



Morro Bay Battery Energy Storage System Project

Draft Environmental Impact Report

prepared by

City of Morro Bay
Community Development Department
955 Shasta Avenue
Morro Bay, California 93442
Contact: Cindy Jacinth, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
1530 Monterey Street, Suite D
San Luis Obispo, California 93401

March 2024



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Table of Contents

List of Globally Used Abbreviations and Acronyms.....	iii
Executive Summary	ES-1
Project Synopsis.....	ES-1
Project Applicant.....	ES-1
Lead Agency Contact Person.....	ES-1
Project Description.....	ES-1
Project Objectives.....	ES-6
Alternatives.....	ES-6
Areas of Known Controversy	ES-8
Project Approvals.....	ES-8
Issues Not Studied in Detail in the EIR.....	ES-9
Summary of Impacts and Mitigation Measures	ES-10
1 Introduction	1-1
1.1 Purpose and Legal Authority.....	1-1
1.2 Environmental Scoping	1-2
1.3 Scope and Content.....	1-15
1.4 Lead, Responsible, and Trustee Agencies	1-16
1.5 Environmental Review Process.....	1-16
2 Project Description	2-1
2.1 Project Applicant.....	2-1
2.2 Lead Agency Contact Person.....	2-1
2.3 Project Location	2-1
2.4 Existing Site Characteristics	2-2
2.4.1 Current Land Use Designation and Zoning	2-2
2.4.2 Surrounding Land Uses.....	2-6
2.5 Project Background.....	2-6
2.6 Project Characteristics	2-8
2.6.1 Construction, Operation, and Future Decommissioning of the BESS Facility	2-8
2.6.2 Demolition of Existing Power Plant Building and Stacks	2-22
2.6.3 Master Plan for Redevelopment of the Power Plant Property	2-26
2.7 Project Objectives	2-27
2.8 Required Approvals.....	2-27
3 Environmental Setting	3-1
3.1 Regional Setting	3-1
3.2 Project Site Setting.....	3-1
3.3 Cumulative Development	3-2

4	Environmental Impact Analysis	4-1
4.1	Aesthetics/Visual Resources	4.1-1
4.1.1	Setting.....	4.1-1
4.1.2	Regulatory Setting	4.1-3
4.1.3	Previous Environmental Review	4.1-7
4.1.4	Impact Analysis	4.1-8
4.1.5	Cumulative Impacts	4.1-27
4.2	Air Quality	4.2-1
4.2.1	Setting.....	4.2-1
4.2.2	Regulatory Setting	4.2-6
4.2.3	Previous Environmental Review	4.2-10
4.2.4	Impact Analysis	4.2-10
4.2.5	Cumulative Impacts	4.2-25
4.3	Biological Resources.....	4.3-1
4.3.1	Setting.....	4.3-2
4.3.2	Regulatory Setting	4.3-13
4.3.3	Previous Environmental Review	4.3-19
4.3.4	Impact Analysis	4.3-19
4.3.5	Cumulative Impacts	4.3-42
4.4	Cultural Resources and Tribal Cultural Resources	4.4-1
4.4.1	Setting.....	4.4-1
4.4.2	Regulatory Setting	4.4-7
4.4.3	Previous Environmental Review	4.4-15
4.4.4	Impact Analysis	4.4-15
4.4.5	Cumulative Impacts	4.4-25
4.5	Geology and Soils	4.5-1
4.5.1	Setting.....	4.5-1
4.5.2	Regulatory Setting	4.5-9
4.5.3	Previous Environmental Review	4.5-12
4.5.4	Impact Analysis	4.5-12
4.5.5	Cumulative Impacts	4.5-22
4.6	Greenhouse Gas Emissions	4.6-1
4.6.1	Setting.....	4.6-1
4.6.2	Regulatory Setting	4.6-3
4.6.3	Previous Environmental Review	4.6-11
4.6.4	Impact Analysis	4.6-11
4.6.5	Cumulative Impacts	4.6-21

4.7	Hazards and Hazardous Materials	4.7-1
4.7.1	Setting.....	4.7-1
4.7.2	Regulatory Setting	4.7-13
4.7.3	Previous Environmental Review	4.7-23
4.7.4	Impact Analysis	4.7-24
4.7.5	Cumulative Impacts	4.7-44
4.8	Noise	4.8-1
4.8.1	Setting.....	4.8-1
4.8.2	Regulatory Setting	4.8-4
4.8.3	Previous Environmental Review	4.8-7
4.8.4	Impact Analysis	4.8-8
4.8.5	Cumulative Impacts	4.8-20
4.9	Transportation	4.9-1
4.9.1	Setting.....	4.9-1
4.9.2	Regulatory Setting	4.9-4
4.9.3	Previous Environmental Review	4.9-6
4.9.4	Impact Analysis	4.9-7
4.9.5	Cumulative Impacts	4.9-15
4.10	Effects Found Not to be Significant	4.10-1
4.10.1	Agricultural and Forestry Resources.....	4.10-1
4.10.2	Biological Resources	4.10-2
4.10.3	Energy	4.10-3
4.10.4	Geology and Soils.....	4.10-5
4.10.5	Hazards and Hazardous Materials	4.10-7
4.10.6	Hydrology/Water Quality	4.10-8
4.10.7	Land Use/Planning.....	4.10-11
4.10.8	Mineral Resources	4.10-15
4.10.9	Noise	4.10-16
4.10.10	Population/Housing.....	4.10-16
4.10.11	Public Services	4.10-17
4.10.12	Recreation.....	4.10-19
4.10.13	Transportation	4.10-20
4.10.14	Utilities/Service Systems	4.10-21
4.10.15	Wildfire	4.10-25
5	Alternatives.....	5-1
5.1	Alternatives Development and Screening Process	5-1
5.2	Project Alternatives Impact Analysis	5-3
5.2.1	Alternative 1: No Project Alternative	5-3
5.2.2	Alternative 2: Plan Morro Bay Consistency Alternative	5-4

Morro Bay Battery Energy Storage System Project

5.2.3	Alternative 3: BESS Facility Without Demolition	5-9
5.2.4	Alternative 4: Reduced BESS Facility	5-12
5.2.5	Alternative 5: Enclosure-Based BESS Facility.....	5-18
5.3	Identification of the Environmentally Superior Alternative	5-23
5.3.1	Comparison of Alternatives	5-23
5.3.2	Environmentally Superior Alternative	5-23
6	Other CEQA Required Topics	6-1
6.1	Growth Inducement.....	6-1
6.1.1	Population Growth	6-1
6.1.2	Economic Growth	6-2
6.1.3	Precedent Setting Action	6-2
6.1.4	Development of Open Space/Vacant Lands	6-3
6.1.5	Removal of Obstacles to Population Growth	6-3
6.2	Significant Irreversible Environmental Effects.....	6-4
6.2.1	Irreversible Commitment of Resources.....	6-4
6.2.2	Potential Environmental Damage from Accidents	6-5
6.2.3	Significant and Unavoidable Environmental Impacts.....	6-5
7	References	7-1
7.1	Bibliography	7-1
7.2	List of Preparers	7-14

Tables

Table ES-1	BESS Facility Characteristics.....	ES-3
Table ES-2	Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts	ES-12
Table 1-1	NOP Comments and EIR Response	1-3
Table 2-1	BESS Facility Characteristics.....	2-9
Table 2-2	Waste Quantities from Demolition of Existing Facilities	2-26
Table 3-1	City of Morro Bay Cumulative Projects List	3-3
Table 4.2-1	San Luis Obispo County Ambient Air Quality.....	4.2-3
Table 4.2-2	State and Federal Ambient Air Quality Standards and Attainment Status	4.2-4
Table 4.2-3	SLOAPCD Criteria Air Pollutant Thresholds for Construction and Operation.....	4.2-12
Table 4.2-4	Demolition and BESS Facility Construction Emissions.....	4.2-16
Table 4.2-5	BESS Facility Operational Emissions	4.2-17
Table 4.2-6	Mitigated Demolition and Construction Emissions	4.2-19
Table 4.2-7	Demolition and Construction Health Risks	4.2-20
Table 4.2-8	Mitigated Demolition and Construction Health Risks	4.2-23
Table 4.6-1	Combined Annual Emissions of Greenhouse Gases	4.6-14
Table 4.6-2	2022 Scoping Plan Conflict Analysis.....	4.6-16
Table 4.6-3	SLOCOG 2023 RTP/SCS Conflict Analysis	4.6-17

Table 4.6-4 Plan Morro Bay Conflict Analysis 4.6-18

Table 4.6-5 Morro Bay CAP Conflict Analysis 4.6-20

Table 4.7-1 Current Status of AOCs 4.7-10

Table 4.8-1 Typical Noise Levels 4.8-3

Table 4.8-2 Community Exterior Noise Exposure Levels 4.8-6

Table 4.8-3 Maximum Allowable Noise Exposure – Transportation Noise Sources..... 4.8-6

Table 4.8-4 Maximum Allowable Exterior Noise Exposure – Stationary Noise Sources 4.8-7

Table 4.8-5 Typical Construction Equipment Maximum Noise Levels 4.8-9

Table 4.8-6 Typical Vibration Levels During Construction..... 4.8-10

Table 4.8-7 Guideline Vibration Annoyance Potential Criteria 4.8-13

Table 4.8-8 Guideline Vibration Damage Potential Threshold Criteria 4.8-13

Table 4.8-9 Construction Noise Levels..... 4.8-14

Table 4.8-10 Construction Phase Traffic Noise Levels..... 4.8-15

Table 4.8-11 Demolition Noise Levels 4.8-16

Table 4.8-12 Demolition Phase Traffic Noise Levels..... 4.8-16

Table 5-1 Comparison of Project Alternatives Buildout Characteristics 5-2

Table 5-2 Impact Comparison of Alternatives 5-25

Figures

Figure 1-1 Environmental Review Process..... 1-18

Figure 2-1 Regional Location..... 2-3

Figure 2-2 Parcel and Project Site Location 2-4

Figure 2-3 Existing Features..... 2-5

Figure 2-4 Land Use Restrictions..... 2-7

Figure 2-5 BESS Facility Site Plan 2-10

Figure 2-6 Building Elevations..... 2-11

Figure 2-7 Example BESS Components 2-12

Figure 2-8 Conceptual Drawing of Proposed Transmission Line Poles..... 2-14

Figure 2-9 Demolition Area..... 2-23

Figure 3-1 City of Morro Bay Cumulative Project Locations..... 3-4

Figure 4.1-1 Key Viewpoints Map 4.1-9

Figure 4.1-2 Key Viewpoint 1 4.1-10

Figure 4.1-3 Key Viewpoint 2 4.1-11

Figure 4.1-4 Key Viewpoint 3 4.1-12

Figure 4.1-5 Key Viewpoint 4 4.1-13

Figure 4.1-6 Key Viewpoint 5 4.1-14

Figure 4.1-7 Key Viewpoint 6 4.1-15

Figure 4.1-8 Key Viewpoint 7 4.1-16

Figure 4.2-1 Maximimally Exposed Individual Receptor Location 4.2-21

Morro Bay Battery Energy Storage System Project

Figure 4.3-1 Project Site Biological Resources 4.3-3
Figure 4.3-2 Project Site and Surrounding ESHA 4.3-9
Figure 4.5-1 Regional Quaternary Fault Zones 4.5-2
Figure 4.5-2 Historical Regional Earthquakes 4.5-3
Figure 4.5-3 Soil Classifications..... 4.5-5
Figure 4.5-4 Regional Underlying Geologic Units 4.5-8
Figure 4.7-1 Areas of Hazardous Materials Concern 4.7-3
Figure 4.7-2 Former Tank Farm and Areas of Concern 1 through 8 4.7-5
Figure 4.7-3 Base Flood Elevations 4.7-12
Figure 4.7-4 Tsunami Inundation Zones 4.7-14
Figure 4.7-5 Berms Surrounding the BESS Site (1/2) 4.7-41
Figure 4.7-6 Berms Surrounding the BESS Site (2/2) 4.7-42
Figure 4.8-1 Noise Measurement Locations and Sensitive Receptor Locations..... 4.8-5
Figure 4.10-1 Conceptual Drainage Plan..... 4.10-12

Appendices

Appendix A Notice of Preparation Comments
Appendix B Air Quality Technical Report
Appendix C Biological Resources Assessment Report
Appendix D-1 (Confidential) Cultural Resources Report¹
Appendix D-2 (Confidential) Supplemental Cultural Resources Report, Pedestrian Path²
Appendix E Historical Resource Evaluation Report
Appendix F Geologic and Soils Hazards Evaluation Report
Appendix G Paleontological Resources Evaluation
Appendix H Greenhouse Gas Technical Report
Appendix I Hazardous Materials Technical Study
Appendix J Acoustical Analysis
Appendix K Traffic and Parking Study
Appendix L Energy Analysis Technical Report

¹ The Cultural Resources Report contains confidential cultural resources information and is therefore not available for public review. This document can be provided upon request to qualified cultural resource specialists and Native American tribal representatives.

² The Supplemental Cultural Resources Report, Pedestrian Path contains confidential cultural resources information and is therefore not available for public review. This document can be provided upon request to qualified cultural resource specialists and Native American tribal representatives.

List of Globally Used Abbreviations and Acronyms

AB	Assembly Bill
AC	alternating current
ACM	asbestos containing material
AOC	Area of Concern:
APCD	Air Pollution Control District
APN	Assessor's Parcel Number (APN)
ASCE	American Society of Civil Engineers
AST	aboveground storage tank
ASTM	American Society for Testing Materials
BESS	Battery Energy Storage System
BFE	Base Flood Elevation
BMP	Best Management Practice
C5	Central Coast Clean Cities Coalition
CalARP	California Accidental Release Prevention
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CAL FIRE	California Department of Forestry and Fire Protection
CalGEM	California Geologic Energy Management Division
CalOES	California Office of Emergency Services
Cal/OSHA	Division of Occupational Safety and Health
CalRecycle	California Department of Resources, Recycling, and Recovery
CAP	Clean Air Plan
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

Morro Bay Battery Energy Storage System Project

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO ₂ e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWC	California Water Code
dB	decibels
DC	direct current
DOC	Department of Conservation
DOSH	Division of Occupational Safety and Health
DTSC	Department of Toxic Substances Control
EHS	San Luis Obispo County Environmental Health Services Division
EISA	Energy Independence and Security Act
EMFAC	Emission Factors Model
EO	Executive Order
EOC	Emergency Operation Center
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
ESHA	environmental sensitive habitat areas
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPP	Fire Prevention Plan
FTA	Federal Transit Administration
FUDS	Formerly Used Defense Site
GHG	greenhouse gas

GIE	gas-insulated equipment
GSU	generator step-up
GWP	global warming potential
HASP	Health and Safety Plan
HFC	hydrofluorocarbon
HHRA	Human Health Risk Assessment
HMBEP	Hazardous Materials Business Emergency Plan
HMIS	Hazardous Material Identification System
HMMA	Hazardous Material Management Act
HMMP	Hazardous Material Management Program
HMTA	Hazardous Materials Transportation Act
HSC	California Health and Safety Code
HSWA	Hazardous and Solid Waste Act
HUD	United States Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
IBC	International Building Code
ICC	International Code Council, Inc.
ICS	Incident Command System
IG	Industrial-General
IPCC	Intergovernmental Panel on Climate Change
IWMA	Integrated Waste Management Authority
kV	kilovolt
LBP	lead-based paint
LCP	Local Coastal Program
L_{dn}	day-night average noise level
LEPC	Local Emergency Planning Committee
L_{eq}	equivalent noise level
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L_{max}	hourly maximum noise level
LUC	and use covenant
LUP	Land Use Plan
MBFD	Morro Bay Fire Department

Morro Bay Battery Energy Storage System Project

MBG	Morro Bay Garbage
MBMC	Morro Bay Municipal Code
MMAA	Master Mutual Aid Agreement
MMT	million metric tons
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MW	megawatt
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NPMS	National Pipeline Mapping System
NRCS	National Resource Conservation District
O&M	operation and maintenance
OSHA	Occupational Safety and Health Act
PAH	polycyclic aromatic hydrocarbon
PBDB	Paleobiology Database
PCS	power conversion system
PFAS	polyfluoroalkyl substances
PFC	perfluorocarbon
PFOS	perfluorooctanesulfonic acid
PGA	Peak Ground Acceleration
PHMSA	Pipeline and Hazardous Materials Safety Administration
PPV	peak particle velocity
PQS	Professional Qualification Standard
PRC	Public Resources Code
PVC	polyvinyl chloride

PG&E	Pacific Gas and Electric Company
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBMNH	Santa Barbara Museum of Natural History
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SCWP	Safe Clean Water Program
SEMS	Standardized Emergency Management System
SERC	State Emergency Response Commission
sf	square feet
SFHA	Special Flood Hazard Area
SHM Act	Seismic Hazards Mapping Act
SLO	San Luis Obispo
SLOAPCD	San Luis Obispo County Air Pollution Control District
SLOCOG	San Luis Obispo Council of Governments
SMARA	Surface Mining and Reclamation Act
SMP	Soil Management Plan
SoCalGas	Southern California Gas Company
SOI	Secretary of the Interior
SPCC	Spill Prevention Control and Countermeasure Plan
SR	State Route
SSL	soil screening level
SVP	Society for Vertebrate Paleontology
SWCP	Stormwater Control Plan
SWIS	Solid Waste Information System
SWPPP	Stormwater Pollution Prevention Plan

Morro Bay Battery Energy Storage System Project

SWRCB	State Water Resources Control Board
TNM	Traffic Noise Model
TPH	total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
UCMP	University of California Museum of Paleontology
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
USNPS	United States National Park Service
UST	underground storage tank
UWMP	Urban Water Management Plan
VHFHSZ	very high fire hazard severity zone
VSC	Visitor Serving Commercial
WEAP	Worker Environmental Awareness Program
WHO	World Health Organization
WRC	Water Resources Center
WRF	water reclamation facility

Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Morro Bay Battery Energy Storage System Project (proposed project or project). This section summarizes the characteristics of the proposed project, the environmental impacts and mitigation measures associated with the proposed project, and the alternatives to the proposed project.

Project Synopsis

Project Applicant

Morro Bay Power Company LLC
Attn: Ms. Claudia Morrow
6555 Sierra Drive
Irving, Texas 75039
(214) 875-9249

Lead Agency Contact Person

Cindy Jacinth, Planning Manager
City of Morro Bay
Community Development Department
955 Shasta Avenue
Morro Bay, California 93442
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Project Description

This EIR has been prepared to examine the potential adverse environmental effects of the proposed project. The following is a summary of the full project description, which can be found in Section 2.0, *Project Description*.

Project Location and Existing Site Characteristics

The approximately 107-acre Morro Bay Power Plant property (Power Plant Property) (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 (City). The Morro Bay Power Plant has been idle since its retirement in 2014. The Power Plant Property currently contains the idle power plant building and smokestacks (stacks), Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center. The Power Plant Property is surrounded by Pacific Gas and Electric (PG&E) 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.

Morro Bay Battery Energy Storage System Project

The Project Site covers approximately 43 acres of the 107-acre Power Plant Property.¹ The Project Site includes approximately 24 acres located immediately north of the inactive power plant building that would be used for construction of a 600 megawatt (MW) BESS (BESS Site). 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 inactive stacks immediately southwest of the power plant building (Demolition Site). The Project Site also includes the approximately 2.75-acre driveway that connects the power plant building to Quintana Road.

Under Plan Morro Bay, which was adopted by the City in May 2021 and serves as the City’s General Plan and Local Coastal Program (LCP) Land Use Plan, the Project Site has a land use designation of Visitor Serving Commercial with a Mixed-Use Residential Overlay. A comprehensive update to the Zoning Ordinance/Implementation Plan was adopted in November 2022, which changed the Project Site’s zoning from M-2/PD/I with a Planned Development overlay and Interim Use overlay designation to Visitor Serving Commercial.²

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

PG&E Deed Restriction

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 to Duke Energy in 1997, PG&E imposed a deed restriction across the Power Plant Property, including the entire Project Site. That deed restriction prohibits developing the Power Plant Property (including the Project Site) with new 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.

DTSC Land Use Restriction

In 2006, PG&E entered into a Corrective Action Consent Agreement with the California Department of Toxic Substances Control (DTSC) to address areas of the Power Plant Property 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 proposed 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 final Limited Use Covenant (LUC), recorded on July 21, 2022, covers most of AOC 1 and 20.5 acres of the 24-acre BESS Site. This final LUC restricts future land uses in the covered areas to commercial/industrial uses and prohibits future development of the property for permanent or temporary lodging, school, day care centers, recreation, or hospital uses.

¹ Following are definitions for several key terms used:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant property.

Project Site refers to the portions of the Power Plant property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant property.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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.

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.

² The comprehensive update to the Zoning Code/Implementation Plan that was adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662) is currently anticipated to be certified by the California Coastal Commission in March 2024.

Project Characteristics

The proposed project includes three components: (1) construction and operation of a 600-MW Battery Energy Storage System facility (BESS Facility), (2) demolition and removal of the existing power plant building and stacks, and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG).

Construction, Operation, and Future Decommissioning of the BESS Facility

Of the 43 acres included in the Project Site, approximately 24 acres (the BESS Site) would be used for construction and operation of the BESS Facility. The DTSC Land Use Restriction applies to most of the 24-acre BESS Site, while the PG&E deed restriction applies to the Power Plant Property, including the entire Project Site. The BESS Facility would provide power to utility customers by interconnecting to the existing PG&E switchyard located east of the Project Site. The BESS Facility would operate year-round to store and discharge electricity to support demand on the power grid and improve grid reliability. In doing so, the BESS would facilitate the efficient use of existing renewable energy sources and the development of new renewable energy facilities, thereby reducing fossil fuel consumption and related emissions.

The BESS Facility would include 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) located on concrete pads outside the buildings. The BESS Facility would also include three substations with transformers, a transmission line connecting to the PG&E switchyard, water supply system improvements, and internal access roads. Table ES-1 summarizes the primary characteristics of the BESS Facility.

Table ES-1 BESS Facility Characteristics

Address	1290 Embarcadero, Morro Bay, California 93442
APN	066-331-046
Parcel Acreage	107 acres
BESS Site Acreage	24 acres
Demolition Site Acreage	19 acres
Battery Storage Buildings (3)	91,000 sf, 35.2 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

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 to reduce the risk of vegetation disrupting BESS Facility operation. Due to the existing berms surrounding the former tank farm area, lower elevations of the former tank farm pads where

Morro Bay Battery Energy Storage System Project

the buildings would be placed, and existing vegetation along the existing berms, no additional vegetative screening is proposed.

Up to six Monterey cypress trees could be removed for access west of the proposed southernmost building and associated substation. Any removed trees would be replaced per the City's Major Vegetation Guidelines. The open areas surrounding the buildings would include access roads and paths. All other surfaces would be rock.

WATER AND SEWER SERVICES

The Project Site is within the City limits and receives water and sewer services from 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 supplement City water service to provide adequate fire protection.

SITE ACCESS AND PARKING

Site access would be provided at the Power Plant Property main gate located along the Embarcadero. Permanent staff for the BESS Facility would use existing parking located adjacent to the BESS Facility's operations and maintenance building (i.e., the existing administration building).

OFF-SITE FRONTAGE AND INFRASTRUCTURE IMPROVEMENTS

Required 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 FACILITY CONSTRUCTION

Construction of the BESS Facility 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 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.

BESS OPERATION AND MAINTENANCE

Once operational, the BESS Facility would operate continuously. The BESS Facility would store and dispatch power during both daylight and non-daylight hours as required by grid operators year-round. Operational activities at the BESS Facility would include the following:

- 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 BESS Facility 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 BESS Facility buildings and the substations. 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.

