views using either mesh or slatted screens. Each building would require approximately 1,000 to 1,500 pilings to a cement depth of 75 feet. The building exteriors would be steel frame with pre-cast concrete sides (refer to Figure 5). Heating, ventilation, and air conditioning (HVAC) units would be either side- or roof-mounted.

Battery Storage System

Each building would house approximately 2,400 racks containing lithium-ion batteries with storage capacity of 200 MW for a total storage capacity of 600 MW. The battery modules (approximately 60,000 per building) would be housed in racks that are approximately 9 to 24 feet tall, depending on the use of stacked racking systems. The contract with the battery supplier would include provisions that provide for the recycling of batteries through the life of the BESS project. The racks would be grouped into blocks with their own access, fire protection, and safety systems. A typical rack is presented in Figure 6.

A key feature of the battery storage system is that the battery modules provide a source of back-up power in the event grid power is lost. The battery capacity of the BESS would be adequate to provide for continued operation of the ventilation and cooling systems during a normal loss of grid power. As a result, no diesel back-up generators are proposed for the BESS.

Power Conversion Systems

The PCSs would be located adjacent to each building and installed on the pavement or gravel pads. Underground conduits buried three to five feet in depth would connect the PCSs to the batteries in the buildings. Each PCS contains an inverter and transformer, which convert the power between direct current (DC) and alternating current (AC) and the voltage from 1,500V to 34.5kV. This is necessary because the electrical power grid operates in AC while the batteries store energy in DC. The transformer changes the voltage, as required, during battery charging and discharging. Each building would be surrounded by approximately 60 PCS units. Each PCS would be approximately10 feet by 30 feet, with a height of approximately 15 feet. The location of the power conversion systems is identified in Figure 4. A typical PCS unit is shown in Figure 6.

Substations

The BESS would include three substations located outside the buildings. The substations would include transformers to increase the voltage to the required level for interconnection to the electrical grid, as well as associated switches, breakers, and control systems. Each BESS substation would have a transmission Gen-tie line to connect to the existing PG&E substation. The dimensions of each substation would be approximately 218 feet by 228 feet and approximately 30 feet tall. Drilled pilings to a maximum depth of 75 feet would be used to support the concrete pad for the transformers. A typical substation is shown in Figure 6.

The substation areas would be graded and compacted to level the ground. Concrete pads would be constructed on site as foundations for substation equipment, and the remaining area would be graveled to a maximum depth of approximately six inches. Pilings drilled to a maximum depth of 75 feet would be used to support the concrete pad for the transformers. Because each of the substation transformers would contain oil as an insulating fluid, the substations would be designed to accommodate an accidental spill of transformer fluid by the use of containment-style mounting.

One control house would be required for the three substations (refer to Figure 4). The control house would be 30 feet by 40 feet in area for a total area of 1,200 square feet, and 15 feet in height.

Connection to the PG&E Switchyard

The three proposed substations would connect to the existing, adjacent PG&E switchyard. Approximately nine new transmission line poles (one 230-kilovolt [kV] double circuit transmission line pole and eight 230-kV single circuit transmission line poles) with a maximum height of 105 feet would be required for connection to PG&E existing 95-foot deadend structures (the final structures before the connection with the substation). The locations of the proposed transmission poles and lines, and the existing deadend structures are shown on Figure 4. Figure 7 shows a conceptual drawing of the proposed poles.

Operation and Maintenance Building

The existing administration building located south of the southernmost battery storage building and just inside the Morro Bay Power Plant property front gate along Embarcadero (refer to Figure 4) would be renovated and upgraded to serve as the BESS's operation and maintenance (O&M) building. This building would include restrooms to accommodate permanent staff. No exterior modifications are planned for this building.

Fencing and Landscaping

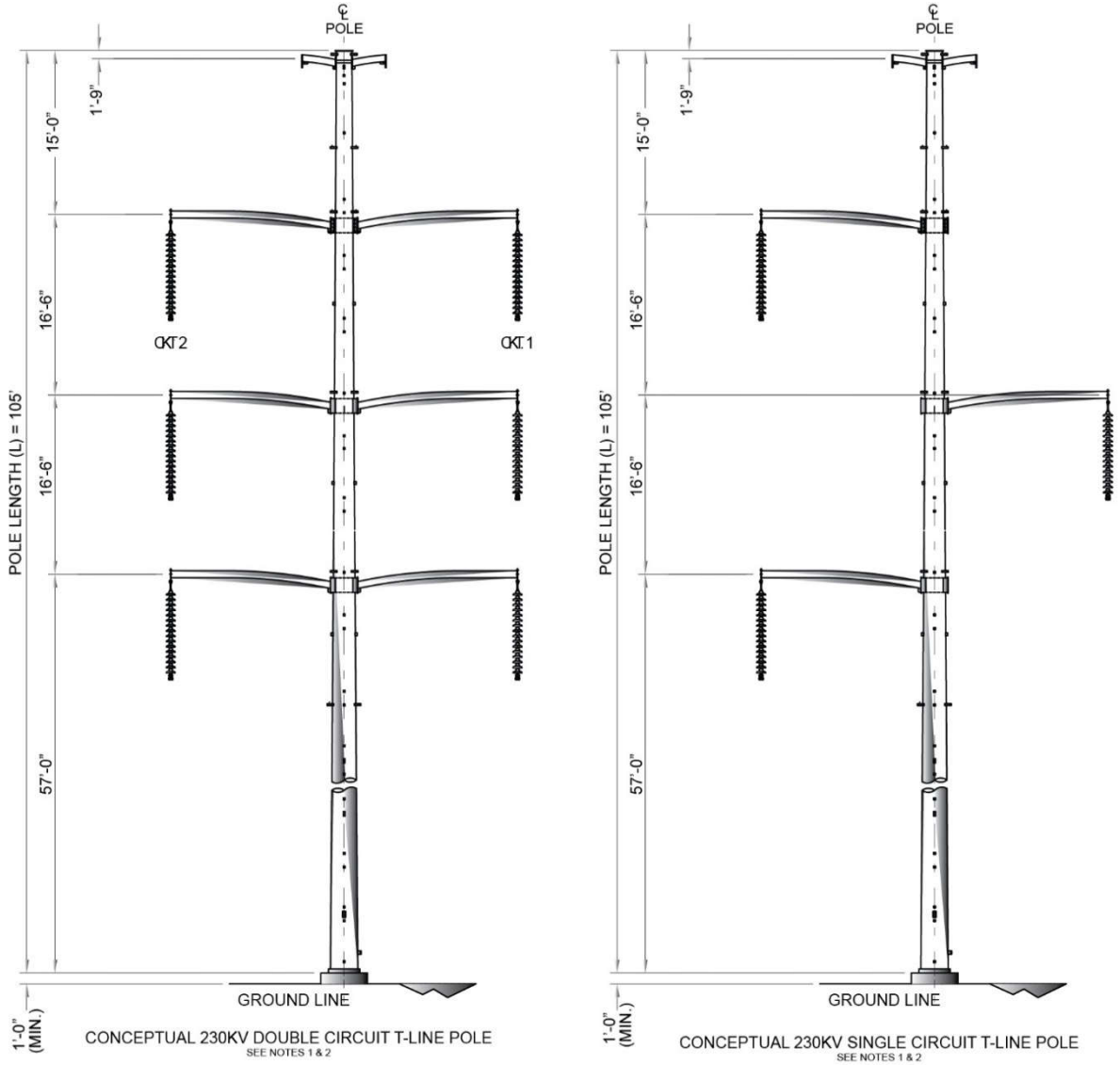
An approximately six-foot-high fence (topped with one-foot of three-strand barbed wire) would surround the area containing the buildings, PCSs, and substations, including the substation control house. Security cameras would be located at key locations.

The 24-acre BESS Site would not be landscaped, as vegetation growing in the immediate vicinity of the proposed PCSs could enter the PCS cooling system and reduce air flow. The project components would be sited to avoid this issue. Due to the existing berms, lower elevations of the tank farm pads where the buildings would be placed and existing vegetation along the berms, no additional vegetative screening is proposed.