FUTURE DECOMMISSIONING

The BESS Facility is anticipated to have an operating life of up to 40 years. At the end of the BESS Facility's operating life, the Project Applicant would either replace or upgrade the technology to extend the operating life, or the BESS Facility would be decommissioned. This EIR considers the potential for decommissioning the BESS Facility to provide a comprehensive review of the potential environmental effects of all reasonably foreseeable outcomes of the project.

Demolition of Existing Power Plant Building and Stacks

Following construction of the BESS, the Project Applicant 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 Facility. 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. Demolition of these structures would allow for future redevelopment of the Power Plant Property in a manner that is consistent with Plan Morro Bay and the Master Plan discussed below.

Master Plan for Redevelopment of the Power Plant Property

The proposed project includes a Master Plan, which establishes a vision for the redevelopment of the Power Plant Property as well as recommended improvements to pedestrian and circulation connections in the area, consistent with the requirements of Plan Morro Bay Policy LU-5.4. The Master Plan would amend the General Plan and LCP Land Use Plan land use designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The proposed Master Plan would not modify the existing land use or zoning designation on the remainder of the Power Plant Property, retaining the Visitor Serving Commercial designation and Mixed-Use Residential Overlay implemented through Plan Morro Bay, and the Visitor Serving Commercial zoning implemented through the recent comprehensive update to the Zoning Ordinance/Implementation Plan that was adopted by the City Council in November 2022 (Ordinance 654) and amended in 2023 (Ordinance 662).

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 Land Use Plan 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 Power Plant Property.
- 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, which includes 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.
- Site the BESS Facility to minimize environmental and social impacts by being located on land that has historically been used for power generation. The BESS Facility 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 Power Plant Property 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 C-9.6, C-9.7, C-9.8, and C-9.9).

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following five alternatives. Based on the alternatives analysis, Alternative 3 was determined to be the environmentally superior alternative.

- Alternative 1: No Project
- Alternative 2: Plan Morro Bay Consistency
- Alternative 3: BESS Facility Without Demolition
- Alternative 4: Reduced BESS Facility
- Alternative 5: Enclosure-Based BESS Facility

Alternative 1 (No Project) assumes the BESS Facility is not constructed and the Master Plan is not implemented. The Power Plant Property currently encompasses the idle Power Plant building and smokestacks, Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center. Under the No Project Alternative, the Power Plant building and stacks would not be demolished, the Power Plant Property would remain in its existing condition, and the Project Site's land use designation would not be modified. The No Project Alternative assumes no future development would occur on the Power Plant Property in the immediate future. The only activity on the Project Site that is assumed to take place under the No Project Alternative is routine maintenance activities that would be required to maintain the structural integrity of the existing Power Plant building and stacks.

Alternative 2 (Plan Morro Bay Consistency Alternative) assumes the BESS Facility is not constructed, and the Power Plant Property is instead redeveloped consistent with the current Visitor Serving Commercial land use designation. Consistent with Plan Morro Bay Policy LU-5.4, this alternative would continue to require implementation of a Master Plan³ prior to the approval of any future development of the Power Plant Property. The Plan Morro Bay Consistency Alternative assumes the Master Plan created for development at the Power Plant Property would not change the existing Visitor Serving Commercial land use designation on the BESS Site, instead retaining the Visitor Serving Commercial land use designation on the entirety of the Power Plant Property. However, the Master Plan could permit specific optional land use overlays at the Power Plant Property, such as a mixed-use residential overlay.

This alternative would result in demolition of the existing Power Plant building and smokestacks to prepare the Project Site for future development under the Visitor Serving Commercial land use designation. Redevelopment of the Power Plant Property with Visitor Serving Commercial uses under this alternative is assumed to occur prior to Plan Morro Bay's horizon year of 2040.

This alternative anticipates the Master Plan required under Plan Morro Bay Policy LU-5.4 would carry forward and would not modify any General Plan and/or LCP goals and policies. Accordingly, the potential environmental impacts anticipated with implementation of this alternative are largely those which are identified in the 2021 Final EIR for Plan Morro Bay, certified by the Morro Bay City Council on May 25, 2021. These impacts are discussed within the Previous Environmental Review discussions in Sections 4.1 through 4.9 of this EIR, and further detailed in the 2021 Final EIR for Plan Morro Bay.

Alternative 3 (BESS Facility Without Demolition) would include the construction and operation of a 600 MW BESS facility and adoption of a Master Plan consistent with Plan Morro Bay Policy LU-5.4; however, this alternative would exclude demolition and removal of the existing Power Plant building and stacks. Under the BESS Facility without Demolition Alternative, the existing Power Plant building and stacks would remain as they are under existing conditions. Therefore, the BESS Facility Without Demolition Alternative has the potential to result in the need for occasional routine maintenance activities for upkeep of the existing Power Plant building and stacks. In addition, retaining the existing Power Plant building and stacks would limit the future development potential for Visitor Serving Commercial uses on the remainder of the Power Plant Property envisioned in Plan Morro Bay.

Alternative 4 (Reduced BESS Facility) would include the construction and operation of a BESS Facility, demolition and removal of the existing Power Plant building and smokestacks, and adoption of a Master Plan, similar to the proposed project. However, under this reduced project alternative, the BESS Facility would include three smaller enclosed buildings, resulting in a reduced BESS Site area and 100 MW reduction in total storage capacity. Under the Reduced BESS Facility Alternative, each building would have a building area of 75,700 sf, resulting in a total building area of approximately 227,000 sf on a 21-acre BESS Site. Similar to the proposed project, the buildings would be up to 35.2 feet in height from average natural grade. Each building would house approximately 2,000 racks containing lithium-ion batteries with storage capacity of approximately 166 MW for a total storage capacity of approximately 500 MW. Construction of the Reduced BESS Facility would take 36 to 42 months, compared to the proposed project's construction schedule of 36 to 48 months. The Reduced BESS Facility Alternative would require approximately 1,000 fewer drilled pilings compared to the proposed project. In addition, the Reduced BESS Facility is expected

³ The Master Plan developed for the proposed project would be required to be revised in accordance with the anticipated buildout of the Plan Morro Bay Consistency Alternative.

to require a slight reduction in permanent operation and maintenance staff activities compared to the proposed project.⁴

Alternative 5 (Enclosure-Based BESS Facility) would include the construction and operation of a 600 MW BESS facility, demolition and removal of the existing Power Plant building and stacks, and adoption of a Master Plan, similar to the proposed project. However, instead of the three large permanent structures envisioned by the proposed project, the enclosure-based alternative would utilize 174 battery storage enclosures, each separated approximately 10 feet apart, and each with its own independent fire protection system and thermal management system. The battery storage enclosures would be approximately 15 ft tall. The Enclosure-Based BESS Facility Alternative would also only include the construction of one approximately 46,000 square foot (sf), 30-foot tall substation, instead of the three approximately 49,700 sf, 30-foot tall substations envisioned in the proposed project. Construction of the enclosure-Based BESS Facility Alternative would take 24 to 36 months, compared to the proposed project's construction schedule of 36 to 48 months. The Enclosure-Based BESS Facility Alternative would require approximately 5,500 to 6,500 drilled pilings, similar to the proposed project.

Refer to Section 5, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

Based on the Notice of Preparation (NOP) comment letters, summarized in Table 1-2, of Section 1, *Introduction*, and included as Appendix A of this EIR, issues known to be of concern to members of the public and responsible agencies include, but are not limited to, potential project impacts associated with aesthetics, air quality, cultural resources and tribal cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation. Refer to Table 1-1 for a summary of the NOP comments received, and Appendix A of this EIR for copies of the NOP comment letters.

Project Approvals

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), Modification Permit, Design Review Permit, and a General Plan and Coastal Land Use Plan Map and Zoning Map Amendment to incorporate the Master Plan and associated land use and zoning 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 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 its contractors, would be required to obtain all necessary federal, State, and local permits and approvals prior to the start of remediation and demolition activities.

⁴ Note that this Reduced BESS Facility Alternative could also be accomplished through the use of an enclosure-based approach for the BESS Facility, similar to the proposal for Alternative 5, which could result in additional reductions to the potential impacts that may result from this Alternative 4, so long as the enclosure system proposed is consistent with the development footprint and building area for the Reduced BESS Facility Alternative.

Development of the Project Site 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.

Future development projects in the Master Plan area would be required to prepare focused, project-level environmental review consistent with the requirements of CEQA, which may include mitigation to reduce potential project-level environmental impacts.

Issues Not Studied in Detail in the EIR

Section 4.10, *Effects Found Not to Be Significant*, summarizes topics from the CEQA Guidelines Appendix G environmental checklist that were determined to not have the potential to result in a significant environmental impact. Some topics were addressed in their entirety in Section 4.10, while other topics were addressed through a combination of analysis in Section 4.10 and another EIR section. The following list presents the topics addressed in their entirety within Section 4.10. As indicated therein, there is no substantial evidence that significant impacts would occur related to the following topics:

- Agricultural and Forestry Resources
- Energy
- Land Use/Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities/Service Systems
- Wildfire

The following list presents the additional issues addressed in Section 4.10. These issues represent individual components of an overarching topic included in the CEQA Guidelines Appendix G environmental checklist. For informational purposes, the overarching topic associated with each issue is shown in parentheses at the end of its respective bulleted line. As indicated in Section 4.10, there is no substantial evidence that significant impacts would occur related to the following issues:

- Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Biological Resources)
- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic ground shaking, landslides (Geology and Soils)
- Result in substantial soil erosion or loss of topsoil (Geology and Soils)
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (Geology and Soils)
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school (Hazards and Hazardous Materials)

Morro Bay Battery Energy Storage System Project

- For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area (Hazards and Hazardous Materials)
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (Hazards and Hazardous Materials)
- Violate any water quality standards or waste discharge requirements (Hydrology and Water Quality)
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (Hydrology and Water Quality)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; and/or impede or redirect flood flows (Hydrology and Water Quality)
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (Hydrology and Water Quality)
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels (Noise)
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment) (Transportation)
- Result in inadequate emergency access (Transportation)

Other issues related to Aesthetics and Visual Resources, Air Quality, Biological Resources, Cultural Resources and Tribal Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation were found to involve potentially significant impacts and are addressed in detail this EIR.

Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are evaluated against various thresholds of significance and are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level of significance despite the implementation of reasonably available and feasible mitigation measures. Pursuant to Section 15093 of the *CEQA Guidelines* (California Code of Regulations, Title 14), such an impact requires a Statement of Overriding Considerations to be issued if the project is approved.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level of significance with implementation of reasonably available and feasible mitigation measures. Pursuant to Section 15091 of the *CEQA Guidelines*, such an impact requires findings if the project is approved.

- **Less than Significant.** An impact that may be adverse, but that does not exceed the threshold level of significance and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no adverse effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-2 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Aesthetics and Visual Resources		
Impact AES-1. The project would not have a substantial adverse effect on a scenic vista. Compliance with Plan Morro Bay policies and Title 17 of the Morro Bay Municipal Code would protect scenic vistas and ensure that development under the Master Plan would not adversely affect public views. These impacts would be less than significant.	None required.	Less than significant.
Impact AES-2. The project would not result in damage to a scenic resource. The Morro Bay Power Plant building and stacks are historic resources pursuant to CEQA, but the Morro Bay Power Plant is not identified as a scenic resource in the San Luis Obispo North Coast Scenic Byway Corridor Plan, which regulates preservation of the scenic quality of SR 1. Compliance with Plan Morro Bay policies and Title 17 of the Morro Bay Municipal Code would ensure that development under the Master Plan would not result in damage to scenic resources. This impact would be less than significant.	None required.	Less than significant.
Impact AES-3. Demolition of the Morro Bay Power Plant building and stacks and development of the BESS Facility would alter, but not degrade, the visual character of public views of the Power Plant Property. Compliance with existing standards and Plan Morro Bay goals and policies would ensure that redevelopment or new development under the Master Plan complements the existing visual character and quality of Morro Bay. Therefore, the project would have less than significant impacts on visual character and quality.	None required.	Less than significant.
Impact AES-4. Demolition of the Morro Bay Power Plant building and stacks, construction and decommissioning of the BESS, and the Master Plan would not create a new source of substantial light or glare. Operation of the Proposed BESS Facility would result in new sources of light and glare; however, operational levels of light and glare would be minor, similar to existing conditions, and all lighting associated with the project and future development under the Master Plan would be shielded and directed downward in accordance with the goals and policies in Plan Morro Bay and the Morro Bay Municipal Code. This impact would be less than significant.	None required.	Less than significant.
Air Quality		
Impact AQ-1. The project would be consistent with existing rules and measures contained in the SLOAPCD 2001 Clean Air Plan. Through regulatory compliance, this impact would be less than significant.	None required.	Less than significant.
Impact AQ-2. Construction and future decommissioning of the BESS Facility and demolition of the Morro Bay Power Plant building and stacks have the potential to generate criteria air pollutant emissions that would exceed SLOAPCD’s Tier 1 and Tier 2 thresholds. Implementation of Mitigation Measures AQ-1(a) and AQ-1(b) would reduce ROG, NO _x , and DPM emissions below the applicable SLOAPCD criteria air pollutant emissions thresholds. As a result, this impact would be less than significant with mitigation incorporated.	<p>AQ-1(a): SLOAPCD Standard Mitigation Measures for Construction Equipment. The project shall implement the SLOAPCD’s “Standard Mitigation Measures for Construction Equipment.” These standard measures include:</p> <ul style="list-style-type: none"> ▪ Maintain all construction equipment in proper tune according to manufacturer’s specifications; ▪ Fuel all off-road and portable diesel powered equipment with CARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road); ▪ Use diesel construction equipment that complies with the State off-Road Regulation; ▪ Use on-road heavy-duty trucks that meet the ARB’s 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation; ▪ Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOX exempt area fleets) may be eligible by proving alternative compliance; ▪ All on and off-road diesel equipment shall not idle for more than 3 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the City’s 3 minute idling limit; ▪ Diesel idling within 1,000 feet of sensitive receptors is not permitted; ▪ Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors; ▪ Electrify equipment when feasible; ▪ Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and, ▪ Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel. <p>AQ-1(b): SLOAPCD Standard Mitigation Measures for Construction Equipment. Mobile off-road construction equipment (wheeled or tracked) greater than 50 hp used during construction of the project shall meet at least the U.S. EPA Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, the equipment shall, at a minimum, meet the Tier 3 standards. Zero-emissions construction equipment may be incorporated in lieu of Tier 4 final equipment. The Project Applicant shall ensure these requirements are incorporated into applicable bid documents, purchase orders, and contracts. Contractors shall confirm the ability to supply the compliant construction</p>	Less than significant.

Impact	Mitigation Measure (s)	Residual Impact
	equipment prior to initiation of any ground-disturbing and construction activities. A copy of each equipment’s certified tier specification or model year specification shall be available upon request at the time of mobilization of each piece of equipment	
<p>Impact AQ-3. Construction activities including demolition, site preparation, grading, building construction, paving, and architectural coating have the potential to expose sensitive receptors to substantial criteria air pollutant concentrations. Implementation of Mitigation Measures AQ-1(a) and AQ-1(b) would reduce DPM and TAC emissions below applicable screening thresholds for associated health risks. Therefore, this impact would be less than significant with mitigation incorporated.</p>	<p>Mitigation Measures AQ-1(a) and AQ-1(b) included under Impact AQ-2 would be required.</p>	<p>Less than significant.</p>
<p>Impact AQ-4. The project would not result in other emissions, such as odors or naturally occurring asbestos, that would adversely affect a substantial number of people. Impacts would be less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>
<p>Biological Resources</p>		
<p>Impact BIO-1. Construction and future decommissioning of the BESS Facility and demolition of the Morro Bay Power Plant building and stacks have the potential to result in temporary and permanent impacts to special-status plant and wildlife species. Implementation of required mitigation would reduce this impact to a less than significant level.</p>	<p>BIO-1(a): Worker Environmental Awareness Program. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status species (e.g., California red-legged frog, Blochman’s leafy daisy), nesting birds, and other sensitive biological resources that may occur within the Project Site. The specifics of this program will include identification of special-status species with potential to occur, a description of their regulatory status and habitat requirements, general ecological characteristics of any other sensitive resources, and a review of the limits of construction and measures required to avoid and/or reduce impacts to biological resources within the Project Site. A fact sheet conveying this information will also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the biologist indicating they have attended the WEAP training and understand the information presented to them. The construction foreman will be responsible to ensure crew members are aware of project boundaries and adhere to the mitigation measures designed to avoid or minimize effects to listed species, nesting birds, and other special-status species and sensitive biological resources.</p> <p>BIO-1(b): Construction General Best Management Practices. The Project Applicant and developer shall ensure implementation of the following general best management practices (BMPs) during vegetation removal, ground disturbing activities, and construction of the BESS Facility. Prior to issuance of grading and building permits, applicable best management practices shall be included on all land use, grading, and building plans.</p> <ol style="list-style-type: none"> 1. Prior to the initiation of construction activities, high-visibility orange construction fencing shall be installed along the limits of the project disturbance area to ensure avoidance of sensitive resources to the maximum extent feasible. A qualified biologist will facilitate installation of the avoidance fencing and will conduct periodic site visits to ensure that the fencing remains intact for the duration of project activities. 2. Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to biological resources. 3. Exterior lighting during any nighttime construction activities shall consist of motion sensor lighting that is shielded to prevent light pollution in adjacent wildlife habitat and ESHAs. 4. All food waste and other construction-related trash shall be contained in secured waste bins and regularly removed from the Project Site. <p>BIO-1(c): Pre-Construction Survey for Special-Status Wildlife Species. A qualified biologist approved by the City shall conduct a pre-construction survey of the Project Site and adjacent habitat no more than two weeks prior to the start of project activities. The biologist will document the presence or absence of any special-status wildlife species with potential to occur within the Project Site and/or within 50 feet of the Project Site. If special-status species are observed onsite during the pre-construction surveys, they will be allowed time to leave or be relocated prior to the initiation of construction activities. Special-status wildlife will not be handled without prior permission from the necessary regulatory agencies, if applicable. If obscure bumblebee and/or Morro Bay blue butterfly is/are detected onsite, suitable habitat (e.g., Silver Dune Lupine Scrub) impacted will be mitigated through development and implementation of a Habitat Mitigation and Monitoring Plan (HMMP), as described in Mitigation Measure BIO-1(j) which includes the required content of an HMMP. Species-specific survey requirements are addressed in BIO-1(e) through BIO-1(i) and may be superseded or added to by resource agency permits and/or incidental take authorizations.</p> <p>BIO-1(d): Biological Monitoring. A qualified biologist approved by the City shall be onsite during all vegetation removal, initial ground disturbing activities, and/or during any construction activities that may impact sensitive biological resources. The biologist will be responsible for ensuring project compliance with biologically related measures and permit conditions, relocating wildlife species out of the impact area, and surveying and documenting wildlife species occurring onsite or in the immediate vicinity. The biologist will have the authority to temporarily halt or redirect work to avoid potential impacts to special-status species or other protected biological resources. Special-status wildlife will not be handled without prior permission from the necessary regulatory agencies. Species-specific monitoring requirements are addressed in BIO-1(e) through BIO-1(i) and may be superseded or added to by resource agency permits and/or incidental take authorizations.</p> <p>BIO-1(e): Avoidance, Minimization, and/or Mitigation Measures for the California Red-legged Frog. The Project Applicant and developer shall ensure implementation of the following measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:</p>	<p>Less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<ul style="list-style-type: none"> a. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and other actions resulting in a “take” of California red-legged frog (CRLF). “Take” authorization would be applied for through Section 7 or Section 10 of the FESA. b. A City-approved biologist shall survey the Project Site no more than 48 hours before the onset of work activities. If any life stage of the CRLF is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the work site before work begins. The City-approved biologist will relocate the CRLF individuals the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with project development. The relocation site shall be in the same drainage and will be determined and approved by the USFWS prior to the capture of any CRLFs. c. As described in BIO-1(c), a City-approved biologist shall be present at the work site until all known CRLFs have been relocated (if relocation is authorized by the USFWS) and disturbance of habitat has been completed. After this time, the City-approved biologist shall designate a monitor to document on-site compliance with all measures. The City-approved biologist will ensure that the monitor receives appropriate training in the identification of CRLFs. d. Work activities shall be scheduled for times of the year when impacts to the CRLF would be minimal, to the extent feasible. For example, work that would affect dispersal habitat shall be minimized during the breeding season (November through May). e. Unless approved by the USFWS, water shall not be impounded in a manner that may attract CRLFs. f. Herbicides should not be used as the primary method used to control invasive, exotic plants. If it is determined that the use of herbicides is the only feasible method for controlling invasive plants at the Project Site, herbicides shall be applied in accordance with USFWS-approved methods. <p>BIO-1(f): Avoidance, Minimization, and/or Mitigation Measures for Special-Status Reptiles. The Project Applicant and developer shall ensure implementation of the following measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:</p> <ul style="list-style-type: none"> a. As described in BIO-1(c), prior to the onset of construction activities, a qualified biologist shall conduct focused surveys for the legless lizard and coast horned lizard within all potentially suitable habitat onsite. Cover boards will be placed within suitable habitat for such species thirty days in advance of the start of construction and shall be checked one week prior to the start of construction. If no legless lizards or coast horned lizards are observed, no further efforts are required. b. If legless lizards and/or coast horned lizards are observed onsite, the qualified biologist shall map their locations using a GPS unit with sub-meter accuracy. A technical report (or memorandum) shall be prepared and submitted to the City that documents the survey results prior to the onset of construction activities. Mapped locations of special-status reptile species shall be integrated into the WEAP training (refer to Mitigation Measure BIO-1[a]). c. If it is determined that complete avoidance of an identified legless lizard and/or coast horned lizard individual(s) is not feasible, then a qualified biologist shall carefully rake or use an equivalent method to scarify the ground surface within suitable habitat to encourage the reptiles to vacate the area prior to construction initiation. At this time, the qualified biologist may also capture and relocate lizards to suitable habitat outside the works areas. This shall occur at least 48 hours prior to the construction activities and shall be repeated if construction is halted for more than 48 hours. Alternatively, or in conjunction with the aforementioned ground-scarifying and capture/relocation efforts, the qualified biologist shall facilitate the installation of drift/silt fencing around the occupied habitat, before construction begins, to exclude the reptiles from entering the work areas. d. A qualified biologist will be present to monitor during all vegetation clearing activities and scarifying the ground surface and shall capture and relocate any legless lizards and/or coast horned lizards to suitable habitat outside the work areas. <p>BIO-1(g): Avoidance, Minimization, and/or Mitigation Measures for Special-Status Birds and Other Nesting Birds. The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:</p> <ul style="list-style-type: none"> a. Above-ground electrical transmission lines shall be designed using industry best practices to minimize bird electrocution hazards. These may include, but are not limited to, adequate phase-to-phase or phase-to-ground separation and/or appropriate insulation of components. Where insulation is not feasible near perching locations, bird deterrent materials may be used as an alternative. b. If at any time during project operations special-status bird species are observed within the work area, work shall be stopped and/or redirected to an area that would not pose a danger to the bird(s). Special-status birds will be monitored and upon its/their flight out of the work area, work activities may resume. c. If ground-disturbing and/or noise-producing activities occur within nesting bird season (i.e., February 1 through August 31), the following conditions shall be implemented to protect all nesting birds during project activities: <ul style="list-style-type: none"> 1. A pre-construction nesting bird survey shall be conducted by a qualified avian biologist no more than 14 days prior to initiation of project activities. The survey shall be conducted within the Project Site and include a 100-foot buffer for passerines and a 500-foot buffer for raptors. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in the region and shall focus on trees, vegetated areas, and other potential nesting habitat within the vicinity of the Project Site. If active nests are found, an appropriate avoidance buffer (typically 100 feet for passerine species and 500 feet for raptors) will be determined and demarcated by the biologist with high visibility material located within or adjacent to the Project Site. The nest buffer may be reduced based on the species, activities that occurred 	