Six Monterey Cypress trees would be removed for access west of proposed southernmost building and associated substation. The trees would be replaced per the City's code. The replaced trees, in addition to trees located outside of the BESS Site but on the Project Parcel, would provide visual screening. Final project design would avoid the trees where possible. However, trees that would need to be removed would be replaced per applicable City requirements.

The open areas surrounding the buildings would include access roads and paths. All other surfaces would be rock.

Figure 7 Conceptual Drawing of Proposed Transmission Line Poles



Notes
1. CONCEPTUAL TRANSMISSION LINE POLE DESIGN SHOWN IS TYPICAL. ACTUAL DESIGN WILL BE DETERMINED DURING DETAILED DESIGN.
2. APPROXIMATE DIAMETER OF CONCEPTUAL FOUNDATION IS 8'-0". APPROXIMATE DEPTH OF CONCEPTUAL FOUNDATION IS 40'-0".

Not to Scale

Source: Sargent & Lundy, 2020.

Water and Sewer Services

The Project Site is within the city limits and currently receives water and sewer services from the City. Water and sewer services would continue to be provided by the City. Improvements to the water system, including a new diesel fire pump as part of an upgrade to the existing fire loop system, may be required to provide adequate fire protection service.

Site Access and Parking

Site access during operation of the BESS would occur at the Morro Bay Power Plant property main gate along Embarcadero. Permanent staff would use existing parking located adjacent to the future O&M building (i.e., the existing administration building).

Off-Site Frontage and Infrastructure Improvements

As part of the proposed project, frontage improvements would include a 12-foot multi-use path, storm drainage, and street trees along the Project Site frontage with Embarcadero pursuant to the Morro Bay Public Works Department requirements, predicated on evaluation of the Environmentally Sensitive Habitat Area (ESHA) along the Project Site frontage. Any work within the City right-of-way (ROW) would comply with the requirements of the City's encroachment permit.

BESS Construction

Construction of the BESS is anticipated to take 36 to 48 months. Construction would generally occur in three phases, which would overlap. For example, Phase 2 would begin towards the end of Phase 1. Phasing is anticipated to occur as follows:

- Phase 1, Site Preparation, would extend for a duration of 12-18 months;
- Phase 2, Installation, would extend for a duration of 18-36 months; and
- Phase 3, Commissioning (Start-up and Testing), would extend for a duration of 12-18 months.

No more than 100 workers are planned to be on site during Phase 1, no more than 300 workers are planned to be on site during Phase 2, and no more than 100 workers are planned to be on site during Phase 3. No more than 300 workers would be present on the Project Site at any given time, with the average number of workers on site during project construction expected to be between 100 and 300. The majority of the labor force is expected to come from San Luis Obispo County.

Construction activity would occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, or as otherwise allowed pursuant to Morro Bay Municipal Code Section 17.52.030. Weekend construction work is not expected to be required, but may occur on occasion, depending on schedule considerations. All construction work, including any weekend work, would comply with the policies and requirements established in the Noise Element of Plan Morro Bay.

Site Preparation

STAGING AND OTHER TEMPORARY WORK AREAS

A staging/laydown area would be established at existing hard surface locations within the Project Parcel. These areas include the concrete pads located between the existing power plant building and PG&E substation and the paved area between the stacks and Embarcadero. Security fencing is

already in place at the Project Parcel. Materials and equipment would be delivered to the staging area before being dispersed to the work area.

ACCESS, DRIVEWAYS, AND PARKING

Access during construction would be provided via two routes from SR 1:

- From Main Street to Quintana Road and then along the northern boundary of the existing PG&E substation; and
- From Main Street to Beach Street to the Morro Bay Power Plant property front gate along Embarcadero.

Flatbed trailers and trucks would be used to transport construction equipment and construction materials to the Project Site. Heavy truck deliveries would be routed to avoid the Main Street to Beach Street to Embarcadero route and would instead access the site via Quintana Road. Construction workers would be directed to access the Project Site from Quintana Road.

The project's internal circulation system would include a perimeter driveway, access driveways, and internal driveways. Perimeter and site access driveways would have 95 percent relative compacted subgrade, and four inches of gravel or equivalent. Driveway construction would include grubbing (i.e., clearing of vegetation), scarification, moisture conditioning, compaction, and grading.

Construction parking would occur on-site in an open area adjacent to the existing PG&E switchyard. Alternatively, a remote off-site parking location may be used, with construction employees bused to the site.

CONSTRUCTION-RELATED GRADING AND VEGETATION MANAGEMENT

The proposed structures would be located predominantly on the previously removed fuel oil tank farm area of the Morro Bay Power Plant. The area is relatively flat with the exception of some raised berms that would need to be removed prior to building construction. The area would be grubbed to remove vegetation and the internal berms would be excavated. Soil from those berms would be spread over the BESS Site and balanced on the site (no net import or export of material). The entire BESS Site would be disturbed during project construction. No soil import or export would be required. Once the berms have been removed, the soil would be compacted as needed. Water would be used to manage dust during construction activities.

EROSION AND SEDIMENT CONTROL AND POLLUTION PREVENTION

The project would be subject to the City's adopted Low Impact Development (LID) and Post Construction requirements pursuant to Morro Bay Municipal Code Section 14.48.140. As the construction of the project would result in disturbance of an area greater than one acre, the proposed construction activity would require coverage under the Stormwater Construction General Permit for the National Pollutant Discharge Elimination System (NPDES) program. To enroll under this permit, the applicant/developer would prepare a single or multiple Stormwater Pollution Prevention Plans (SWPPPs) which would be based on the final engineering design and include all project components. The SWPPP would be prepared by a qualified engineer or erosion control specialist and would be implemented prior to construction. The SWPPP would be designed to reduce potential erosion and surface water quality impacts during construction activities and throughout the life of the project. The SWPPP would include project information and best management practices (BMPs) for water quality.

HAZARDOUS MATERIALS AND CONSTRUCTION WASTE

Construction of the project would involve the use of hazardous materials, such as fuels and greases, to fuel and service construction equipment. A Hazardous Materials Business Plan (HMBP) that describes the allowable uses and storage of fuels and greases would be developed prior to construction. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, State, and county regulations. No extremely hazardous substances (i.e., those governed pursuant to Title 40, Part 335 of the Code of Federal Regulations [CFR]) are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction. Material Safety Data Sheets for all applicable materials present on-site would be made readily available to on-site personnel and emergency services. Trucks and construction vehicles would be serviced at off-site facilities, except that routine fueling may be completed in designated areas within the Project Parcel outside of the BESS footprint.

Construction waste would be sorted on-site throughout construction and transported to a facility licensed to accept construction waste. The nearest landfills are the Chicago Grade Landfill, located about 20 miles to the northeast via SR 41, and Cold Canyon Landfill, located about 33 miles to the southeast via SR 1 and U.S. 101. Recyclable materials would be separated from non-recyclable items and stored until they could be transported to a designated recycling facility. Hazardous waste and electrical waste would be transported to a hazardous waste handling facility.

Building Construction and Battery Installation

PILE INSTALLATION, BUILDING ASSEMBLY, AND RACKING

The structures supporting the building foundation would consist of steel piles which would be driven into the soil. The piles typically would be spaced eight feet apart. Between 1,000 and 1,500 pilings would be installed up to a maximum depth of 75 feet. Once the piles are in place, a concrete foundation of 36 inches thick would be poured. The buildings would be erected using a steel frame and pre-cast concrete side panels. HVAC units would be installed on the roof or at the side of the building. After building erection is complete, the batteries would be installed in the buildings along with the associated wiring and control and fire protection systems.

POWER CONVERSION SYSTEMS AND SUBSTATIONS

Underground cables to connect the batteries to the PCSs would be installed using ordinary trenching techniques, which typically include a rubber-tired backhoe excavator or trencher. Wire depths would be in accordance with local, State, and federal requirements, and would likely be buried two to three feet below grade, by excavating a trench approximately three to six feet wide to accommodate the conduits or direct buried cables. After excavation, cables rated for direct burial or cables installed inside a polyvinyl chloride (PVC) conduit would be installed in the trench and the excavated soil would typically be used to backfill the trench.