Impact	Mitigation Measure (s)	Residual Impact
	<p>prior to and/or during nest building, ambient conditions (e.g., existing elevated noise due to proximity to a roadway/highway), and the biologist's professional opinion and City's concurrence.</p> <p>2. All project personnel shall be notified as to the existence of the exclusionary buffer zone and no project activities shall occur within the buffer until the avian biologist has confirmed that breeding/nesting is complete, and the young have fledged the nest. This buffer may be reduced as described above. The nest shall be monitored by the qualified avian biologist and if the monitoring biologist observes signs of distress, then they shall stop construction work within the buffer and coordinate with the City and/or one or more regulatory agencies (i.e., CDFW and USFWS) to establish additional protection measures to ensure avoidance of nest abandonment prior to the re-start of project activities within the exclusionary buffer.</p>	
	<p>BIO-1(h): Avoidance, Minimization, and/or Mitigation Measures for Pallid Bat, Townsend's Big-Eared Bat, and Big Free-tailed Bat. The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility, to avoid potential impacts to pallid bat, Townsend's big-eared bat, and big free-tailed bat:</p> <ol style="list-style-type: none"> An acoustic survey shall be conducted by a qualified biologist to identify bat species prior to the maternity roosting season (approximately mid-May to August) of the year that demolition of existing structures is scheduled, or the year prior if demolition is planned to occur before mid-May. The survey shall occur over at least three nights to determine presence/absence of bats within the structures. If bats are not detected, buildings and the stacks shall be sealed off to prevent entry of bats (exclusion materials may consist of wood, plastic, or other suitable exclusion devices). If bats are detected, the buildings and the stacks shall be partially sealed off until bats leave the structures to forage, during which time the remaining openings will be sealed off with one-way door systems installed to allow bats to leave the structures but to prevent re-entry. This procedure would only be done during the non-maternity roosting season, which is typically from September 1 to February 15. Demolition of the existing structures would not occur until a qualified biologist has determined that roosting bats are no longer present. If bats are using the Project Site as a maternity location, a qualified biologist will monitor the colony and provide a written report to the City that concludes the bats are no longer rearing young and recommends that demolition activities may commence. In this instance, demolition activities cannot occur without written approval from the City and CDFW. 	
	<p>BIO-1(i): Avoidance, Minimization, and/or Mitigation Measures for Blochman's Leafy Daisy and/or Other Special-Status Plants. The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility, to avoid potential impacts to Blochman's leafy daisy and/or other special-status plants (i.e., sticky sand verbena, Miles' milk vetch, Kellogg's horkelia, and dune ragwort).</p> <ol style="list-style-type: none"> Prior to initiation of construction activities (any vegetation removal, grubbing, or grading), a pre-construction botanical survey shall be conducted within the Silver Dune Lupine Scrub and Mixed Dune habitats onsite. This survey shall be conducted within the appropriate bloom period for Blochman's leafy daisy and the other potentially occurring special-status plants, typically June through October. The botanical survey shall be conducted by a qualified botanist. The purpose of the survey will be to document the location(s), aerial extent(s), and number(s) of individuals for Blochman's leafy daisy and other special-status plant occurrence(s) within the construction footprint. All individuals identified onsite shall be mapped using a GPS unit with sub-meter accuracy. If Blochman's leafy daisy and/or any other special-status plant species is(are) observed during the botanical survey described above, the Project Applicant shall reconfigure and redesign the development footprint to avoid impacts to special-status plants to the maximum extent feasible. Avoidance shall be accomplished by installation of high visibility fencing around areas that are occupied by Blochman's leafy daisy and/or other special-status plant species. A qualified botanist shall oversee, direct, and generally facilitate fence installation and will monitor the fencing periodically to ensure that it remains intact and is effective for the intended avoidance throughout the duration of construction activities within this location. After construction within this area is complete, the fencing may be removed by construction personnel under the supervision of the qualified botanist. If avoidance of Blochman's leafy daisy and/or any other special-status plant species is not feasible, seed shall be collected from each individual Blochman's leafy daisy and/or any other special-status plant species observed within the project footprint by a qualified botanist. Seed collection shall be conducted prior to initial grading, when seed is ripe, typically at the end and/or after the typical blooming season (e.g., August through November for Blochman's leafy daisy). In addition, individual plants may be salvaged and transplanted to containers, if feasible. The seed and/or salvaged plants would be used for future habitat restoration as mitigation for removal of Blochman's leafy daisy and/or any other special-status plant species. The HMMP prepared for the project (required in Mitigation Measure BIO-1[k]) shall include details on the seed salvage, transplantation, and habitat restoration that shall be implemented as compensatory mitigation for any impacts to Blochman's leafy daisy and/or any other special-status plant species. 	

Impact	Mitigation Measure (s)	Residual Impact
	<p>BIO-1(j): Habitat Mitigation and Monitoring Plan. The Project Applicant shall prepare a Habitat Mitigation and Monitoring Plan (HMMP) for any ESHAs, sensitive plant communities and/or sensitive plant species permanently impacted by the project. The HMMP shall be prepared by a qualified biologist/restoration ecologist and approved by the City prior to the initiation of any ground disturbing activities. At a minimum, the HMMP shall include the following:</p> <ul style="list-style-type: none"> ▪ A description of the ESHAs, sensitive plant communities and/or sensitive plant species permanently impacted by the project. ▪ An acreage calculation of all ESHAs, sensitive plant communities and/or sensitive plant species that will be permanently impacted by the project, as determined through the surveys called for in Mitigation Measure BIO-1(c) and Mitigation Measure BIO-1(i), as well as Mitigation Measure BIO-2. ▪ A plant palette and methods of salvaging, propagating, seeding, and/or planting any sensitive plant species (e.g., Blochman’s leafy daisy) or sensitive plant communities (e.g., silver dune lupine scrub) permanently impacted by the project. ▪ Compensatory replanting for the removal of all native trees that are 6 inches or greater at 54 inches above grade, as per City and LCP requirements. The trees shall be irrigated for a period of three years, or until deemed self-sufficient by a qualified biological monitor. ▪ The locations for onsite or offsite mitigation (mitigation areas) for all permanent impacts to ESHAs, sensitive plant communities and/or sensitive plant species. Onsite mitigation through enhancement, restoration, and/or creation of suitable habitat on the Project Site or other areas of the Power Plant Property is preferred. The City may also approve off-site mitigation at a location in the same watershed that meets applicable City policy requirements and resource agency permitting requirements. Mitigation for permanent impacts shall be at a minimum ratio of 3:1 (area enhanced, restored, and/or created: area/individuals permanently impacted). ▪ Measures to avoid inadvertent impacts to sensitive plant or wildlife species in connection with establishing and maintaining onsite or offsite mitigation. ▪ A description of the activities necessary to ensure the establishment, long-term success and maintenance of any onsite or offsite mitigation areas. Such necessary activities may include weed abatement, propagating and planting, soil preparation, erosion control, and periodic monitoring. ▪ A schedule for periodic maintenance and monitoring activities. <p>Contingency and adaptive management measures to address unforeseen changes in conditions on the Project Site and/or mitigation areas.</p>	
<p>Impact BIO-2. Project construction, demolition, and future decommissioning activities have the potential to result in direct and indirect impacts to riparian habitats and sensitive natural communities. implementation of required mitigation would reduce this impact to a less than significant level.</p>	<p>Implement Mitigation Measures BIO-1(a), BIO-1(b), BIO-1(d), and BIO-1(j).</p> <p>BIO-2: Avoidance, Minimization, and Mitigation Measures for Sensitive Natural Communities and Environmentally Sensitive Habitat Areas. The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:</p> <ol style="list-style-type: none"> a. All development in and impacts to sensitive plant communities and/or ESHAs shall be avoided to the maximum extent feasible. b. Prior to the start of project construction, all sensitive plant community and/or ESHA boundaries that are not separated from work/staging areas or access routes by the existing permanent fencing shall be clearly delineated with orange construction fencing or other high visibility materials. c. The use of heavy equipment and vehicles shall be limited to the Project Site limits, existing roadways, and defined staging areas/access points with the exception of construction activities in support of the multi-use path along the Embarcadero. No unauthorized personnel or equipment shall be allowed within delineated sensitive plant communities and/or ESHAs. d. Drainage plans shall be designed to prevent runoff into adjacent sensitive plant community and/or ESHA. e. The following BMPs shall be implemented throughout the construction phase of the project to curtail the spread of invasive plant species: <ul style="list-style-type: none"> ▪ No fill shall be imported and soils currently existing on-site shall be used for fill material. If the use of imported fill material is necessary, the imported material must be obtained from a source that is known to be free of invasive plant species; or the material must consist of purchased clean material such as crushed aggregate, sorted rock, or other similar substances. ▪ Any removed topsoil shall be stockpiled and redeposited onsite or transported to a certified landfill for disposal. ▪ All erosion control materials including straw bales, straw wattles, or mulch used on-site shall be free of invasive species seed to the maximum extent practicable. ▪ Exotic and invasive plant species shall be excluded from any erosion control seed mixes and/or landscaping plant palettes associated with the project. f. The use of heavy equipment to construct the pathway under the Rookery ESHA shall be minimized to the greatest extent feasible and shall be scheduled to avoid the nesting bird season, typically February 1 through August 31. g. The HMMP prepared for the project (required in Mitigation Measure BIO-1[k]) will include compensatory mitigation for any impacts to Silver Dune Lupine Scrub and ESHAs. 	<p>Less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact BIO-3. The Project Site does not contain wetlands but is adjacent to freshwater wetlands and estuarine wetlands of Morro Bay. Project construction, demolition, and future decommissioning activities could potentially indirectly impact wetlands. However, with implementation of a SWPPP in compliance with the NPDES Construction General Permit, potential impacts to wetlands would be less than significant.</p>	<p>Implement Mitigation Measures BIO-1(b), BIO-1(d), and BIO-2.</p>	<p>Less than significant.</p>
<p>Impact BIO-4. Several species may use the Project Site during movement or migration throughout the region. This impact would be less than significant with mitigation incorporated.</p>	<p>Implement Mitigation Measures BIO-1(b) through BIO-1(h) and BIO-2.</p>	<p>Less than significant.</p>
<p>Impact BIO-5. The project would potentially conflict with Plan Morro Bay and the Morro Bay Municipal Code. However, implementation of required mitigation to minimize potential impacts on biological resources would ensure the project would not conflict with local policies or ordinances protecting biological resources. This impact would be less than significant with mitigation incorporated.</p>	<p>Implement Mitigation Measures BIO-1(a) through BIO-1(j) and BIO-2.</p>	<p>Less than significant.</p>
<p>Cultural Resources and Tribal Cultural Resources</p>		
<p>Impact CUL-1. The project would result in the demolition of buildings and structures that contribute to the Morro Bay Power Plant’s eligibility for the National Register of Historic Places and California Register of Historical Resources. As a result, the project would result in a significant and unavoidable impact to historical resources.</p>	<p>CUL-1(a): Building Recordation. Impacts resulting from the proposed demolition of the Morro Bay Power Plant’s building and boiler stacks shall be minimized through archival documentation of the as-built and as-found condition. Prior to issuance of demolition permits, the lead agency shall ensure that the existing Historic American Engineering Record (HAER) be updated and shall document the buildings and structures proposed for demolition. The Level-III documentation shall be completed to National Park Service (NPS) Heritage Documentation Program-like standards and include high resolution digital photographic recordation, an outline format historical report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior’s Professional Qualification Standards for History and/or Architectural History. The documentation shall be offered as donated material by the lead agency to repositories, such as the Historical Society of Morro Bay and the San Luis Obispo County Historical Society, that will make it available for current and future generations. Receiving repositories may specify preferred format, including digital copies, to accommodate their capacity and/or needs. Original archival quality copies of the documentation also shall be submitted to the City of Morro Bay and the Morro Bay Public Library, where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Morro Bay or designee.</p> <p>CUL-1(b): Interpretative Display. Impacts resulting from the demolition of the Morro Bay Power Plant shall be minimized through the installation of a high-quality, on-site interpretive display in a publicly accessible location within the Power Plant Property at the Project Applicant’s expense to be installed within one year of the removal of the structures proposed for demolition as part of the project. The display shall focus on the Power Plant’s history, particularly its engineering features. The content for the interpretive display shall be prepared by a historian, and the interpretive display shall be designed by a professional exhibit designer. Historic information contained in the Historical Resource Evaluation can serve as the basis for the interpretive display. The goal of the interpretive display will be to educate the public about the Power Plant’s historic themes and associations within broader cultural contexts. The content of the display shall be approved by the City of Morro Bay or designee.</p>	<p>Significant and unavoidable.</p>
<p>Impact CUL-2. The project would involve ground disturbance and construction activities that could impact buried archaeological resources. This impact would be less than significant with mitigation incorporated.</p>	<p>CUL-2(a): Cultural Resource Avoidance. To minimize potential impacts to buried cultural deposits, the Master Plan shall specify that new development on the Morro Bay Power Plant Property shall be designed and engineered to minimize disturbance below the uppermost five feet of soil at the Project Site. This recommendation is consistent with Policy C-2.3 of Plan Morro Bay’s Conservation Element.</p> <p>CUL-2(b): Construction Monitoring Treatment Plan. A Construction Monitoring Treatment Plan shall be developed and implemented to ensure that any new discoveries of archaeological materials are adequately recorded, evaluated, and if significant, mitigated. The Construction Monitoring Treatment Plan shall provide the following:</p> <ul style="list-style-type: none"> h. All ground disturbances shall be monitored by a qualified archaeologist and Native American observer. i. Procedures for notifying the City and other involved or interested parties in case of a new discovery. The qualified archaeologist and/or Native American observer shall have the authority to temporarily halt or redirect construction in the vicinity of any potentially significant discovery to allow for adequate recordation and evaluation. j. Preparation and approval of a plan that identifies procedures that shall be used to promptly record, evaluate, and mitigate unanticipated discoveries of archaeological materials during ground disturbing construction activities with a minimum of delay. Procedures may include, but would not be limited to, a temporary work stoppage within the vicinity of the unanticipated discovery and a Phase II Archaeological Investigation to assess the California Register of Historical Resources eligibility of the unanticipated discovery, if warranted. k. Procedures that shall be followed in case of discovery of human remains. In the event that isolated human remains are encountered, consultation with the most likely Native American descendant, pursuant to Public Resources Code Section 5097.97 and 5097.98, shall apply. l. Results of the monitoring program shall be documented in a technical report after completion of all ground disturbances. <p>CUL-2(c): Worker’s Environmental Awareness Program. A qualified archaeologist shall be retained to conduct Worker Environmental Awareness Program training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. The training shall be conducted by an archaeologist who meets or exceeds the Secretary of Interior’s Professional Qualification Standards for archaeology (NPS 1983) and a Native American representative. Archaeological sensitivity training shall include a description of the types of cultural material that</p>	<p>Less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<p>may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find of archaeological materials.</p> <p>CUL-2(d): Cultural Resource Monitoring. All construction-related ground disturbance, including clearing/grubbing, shall be monitored by a qualified archaeologist and a Native American representative, consistent with the Construction Monitoring Treatment Plan prepared under Mitigation Measure CUL-2(b). Depending on the type of work, multiple teams of monitors may be necessary to observe construction activities occurring in separate areas. Although sterile deposits were encountered up to 10 feet below surface, monitoring below 5 feet is required due to the variation in fill cover and the unpredictable nature of the depth of sterile soils in the areas. In the event of an unanticipated discovery of archaeological materials during ground disturbing construction activities, the Construction Monitoring Treatment Plan may require the implementation of procedures including, but not limited to, a temporary work stoppage in the vicinity of the unanticipated discovery and a Phase II Archaeological Investigation.</p> <p>CUL-2(e): Phase III Data Recovery Excavations. In the event that prehistoric materials associated with CA-SLO-2124 or CA-SLO-16 are encountered during construction-related ground disturbances, a Phase II Archaeological Testing and Evaluation would be required. If the materials are determined to be significant and avoidance is not possible, a Phase III Data Recovery Excavation would be required. The Phase III Data Recovery Excavation will collect and analyze data from cultural resource deposits and loci, to preserve important information that will be lost during construction activities.</p> <p>The Phase II Archaeological Testing and Evaluation and Phase III Data Recovery Excavations shall be directed by a qualified archaeologist, and the Phase III Data Recovery Excavations shall be carried out in accordance with a research design and testing plan prepared in advance by the qualified archaeologist and approved by the City of Morro Bay and consulting Native American tribes, as applicable. Data recovery investigations shall use a combination of excavation techniques such as excavation units and collection units with the number and location of each testing technique to be determined once Phase III Data Recovery Excavations commence.</p> <p>Any formed tools exposed during Phase III Data Recovery Excavations shall be collected. If archaeological features are exposed (including but not limited to hearths, storage pits, or midden deposits), each feature shall be exposed, recorded, and sampled according to standard archaeological procedures. Organic remains shall be dated using the radiocarbon method and technical analyses of plant remains, bone and shell dietary debris, and other important materials shall also be performed. A final technical report shall be prepared that describes field and laboratory methods, results of technical analysis of recovered materials, and site interpretations. Artifacts, records, and other associated materials shall be deposited with an appropriate curation facility following completion of the work; the Project Applicant shall be responsible for all curation costs.</p>	
<p>Impact CUL-3. Construction of the project would involve ground disturbing activities such as grading and surface excavation, which have the potential to unearthen or adversely impact previously unidentified human remains. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>
<p>Impact CUL-4. Project construction activities have the potential to disturb buried tribal cultural resources. This impact would be less than significant with mitigation incorporated.</p>	<p>Implementation of Mitigation Measures CUL-2(a) through CUL-2(e), listed above under Impact CUL-2, would be required.</p>	<p>Less than significant.</p>
<p>Geology and Soils</p>		
<p>Impact GEO-1. The Project Site is in an area with the potential for ground shaking, which can cause liquefaction, settlement, lateral spreading, subsidence, and/or collapse in areas with loose sand or silt where groundwater is shallow. With implementation of mitigation requiring the Project Applicant to implement project-specific design recommendations to treat the Project Site in such a manner as to address seismically induced geologic hazards, this impact would be reduced to a less than significant level.</p>	<p>GEO-1: Geotechnical Assessments. Future development proposals on the Power Plant Property, including the BESS Facility, shall require a project-specific geotechnical assessment to be prepared by a qualified engineer prior to issuance of grading permits. Geotechnical assessments shall include onsite sampling of existing soil to ascertain current conditions and characterize the potential for risks associated with liquefaction (such as lateral spreading, sand boils, etc.) and implications for future building foundation elements (including drilled piles). The analysis of the onsite potential for liquefaction, settlement, lateral spreading, and the presence of expansive soils, will be based on laboratory results generated in accordance with current procedures and applicable State and local construction, engineering, and geotechnical building standards at the time the assessment is prepared. Project design and construction shall incorporate all recommendations of the project-specific geotechnical assessment by a California-licensed geotechnical engineer. The design shall be prepared by a California-licensed engineer, and shall comply with current State and Local Building Codes and Department of Transportation design standards. The design of all building foundations, subgrades, and transportation infrastructure shall be such that they can withstand existing conditions, or the site shall be treated in such a manner as to address the conditions.</p> <p>Suitable measures to reduce impacts include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ▪ Specialized design of foundations by a structural engineer ▪ Removal or treatment of liquefiable soils ▪ In-situ densification of soils or other alterations to soil characteristics ▪ Excavation and recompaction of onsite or imported soils ▪ Treatment of existing soils with fixing agents prior to recompaction 	<p>Less than significant.</p>
<p>Impact GEO-2. The Project Site is in an area with expansive soils with the potential to shrink and swell. With implementation of mitigation requiring the Project Applicant to implement project-specific design recommendations to treat the Project Site in such a manner as to address expansive soil conditions, this impact would be reduced to a less than significant level.</p>	<p>Implement Mitigation Measure GEO-1.</p>	<p>Less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact GEO-3. Construction of the BESS Facility has the potential to impact previously undiscovered paleontological resources during mass grading on the Project Site. With implementation of mitigation requiring the Project Applicant to establish a protocol to follow if a paleontological resource is encountered during project construction, this impact would be reduced to a less than significant level.</p>	<p>GEO-2: Paleontological Worker Environmental Awareness Program. Future development proposals on the Power Plant Property, including the BESS Facility, shall require a paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of construction, a Qualified Professional Paleontologist (as defined by the Society for Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources [SVP 2010]) or their designee shall conduct a paleontological WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.</p> <p>GEO-3: Unanticipated Discovery of Paleontological Resources. In the event a fossil is discovered during construction of a project on the Power Plant Property, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a Qualified Professional Paleontologist. The Project Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant, the applicant shall retain a Qualified Professional Paleontologist to direct all mitigation measures related to paleontological resources. The Qualified Professional Paleontologist shall design and carry out a data recovery plan consistent with the SVP (2010) standards.</p>	<p>Less than significant.</p>
Greenhouse Gas Emissions		
<p>Impact GHG-1. Demolition of the Morro Bay Power Plant Building, and construction, operation, and decommissioning of the BESS Facility would not generate GHG emissions that exceed applicable GHG thresholds. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>
<p>Impact GHG-2. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>
Hazards and Hazardous Materials		
<p>Impact HAZ-1. Construction and Operation of the BESS Facility, demolition of the Morro Bay Power Plant building and stacks, and future land uses developed under the Master Plan would include routine transport, use, storage, and disposal of hazardous materials. Compliance with applicable federal, State, and local laws, regulations, standards, and guidelines related to the handling, Transport, disposal, and storage of hazardous materials would minimize the risk of public exposure to these substances and reduce the risk of significant hazards to the public or the environment from hazardous materials. This impact would be less than significant.</p>	<p>None required.</p>	<p>Less than significant.</p>
<p>Impact HAZ-2. Portions of the Project Site are known to contain soil contaminants including metals and petroleum. Project construction and operational activities could expose construction workers, future BESS Facility employees, and the environment to contaminants, resulting in potentially significant impacts. Implementation of Mitigation Measures HAZ-1 and HAZ-2, which require implementation of all remedial measures and soil management practices described in the DTSC-approved SMP, would reduce construction and operational hazardous material impacts to a less than significant level.</p>	<p>HAZ-1: DTSC Regulatory Agency Submittal and Cleanup/Remediation. Prior to commencement of construction/grading activities and/or demolition activities at the Project Site, the Project Applicant, as well as future applicants for development proposals on the Power Plant Property, shall submit the following documents to the DTSC project manager of the open Corrective Action and Cleanup Program Site cases:</p> <ul style="list-style-type: none"> ▪ Current development plan and any modifications to the development plan ▪ All environmental documents completed for the project, including the April 2023 Hazardous Materials Technical Study ▪ All future environmental documents completed for the project <p>Upon submittal of the information above, the DTSC may require actions such as: development of subsurface investigation workplans; completion of soil, soil vapor, and/or groundwater subsurface investigations; installation of soil vapor or groundwater monitoring wells; soil excavation and offsite disposal; completion of human health risk assessments; development of a new LUC for AOC 7 or an expansion of the existing AOC 1 LUC to include AOC 7; and/or completion of remediation reports or case closure documents. Subsurface soil, soil vapor, and groundwater investigations, if required, shall be conducted in accordance with a sampling plan that shall be reviewed and approved by the DTSC. Documentation of compliance with applicable DTSC requirements shall be submitted to the City and reviewed by the Project Applicant prior to issuance of grading permits.</p> <p>It should also be noted that the DTSC may determine that EHS or the RWQCB may be best suited to perform the cleanup oversight agency duties for the assessment and/or remediation of this project. Should the cleanup oversight agency be transferred from the DTSC to EHS or RWQCB, this and other mitigation measures will still apply.</p> <p>HAZ-2: Soil Management Plan and Land Use Covenant. Future project applicants under the Master Plan that propose soil or ground disturbing activities within AOC 7 shall retain a qualified environmental consultant to prepare an SMP to address potential contamination in AOC 7 that has not yet been assessed. The SMP shall address:</p> <ul style="list-style-type: none"> ▪ On-site handling and management of impacted soils or other impacted wastes (e.g., stained soil, soil, or groundwater with solvent or chemical odors) if such soils or impacted wastes are encountered, and ▪ Specific actions to reduce hazards to construction workers and offsite receptors during the construction phase. <p>The SMP shall establish remedial measures and soil management practices to ensure construction worker safety, the health of future workers and visitors, and the off-site migration of contaminants from the project alignment. These measures and practices shall include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Stockpile management including stormwater pollution prevention and the installation of BMPs ▪ Proper disposal procedures of contaminated materials 	<p>Less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<ul style="list-style-type: none"> ▪ Monitoring and reporting ▪ A health and safety plan for contractors working at the site that addresses the safety and health hazards of each phase of site construction activities with the requirements and procedures for employee protection ▪ The health and safety plan will also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction. <p>The DTSC shall review and approve the SMP prior to construction (grading or other ground or soil disturbing) activities at AOC 7. The City shall review and approve the SMP prior to issuance of grading permits for future projects under the Master Plan. The SMP shall be implemented during construction at AOC 7.</p>	
<p>Impact HAZ-3. Construction and demolition activities and staging areas would be limited to the Project Site and would not require roadway closures or detours that could affect emergency response and evacuation. Implementation of the proposed BESS Facility safety standards and features, as well as response features required by the MBFD, and compliance with the provisions of the Emergency Response Plan would ensure project construction, operation, and future decommissioning activities would not substantially impair an adopted emergency response or emergency evacuation plan. This impact would be less than significant.</p>	None required.	Less than significant.
<p>Impact HAZ-4. The Project Site is located in a Tsunami Hazard Area and is subject to flooding risk. However, implementation of the proposed safety standards and features, CBC structural design standards, local, State and federal regulations regarding the use, storage, and disposal of hazardous materials, and the required Tsunami Response Plan, as well as compliance with the provisions of the Emergency Response Plan, would collectively minimize the potential for the project to release pollutants due to project inundation. These impacts would be less than significant.</p>	None required.	Less than significant.
Noise		
<p>Impact NOI-1. Project construction, future decommissioning, and demolition activities would not result in a substantial temporary increase in ambient noise levels in excess of applicable noise standards. Operation of the BESS Facility would not result in a substantial permanent increase in ambient noise levels in excess of applicable noise standards. These impacts would be less than significant.</p>	None required.	Less than significant.
<p>Impact NOI-2. Construction and demolition activities would not result in the generation of excessive groundborne vibration or groundborne noise levels. This impact would be less than significant.</p>	None required.	Less than significant.
Transportation		
<p>Impact TRA-1. Operation of the BESS Facility and future land uses developed under the Master Plan would implement planned circulation improvements envisioned in the Plan Morro Bay Circulation Element. This impact would be less than significant.</p>	None required.	Less than significant.
<p>Impact TRA-2. Operation of the BESS Facility would not result in new vehicle travel that would exceed the applicable vehicle miles travelled (VMT) screening criteria. Future development under the Master Plan would continue to result in long-term VMT, consistent with the conclusions of the 2021 Final EIR for Plan Morro Bay. However, the change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial would substantially reduce long-term increase in VMT associated with future development of the Master Plan area. As a result, this impact would be less than significant.</p>	None required.	Less than significant.