The substation areas would be excavated for the transformer equipment and control building foundations and oil containment area. The site area for the substations would be graded and compacted to an approximately level grade. Concrete pads would be constructed as foundations for substation equipment, and the remaining area would be graveled. Concrete for foundations would be brought on-site via truck.

Construction Personnel Training

Prior to construction, a qualified biologist and archaeologist would be retained by the project applicant to conduct environmental awareness training for construction personnel. The training program for biological resources would communicate information related to the protection of sensitive resources that might be present at the Project Site, and would include:

- A description of species of concern and associated habitats;
- The general provisions of applicable environmental regulations and the need to adhere to the provisions of the regulations; and
- General measures being implemented to conserve the species of concern as they relate to the project.

The training program for cultural resources would inform the construction personnel about the possibility of encountering buried cultural resources and the following proper procedures if cultural resources are encountered.

The project applicant would coordinate with the City of Morro Bay to provide training for personnel to safely interrupt electrical power in the event of emergency incidents requiring fire suppression or rescue activities.

Construction employees would be required to limit their construction activities, vehicle parking, equipment staging, and construction materials storage to the project footprint and designated staging areas and routes of travel. The construction areas would be the minimal area necessary to complete the project and would be specified in the construction plans. Construction areas would be demarcated on-site, and employees would be instructed to limit activities to these areas.

BESS Operation and Maintenance

The operational phase of the project would begin with commissioning (start-up and testing). The project would operate continuously. The BESS would store and dispatch power during both daylight and non-daylight hours as required by grid operators year-round.

Operational activities at the Project Site would include:

- Routine inspection and testing;
- Vegetation, weed, and pest management;
- Security;
- Routine maintenance;
- Occasional equipment repair and replacement; and
- Communicating with customers, transmission system operators, and other entities involved in facility operations.

The project would not require new continuous, exterior lighting. Motion sensor lighting would be placed in specific locations as needed to assure safe ingress and egress from the battery storage building and the substation. The battery storage buildings would include interior lighting. The buildings would be secured, and access would be controlled to allow only authorized persons to enter the buildings.

Maintenance and Staffing

Once operational, the project would require only minimal long-term maintenance. Periodically, it may be necessary to test and/or replace individual battery modules. The BESS would be continually monitored to determine if and when such maintenance is required. To maintain consistent operation and fulfill contractual requirements, it is anticipated that routine module replacement would occur over the life of the project, starting at approximately year five after beginning operation. Batteries would be recycled at the appropriate facilities. The batteries are anticipated to have a 20-year life. At the end of this period the batteries would be replaced.

The O&M building would accommodate up to 15 permanent O&M staff, operating in three daily shifts. Additional personnel would occasionally be required on-site to perform periodic inspections and repairs. The operational labor force is expected to be from the local project area.

Operation and maintenance activities would produce negligible volumes of solid and liquid wastes. The transformers proposed to be located at the PCSs and substations would use oil as an insulating fluid. As required for routine maintenance of the transformers, the oil would be replaced and disposed of in accordance with applicable regulations.

Safety Systems

Although the proposed new structures would not be occupied, personnel would be required to access the batteries for maintenance. Therefore, the project would incorporate a multi-tiered safety system based on industrial best practices in consultation with the Morro Bay Fire Department (MBFD). Safety systems would incorporate passive design considerations and include monitoring, automatic and manual protection elements, and explosion prevention protection, further described below.

- **Passive Design Considerations.** Compartmentalization is a passive method of fire protection that would be used to confine batteries into zones or areas. Each zone would be separated by rated fire barriers in accordance with the California Fire Code. The project has been sited to mitigate sea-level rise and tsunami risk; the side of the project facing the ocean is protected by existing berms that are approximately 33 feet in height.
- **Monitoring.** The system would be continually monitored at multiple levels. Each level of the system would be monitored for electrical, gas/smoke, and thermal variations as appropriate and would trigger a corresponding response.
- **Automatic Protection.** The project would incorporate fire suppression for the various areas within the building based on the type of hazard. The design would incorporate an automatic sprinkler system. There would be one system dedicated to suppression at the battery/rack level and, if required, another system to protect the building.
- **Manual Protection.** The project would include on-site fire hydrants, automatic wet standpipes, Class III hose stations, and hand-held portable fire extinguishers.
- **Explosion Prevention Protection.** The lithium-ion batteries selected for the BESS would incorporate explosion prevention protection pursuant to the National Fire Protection Association (NFPA) 855 or International Fire Code Chapter 12.

In addition, all conditions required by the MBFD, including fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be implemented.

Demolition of Existing Power Plant Building and Stacks

Following construction of the BESS, Vistra would remediate and demolish the existing power plant building and stacks. These activities would be expected to commence within six months of completion of the BESS. Of the 43 acres included in the Project Site, approximately 19 acres (Demolition Site) would be used for remediation and demolition of the power plant building and stacks. Figure 8 shows the approximate limits of the demolition activities. The PG&E Deed Restriction described above covers the entirety of the Demolition Site.

Environmental remediation and demolition would include the removal of equipment, removal of remaining regulated materials, dismantling of plant facilities and infrastructure, salvage and recycling of remaining equipment, waste management transport and disposal and backfill of below grade voids. Remediation and demolition is anticipated to take up to two years to complete.

The project applicant would comply with all applicable laws, regulations, and remediation requirements before initiating demolition of the Power Plant building and stacks. Demolition of these structures would allow for future redevelopment of the Morro Bay Power Plant property in a manner that is consistent with Plan Morro Bay (refer to Section 0, Required Approvals, for a discussion of Plan Morro Bay Policy LU-5.4). The proposed demolition activities are further described below.

Pre-demolition Activities

Vistra, in conjunction with the selected contractor, would obtain all necessary federal, State, and local permits and approvals prior to the start of the remediation and demolition. Pre-demolition activities would also include preparation of the following plans.

Health and Safety Plan

The environmental remediation and demolition would be completed using company- and project-specific policies and procedures designed to identify, communicate, and control all work so that it can be performed safely. The plans would meet all CA OSHA and any other Federal, California or local requirements. All aspects of the work would have detailed individual task specific work plans to evaluate tasks, processes, and procedures to identify, eliminate or reduce related risks. A detailed contractor health and safety plan (HASP) would be prepared by the selected Contractor prior to start of the work.

Environmental Plans and Best Practices

To the extent possible, all off-site hauling would exit the Quintana/Main Street plant gate. Contractor would ensure no track-out of soils onto public roads by incorporating sweeping and/or tire wash as required.

Prior to the start of demolition, the demolition contractor would implement any required storm water pollution prevention plan (SWPPP) and spill protection plans (SPCC). Demolition contractor would put in place engineering and administrative controls to prevent fugitive dust or particulate matter emissions. A project-specific dust control plan would be prepared to address all necessary controls for demolition, materials handling, roadways, and stockpiles in accordance with state and San Luis Obispo County Air Pollution Control District requirements.

Figure 8 Demolition Area

Transportation Management Plan

The selected contractor would prepare a site-specific Traffic Management Plan that details safety precautions and controls to cover all on site vehicular and pedestrian traffic and off-site haul routes. Signs and flaggers would be employed as necessary to ensure public and worker safety.

Fire Prevention Plan

A site-specific Fire Prevention Plan would be completed before the start of any site work. It would include identification of major fire hazards, storage procedures for flammable and hazardous materials, potential ignition sources and site-specific fire protection equipment and procedures to address fire hazards. All employees would receive fire specific training before the work begins.

Detailed Demolition Plans

Prior to the start of the work all project plans and plans required by regulation would be prepared, such as OSHA Pre-Demolition survey, site security plans, rigging and lift plans. Any plans that require regulatory approval would be submitted to the appropriate governmental authority.

Environmental Remediation

Following preparation of the above plans, remediation would occur prior to any demolition activities. Significant environmental remediation was completed at the time the plant closed in February 2014. This included the removal or all oils and flammable materials. The equipment housed inside the Morro Bay power plant structure still contains some regulated materials such as mercury switches, lighting devices, and asbestos. Prior to commencement of structural demolition, all remaining regulated materials would be removed and disposed of off-site in compliance with California and federal regulations.