1 Introduction

This document is an Environmental Impact Report (EIR) for a proposed 600-megawatt (MW) battery energy storage system (BESS), demolition of the existing Morro Bay Power Plant building and Stacks, and adoption of a Master Plan (hereafter referred to as the “Morro Bay Battery Energy Storage System Project,” “proposed project,” or “project”) on a 43-acre portion of the former Morro Bay Power Plant Property (Project Site) located at 1290 Embarcadero in Morro Bay, California. The 600-MW BESS would be constructed on a 24-acre portion of the Project Site (BESS Site) that is vacant but was previously developed with above-ground fuel oil storage tanks. The Master Plan would amend the City of Morro Bay’s General Plan and Local Coastal Program land use designation for the 24-acre BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The Master Plan would not modify the existing land use designation on the remainder of the former Power Plant Property. 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 inactive stacks immediately southwest of the Power Plant building that would be demolished as part of the project.

This section discusses (1) the project and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) the lead, responsible, and trustee agencies; and (5) the environmental review process required under the California Environmental Quality Act (CEQA). The project is described in detail in Section 2, *Project Description*.

1.1 Purpose and Legal Authority

The proposed project requires the discretionary approval of the Morro Bay City Council; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

“...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

This EIR has been prepared as a project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:

“This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.”

In 2021, the City of Morro Bay (City) adopted Plan Morro Bay, which serves as the City’s General Plan and Local Coastal Program (LCP) Land Use Plan. Under Plan Morro Bay (also referred to herein as the General Plan and LCP Update), the land use designation of the Power Plant Property was changed from Coastal Dependent Industrial to Visitor Serving Commercial. In addition, Policy LU-5.4 of Plan Morro Bay requires a Master Plan for the redevelopment of the Power Plant Property and surrounding area. The required Master Plan, which is discussed in in Section 2, *Project Description*, Subsection 2.6.3, *Master Plan for Redevelopment of the Power Plant Property*, functions as a forward-looking planning document, supplementing Plan Morro Bay to establish a vision for the

redevelopment of the Power Plant Property. The Master Plan is being completed in two phases. The current phase (Phase 1) includes amendments to the General Plan and LCP Land Use Plan designations necessary to support the requested General Plan and Coastal Land Use Plan Map Amendment, but does not enable future development on the Power Plant Property aside from the development components included in this EIR – the BESS Facility, connection to the existing PG&E switchyard, and demolition and removal of the existing Power Plant building and stacks, which are described in detail in Section 2, *Project Description*. Phase 2 of the Master Plan will establish future site-specific planning and programming of the remainder of the Power Plant Property. Phase 1 of the Master Plan would not preclude other development on the remainder of the Power Plant Property under Phase 2. Any future development on the Power Plant Property under the Master Plan would require CEQA review on a project-by-project basis at the time any such development is proposed and prior to its approval.

A Program EIR was prepared for Plan Morro Bay in 2021 to analyze the effects of implementation of Plan Morro Bay as a whole, including land use designation changes and policies guiding future development of the Power Plant Property. The Final Plan EIR for Plan Morro Bay (SCH# 2017111026) was certified by the City Council on May 25, 2021. Pursuant to Sections 15168 (Program EIR), 15152 (Tiering), and 15385 (Tiering) of the *CEQA Guidelines*, Title 14 of the California Code of Regulations, this document has been prepared as a Project-level EIR that tiers from the 2021 Final EIR for Plan Morro Bay. To the extent that the 2021 Final EIR adequately analyzed environmental impacts from the development of the Project Site, this Project-level EIR relies on that analysis and/or incorporates the 2021 Final EIR by reference (where applicable), focusing on project-specific effects that were not examined as significant effects on the environment in the 2021 Final EIR.

This EIR has been prepared to serve as an informational document for the public and City of Morro Bay decision makers. The approval process for this EIR will include public hearings before the Planning Commission and City Council to consider certification of a Final EIR and approval of the project.

1.2 Environmental Scoping

The City of Morro Bay distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on June 3, 2022 and ending on July 3, 2022. In addition, the City held a virtual EIR Scoping Meeting via Zoom on June 21, 2022, as well as an in-person meeting on June 29, 2022 at the Veteran's Memorial Building. The meetings, held from 4:00 PM to 5:30 PM, were aimed at providing information about the project to members of public agencies and soliciting feedback from interested stakeholders and residents/community members. The City received letters from two agencies and eleven interested stakeholders in response to the NOP during the public review period, as well as various verbal comments during the EIR Scoping Meetings. The NOP and NOP responses received are presented in Appendix A of this EIR. Table 1-1 on the following page summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.

Table 1-1 NOP Comments and EIR Response

Committer	Comment/Request	How and Where It Was Addressed
Agency Comment Letters		
Native American Heritage Commission (NAHC)	<p>States that the proposed project is subject to the requirements and provisions under Assembly Bill (AB 52) and Senate Bill 18 (SB 18) for tribal cultural resources and describes the requirements to comply with AB 52 and SB 18.</p> <p>Describes the NAHC recommendations for cultural resource assessments.</p>	<p>Consultation required by AB 52 and SB 18 was carried out by the City of Morro Bay. Section 4.4, <i>Cultural Resources and Tribal Cultural Resources</i>, includes a summary of the project's compliance with the requirements and provisions under AB 52 and SB 18, and evaluates the potential for impacts to tribal cultural resources.</p>
California Department of Fish and Wildlife (CDFW)	<p>Describes CDFW's roles and responsibilities for management of natural resources and CDFW's understanding of the proposed project. Requests reporting of any special status species or natural communities identified during project surveys to the California Natural Diversity Database (CNDDDB) and summarizes applicable filing fees that would be required if the project is found to have the potential to impact biological resources.</p> <p>Recommends the EIR evaluate the potential for impacts to special status species, including steelhead, western snowy plover, monarch butterfly, and pallid bat, as well as nesting birds.</p> <p>Recommends the EIR evaluate the potential for impacts to waters of the State and United States, as well as lakes and streambeds, including those that are ephemeral or intermittent.</p> <p>Recommends the EIR include a cumulative analysis of potential impacts to biological resources.</p>	<p>Section 4.3, <i>Biological Resources</i>, evaluates the potential for impacts to special status species, natural communities, and waters of the State and United States, as well as potential cumulative impacts to biological resources.</p>
Public Comment Letters		
Mitchell M. Tsai	<p>Requests that the City provide all notices related to the project.</p> <p>Recommends that construction of the project be completed by a local skilled and trained workforce to reduce greenhouse gas (GHG) and air pollutant emissions and traffic impacts and to provide economic benefits.</p>	<p>The City of Morro Bay will add the commenter to the list of parties who have requested notification related to the project.</p> <p>GHG and air pollutant emissions associated with project construction, including worker trips, are discussed in Section 4.6, <i>Greenhouse Gas Emissions</i>, and Section 4.2, <i>Air Quality</i>. Traffic impacts of construction are addressed in Section 4.9, <i>Transportation</i>. Comments related to skilled and trained workforce policies and requirements do not relate to the environmental analysis. However, they will be forwarded to City decision makers for their consideration.</p>

City of Morro Bay
Morro Bay Battery Energy Storage System Project

Commenter	Comment/Request	How and Where It Was Addressed
Joe Ingraffia	<p>Requests information regarding fire prevention and suppression technology to address the potential for particulate substances, including lithium ash, to spread as a result of fire.</p> <hr/> <p>Requests information regarding the consequences of exposure to particulate substances, including lithium ash.</p>	<p>The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i>, and the potential for fires and release of pollutants is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The Morro Bay Fire Department (MBFD) has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p> <hr/> <p>The potential for impacts related to the release of pollutants is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>.</p>
Betty Winholtz	<p>Requests clarification of the Project Site access.</p> <hr/> <p>States that the policies and future land uses related to the redevelopment of the former Morro Bay Power Plant property discussed in the Final Plan Morro Bay EIR seems to contradict building a BESS on the project site.</p> <p>States that the Final Plan Morro Bay EIR selected Alternative 2 as the environmentally superior alternative regarding the future redevelopment of the former Morro Bay Power Plant property.</p> <hr/> <p>Requests that the EIR discuss how contamination from the former uses on the Project Site will be cleaned up to prevent groundwater contamination.</p> <hr/> <p>Asks whether the City of Morro Bay Comprehensive Emergency Response Plan will be revised to include operation of the proposed BESS.</p> <hr/> <p>Asks whether the removal of the former Morro Bay Power Plant stacks has already been permitted.</p> <hr/> <p>Comments that the Final Plan Morro Bay EIR assumes that the stacks would remain in place on the Project Site.</p>	<p>Section 2, <i>Project Description</i>, provides details regarding site access. Section 4.10, <i>Effects Found Not to be Significant</i>, include a discussion of transportation-related hazards associated with geometric design features (e.g., sharp curves or dangerous intersections).</p> <hr/> <p>Section 2, <i>Project Description</i>, describes the Master Plan, which would change the land uses allowed on a 24 acre portion of the Project Site, from what was evaluated in Plan Morro Bay. The potential impacts of such land use changes are discussed throughout this EIR. Consistency with the policies contained in Plan Morro Bay is addressed in Section 4.10, <i>Effects Found Not to be Significant</i>. Sections 4.1, <i>Aesthetics</i>, through 4.9, <i>Transportation</i>, address project-specific effects that were not examined as significant effects on the environment in the Final EIR for Plan Morro Bay.</p> <hr/> <p>Contamination and cleanup procedures are addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>.</p> <hr/> <p>Emergency response procedures are addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p> <hr/> <p>Permits for the removal of the Power Plant stacks would not be granted until certification of this EIR and approval of the project.</p> <hr/> <p>The potential visual impacts of demolition of the Power Plant building and stacks is addressed in Section 4.1, <i>Aesthetics</i>.</p>

Commenter	Comment/Request	How and Where It Was Addressed
	Asks whether the proposed project will require a General Plan Update.	The project would require a General Plan and LCP Land Use Plan Map Amendment to incorporate the Master Plan and associated land use designations into Plan Morro Bay, as described in Section 2, <i>Project Description</i> . The Master Plan would amend the General Plan and LCP Land Use Plan designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). Plan Morro Bay Policy LU-5.4 requires a Master Plan to be incorporated into the LCP via a Land Use Plan amendment pursuant to Chapter 3 of the Coastal Act prior to any CDP processing for associated development on the Power Plant Property.
Nicole Dorfman	Expresses opposition to the proposed BESS component of the project.	The comment does not relate to the environmental analysis of the project. However, it will be forwarded to City decision makers for their consideration.
	Expresses concerns about the potential for a BESS fire and release of toxic materials.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fire and the release of pollutants is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Asks if the City has considered the pros and cons of the project.	The purpose of the EIR is to disclose the potential environmental impacts of the project to members of the public and City decision makers, including the Planning Commission and City Council. Potential environmental impacts are discussed throughout this EIR.
Terry Simons	Expresses concerns about the fire safety of the proposed BESS and the ability of the fire department to adequately respond in the event of an emergency.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fires is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> , and the potential for environmental impacts to fire protection services is discussed in Section 4.10, <i>Effects Found Not to be Significant</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Asks if there will be a review of the safety systems to be included in the BESS	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . As discussed therein, a multi-tiered safety system would be developed in

Commenter	Comment/Request	How and Where It Was Addressed
		consultation with the MBFD. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Asks if the EIR will address economic benefits of the proposed project in the context of the associated risks of the proposed project.	The benefits of the project are discussed in Section 2, <i>Project Description</i> . Economic effects are typically not considered physical environmental effects under CEQA. However, Section 6, <i>Other CEQA Required Topics</i> , evaluates the potential for the project's economic benefits to result in physical environmental effects.
	Requests that the EIR address conflicts between the project and the Local Coastal Program and zoning, including policies related to visual and environmental objectives (such as ESHA preservation).	Section 2, <i>Project Description</i> , describes the Master Plan, which will describe land use changes that would be necessary to ensure the project would be consistent with the General Plan and Local Coastal Plan. Consistency with the Local Coastal Plan and zoning code is addressed in Section 4.10, <i>Effects Found Not to be Significant</i> . Consistency with visual policies contained in the Local Coastal Plan are addressed in Section 4.1, <i>Aesthetics</i> . Consistency with other environmental objectives related to specific resource areas, such as special habitat, are addressed as applicable in Section 4.2, <i>Air Quality</i> , through Section 4.10, <i>Effects Found Not to be Significant</i> .
	Requests that the EIR consider the future retirement of the BESS to ensure that unresolved environmental damage does not occur when the BESS is no longer in operation.	The EIR describes the potential for the BESS Facility to be decommissioned at the end of its operating life in Section 2, <i>Project Description</i> . The EIR includes analysis of the potential environmental consequences of future BESS Facility decommissioning in Section 4.1, <i>Aesthetics</i> , through Section 6, <i>Other CEQA Required Topics</i> .
Jeff Heller	Expresses concerns about visual impacts of the project and suggests planting mature Monterey cypress trees around the site perimeter to screen the development.	Section 2, <i>Project Description</i> , includes details about the landscaping and visual screening on the Project Site. The potential for visual impacts is discussed in Section 4.1, <i>Aesthetics</i> .
	Asks if there will be archaeological or paleontological resources on the project site.	The potential for impacts to archaeological resources is addressed in Section 4.4, <i>Cultural Resources and Tribal Cultural Resources</i> , and the potential for impacts to paleontological resources is discussed in Section 4.5, <i>Geology and Soils</i> .
	States that the project site is subject to moderate potential liquefaction.	Potential environmental hazards related to liquefaction are addressed in Section 4.5, <i>Geology and Soils</i> .
	States that the project site is within the 100-year flood zone, tsunami inundation zone, and is subject to sea level rise. Asks	The potential for flooding at the Project Site is addressed in Section 4.7, <i>Hazards and Hazardous</i>

Commenter	Comment/Request	How and Where It Was Addressed
	<p>how the BESS will be protected from potential flooding impacts.</p> <p>Expresses concerns about the potential for fire, explosions, and the release of pollutants in the event of BESS failure.</p> <p>Expresses concerns that the existing street network is inadequate for construction traffic, emergency vehicle access, and tourism traffic. Suggests that improvements to vehicular connections in the project vicinity should be included as part of the project.</p>	<p><i>Materials</i>, and Section 4.10, <i>Effects Found Not to be Significant</i>.</p> <p>The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i>. The potential for fires, explosions, and release of pollutants is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p> <p>As described in Section 2, <i>Project Description</i>, the project would implement a Transportation Management Plan during construction to minimize the potential impacts of construction on the circulation system. In addition, potential traffic impacts, including during construction and operation of the project, are discussed in Section 4.9, <i>Transportation</i>. Pursuant to <i>CEQA Guidelines</i> Section 15064.3 and Public Resources Code Section 21099(b)(2), level of service/congestion impacts are not considered a significant environmental effect. Emergency access is discussed in Section 4.6, <i>Hazards and Hazardous Materials</i>, and Section 4.10, <i>Effects Found Not to be Significant</i>.</p>
Steve Spielman	Request information regarding whether the project proponent has addressed the potential for overheating to result in fires that may require assistance from local fire agencies.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fires is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.

City of Morro Bay
Morro Bay Battery Energy Storage System Project

Commenter	Comment/Request	How and Where It Was Addressed
Tina Metzger	Requests information about the plans for the existing Water Intake Building across the street from the former Morro Bay Power Plant.	Section 2, <i>Project Description</i> , provides a detailed description of activities associated with the project. The project does not include any changes to the Water Intake Building.
	Suggests that demolition of the Morro Bay Power Plant Building and stacks should occur prior to construction of the BESS.	The comment is a recommendation for the project application and does not relate to the environmental analysis of the project. However, it will be forwarded to City decision makers for their consideration.
	Requests information regarding the proposed public access improvements along the Embarcadero street frontage.	The proposed improvements along Embarcadero are described in Section 2, <i>Project Description</i> .
	Requests that the project’s off-site haul routes, including the number of diesel trucks per day during demolition, construction, and operation of the project, be described.	Construction and demolition access and haul routes are provided in Section 2, <i>Project Description</i> . The estimated number of hauling and vendor/material trips associated with construction of the BESS Facility and demolition of existing facilities are provided in the Air Quality Technical Report prepared by Ramboll US Consulting, Inc (Ramboll) in July 2023 (Appendix B) and summarized in Section 4.2, <i>Air Quality</i> , Section 4.6, <i>Greenhouse Gas Emissions</i> , and Section 4.7, <i>Noise</i> . Operation of the BESS Facility would involve minimal maintenance activities would not require regular diesel truck trips, as discussed in Section 2, <i>Project Description</i> .
	Requests that the EIR describe the fire prevention plan for the site, including identification of fire hazards, storage procedures for hazardous materials, fire protection equipment, and procedures to address fire hazards. Requests a description of any hazardous materials related to the proposed project.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fires and other hazardous materials-related issues is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Requests a discussion of the water needs during project construction, operation, and emergency fire suppression.	Water consumption associated with the project is addressed in Section 4.10, <i>Effects Found Not to be Significant</i> .
	Requests a discussion of the construction and operational noise levels associated with the project.	Construction and operational noise are discussed in Section 4.8, <i>Noise</i> .
	Requests details of the proposed lighting for the project, as well as the potential for sunlight to reflect off the project buildings.	Project lighting is described in Section 2, <i>Project Description</i> . Potential environmental impacts related to project light and glare are addressed in Section 4.1, <i>Aesthetics</i> .
	Requests viewshed analysis from a number of locations surrounding the project site.	Potential visual impacts are addressed in Section 4.1, <i>Aesthetics</i> , including visual simulations representing post-development views of the Project Site from key locations.

Commenter	Comment/Request	How and Where It Was Addressed
Betty Winholtz	Recommends the EIR consider the potential for poisonous fumes resulting from fire.	The potential for fires and the release of pollutants is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
Anonymous	Expresses opposition to the construction and operation of a BESS on the Project Site and states that other coastal cities would not allow such a project.	The comment does not relate to the environmental analysis of the project. However, it will be forwarded to City decision makers for their consideration.
	States that the proposed project defies the Coastal Act.	Section 2, <i>Project Description</i> , describes the Master Plan, which will describe land use changes that would be necessary to ensure the project would be consistent with the General Plan and Local Coastal Plan. The project's consistency with the City of Morro Bay Local Coastal Plan is addressed in Section 4.10, <i>Effects Found Not to be Significant</i> .
	Expresses concerns regarding the potential for explosions and fire and the release of pollutants to the environment	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fires, explosions, and pollutant release is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
Ken Green	States support for the project on the basis that the BESS would level supply from renewable energy sources.	The comment does not relate to the environmental analysis of the project. However, it will be forwarded to City decision makers for their consideration. The potential energy-related effects of the project are discussed in Section 4.10, <i>Effects Found Not to be Significant</i> , of this EIR
	States that the project would be a financial asset to the City and County.	The comment does not relate to the environmental analysis of the project. However, they will be forwarded to City decision makers for their consideration. Economic/fiscal effects are typically not considered physical environmental effects under CEQA. Section 6, <i>Other CEQA Required Topics</i> , evaluates the potential for the project's economic benefits to result in physical environmental effects.

City of Morro Bay
Morro Bay Battery Energy Storage System Project

Commenter	Comment/Request	How and Where It Was Addressed
Public Scoping Meeting Verbal Comments		
Garry Johnson	Expresses opposition to the construction and operation of a BESS in Morro Bay.	The comment does not relate to the environmental analysis of the project. However, it will be forwarded to City decision makers for their consideration.
	Expresses concerns regarding the potential for tsunamis, fires, and explosions at the BESS facility, as well as the cost and ability of the local fire department to respond to emergency events at the BESS facility.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for tsunamis, fires, explosions, and other hazardous materials-related issues is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . Emergency response procedures are also addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The potential for environmental impacts to fire protection services is discussed in Section 4.10, <i>Effects Found Not to be Significant</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Expresses concerns regarding the potential noise and other impacts of truck traffic.	The potential noise impacts related to construction and operation of the project, including truck traffic, are addressed in Section 4.8, <i>Noise</i> . In addition, truck traffic and potential effects to the local circulation system are addressed in Section 4.9, <i>Transportation</i> .
Barry Branin	Expresses concerns about the potential for explosion or fire at the BESS facility due to citing the BESS facility in a coastal location where moisture could present an issue to battery integrity.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . The potential for fires, explosions, and other hazardous materials-related issues is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
Betty Winholtz	Expresses concern about the alternatives considered in the 2021 Final Plan Morro Bay EIR and tiering from it. Suggests that this EIR consider alternatives that address the entire project, including consideration of project impacts with removal of the stacks and without removal of the stacks.	Project alternatives are discussed in Section 5, <i>Alternatives</i> .
	Expresses concern about the Visitor-Serving Commercial zoning on the site of the former Morro Bay Power Plant stacks due to contamination on the site.	The potential for hazards related to site contamination is discussed in Section 4.7, <i>Hazards and Hazardous Materials</i> .
	Expresses concerns about the lifespan of the BESS facility, the longevity of the	Section 2, <i>Project Description</i> , describes the anticipated lifespan of the batteries and BESS Facility, as well as future decommissioning. The

Commenter	Comment/Request	How and Where It Was Addressed
	batteries, and future technology advances.	EIR includes analysis of the potential environmental consequences throughout the lifespan of the BESS Facility, including future BESS Facility decommissioning, throughout the environmental analysis in this EIR.
	Expresses concerns about the potential visual impacts of the BESS facility and associated infrastructure, including impacts to view from SR 1 and Embarcadero.	Potential visual impacts are addressed in Section 4.1, <i>Aesthetics</i> , including public views from SR 1 and Embarcadero. Visual simulations from key locations identified by City staff are included therein.
	Expresses concerns about vibration and noise from the BESS facility and associated infrastructure.	Noise and vibration from operation of the project are addressed in Section 4.8, <i>Noise</i> .
	Expresses concerns about water use and drought.	Water consumption associated with the project is addressed in Section 4.10, <i>Effects Found Not to be Significant</i> .
	Expresses concerns about air pollution generated by project construction, including worker trips and fugitive dust.	The potential impacts of construction activities on air quality are addressed in Section 4.2, <i>Air Quality</i> .
	Expresses concerns about the potential impacts of pile driving during project construction.	The potential environmental impacts related to pile driving are addressed in Section 4.8, <i>Noise</i> .
	Concerned about the potential for spills of oil used to maintain machinery.	The potential for accidental release of hazardous materials, including oils, is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> .
	Expresses concerns about new lighting associated with the proposed project and how bright it will be.	Project lighting is described in Section 2, <i>Project Description</i> . Potential environmental impacts related to project light and glare are addressed in Section 4.1, <i>Aesthetics</i> .
	Requests more detail about the Master Plan component of the proposed project.	Section 2, <i>Project Description</i> , describes the purpose and contents of the Master Plan.
	Expresses concerns about construction traffic impacts.	The potential impacts of project construction on the local transportation system are addressed in Section 4.9, <i>Transportation</i> .
Mandy Davis	Expresses concerns about potential impacts to estuary, near shore, and offshore ecosystems.	The potential for impacts to the surrounding ecosystems are addressed in Section 4.3, <i>Biological Resources</i> .
	Notes sea level rise and faults in the area as hazards that could affect the project, causing problems.	The potential for hazards related to faults and earthquakes at the Project Site are addressed in Section 4.5, <i>Geology and Soils</i> , and Section 4.10, <i>Effects Found Not to be Significant</i> . The potential for impacts related to sea level rise and flooding are addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> .
	Expresses concerns that mitigation would not be sufficient.	Feasible mitigation is required for all potentially significant environmental impacts identified in this EIR, and detailed mitigation measures that provide the requirements and timing of each measure are described throughout this EIR. In addition to feasible mitigation measures, potential project alternatives that may avoid or substantially lessen the significant adverse

City of Morro Bay
Morro Bay Battery Energy Storage System Project

Commenter	Comment/Request	How and Where It Was Addressed
		<p>impacts of the project through design changes, are described in Section 5, <i>Alternatives</i>.</p>
Tina Metzger	<p>Expresses concerns about the environmental danger of the batteries.</p>	<p>The potential for fires, explosions, and other environmental hazards related to the BESS Facility is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p>
	<p>Expresses concerns about the potential visual impacts of the proposed project and requests viewshed analysis from a number of locations surrounding the project site.</p>	<p>Potential visual impacts are addressed in Section 4.1, <i>Aesthetics</i>, including visual simulations representing post-development views of the Project Site from key locations.</p>
	<p>Expresses concerns about night lighting and the potential combined impacts of nighttime lighting in the project vicinity.</p>	<p>Project lighting is described in Section 2, <i>Project Description</i>. Potential environmental impacts related to project lighting, including cumulative lighting impacts, are addressed in Section 4.1, <i>Aesthetics</i>.</p>
	<p>Requests that information regarding evacuation options is discussed and expresses concerns regarding the adequacy of the site access point and roadways in the area for emergency evacuation.</p>	<p>Emergency response and evacuation procedures are addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p>
	<p>Asks who is insuring the project in the event of a disaster.</p>	<p>The project's insurance is not a component of the project that could result in physical environmental effects and is therefore not discussed in this EIR. Questions regarding the project's insurance may be directed to City staff and/or the City's decision makers.</p>
	<p>Requests information regarding visual screening and visual impacts, including impacts to Morro Rock.</p>	<p>Section 2, <i>Project Description</i>, includes details about the proposed landscaping and visual screening on the Project Site. The potential for visual impacts is discussed in Section 4.1, <i>Aesthetics</i>.</p>
	<p>Requests that the EIR discuss why this Project Site was selected for the proposed project.</p>	<p>The Project Site location is described in Section 2, <i>Project Description</i>. The Project Site was selected by the Project Applicant as it is the owner of the site. The potential for evaluating alternative project locations is described in Section 5, <i>Alternatives</i>.</p>
	<p>Expresses concerns about potential circulation impacts.</p>	<p>Potential impacts to the local circulation system are addressed in Section 4.9, <i>Transportation</i>.</p>

Commenter	Comment/Request	How and Where It Was Addressed
Betty Winholtz	<p>Expresses concerns about the environmental impacts of removing the stacks, including asbestos.</p> <hr/> <p>Suggests that the EIR evaluate the potential impacts of the project with and without removal of the stacks.</p>	<p>The potential environmental impacts of the removal of the stacks are addressed throughout the environmental analysis in this EIR. The potential for impacts specifically related to asbestos is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The City would require, as a standard Condition of Approval for the project, that the Project Applicant prepare a Demolition Materials Management Plan for review and approval by the Fire Chief, Police Chief, Harbor Director, and the Community Development Director.</p> <hr/> <p>Section 5, <i>Alternatives</i>, evaluates a range of feasible alternatives to the project and presents the environmentally superior alternative.</p>
Garry Johnson	<p>Expresses safety concerns regarding the BESS facility and supporting electrical infrastructure. Notes that there have been fires at the Moss Landing BESS facility.</p> <hr/> <p>Requests that the EIR consider the future removal of the BESS facility.</p>	<p>The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i>. The potential for fires and other safety issues is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i>. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.</p> <hr/> <p>The EIR includes analysis of the potential environmental consequences of future BESS Facility decommissioning in Section 4.1, <i>Aesthetics</i>, through Section, 6, <i>Other CEQA Required Topics</i>.</p>
Anthony Ventura	<p>Suggests that the City should require the project to be constructed using a local skilled and trained workforce, which could reduce VMT and associated air pollutant and greenhouse gas emissions.</p>	<p>GHG and air pollutant emissions associated with project construction, including worker trips, are discussed in Section 4.6, <i>Greenhouse Gas Emissions</i>, and Section 4.2, <i>Air Quality</i>. Traffic impacts of construction are addressed in Section 4.9, <i>Transportation</i>. Comments related to skilled and trained workforce policies and requirements do not relate to the environmental analysis. However, they will be forwarded to City decision makers for their consideration.</p>
Alex Perez	<p>Suggests that the City should require the project to be constructed using a local skilled and trained workforce to benefit the community financially and to reduce air pollution associated with project construction.</p>	<p>Air pollutant emissions associated with project construction are discussed in Section 4.2, <i>Air Quality</i>. Comments related to skilled and trained workforce policies and requirements do not relate to the environmental analysis. However, they will be forwarded to City decision makers for their consideration.</p>

City of Morro Bay
Morro Bay Battery Energy Storage System Project

Committer	Comment/Request	How and Where It Was Addressed
Manley McNinch	Requests that the City include language in the project conditions that materials used during construction are made in the United States. Also suggests that the City should require use of local workforce.	Comments related to skilled and trained workforce policies and requirements do not relate to the environmental analysis. However, they will be forwarded to City decision makers for their consideration.
Marcel	Expresses support for the proposed project. Agrees with points raised by other commenters regarding the potential environmental impacts such as the building heights but disagrees with risks raised by other commenters associated with lithium-ion technology. Points out that fires at the Moss Landing BESS facility were contained by failure support systems/fire suppression systems and that battery energy storage systems are low impact and high value.	The potential impacts of the building and substation heights are addressed in Section 4.1, <i>Aesthetics</i> . Safety systems for the BESS Facility are described in Section 2, <i>Project Description</i> .
Pedro Toscano	Expresses support for the proposed project. States that there are 500 to 600 Southwest Regional Council of Carpenters union members living in the vicinity of the project and suggests that local workers such as these be hired to construct the project.	Comments related to skilled and trained workforce policies and requirements do not relate to the environmental analysis. However, they will be forwarded to City decision makers for their consideration.
Nancy Johnson	Expresses concerns about safety risks of the proposed BESS facility, including tsunamis and the potential for explosions.	The potential for tsunamis, fires, and explosions is addressed in Section 4.7, <i>Hazards and Hazardous Materials</i> . In addition, Section 2, <i>Project Description</i> , includes details regarding the fire suppression and safety technology that would be included in the BESS Facility. The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.
	Expresses concerns about potential damage to the local streets due to project construction.	Potential impacts of construction on the local circulation system are addressed in Section 4.9, <i>Transportation</i> .
Name not provided	Asks if the fire department would require additional equipment or training to serve the proposed project.	The fire prevention and suppression technology for the BESS Facility are described in Section 2, <i>Project Description</i> . As discussed therein, the safety features required for the BESS Facility would be developed in consultation with the MBFD. The potential for environmental impacts to fire protection services is discussed in Section 4.10, <i>Effects Found Not to be Significant</i> . The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization.

1.3 Scope and Content

This EIR addresses the project's potentially significant adverse effects (impacts) on the physical environment, including those identified by the lead agency (City of Morro Bay) and by resource agencies and interested stakeholders during the public scoping process. The following topics were found to include potentially significant impacts and are discussed in depth in the EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise
- Transportation

Other environmental topics required to be evaluated under the *CEQA Guidelines* are discussed in Section 4.10, *Effects Found Not to be Significant*.

Section 5, *Alternatives*, was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives to the project that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives discussion identifies the “environmentally superior” alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative and four alternative development scenarios for the Project Site.

In preparing the EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. A full list of references is included in Section 7, *References and Preparers*.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *CEQA Guidelines* state:

“An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.”

1.4 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Morro Bay is the lead agency for the project because it holds principal responsibility for approving the project. It should be noted for the purpose of this EIR that the plans depicted in Section 2, *Project Description*, have been developed to support the BESS Facility's development application and permitting and are not final for the purpose of project construction. In the event the City approves the project, any major modifications to the project design would require approval of the City's Planning Commission, and minor modifications would require the approval of the Community Development Director.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. Responsible agencies include the California Coastal Commission for review of environmental topics in the Coastal Zone; Central Coast Regional Water Quality Control Board (RWQCB) for review of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit application and issuance of a waste discharge requirements permit for wastewater systems; and the San Luis Obispo County Air Pollution Control District (APCD) for review of project equipment subject to APCD permit requirements and prohibitory rules. The EIR will also be submitted to these agencies for review and comment.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. Trustee agencies include CDFW for administering the California Endangered Species Act (CESA) and other aspects of the California Fish and Game Code, and United States Fish and Wildlife Service (USFWS) for administering the federal Endangered Species Act (ESA).

1.5 Environmental Review Process

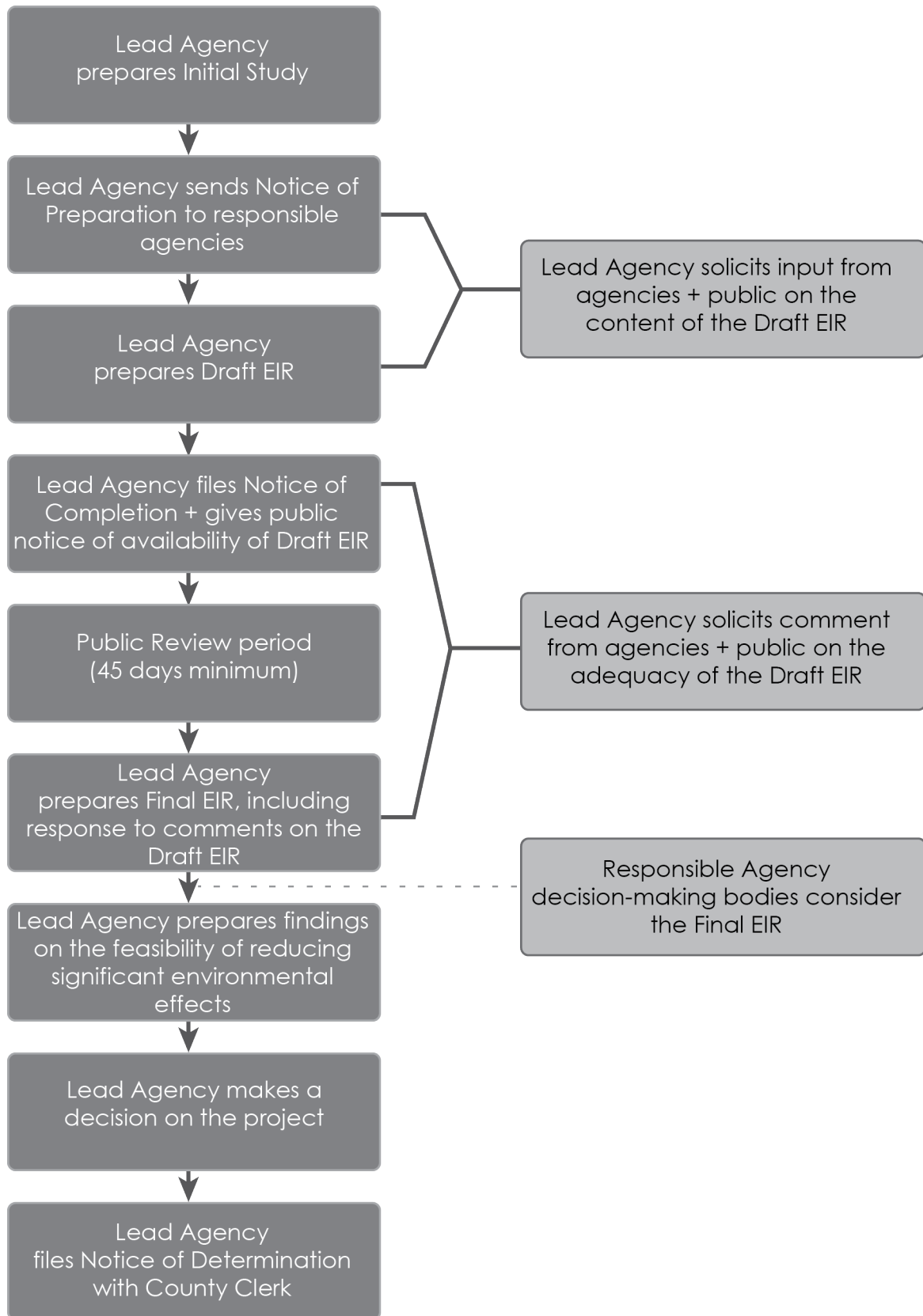
The environmental review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation and Initial Study.** After deciding that an EIR is required, the lead agency (City of Morro Bay) must file a NOP soliciting input on the EIR scope from the State Clearinghouse, responsible agencies and other concerned agencies, parties previously requesting notice in writing, and other members of the public (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days.
2. **Draft EIR Prepared.** The Draft EIR must contain: a) a table of contents or index; b) a summary; c) a project description; d) a discussion of the environmental setting; e) a discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) a discussion of mitigation measures; and h) a discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability (NOA) of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the Project Site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public and respond

in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).

4. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) a list of persons and entities commenting; and d) responses to comments.
5. **Certification of Final EIR.** Prior to making a decision on a project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

This section describes the Morro Bay Battery Energy Storage System Project, including the Project Applicant, the Project Site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Applicant

Morro Bay Power Company LLC
 Attn: Ms. Claudia Morrow
 6555 Sierra Drive
 Irving, Texas 75039
 (214) 875-9249

2.2 Lead Agency Contact Person

Cindy Jacinth, Planning Manager
 City of Morro Bay
 Community Development Department
 955 Shasta Avenue
 Morro Bay, California 93442
 (805) 772-6261

2.3 Project Location

The approximately 107-acre Morro Bay Power Plant property (Power Plant Property) (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 began operating in 1955, but has been idle since its retirement in 2014. The Power Plant Property currently contains the idle power plant building and smokestacks (stacks), Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center. The Power Plant Property 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 Project Site covers approximately 43 acres of the 107-acre Power Plant Property.¹ The Project Site includes approximately 24 acres located immediately north of the inactive power plant building

¹ Following are definitions for several key terms used in this Project Description:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant property. Refer to Figure 2-2.

Project Site refers to the portions of the Power Plant property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant property. Refer to Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 2-5.

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 2-9.

in the northwestern portion of the property that will be used for construction of the proposed 600 megawatt (MW) BESS (BESS Site). 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 inactive stacks immediately southwest of the power plant building (Demolition Site). 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 2-1 shows the regional location of the Project Site, Figure 2-2 shows the location of the Power Plant Property in its neighborhood context, and the Project Site in its neighborhood context. Figure 2-3 shows existing features on and in the immediate vicinity of the Project Site and Power Plant Property.

2.4 Existing Site Characteristics

2.4.1 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 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, the Project Site has a land use designation of Visitor Serving Commercial with a Mixed-Use Residential Overlay. A comprehensive update to the Zoning Ordinance/Implementation Plan was adopted in November 2022, which changed the Project Site's zoning from M-2/PD/I with a Planned Development overlay and Interim Use overlay designation to Visitor Serving Commercial.²

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

PG&E Deed Restriction

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 to Duke Energy in 1997, PG&E imposed a deed restriction across the Power Plant Property, including the entire Project Site. That deed restriction prohibits developing the Power Plant site (including the Project Site) with new 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.

² The comprehensive update to the Zoning Code/Implementation Plan that was adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662) is currently anticipated to be certified by the California Coastal Commission in March 2024.

Figure 2-1 Regional Location



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★ Project Location

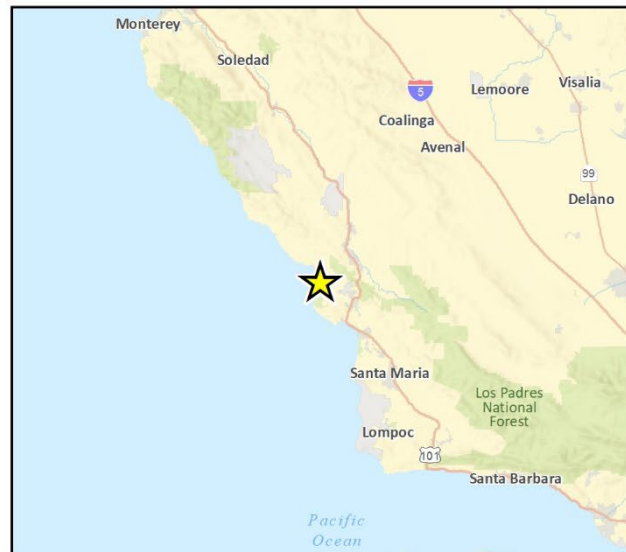


Fig 2-1 Regional Location

Figure 2-2 Parcel and Project Site Location



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

Fig. 2-2 Parcel and Project Site Location

Figure 2-3 Existing Features



Imagery provided by Microsoft Bing and its licensors © 2024.

DTSC Land Use Restriction

In 2006, PG&E entered into a Corrective Action Consent Agreement with the California Department of Toxic Substances Control (DTSC) to address areas of the Power Plant Property 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 proposed 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 final Limited Use Covenant (LUC), recorded on July 21, 2022, covers most of AOC 1 and 20.5 acres of the 24-acre BESS Site. This final LUC restricts future land uses in the covered areas to commercial/industrial uses and prohibits future development of the property for permanent or temporary lodging, school, day care centers, recreation, or hospital uses. Figure 2-4 shows the location of AOC 1 and the LUC on the Power Plant Property.

2.4.2 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.

2.5 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 system (BESS) 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. AB 205 (2022) established a new certification program for eligible facilities (including, among others, non-fossil fueled power plants, onshore wind and solar, energy storage systems capable of storing 200 megawatt hours or more of electricity, and associated transmission lines from those generating or storage facilities) to optionally seek certification from the California Energy Commission (CEC), rather than local governments.

There are currently many BESS facilities located throughout California, with over 7,300 MW of installed capacity as of November 2023 (U.S. Energy Information Administration 2023). More BESS facilities are planned or under construction. The Project Applicant developed and operates the 750-MW BESS at Moss Landing, in Monterey County.

Regarding the planned BESS component of the project, in July 2022 the DTSC imposed a LUC for those portions of the site that contained the previously removed fuel oil tank farm (depicted on Figure 2-4). This restriction would limit the former tank farm area to commercial/industrial uses and places restrictions on the movement of soil materials in this area.

Figure 2-4 Land Use Restrictions



Source: Terraphase Engineering, 2022.

2.6 Project Characteristics

The proposed project includes three components: (1) construction and operation of a 600-MW Battery Energy Storage System facility (BESS Facility), which would occur on approximately 24 acres (BESS Site) of the 43 acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan which would apply to the entire Power Plant Property, and would change the land use designation of the 24 acre BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG).

2.6.1 Construction, Operation, and Future Decommissioning of the BESS Facility

Of the 43 acres included in the Project Site, approximately 24 acres (i.e., the BESS Site) would be used for construction and operation of the BESS Facility. As described in Section 2.4.1, Current Land Use Designation and Zoning, the DTSC Land Use Restriction applies to most of AOC 1 (refer to Figure 2-4), including 20.5 acres of the 24-acre BESS Site, while the PG&E imposed a deed restriction applies to the Power Plant Property, including the entire Project Site. The BESS would provide power to utility customers by interconnecting to the existing PG&E switchyard located east of the Power Plant Property and Project Site. The BESS Facility would operate year-round to store and discharge electricity to support demand on the power grid and improve grid reliability.

The BESS Facility would include three enclosed buildings with fire protection systems (which are addressed in detail below) 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 Facility 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 BESS, PCSs, and substation components are each further described below.

Figure 2-5 presents the proposed locations of these facilities on the approximately 24-acre BESS Site. Figure 2-6 shows the elevations of the proposed buildings. Figure 2-7 shows typical BESS components.

Table 2-1 summarizes the primary characteristics of the BESS Facility.

Battery Energy Storage System

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

Buildings

Each building would be approximately 350 feet by 260 feet, for a per-building area of 91,000 square feet (sf), and a total building area of 273,000 sf (refer to Figure 2-5). The buildings would be two stories and up to 35.2 feet in height from average natural grade. Equipment installed on the roof of the buildings may extend up to 10 feet in height which is included in the City's building height measurements. This equipment would be screened from views using either mesh or slatted screens.

Each building would require approximately 5,500 to 6,500 pilings to a pile depth of approximately 70 feet (the depth of each pile would be determined during the final design-level geotechnical work based on loads and other location-specific analysis). The building exteriors would be steel frame with pre-cast concrete sides (refer to Figure 2-6). Heating, ventilation, and air conditioning (HVAC) units would be either side- or roof-mounted.