Asbestos containing materials have been identified by a Pre-Demolition Asbestos Containing Materials Survey completed in September 2019. Negative pressure containment tents would be erected inside the power building to make sure all asbestos materials can be contained and not expose areas outside to contamination. Asbestos abatement of the main structure would be performed by dividing the building into segments and would take approximately 9 to 12 months to complete. Demolition would not begin until the area has been abated for all asbestos and other hazardous materials. Work crews would consist of 50-75 workers and appropriate supervision and safety oversight. The Contractor and all employees would meet all California and Federal training requirements and have appropriate licenses/certifications. Required air monitoring would be completed by a Vistra-employed qualified contractor.

The contractor would provide on-site decontamination facilities for all workers and inspectors.

Transportation of all regulated materials off-site would be carried out by licensed, qualified haulers using containers that meet all state and federal regulatory requirements.

Demolition Exterior to the Building

Most of the outbuildings and transformers at the Project Parcel were removed in 2014. Several transformers and circuit breakers remain on the Project Parcel and would be demolished in conjunction with or prior to the main building demolition. A detached garage and water tank near the main plant entrance would also be demolished. This work would be accomplished using cranes,

torches, and shearing machines. All materials would be hauled to a qualified recycler or disposal facility.

Surface Impoundments

The surface impoundments were certified as clean closed by CA DTSC in August 2008. The liners would be removed and properly disposed of. The impoundments would be filled with soil and compacted to ground level. Concrete above ground level would be removed and stockpiled for use as building foundation fill. Below-ground concrete would be left in place.

Main Plant Structure Demolition

The main plant consists of four separate boilers and turbines (fully enclosed) and office/warehouse space. Following removal of asbestos in each of these segments, demolition would begin. Generally, interior equipment would be removed first and then the structure of each segment would be removed. The structure may be brought down by implosion or mechanical means based on engineering evaluation. Salvaged materials would be staged on site and sorted by material type. The sorted materials would be placed in containers for hauling to recycling or disposal.

At all times demolition contractor would comply with all federal, State, and local laws and regulations. Fugitive dust control would be employed at all times using industry best practices to meet all air quality requirements.

Demolition contractor would use cranes, shearing machines, man lifts, cutting torches and other similar equipment to accomplish the demolition work. Demolition contractor would provide misting systems and water trucks for the management of fugitive dust. Trucks taking all materials from the site would use enclosed bins or be covered.

The demolition contractor may have up to 100 workers on site. Work shifts would be ten to twelve hours per day Monday through Saturday except any Federal or State holidays. Workers would park on-site or may be bussed to the site from an off-site location.

Stacks Demolition

Demolition of the stacks would occur following abatement of any regulated materials and demolition of any connecting ductwork. The stacks would be removed by conventional means without using explosives, one stack at a time. Screening would be used around the perimeter of the stack at the levels where concrete cutting is taking place to minimize airborne dust.

Backfilling and Site Restoration

Following completion of removal of all structures the foundation would be filled with crushed concrete and aggregates that have been stockpiled on site to meet the surrounding ground elevation. Additional fill material would only be brought on-site as necessary to complete compaction and grading should there be insufficient crushed concrete. All site areas would continue to drain through existing storm drains. No soil materials are anticipated to be disturbed during the demolition process.

Following completion of the demolition, backfilling, and clean-up, all materials and equipment would be removed from the site. Due to the age and volume of surplus equipment in the market due to numerous power plant retirements, it is unlikely that much equipment would be salvaged for re-use. The bulk of the equipment would be cut up and the metals recycled. Table 2 presents estimated waste quantities from the demolition activities.

Table 2 Waste Quantities from Demolition of Existing Facilities

Waste Type	Salvage	Recycle/Reuse	Dispose
	Disposition and Weight (tons)		
Foundation Concrete, Asphalt, and Soil	0	64,000	0
Other Building Materials, Equipment, Instruments	8,000	40,000	22,000
Total Tons	**8,000**	**104,000**	**22,000**
	Truck Trips		
Total Truck Trips	**400**[1]	**2,000**[2]	**1,100**[3]

1. All shipped off site. 8,000 tons/20 tons/truck = 400 truck trips.
2. Assumes 64,000 tons of foundations, etc. would remain on site for re-use. 40,000 tons/20 tons/truck = 2,000 truck trips.
3. All shipped off site. 22,000 tons/20 tons/truck = 1,100 truck trips.