Table 2-1 BESS Facility Characteristics

Address	1290 Embarcadero, Morro Bay, California 93442
APN	066-331-046
Parcel Acreage	107 acres
BESS Site Acreage	24 acres
Demolition Site Acreage	19 acres
Battery Storage Buildings (3)	91,000 sf, 35.2 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	

Battery Energy Storage System

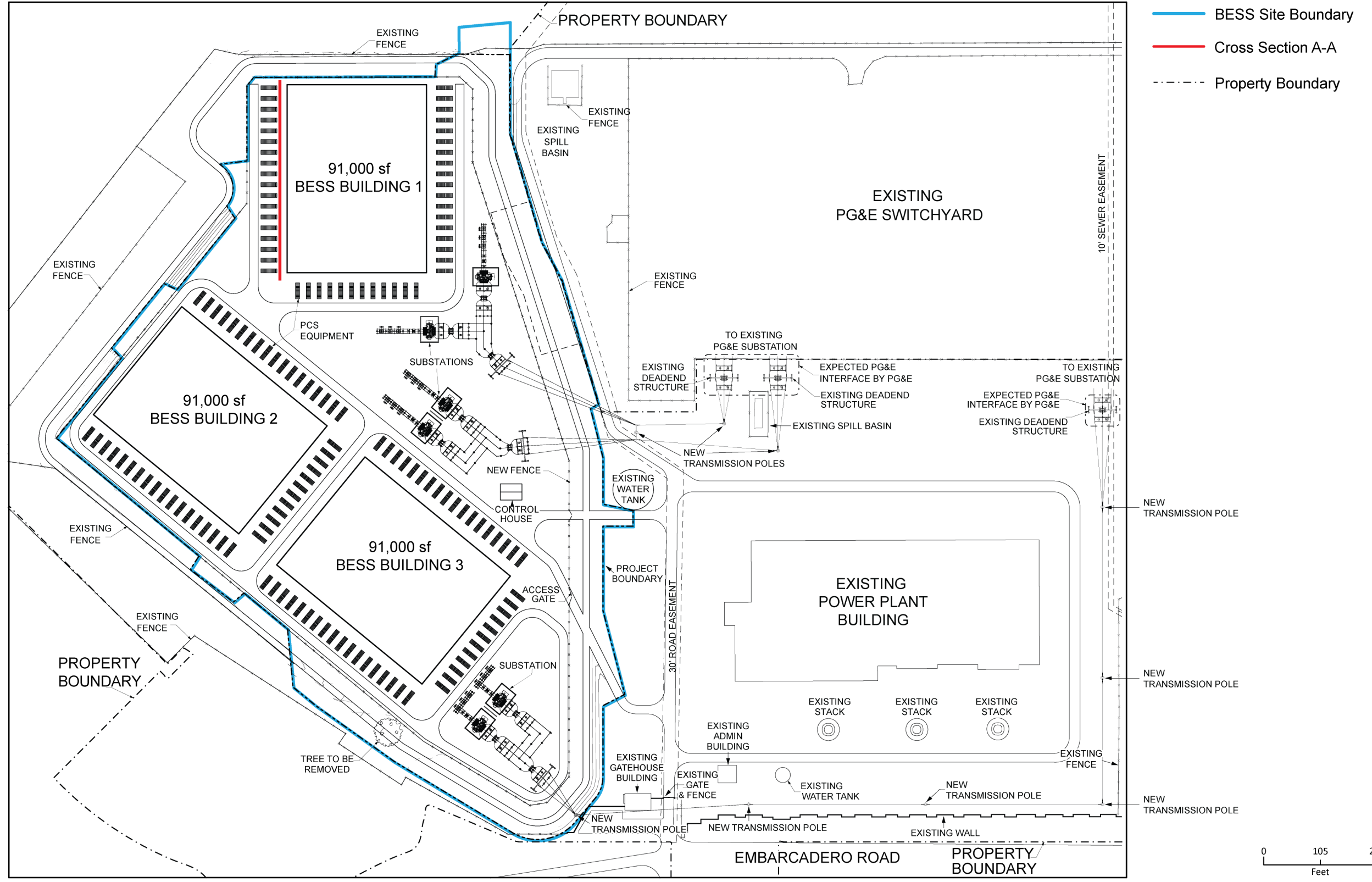
Each building would house approximately 2,400 racks containing lithium-ion batteries with storage capacity of 200 MW for a total storage capacity of 600 MW. The battery modules (approximately 60,000 per building) would be housed in racks that are approximately 9 to 24 feet tall, depending on the use of stacked racking systems. Battery modules would provide a source of back-up power in the event grid power is lost. The contract with the battery supplier would include provisions that provide for the recycling of batteries through the life of the BESS Facility. The racks would be grouped into blocks with their own access, fire protection, and safety systems (see Safety Systems discussion below). A typical rack is presented in Figure 2-7.

The battery capacity of the BESS Facility 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 required for the operation of the BESS Facility.

Power Conversion Systems

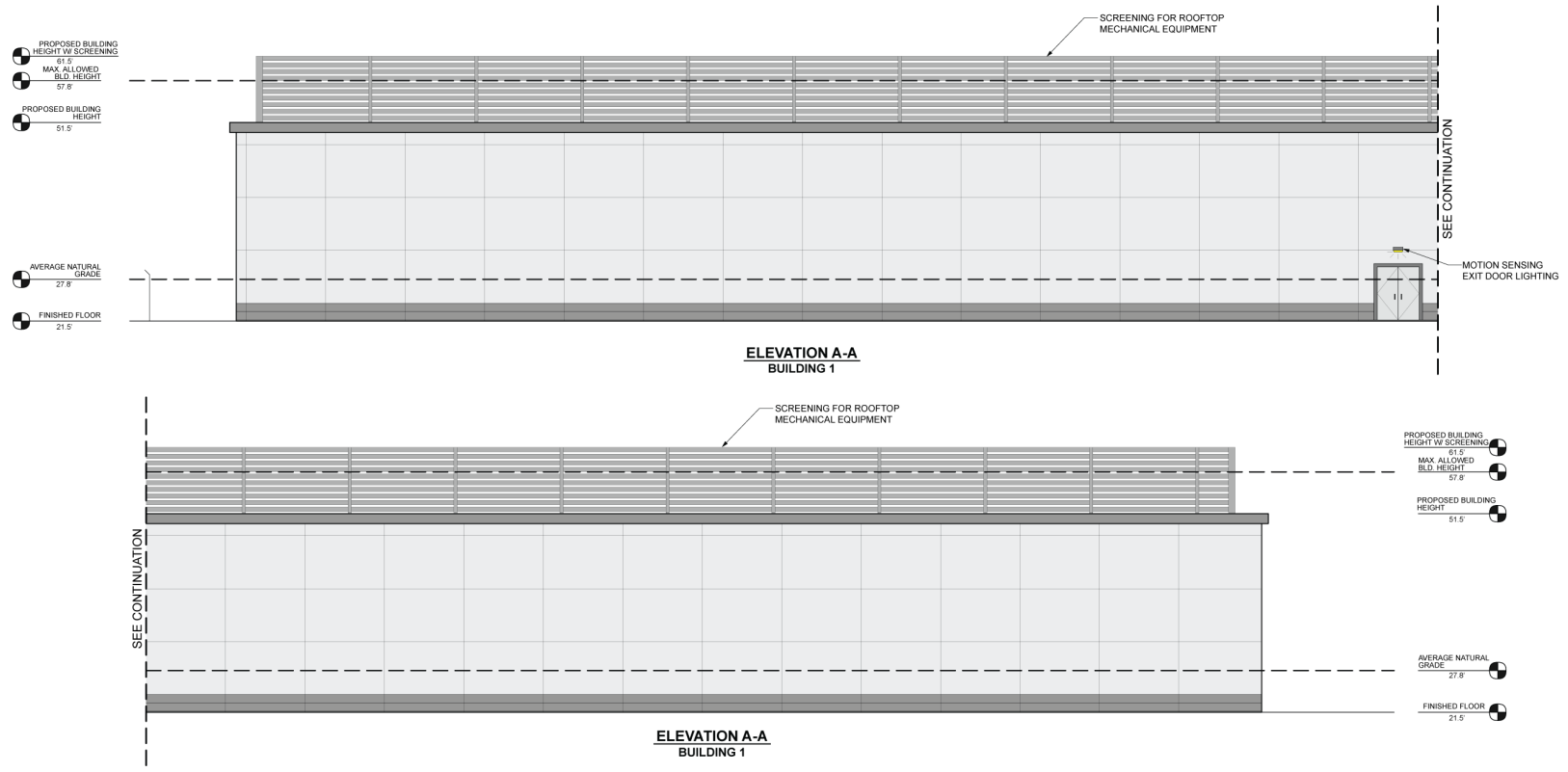
The PCSs would be located adjacent to each building (referenced above) and installed on the pavement or gravel pads. Underground conduits would be buried three to five feet in depth to connect the PCSs to the batteries in the buildings. Each PCS contains an inverter and transformer, which convert the 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 approximately 10 feet by 30 feet, with a height of approximately 15 feet. The location of the power conversion systems is identified in Figure 2-5. A typical PCS unit is shown in Figure 2-7.

Figure 2-5 BESS Facility Site Plan



Source: Sargent & Lundy, 2020.

Figure 2-6 Building Elevations



- BUILDING MATERIALITY:
PRE-FABRICATED CONCRETE
- CHAIN LINK FENCE
- NO NEW SIGNAGE

Source: Sargent & Lundy, 2021.

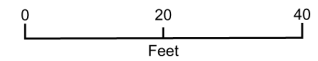


Figure 2-7 Example BESS Components

Battery Energy Storage



Power Conversion System



Substation



Source: *Vistra, 2018 and 2021.*

Substations

The BESS Facility would include three substations located outside the buildings (referenced above). 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 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. A typical substation is shown in Figure 2-7.

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 approximately 70 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 secondary containment.

One control house would be required for the three substations (refer to Figure 2-5). 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.

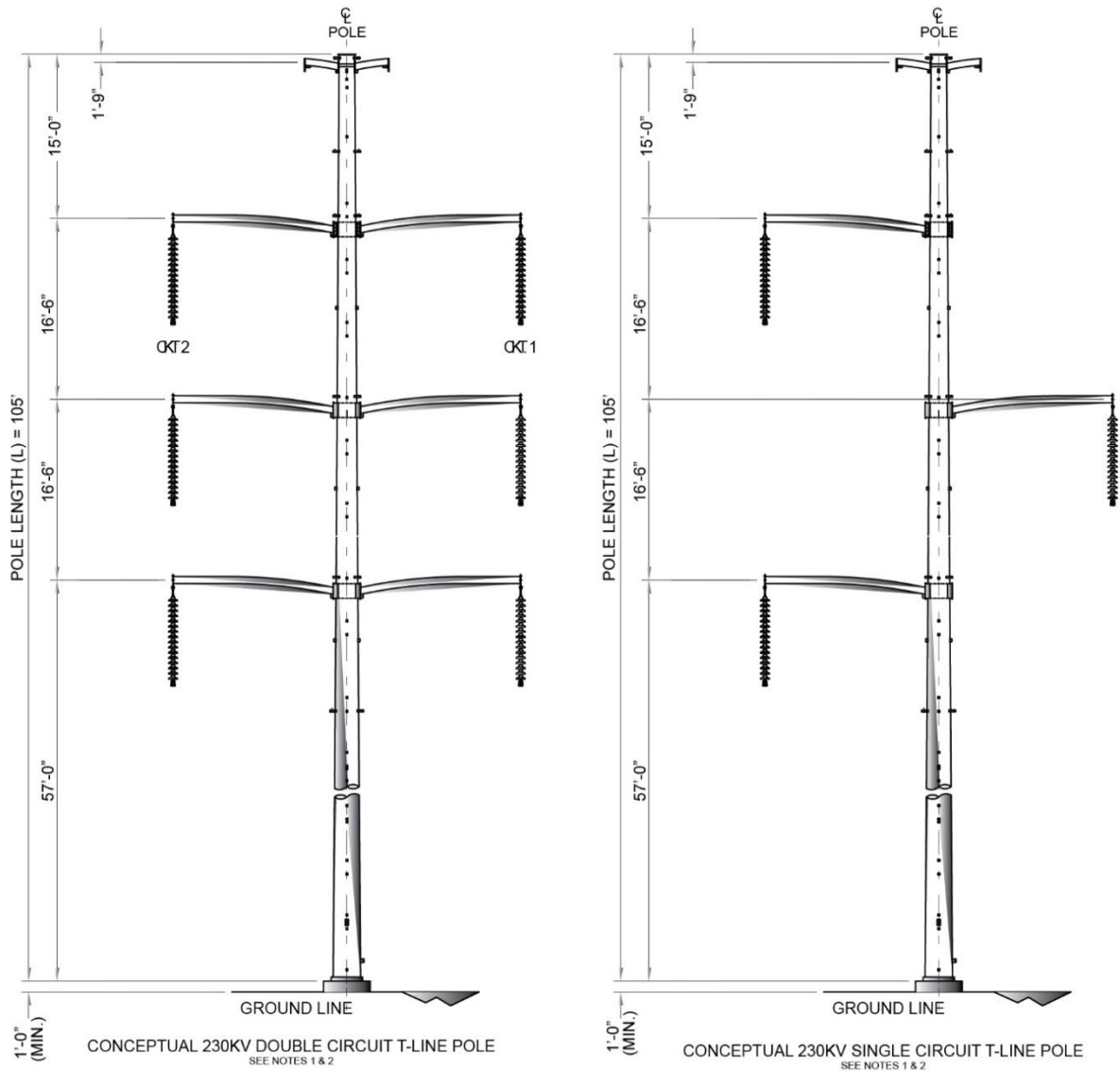
Connection to the PG&E Switchyard

The three 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 new transmission line poles would cross the Project Site to provide the most direct connection between the BESS Facility and the existing PG&E switchyard. The final alignment of this connection is expected to be informed by the Master Planning process for the Power Plant Property (refer to Section 2.6.3) and would require review and final determination from PG&E. The current proposed locations of the new transmission poles and lines, and the existing deadend structures, are shown on Figure 2-5. Figure 2-8 shows a conceptual drawing of the poles.

Operation and Maintenance Building

The existing gatehouse building located inside the Morro Bay Power Plant Property front gate along the Embarcadero (refer to Figure 2-5) 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.

Figure 2-8 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".

Source: Sargent & Lundy, 2020.

Not to Scale

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 PCSs could enter the PCS cooling system and reduce air flow. The BESS Facility components would be sited to avoid this issue. Due to the existing berms surrounding the former tank farm area, lower elevations of the former tank farm pads where the buildings would be placed, and existing vegetation along the existing berms, no additional vegetative screening is proposed.

Up to six Monterey cypress trees may be removed for access west of proposed southernmost building and associated substation. The trees would be replaced per the City's Major Removal, Replacement and Protection Vegetation Guidelines. The replaced trees, in addition to trees located outside of the BESS Site but on the Power Plant Property, would provide visual screening. Final project design would avoid the trees where possible. However, all trees that would be removed would be required to be replaced consistent with the City's Major Vegetation Guidelines.

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

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. There are two existing wells located on the Power Plant Property, both of which are owned and operated by Morro Bay Mutual Water Company. Neither well is located on the Project Site, and the Project Applicant has not proposed to use either well in connection with the project. 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 supplement City water service to provide adequate fire protection.

Site Access and Parking

Site access during operation of the BESS would be provided at the Power Plant Property main gate located along the 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

Required 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 Facility Construction

Construction of the BESS Facility 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;

Morro Bay Battery Energy Storage System Project

- 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. At limited times some construction activities, such as de-energizing and re-energizing gen-tie transmission lines and substations, may be required or finished at night while electrical demand is low, and these activities will require lighting for safety. 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 Power Plant Property. 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 Power Plant Property. 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 from SR 1 via Main Street to the existing driveway that connects to Quintana Road and then along the northern boundary of the existing PG&E substation. The driveway on Embarcadero would not be used for vehicular traffic but would be open for employees walking to local retail/restaurant facilities during the lunch break period. Flatbed trailers and trucks would be used to transport construction equipment and construction materials to the Project Site.

The internal circulation system to support the BESS Facility 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 BESS Facility structures would be located predominantly on the previously former tank farm area of the Morro Bay Power Plant. The area is relatively flat with the exception of some raised

berms inside the former tank farm area that would be removed prior to construction. Existing berms surrounding the former tank farm area would remain intact to provide visual screening and protection of the BESS Facility from sea-level rise and tsunami risk. As a part of the construction of the BESS Facility the BESS Site would be grubbed to remove vegetation and the internal berms would be excavated. Soil from the removed berms would be spread over the BESS Site and balanced on the site (i.e., to ensure there is no net import or export of material). The entire BESS Site would be disturbed during project construction. However, no soil import or export would be required. Once the berms inside the former tank farm area 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 BESS Facility 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. Because construction 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 Project 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 BESS Facility. The SWPPP would include project information and best management practices (BMPs) for water quality.

HAZARDOUS MATERIALS AND CONSTRUCTION WASTE

Construction of the BESS Facility would involve the use of hazardous materials typical of similar construction activities, 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 and would be subject to approval by the San Luis Obispo County Environmental Health Services Division, which serves as the local Certified Unified Program Agency (CUPA). The use, storage, transport, and disposal of hazardous materials used in construction of the BESS Facility would be carried out in accordance with applicable federal, State, County, and City laws and regulations. No extremely hazardous substances (i.e., those governed pursuant to Title 40 of the Code of Federal Regulations [40 CFR 335]) 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 Power Plant Property outside of the BESS Site.

Construction waste would be sorted on the Project 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. Highway 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 BESS Facility building foundation would consist of steel piles which would be driven into the soil. The piles typically would be spaced eight feet apart. Between 5,500 and 6,500 pilings would be installed up to a maximum depth of approximately 70 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 construction and operation of the BESS Facility.

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 Site footprint and designated staging areas and routes of travel. The construction areas would be the minimal area necessary to

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

Operational activities at the BESS Facility would include the following:

- 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 BESS Facility 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 BESS Facility would require only minimal long-term maintenance. Periodically, it may be necessary to test and/or replace individual battery modules. The BESS Facility 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 BESS Facility, starting at approximately year five after beginning operation. The batteries are anticipated to have a 20-year life, though some may need to be replaced or repaired earlier on a case-by-case basis. At the end of this period the batteries would be replaced. All batteries would be recycled at the appropriate facilities.

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

The BESS would comply with all federal, State and local laws and implement various operating and maintenance standards, extensive monitoring systems, and best industry practices to avoid and minimize safety risks. In addition to complying with all federal, State, and local laws and regulations,

the BESS Facility would incorporate multi-tiered safety and accident prevention systems based on best practices in the energy industry and in consultation with the Morro Bay Fire Department (MBFD). Safety systems would incorporate operational measures, maintenance standards, and passive design considerations, including monitoring, automatic and manual protection elements, engineering designs, site layout designs (e.g., battery spacing and orientation), and explosion prevention protection, among other features, as 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 fire barriers with fire resistance ratings greater or equal to two hours in accordance with the California Fire Code.
- The BESS Facility would not locate any new structures in Federal Emergency Management Agency (FEMA) Flood Zone AE or any other FEMA-designated Special Flood Hazard Area, and has been sited to mitigate sea-level rise and tsunami risk. The former tank farm area, including the west, north, and northeast sides of the BESS Site facing the ocean, is protected by existing berms that are approximately 33 feet in height. These external berms will remain intact and only the berms inside the former tank farm area would be modified.

▪ **Monitoring and Detection:**

- The fire protection systems would be continually monitored at multiple levels (i.e., at the cell, module, rack and building levels, as well as within various building systems such as HVAC systems). All these levels and systems would be monitored for electrical, gas/smoke, and thermal variations as appropriate and would trigger a corresponding response.
- The BESS Facility would also contain battery management systems with battery protection units. Battery protection units actively monitor each battery's operating conditions at all times and are programmed to warn, alarm, and automatically take preventive action if certain metrics exceed programmed tolerance levels. This preventive monitoring system can automatically shut down batteries if any measured parameters reach certain risk levels, as well as trigger other early safety responses.
- BESS Facility monitoring systems will monitor temperature, smoke, gas, heat, and air pressure drops in water lines to provide an additional layer of protection in the event a shutdown does not resolve the issue. Appropriate monitoring systems will be identified during final project design and will incorporate technologies such as Very Early Smoke Detection Apparatus (VESDA) systems that continually sample the air to detect an impending fire hazard as soon as possible and provide a warning before there is visible smoke, which is before conventional detectors would provide warnings. VESDA systems have a wide range of sensitivities, allowing very small levels of smoke to be detected and responded to before a fire has time to escalate.

▪ **Automatic Protection and Suppression:**

- The BESS Facility would incorporate fire suppression for the various areas within each building based on the type of hazard. The design would incorporate automatic sprinkler systems with sprinklers located throughout the buildings and, if required, within individual battery modules. There would be one system dedicated to suppression at the battery/rack level and, if required, another system to protect the building.
- Additional response measures would include automatic battery shutdowns, detection systems, and ventilation systems. Additional safety systems such as water and clean agent

injection systems, roof level wet systems (which spray certain building areas if triggered), and vacuum purge systems may also be required depending on final battery system configuration.

- **Manual Protection.** The BESS Facility would include on-site fire hydrants, automatic wet standpipes, Class III hose stations, and hand-held portable fire extinguishers.
- **Explosion Prevention Protection.** The batteries selected for use at the BESS Facility, such as lithium-ion or other technologies, would incorporate explosion prevention and protection measures (e.g., venting) pursuant to the National Fire Protection Association (NFPA) 855 (Standard for the Installation of Stationary Energy Storage Systems) or International Fire Code Chapter 12 (Energy systems).
- **Prevention:** In addition to the measures described above, potential battery module overheating would be addressed by preventive measures including site specific engineering designs addressing battery spacing, battery orientation and cooling designs, as well as other preventative measures such as hazard mitigation analyses and emergency planning.
- **Emergency Planning:** The Project Applicant would be required to prepare and implement BESS Facility emergency plans and emergency evacuation plans. The Project Applicant would also be required to provide training to MBFD personnel, including walkthroughs, visual inspections, construction inspections, formal in class trainings regarding batteries, with specific instructions regarding addressing potential incidents and utilizing the BESS Facility's resources. Personal protective equipment and life safety equipment for personnel safety and other equipment to address emergencies all will be stored and accessible at the BESS Facility and at additional locations on the Project Site as needed.

In addition, all emergency preparedness and response features required by the MBFD, which may include but would not be limited to fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be required to be incorporated into the final BESS Facility design and project plans prior to issuance of a building permit. The MBFD would be responsible for final review and approval of the Project Applicant's building plans.

Future Decommissioning

The BESS Facility is anticipated to have an operating life of up to 40 years. At the end of the BESS Facility's operating life, the Project Applicant would either replace or upgrade the technology to extend the operating life, or the BESS Facility would be decommissioned. This EIR considers the potential for decommissioning the BESS Facility to provide a comprehensive review of the potential environmental effects of all reasonably foreseeable outcomes of the project.

Decommissioning of Equipment

Decommissioning the BESS Facility may require the removal of above-grade facilities and concrete foundations, if such improvements are not identified for potential future redevelopment by the City. Batteries from the energy storage system may include lithium-ion, which degrades but can also be recycled or repurposed. Electrical conduit and other structures and materials that break off more than 4 feet underground would be decommissioned and abandoned in place. Metal and scrap equipment and parts that do not have free-flowing oil would be sent for salvage at local recycling facilities. It is anticipated that oils and batteries would be recyclable and would be disposed of at proper facilities. Utility-owned infrastructure would not be removed at the time the BESS is

decommissioned. For the purpose of this EIR, decommissioning is assumed involve the use of similar heavy equipment and personnel to that used for construction of the BESS Facility.

Site Reclamation and Decommissioning Plan

As a Condition of Approval for the project, a plan containing details regarding site reclamation, decommissioning of the BESS, and removal of all improvements installed by the Applicant and its contractors that are deemed by the City to not be of potential value for redevelopment or adaptive reuse (Reclamation and Decommissioning Plan) would be required to be submitted by the Project Applicant to the City for review and approval. All unpaved areas of the Project Site compacted during construction, operations, or by equipment used for decommissioning would be tilled in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property.

2.6.2 Demolition of Existing Power Plant Building and Stacks

Following construction of the BESS, the Project Applicant 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 Facility. 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 2-9 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 Power Plant Property in a manner that is consistent with Plan Morro Bay (refer to Section 2.8, Required Approvals, for a discussion of Plan Morro Bay Policy LU-5.4). The proposed demolition activities are further described below.

Pre-demolition Activities

The Project Applicant, in conjunction with its contractor(s), would be required to 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 and implementation of a health and safety plan, environmental plans and best practices, a transportation management plan, a fire prevention plan, and detailed demolition plans. These plans and associated required practices during remediation and demolition are described below.

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 Division of Occupational Safety and Health (Cal/OSHA) and any other federal, State, and local requirements. All aspects of the demolition 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.

Figure 2-9 Demolition Area



19-08915 MB, MB BESS EIR
Fig 2-8 Demolition Area

Environmental Plans and Best Practices

To the extent possible, all off-site hauling would exit the Quintana/Main Street plant gate. Selected contractors 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 selected demolition contractor would implement any required storm water pollution prevention plan (SWPPP) and spill prevention, control, and countermeasure (SPCC) plan. The demolition contractor would put in place engineering and administrative controls to prevent fugitive dust or particulate matter emissions as required to comply with applicable regulations. 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 (SLOAPCD) requirements.

Transportation Management Plan

The Traffic Management Plan, prepared by the Project Applicant and approved by the City, would detail 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 (FPP) would be completed before the start of any site work, and would require approval from the MBFD. The FPP must 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

All project plans required by the City, State, DTSC, or other regulations, such as Cal/OSHA Pre-Demolition survey, site security plans, rigging and lift plans, would be prepared prior to the start of applicable demolition activities. Any plans that require regulatory approval would be submitted to the appropriate governmental authority and shall require approval prior to any demolition work.

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 power plant closed in February 2014. This included the removal of 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 in a Pre-Demolition Asbestos Containing Materials Survey completed in September 2019. Negative pressure containment tents would be erected inside the power plant 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. Contractors and all employees would meet all California and federal training requirements and have appropriate licenses/certifications. Required air monitoring would be completed by a Project Applicant-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 Power Plant Property were removed in 2014. A separate minor amendment application was approved and issued by the City in October 2022 to remove several transformers and circuit breakers from the Power Plant Property. 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 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 power plant structure 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 would be brought down by 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, the selected 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.

The demolition contractor would be expected to use cranes, shearing machines, man lifts, cutting torches and other similar equipment to accomplish the demolition work. The 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 one at a time by using concrete saws to remove portions of each stack piece by piece, from top to bottom. No explosives

would be used. Screening would be used around the perimeter of the stacks 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 2-2 presents estimated waste quantities from the demolition activities.

Table 2-2 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	400¹	2,000²	1,100³

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.

2.6.3 Master Plan for Redevelopment of the Power Plant Property

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.³ The proposed project includes a Master Plan which establishes a vision for the redevelopment of the Power Plant Property as well as recommended improvements to pedestrian and circulation connections in the area. The Master Plan would amend the General Plan and LCP Land Use Plan designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project includes a General Plan and Coastal Land Use Plan Map Amendment and Zoning Map Amendment to incorporate the Master Plan and associated land use and zoning designations into Plan Morro Bay. The proposed Master Plan would not modify the

³ **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 a Land Use Plan amendment with Chapter 3 of the Coastal Act with the standard of review prior to any CDP processing for associated development.

existing land use or zoning designation on the remainder of the Power Plant Property, retaining the Visitor Serving Commercial designation and Mixed-Use Residential Overlay recently implemented through Plan Morro Bay and the Visitor Serving Commercial zoning implemented through the recent comprehensive update to the Zoning Ordinance/Implementation Plan that was adopted by the City Council in November 2022 (Ordinance 654) and amended in 2023 (Ordinance 662).

2.7 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 Land Use Plan 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 Power Plant Property.
- 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, which includes 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.
- Site the BESS Facility to minimize environmental and social impacts by being located on land that has historically been used for power generation. The BESS Facility 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 Power Plant Property 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).

2.8 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), Modification Permit, Design Review Permit, and a General Plan and Coastal Land Use Plan Map and Zoning Map Amendment to incorporate the Master Plan and associated land use and zoning 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 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.

Morro Bay Battery Energy Storage System Project

The Project Applicant, in conjunction with its contractors, 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 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.

Future development projects in the Master Plan area would be required to prepare focused, project-level environmental review consistent with the requirements of CEQA, which may include mitigation to reduce potential project-level environmental impacts.

3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

Morro Bay is located along the Pacific Ocean in western San Luis Obispo County, approximately thirteen miles northwest of the City of San Luis Obispo. San Luis Obispo County is located in the central coast region of California. Morro Bay occupies a coastal terrace, framed on the west by the Pacific Ocean and on the east by the Coast Range and Los Osos Valley in San Luis Obispo County. The City of Morro Bay (City) is surrounded by a buffer of undeveloped land on the north, east, and south and by the Pacific Ocean on the west. The Project Site is located in western Morro Bay, approximately 350 feet east of the Pacific Ocean and 2,100 feet east of Morro Rock. Figure 2 in Section 2, *Project Description*, shows the location of the Project Site in the region.

Regional access to the City is provided by State Route (SR 1), which runs east-west and north through the community, connecting Central Morro Bay to North Morro Bay, as well as SR 41 West, which extends east from the City to U.S. Highway 101 then to California's Central Valley. A grid-like system of east-west and north-south local roadways serve the local transportation system, with major local roads including Embarcadero and Main Street.

The region is characterized by a typical Mediterranean coastal climate, which is generally dry in the summer with mild, wet winters. The climate is moderated by the marine influence of the Pacific Ocean, which can bring persistent periods of wind and fog, especially during spring and summer months. The U.S. Climate Data Center maintains average weather data for the City. According to data collected at the City's weather station, the warmest months of the year are September and October, with an average maximum temperature of 71 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 44 degrees Fahrenheit. Rainfall is concentrated in the winter months, with the wettest months of the year being January, February, and March, with average monthly rainfall totals of 3.6, 3.8, and 3.3 inches, respectively (U.S. Climate Data 2024).

3.2 Project Site Setting

The approximately 107-acre Morro Bay Power Plant Property (Power Plant Property) is located at 1290 Embarcadero south of SR 1 and north of Embarcadero in the City. The Morro Bay Power Plant began operating in 1955, but has been idle since its retirement in 2014. The Power Plant Property currently contains the idle power plant building and smokestacks (stacks), Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center.

The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. The Project Site includes an approximately 24-acre portion located immediately north of the inactive Power Plant building that will be used for construction of the proposed 600-MW BESS (BESS Site). 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 inactive stacks immediately southwest of the power plant building (Demolition Site). The Project Site also includes the approximately 2.75-acre driveway that connects the power plant building to Quintana Road.

The Project Site is surrounded by Morro Creek, a recreational vehicle (RV) park, and temporary lodging facilities (hotel and motel) to the north; Pacific Gas and Electric (PG&E) property (switchyards) to the east; commercial and residential development to the south; the Embarcadero, commercial uses, and a marina to the southwest; and Coleman Park, the Morro Bay harbor walk, and dune habitat associated with Morro Rock beach to the west. The Project Site is locally accessible from Main Street, Beach Street, and Embarcadero, or from Main Street and Quintana Road.

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending development projects that may contribute to cumulative effects or a forecast of future development potential. Planned and pending development projects in Morro Bay at the time of the public release of the Notice of Preparation (NOP) of the EIR for the project (June 3, 2022) are listed in Table 3-1 and shown in Figure 3-1. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*, and Section 5, *Alternatives*.

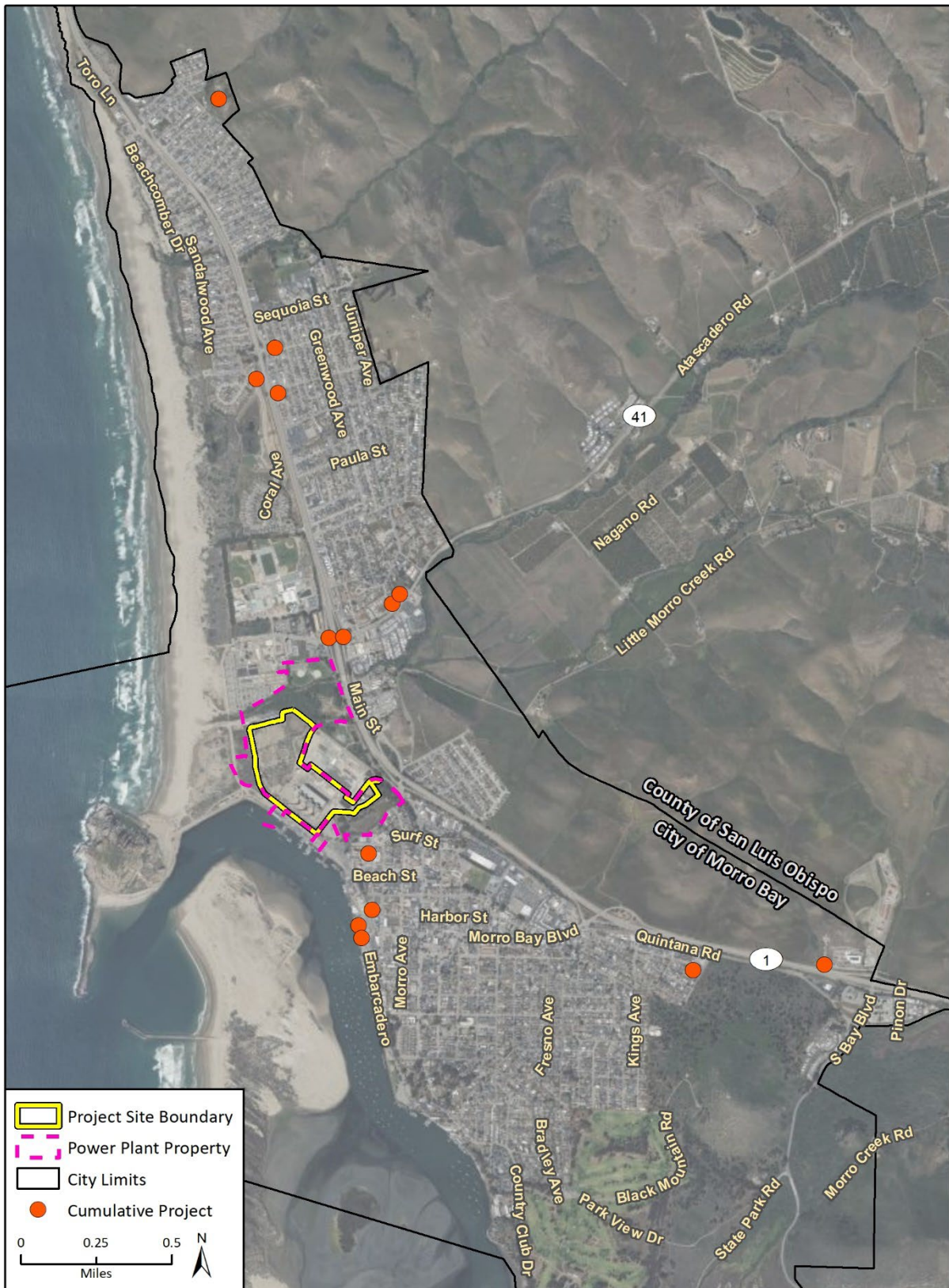
Table 3-1 City of Morro Bay Cumulative Projects List

Location	Status	Description ¹	Residential Units ²	Non-Residential Square Footage ²
295 Atascadero Road	in construction	83 room hotel		56,368
405 Atascadero Road	in construction	35-unit affordable apartments	35	
833 Embarcadero	in construction	Demo/reconstruction of 2-story mixed use commercial building		1,320
2790 Main Street	in construction	New construction of 8-room hotel		9,103
205 Harbor Street	building application review	Demolition of 3 existing office/residential structures, and construct new 6-unit 5,042 sf hotel		5,042
2900 Alder Avenue	planning approved	New construction of 6-unit hotel		4,117
2783 Coral Avenue	planning approved	5- lot SFR subdivision	5	
801 Embarcadero	planning application review	Redevelopment of mixed use building/hotel & restaurant retail		5,206
3300 Panorama Drive	planning application review	61-lot SFR subdivision	61	
1140 Allesandro Avenue	planning application review	New construction & subdivision map to create 5 residential units and 2 commercial units	5	10,000
541 Atascadero Road	planning application review	New construction of 4-unit apartment complex	4	
1175 Scott Street	planning application review	New construction of 3 hotel units and 1 residential security unit	1	2,290
545 Atascadero Road	planning application review	New construction of 15-unit townhome project	15	
301-390 Seashell Cove	pre-application	Potential 40-70 unit multi-family housing project	70	

¹ The information in this table was provided by the Morro Bay Community Development Department in October 2022.

² For some projects, estimates of residential units and non-residential square footage are estimated based on available project information.

Figure 3-1 City of Morro Bay Cumulative Project Locations



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 Additional data provided by Vistra, 2022 and County of San Luis Obispo, 2017.

4 Environmental Impact Analysis

This section discusses the potentially significant environmental effects of the proposed project. A “significant effect” as defined by the *CEQA Guidelines* §15382 is “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

The assessment of each topic area begins with a discussion of the environmental setting and regulatory setting related to the topic, and is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for a topic area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *CEQA Guidelines*.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where a mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the project in conjunction with other planned and pending developments in the area listed in Section 3.0, *Environmental Setting*.

Mandatory Findings of Significance

Section 15065 of the *CEQA Guidelines* states that an agency must find that a project may have a significant effect on the environment and require preparation of an EIR if there is substantial evidence, in light of the whole record, that any of the following conditions may occur:

- The potential for the project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory;
- Project impacts that are individually limited, but cumulatively considerable. (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects); and
- Environmental effects of the project which will cause substantial adverse effects on human beings, either directly or indirectly.

These conditions are known as Mandatory Findings of Significance. Section 15065 also requires that once an agency decides to prepare an EIR for a project, the agency must determine whether any of the above conditions will occur as a result of the project. This EIR discusses whether these conditions will occur in the following subsections:

- Section 4.3, *Biological Resources*, describes the project’s potential effects of the project on plant and animal species populations, habitats, communities, and migratory patterns.
- Section 4.4, *Cultural Resources and Tribal Cultural Resources*, describes the project’s potential effects on important historic and prehistoric cultural and tribal cultural resources on the Project Site.
- The project’s potential adverse environmental effects to human beings are discussed in Section 4.1, *Aesthetics and Visual Resources*; Section 4.2, *Air Quality*; Section 4.5, *Geology and Soils*; Section 4.6, *Greenhouse Gas Emissions*; Section 4.7, *Hazards and Hazardous Materials*; Section 4.8, *Noise*; Section 4.9, *Transportation*; and Section 4.10, *Effects Found Not to be Significant*.
- The environmental analysis sections of the EIR each conclude with a discussion of the project’s contribution to cumulative effects.

As discussed in Section 4.4, *Cultural Resources and Tribal Cultural Resources*, the project would have a significant and unavoidable impact on historical resources (Impact CUL-1). The project would not result in any other significant and unavoidable impacts to the environment. The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the project.

4.1 Aesthetics/Visual Resources

This section of the EIR addresses the potential physical environmental effects on scenic vistas, scenic resources, visual character and quality, and light and glare from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24-acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

4.1.1 Setting

a. Existing Visual Conditions

The City of Morro Bay (City) is a seaside city adjacent to the Pacific Ocean in northwestern San Luis Obispo County, along State Route (SR) 1 (also referred to as Highway 1). Much of the City overlooks Morro Bay, a natural embayment with an all-weather small craft commercial and recreational harbor. Views west of SR 1 include Morro Rock, Morro Bay, the sandspit and beaches of Morro Bay State Park, and the cityscape of Morro Bay. East of SR 1, the surrounding hillsides provide a backdrop for Morro Bay. Montana de Oro State Park can be seen from Main Street and Embarcadero, providing a viewshed for the City. The City contains large areas of open space along the coast. Much of the beaches and coastal lands west and south of downtown Morro Bay are designated as permanent open space for conservation and recreation under the jurisdiction of the California State Parks System.

b. Scenic Resources

Most communities identify scenic resources as important assets that contribute to community identity. Scenic resources can be natural or man-made features such as trees, rock formations, historic buildings, and public art. Scenic resources in Morro Bay include:

- Morro Rock
- Del Mar Park
- Morro Bay salt marsh
- Atascadero Beach tract

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, *Project Description*, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, *Project Description*, Figure 2-8.

- Cloisters Park
- Former Morro Bay Power Plant building and stacks
- Downtown
- Black Mountain
- Morro Bay Sandspit
- State Museum of Natural History
- Cloisters neighborhood
- The beaches
- Coleman Park
- Embarcadero
- Morro Heights
- Morro Bay Golf Course
- State Boat Marina

c. Scenic Vistas and Views

A scenic vista benefits the public by providing views of an aesthetically valued landscape. The term “vista” generally implies an expansive view, usually from an elevated point or open area. Scenic vistas and views may be officially designated or unofficially defined by a set of criteria. The criteria used for assessing views and scenic vistas in Morro Bay are described in the 2021 Final EIR for Plan Morro Bay (2021 Final EIR). These criteria include the extent to which the viewable landscape or structures: enhance the City’s character through the use of building materials and the scale of structures; are compatible with surrounding structures; are compatible with the natural features of the area (i.e., topography); preserve public views; enhance and define the City’s image; add to the uniqueness of the City’s image; maintain scenic highway conditions; and any additional view considerations as requested by regulatory agencies. There are no officially designated scenic vistas identified in the Plan Morro Bay, which serves as the City’s General Plan and Local Coastal Program (LCP) and Coastal Land Use Plan. However, the 2021 Final EIR identifies the following scenic vistas in the vicinity of the Project Site and Power Plant Property: views toward Morro Rock, views toward Morro Bay Estuary and the sandspit, views toward Los Osos and the Irish Hills, and views toward the hills. Unlike scenic vistas, which are expansive views from a particular point, scenic views are visible from multiple areas. For example, scenic views of the coastline are visible from many areas within Morro Bay.

d. Scenic Highways

California’s Scenic Highway Program designates scenic highways with the intention of protecting these corridors from change that would diminish the aesthetic value of adjacent lands. A highway is designated as an eligible scenic highway when the local governing body (city or county) applies to the California Department of Transportation (Caltrans) for scenic highway approval, and Caltrans determines that it qualifies for official status (Caltrans 2024). Scenic highways must have an approved Corridor Protection Program (see Section 4.1.2) and remain in compliance to maintain scenic highway status.

According to the Caltrans State Scenic Highway Mapping System, SR 1 is an officially designated State Scenic Highway and All American Road in the vicinity of the Project Site. SR 41 between SR 1 and U.S. 101 is eligible for State Scenic Highway designation but has not been officially designated (Caltrans 2019). Both highways are shown on Figure 2-1 and Figure 2-2 in Section 2, Project Description.

e. Visual Character

The existing visual character of Morro Bay is organized by neighborhood or corridor, also referred to as “community character areas” identified in Plan Morro Bay. The character-defining features of

Morro Bay vary by area of the City and generally include density, building bulk, the location of buildings on a lot, lot size, architectural style, exterior colors and materials, similarities and differences between neighboring structures, and the year in which structures were built. Most buildings are one to two stories in height. Most public landscaping vegetation is native and drought-tolerant. The most common large trees throughout the City are eucalyptus, cypress, melaleuca, and blue gum. Large, mature trees line the Embarcadero in front of the Power Plant Property. Waterfront commercial and industrial businesses are located across the street from the Project Site to the southwest, on the west side of the Embarcadero, overlooking the harbor. Morro Rock, downtown Morro Bay, and various coastal resources such as the beach, sandspit, and harbor are visible in the vicinity of the Project Site, and are identified by Plan Morro Bay as “iconic” visual resources which add to the character of the City.

Plan Morro Bay identifies specific community character areas within the City. The Project Site is part of the North Embarcadero community character area, which includes the North Embarcadero waterfront as well as adjacent industrial areas, including the former Morro Bay Power Plant, Lila Keiser Park, the City wastewater treatment plant, the commercial fishermen’s dry storage and repair facility, and Morro Rock, as well as several residentially zoned parcels. The area is mostly paved and has minimal vegetation, except along Morro Creek and at Lila Keiser Park. The existing three smokestacks (stacks) and power plant building located on the Project Site contribute to the industrial character of the North Embarcadero and are the visually dominant feature of this area. Much of the North Embarcadero offers a clear view of Morro Rock. This area represents the largest concentration of working waterfront uses in Morro Bay, with restaurants, retail stores, piers, docks, commercial fishing offloading facilities, and other related commercial fishing infrastructure located along the waterfront. The topography in this area is relatively flat and the only beaches are located north and south of Morro Rock. The area between the waterfront and Morro Rock, including Coleman Park, is undeveloped and used for recreation.

f. Light and Glare Conditions

Light conditions in the vicinity of the Project Site are typical to those found in suburban areas (e.g., roadway lighting, commercial parking lot and building lighting, residential buildings, headlights from motor vehicles). Sources of daytime glare include direct beam sunlight and reflections from the water, windows, architectural coatings, glass, and other reflective surfaces. Sources of nighttime light include structure illumination, decorative landscape lighting, lighted signs, streetlights, and vehicle headlights, particularly from SR 1 and other high traffic roadways. The Power Plant Property includes existing security lighting around its perimeter, as well as red Federal Aviation Administration (FAA) safety lights located on each of the three stacks.

4.1.2 Regulatory Setting

a. Federal Regulations

No existing federal regulations pertain to the visual resources in the vicinity of the project.

b. State Regulations

California Coastal Act and California Coastal Commission

The California Coastal Act of 1976 (Coastal Act; Public Resources Code Section 30000, et seq.) established the California Coastal Commission, the State’s coastal protection and planning agency;

set forth requirements to guide long-term planning and regulation of new development within the coastal zone; and established policies to protect public access to and along the shoreline. Section 30251 of the Coastal Act mandates that scenic and visual qualities of coastal areas be considered and protected as resources of public importance. Permitted development must be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas.

Caltrans Scenic Highways and Corridor Protection Program

Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way, that traverses an area of exceptional scenic quality. As described in Section 4.1.1, Setting, all designated scenic highways are required to have an approved Corridor Protection Program and remain in compliance to maintain Caltrans scenic highway status. The Corridor Protection Program requires the local governing body to develop and adopt protection measures in the form of ordinances, zoning, and/or planning policies that apply to the area of land within the scenic corridor.

The City of Morro Bay Scenic Highway Corridor Protection Plan was developed by the San Luis Obispo Council of Governments as part of the SLO *North Coast Scenic Byway Corridor Plan*, which regulates preservation of the scenic quality of the SR 1 corridor (SLOCOG 2014). This document identifies programs that will maintain and improve the opportunities and experiences of traveling in the scenic highway corridor along SR 1 and serves as the Corridor Protection Program consistent with Caltrans requirements.

c. Local Regulations

Plan Morro Bay

Plan Morro Bay, which was adopted by the City of Morro Bay in May 2021, serves as the City's General Plan and LCP and Coastal Land Use Plan. Protections for scenic resources are included in the Community Design, Conservation, and Land Use Elements. The Community Design Element outlines the vision for the aesthetic development of the community and character of Morro Bay and establishes the City's long-term community design and development goals to maintain a unique city culture and identity with respect to community form, layout, and community character areas. Community Design Element Policies applicable to scenic resources are listed below.

Policy CD-1.1 Distinct Character Areas. Consider and maintain the distinctiveness of each character area in planning and design decision-making.

Policy CD-1.2 Compatible New Development. Require new development projects to be compatible with the character vision for the area in which it is located, as described in the Vision for Community Character Areas, above, including ensuring that new development is located within existing developed areas and built in a manner that respects and responds to their unique natural and built environments.