Master Plan for Redevelopment of the Project Parcel

Plan Morro Bay Policy LU-5.4 requires a Master Plan for the redevelopment of the former Morro Bay Power Plant property and surrounding area.[2] The proposed project includes a Master Plan that would amend the General Plan and LCP LUP land use designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial. The proposed Master Plan would not modify the existing land use designation on the remainder of the Project Parcel, retaining the Visitor Serving Commercial designation and Mixed-Use Residential Overlay recently implemented through Plan Morro Bay.

Project Objectives

The project applicant has identified the following objectives for the proposed project:

- Provide a Master Plan that is consistent with Plan Morro Bay Policy LU-5.4 and updates the LCP LUP land use designation on the BESS Site while carrying forward the Visitor Serving Commercial designation and Mixed-Use Residential Overlay recently implemented through Plan Morro Bay on the remainder of the Project Parcel.
- Reduce the amount of fossil fuels consumed during peak hours and maximize usage of energy from renewable sources such as wind and solar facilities that may not be able to produce energy during times of peak demand.
- Assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program and support the retirement of the Diablo Canyon Nuclear Generation Station, both of which include the procurement of locally sited energy storage systems.
- Realize economies of scale inherent in constructing a large-scale storage facility on contiguous lands in the immediate vicinity of a high-voltage interconnection to the California Independent System Operator (CAISO) controlled grid.

[2] **Policy LU-5.4: Vistra Site Master Plan**. Create a master plan for the redevelopment of the former Vistra power plant site and surrounding area, which could include reuse of some of the existing buildings. The master plan will be the responsibility of the developer or property owner upon property development. Encourage extensive community participation in the master plan process. Ensure that the land use map identified in Figure LU-4 and development capacity established in Table LU-2 guide land planning for the site. Other objectives for the master plan include creating a better connection between the two sides of the Embarcadero at the Vistra site and creating a pedestrian-friendly atmosphere along the site's Embarcadero street frontage. The master plan shall be incorporated into the LCP via an LUP amendment with Chapter 3 of the Coastal Act with the standard of review prior to any CDP processing for associated development.

- Site the project to minimize environmental and social impacts by being located on land that has historically been used for power generation. The project will take advantage of existing infrastructure and not create impacts to undisturbed areas of the City of Morro Bay.
- Improve aesthetics, sight lines, and view corridors along the Morro Bay waterfront and Embarcadero areas in relation to the Project in a manner consistent with Plan Morro Bay policies on improving degraded viewsheds and preserving the visual character of Morro Bay (see Plan Morro Bay Policies 9.6, 9.7, 9.8, and 9.9).
- Identify public access improvements through and/or along the Project Site's Embarcadero street frontage.

Required Approvals

The City of Morro Bay is the lead agency for the proposed project. The proposed development and demolition would require entitlements from the City, as well as approvals from other agencies. Required entitlements from the City include a Coastal Development Permit (CDP), Conditional Use Permit, and a General Plan and Coastal Land Use Plan Map Amendment to incorporate the Master Plan and associated land use designations into Plan Morro Bay. Approval of these entitlements would satisfy the requirements of Plan Morro Bay Policy LU-5.4 and Chapter 3 of the Coastal Act, requiring a CDP for any associated development on the Morro Bay Power Plant property, and would allow a final development plan for the Project Site (consistent with the requirements of the granted entitlements) including the following ministerial approvals from the City: grading permits, improvement plans, building permits, and a Flood Zone Hazard Development Permit.

The project applicant, in conjunction with the selected contractor, would be required to obtain all necessary federal, State, and local permits and approvals prior to the start of remediation and demolition activities.

Development of the Project Site under the proposed project would be required to comply with the Regional Water Quality Control Board (RWQCB) Post Construction Storm Water Requirements and City of Morro Bay Low Impact Development and Post-Construction Requirements for redeveloped sites.

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