Policy CD-1.3 Design Guidelines. Work with residents and business owners to develop and adopt citywide design guidelines (for areas of the City that don't already have them) that illustrate appropriate form, scale, and massing for buildings while allowing for distinctive design and flexibility.

Policy CD-1.8: Minimize Aesthetic Impacts. Structures, including fences, shall be subordinate to and blended into the environment, including by using appropriate materials that will achieve that effect. Where necessary, modifications shall be required for siting, structural design, shape, lighting, color, texture, building materials, access, and screening to protect public views and ensure development protects the public viewshed. Public views shall be protected and enhanced as a matter of great public importance, particularly related to public views that include Morro Bay proper, the sandspit, and Morro Rock, and all development shall be sited and designed to be subordinate to such views.

Policy CD-1.9: Complementary Design. Require building designs, materials, and landscaping that are complementary to the landscape, climate, and existing development.

Plan Morro Bay's Conservation Element also addresses visual resources, scenic highways, and viewsheds, and includes policies focused on protecting the aesthetic and natural visual resources in and around Morro Bay while preserving the community's identity. Conservation Element Policies applicable to scenic resources are listed below.

Policy C-9.2 Public View Protection. Public views to and along the ocean and scenic coastal areas shall be protected and enhanced, and alteration of natural landforms shall be minimized. Additionally, development in visually prominent settings, including all development seen from Highway 1, shall be sited and designed to avoid blocking or having a significant adverse impact on public views. Methods to achieve this may include building and road siting, building size, design and lighting that is integrated with the environment, and clustering of development.

Policy C-9.4 Viewshed Protection Guidelines. Designate and protect official viewsheds through viewshed protection design guidelines. The guidelines shall include special siting and design criteria including placing accessory development such as fences away from public view as much as possible, height and story limitations, bulk and scale limitations, screening and landscaping requirements, natural materials and color requirements, minimizing lighting that spills into nighttime public views, avoiding glares from windows and reflective surfaces, and requirements to prepare landscaping plans using drought-tolerant and native plants that protect and enhance scenic resources; minimizing land coverage, grading, and structure height; and maximizing setbacks from adjacent open space areas.

Policy C-9.5 Lighting Standards. Development shall be sited and designed to avoid illuminating, reduce glare, protect and enhance skyward nighttime public views, and minimize lighting in open spaces and natural areas. New lighting fixtures shall be mounted at low elevations and fully shielded to direct lighting downward. Lighting along walkways should be mounted on low bollards or ground buttons. Lighting shall be focused on targeted use areas and shall be limited to what is necessary for public safety. Floodlighting shall be prohibited. Exterior lighting fixtures should complement the architectural style of structures.

Policy C-9.7 Massing, Height, and Orientation Requirements. Require massing, height, and orientation of new development or construction to be sited and designed to preserve public coastal views to and along the ocean and scenic areas.

Policy C-9.9 Infrastructure and Utility Requirements. Encourage infrastructure and utilities that do not block or detract from views of scenic vistas. All new utilities shall be located underground or outside of public view if feasible. If undergrounding is not possible, an in-lieu fee shall be paid toward future undergrounding.

Policy C-9.12 Public and Private Landscaping. Ensure new public or private landscaping considers public views and vistas, and encourage landscape installations that protect or enhance those views and vistas, including ensuring that such landscaping does not obstruct public scenic views and vistas at maturity.

Plan Morro Bay’s Land Use Element identifies a cohesive land use development pattern designed to accomplish the goals of the City. Policies related to scenic resources are listed below.

Policy LU-5.4 Vistra Energy 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 LCP amendment prior to any CDP processing for associated development.

Policy LU-8.9 Design Flexibility. Allow for design flexibility in the downtown and waterfront areas while perpetuating quality development that will complement and enhance the area's eclectic style and small, seaside character. Development along the waterfront shall comply with the Waterfront Master Plan.

Morro Bay Municipal Code – Title 17 (Zoning)

The Zoning Code (Title 17) of the Morro Bay Municipal Code implements the General Plan, particularly the Land Use Element.² While General Plan designations are more generalized in nature, the Zoning Code provides more specific controls on land use, density or intensity of development, and development standards to implement the City’s General Plan goals and policies. A comprehensive update to the Zoning Code was adopted in November 2022, including development standards such as maximum height, setbacks, design standards and other standards (City of Morro Bay 2023a). Section 17.14.090 of the Zoning Code provides standards for the protection of visual resources and compatible design for new development within the coastal zone of the City. Additionally, Chapter 17.29 of the Zoning Code provides regulations for signage in the City. Lighting, illumination, and glare in the City are regulated by Sections 17.23.080 and 17.28.080 of the Zoning Code. Chapter 17.38 of the Zoning Code establishes design review requirements to ensure that new development supports the goals and objectives of the General Plan and other adopted plans and guidelines, including those related to visual resources and compatible design.

Residential Design Guidelines

In July 2015, the City of Morro Bay adopted residential design guidelines, which were re-authorized in October 2016. The design guidelines were developed to provide guidelines for use in reviewing residential projects to achieve consistency with the look and feel of the existing neighborhood (City of Morro Bay 2015).

² The references in this section are to the comprehensive update to the Zoning Code/Implementation Plan adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662), which is currently anticipated to be certified by the California Coastal Commission in March 2024.

Objective Design Standards

In December 2023, the City of Morro Bay adopted Ordinance 662, which establishes Residential and Mixed-Use Objective Design Standards as Chapter 17.31 of the Zoning Code. Chapter 17.31 of the Zoning Code includes regulations for site and building design standards, special standards for mixed-use buildings, and parking structure design standards (City of Morro Bay 2023b).

4.1.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for the future development authorized under Plan Morro Bay to create potential aesthetic and visual impacts, including impacts to scenic vistas, scenic resources, visual character and quality, and light and glare.

The 2021 Final EIR concluded that, while implementation of the General Plan and LCP Update could affect views of scenic resources such as Morro Rock and the Morro Bay Power Plant smokestacks, planned future land uses on the Power Plant Property would be consistent with surrounding development and comply with the General Plan and LCP Update Policies and the Zoning Code (Title 17 of the Morro Bay Municipal Code), and the City's Residential Design Guidelines would minimize any such effects. Furthermore, General Plan and LCP Update Conservation and Community Design Elements Goal C-2 and Policies C-2.1 through C-2.4; as well as Goal C-9 and Policies C-9.2, C-9.4, C-9.7, C-9.9, C-9.10, C-9.12, CD-1.3, CD-1.8, and CD-1.9, would minimize adverse effects on scenic vistas and resources, including historic buildings, by implementing cultural and historic resource protections and protections of public views and viewsheds. The 2021 Final EIR determined that these policies, as well as compliance with the Morro Bay Municipal Code, would minimize the potential for implementation of the General Plan and LCP Update to result in any significant impacts related to degradation of scenic vistas and scenic resources.

The 2021 Final EIR concluded that development and redevelopment under the General Plan and LCP Update could affect the visual character of areas of the City, particularly on the former Morro Bay Power Plant and City wastewater treatment plant sites in the North Embarcadero community character area, where existing paved lots and industrial uses were planned to be replaced by a mix of potential residential and Visitor-Serving Commercial uses on the Morro Bay Power Plant site and open space/recreation uses on the wastewater treatment site. However, the General Plan and LCP Update would maintain the City's character through implementation of Conservation and Community Design Elements Goal CD-1, Policies CD-1.1 through CD-1.10; Goal LU-1, Policy LU1.1; Goal LU-5, Policy 5.4; and Goal LU-8, Policy 8.9, all of which describe design standards and guidelines for compatible development. The 2021 Final EIR determined that these policies, as well as compliance with the Morro Bay Municipal Code, would minimize the potential for implementation of the General Plan and LCP Update to result in significant impacts related to degradation of existing visual character.

The 2021 Final EIR concluded that new development facilitated by the General Plan and LCP Update would introduce new sources of light and glare in Morro Bay, resulting in increased ambient nighttime lighting; however, the lighting standards included in General Plan and LCP Update Conservation Element Policy C-9.5 would prevent new sources of light or glare that would impact views in the City. The 2021 Final EIR concluded that new development facilitated by the General Plan and LCP Update would be subject to existing regulations in the City's Zoning Code, and General Plan and LCP Update policies to protect skyward nighttime views and to lessen or prevent glare, and thereby would result in less than significant impacts associated with new sources of light and glare.

4.1.4 Impact Analysis

a. Methodology

Visual resources are generally defined as including natural and built features in the visible landscape. Landforms, water, and vegetation are among the natural elements that define an area's visual character. Buildings, roads, and other structures reflect human modifications to the natural landscape. The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to views and aesthetic conditions differently. This evaluation is limited to public views, as impacts to private views do not constitute an environmental impact under CEQA. This analysis evaluates changes to the existing visual environment resulting from the project.

Simulation Preparation

To represent views that would be experienced from sensitive viewpoints, seven key viewpoints (KVPs) were selected for the simulation of post-project conditions; Figure 4.1-1 shows the location of the KVPs and Figure 4.1-2 through Figure 4.1-8 show the results of these simulations. Each KVP presents a single viewpoint which depicts the visual change that implementation of the project would have on viewers from the identified viewpoint (sensitive receptors). KVP 1 (Figure 4.1-2) depicts the view looking northwest toward Morro Bay Power Plant from the Embarcadero, representing the view recreational visitors and motorists along the Embarcadero would have of the Project Site. KVP 2 (Figure 4.1-3) depicts the view looking northeast from the Morro Rock parking area, approximately 0.4 mile from the Power Plant Property, representing the view visitors at Morro Rock would have of the Project Site. KVP 3 (Figure 4.1-4) depicts the view looking southeast toward Morro Bay Power Plant from the adjacent bicycle bridge, representing the view recreational visitors and cyclists traveling along the bike path would have of the Project Site. KVP 4 (Figure 4.1-5) depicts the view looking southwest from southbound SR 1 at the SR 41/Atascadero exit, representing the view of the Project Site for motorists along SR 1. KVP 5 (Figure 4.1-6) depicts the view looking southwest from Sunset Court, approximately 0.5 mile from the Power Plant Property, representing the view of the Project Site for proximate residents. KVP 6 (Figure 4.1-7) depicts the view looking west from Redcliff Avenue and Berwick Drive, approximately 0.3 mile from the Power Plant Property, representing the view of the Project Site for proximate residents. KVP 7 (Figure 4.1-8) depicts the view looking north toward the entrance to the Project Site from the Embarcadero, representing the view recreational visitors and motorists along the Embarcadero would have of the Project Site.

Visual simulations of the Project Site from the identified KVPs were prepared to provide a comparison of pre- and post-project conditions, as shown in Figure 4.1-2 through Figure 4.1-8 (AESims 2023). The visual simulations provided in these figures are the result of a computer modeling process that combines gathered field data (photographs and measurements) with the Project Applicant's conceptual engineering design data to digitally model a simulated image of the project.

Figure 4.1-1 Key Viewpoints Map



Figure 4.1-2 Key Viewpoint 1



Photograph 1. Existing view looking northwest from Embarcadero.



Simulated View 1. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-3 Key Viewpoint 2



Photograph 2. Existing view looking northeast from Morro Rock parking area.



Simulated View 2. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-4 Key Viewpoint 3



Photograph 3. Existing view looking southeast from bicycle bridge.



Simulated View 3. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-5 Key Viewpoint 4

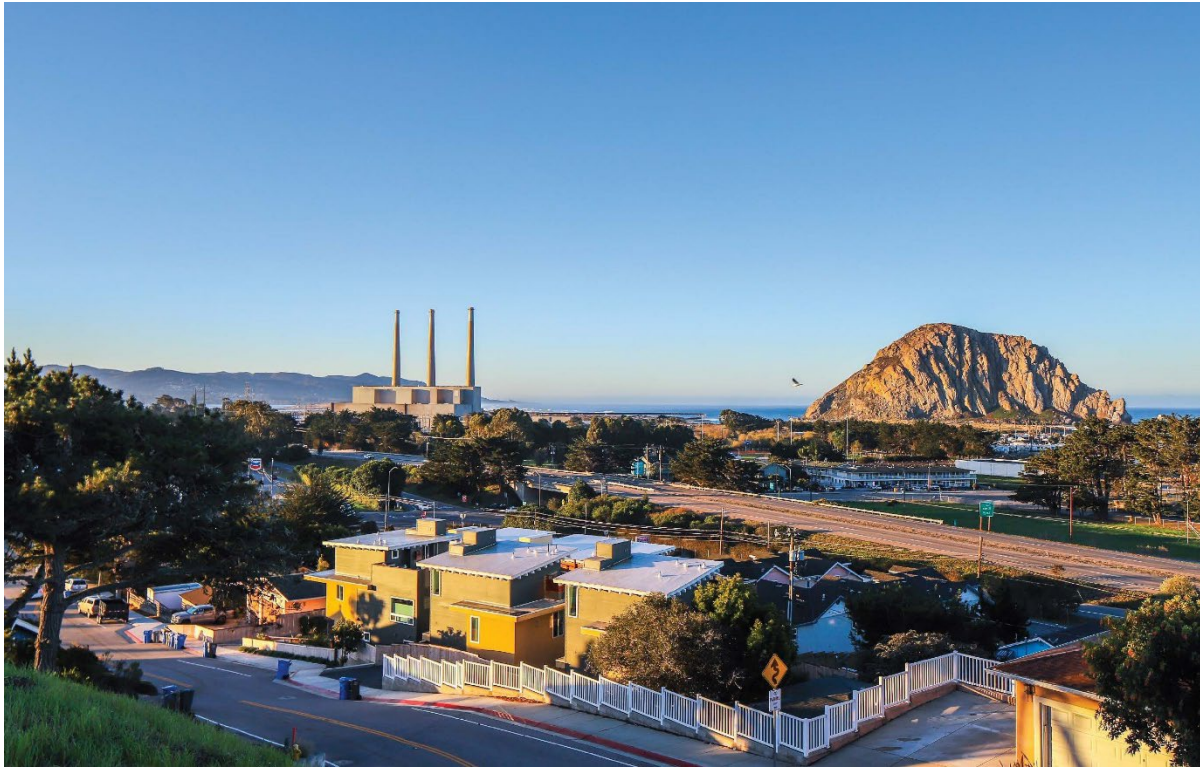


Photograph 4. Existing view looking southwest from southbound Highway 1.



Simulated View 4. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-6 Key Viewpoint 5



Photograph 5. Existing view looking southwest from Sunset Court.



Simulated View 5. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-7 Key Viewpoint 6



Photograph 6. Existing view looking west from Redcliff Avenue and Berwick Drive.



Simulated View 6. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

Figure 4.1-8 Key Viewpoint 7



Photograph 7. Existing view looking north from Embarcadero.



Simulated View 7. Simulated view after construction of the BESS and demolition of the power plant building and stacks.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G to the *CEQA Guidelines*. For purposes of this EIR, implementation of the project may have a significant effect on the environment if it would do any of the following:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point); and/or
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

c. Project Impacts

Threshold 1: Would the project have a substantial adverse effect on a scenic vista?
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Impact AES-1 THE PROJECT WOULD NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA. COMPLIANCE WITH PLAN MORRO BAY POLICIES AND TITLE 17 OF THE MORRO BAY MUNICIPAL CODE WOULD PROTECT SCENIC VISTAS AND ENSURE THAT DEVELOPMENT UNDER THE MASTER PLAN WOULD NOT ADVERSELY AFFECT PUBLIC VIEWS. THESE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

There are no officially designated scenic vistas visible from the Project Site, and the Power Plant Property does not contribute to a designated scenic vista as a scenic resource. However, views toward Morro Rock, toward Morro Bay Estuary and the sandspit, toward Los Osos and the Irish Hills, and looking toward the hills, function as scenic vistas.

Demolition

As part of the project, the power plant building and three stacks, which serve as a visually dominant feature on the Project Site, would be demolished. Figure 4.1-2 through Figure 4.1-8 provide simulated views of KVPs 1 through 7 with the power plant building and stacks removed. As shown in Figure 4.1-2, the existing view looking northwest from the harbor waterfront toward the Embarcadero is dominated by the power plant building and stacks. Removal of these structures would remove existing visual intrusions from views along the Embarcadero and provide more visual emphasis on existing trees, other vegetation, and smaller-scale community development. As shown in Figure 4.1-3, the power plant building and stacks dominate the view looking northeast from the parking area adjacent to Morro Rock, obstructing views of surrounding hillsides. Removal of these structures would result in more open and unobstructed views of the surrounding hillsides and trees. As shown in Figure 4.1-4, the Power Plant stacks are highly contrasting vertical features in the view from the bicycle bridge. With removal of these structures, the existing Monterey Cypress trees in the foreground, which are characteristic of the region, would become more visually prominent. As shown in Figure 4.1-5, the top half of the three stacks are visible above the tree line from the southwest view along southbound SR 1. As shown in the simulation of this view, removal of the stacks would result in more open views of the tree line and natural landscape with fewer encroaching artificial visual elements. As shown in Figure 4.1-6, the Power Plant Property is prominent above the tree line and competes with Morro Rock for visual dominance. As shown in

the simulation of this view, removal of the stacks and power plant building would provide more open views of the ocean and bring visual focus to Morro Rock, which Plan Morro Bay describes as “Morro Bay’s most iconic feature.” Similarly, as shown in Figure 4.1-7, structures on the Power Plant Property currently obscure views of Morro Rock. As shown in the simulation of this view, removal of the power plant building and stacks would enhance views of Morro Rock and the ocean.

While the power plant building and stacks serve as a unique character feature of the City, their removal would provide a more unified viewshed emphasizing the area’s natural features, including the ocean and Morro Rock, and free of encroaching artificial and industrial elements. As a result, removal of the power plant building and stacks would not result in a significant adverse impact to a scenic vista.

BESS Facility Construction

Construction and decommissioning of the proposed BESS Facility would require establishing temporary staging areas for vehicle and equipment parking, as well as material storage. A temporary staging/laydown area would be established at existing hard surface locations on the Power Plant Property, such as 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 Power Plant Property. No more than 300 workers would be present on the Project Site at any given time; the average number of workers on site during project construction or decommissioning would be expected to be between 100 and 300. Construction and decommissioning 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. While certain construction activities would be visible to motorists and recreational visitors for the full duration of the BESS Facility’s construction phase, which is expected to last for a period of 36 to 48 months, all construction impacts would be temporary.

Construction-related visual impacts resulting from the temporary presence of equipment, materials, and work crews at the BESS Site and staging/laydown yards would therefore not significantly impact a scenic vista.

BESS Facility Operation

The BESS Facility would include three enclosed buildings, each approximately 30 feet tall. Additional equipment installed on the roof of the buildings would extend up to 2 to 6 feet in height. As shown in Figure 2-5 (BESS Site Plan), the Power Conversion Systems (PCSs) would be located on concrete pads outside the buildings. Each PCS would be approximately 15 feet tall. The proposed BESS Facility would also include three approximately 30-foot-tall substations. 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. Approximately nine new transmission line poles with a maximum height of 105 feet would be required for connection to PG&E’s existing 95-foot-tall dead-end structures (the H-shaped structure shown in Figure 4.1-8), which are the final structures before the connection with the substation.

Due to the existing berms and vegetation around the perimeter of the Project Site, and the lower elevations of the tank farm pads where the buildings would be placed, no additional vegetative screening is proposed.

Section 17.14.090 of the Zoning Code describes required standards for the protection of visual resources and compatible design for new development within the coastal zone of the City, and

Chapter 17.29 of the Zoning Code provides regulations for signage in the City. As shown in the simulation in Figure 4.1-4, the proposed BESS Facility buildings would be partially obscured by the existing berms, vegetation, fencing, and topography. Additionally, the BESS Facility buildings would be approximately the same height as existing trees in the vicinity, would not obstruct public views of the hills in the background, and would not present as a dominant feature, as shown in Figure 4.1-3. The proposed substations and associated gen-tie transmission line would be faintly visible against the BESS Facility buildings and the hills in the background. However, the BESS Facility, gen-tie line, and substations would be visually consistent with the character of the existing PG&E substation and infrastructure, and would not contrast highly with these elements.

As shown in the visual simulations in Figure 4.1-3 and Figure 4.1-4, the BESS Facility design would not highly contrast with the existing substation and utility infrastructure in the vicinity of the Project Site. Compliance with the City's Zoning Code requirements and the goals and policies in Plan Morro Bay would further protect scenic resources upon project development. As a result, the BESS Facility would not result in significant adverse effects on scenic vistas.

BESS Facility Decommissioning

As described in Section 2, *Project Description*, this analysis assumes that at the end of the BESS Facility's anticipated 40-year operating life, the BESS Facility would be decommissioned, which may require the removal of all above-grade facilities, buried electrical conduit, all concrete foundations if such improvements are not identified for potential future redevelopment by the City, as well as restoration of site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. Decommissioning activities would involve the use of heavy equipment and personnel similar to that used for the BESS Facility's construction phase. As a Condition of Approval for the project, the Project Applicant would be required to prepare a Reclamation and Decommissioning Plan containing details regarding site reclamation, decommissioning of the BESS, and removal of all project improvements that are deemed by the City to not be of potential value for redevelopment or adaptive reuse.

Decommissioning-related visual impacts resulting from the temporary presence of equipment, materials, and work crews at the BESS Site and staging/laydown yards during decommissioning would not significantly impact a scenic vista. All unpaved areas of the Project Site compacted during construction, operations, or by equipment used for decommissioning would be tilled in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. Upon removal of the BESS Facility, the BESS Site would look similar to the existing, undeveloped conditions and the removal of the BESS Facility would not significantly impact a scenic vista.

Master Plan

As described in Section 4.1.3, *Previous Environmental Review*, the 2021 Final EIR concluded that, while implementation of the General Plan and LCP Update could affect views of scenic resources such as Morro Rock, planned future land uses on the Power Plant Property would be consistent with surrounding development and compliance with the General Plan and LCP Update Policies, Title 17 of the Morro Bay Municipal Code, and the City's Residential Design Guidelines would minimize any such effects.

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use

and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use designation on the BESS Site. Therefore, the potential visual effects of this land use designation change would not result in a significant adverse effect on scenic vistas.

Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the land uses and vision of Plan Morro Bay evaluated in the 2021 Final EIR. Furthermore, the Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to preservation of scenic vistas. As a result, future development that may occur under the Master Plan would be required to comply with applicable General Plan and LCP policies related to scenic vistas. With compliance with the applicable rules, regulations, and policies described above, impacts to scenic vistas associated with the Master Plan would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 2: Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact AES-2 THE PROJECT WOULD NOT RESULT IN DAMAGE TO A SCENIC RESOURCE. THE MORRO BAY POWER PLANT BUILDING AND STACKS ARE HISTORIC RESOURCES PURSUANT TO CEQA, BUT THE MORRO BAY POWER PLANT IS NOT IDENTIFIED AS A SCENIC RESOURCE IN THE SAN LUIS OBISPO NORTH COAST SCENIC BYWAY CORRIDOR PLAN, WHICH REGULATES PRESERVATION OF THE SCENIC QUALITY OF SR 1. COMPLIANCE WITH PLAN MORRO BAY POLICIES AND TITLE 17 OF THE MORRO BAY MUNICIPAL CODE WOULD ENSURE THAT DEVELOPMENT UNDER THE MASTER PLAN WOULD NOT RESULT IN DAMAGE TO SCENIC RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The Morro Bay Power Plant building and three stacks are visible from SR 1, which is an officially designated State Scenic Highway and All-American Road, and SR 41, which is eligible but has not been officially designated (Caltrans 2019). As described in the *San Luis Obispo North Coast Scenic Byway Corridor Plan*, SR 1 possesses nationally significant intrinsic qualities, and was designated as a result of the scenic, natural, recreational, and historical qualities (SLOCOG 2014). The power plant building and stacks are not identified as a scenic resource within the *San Luis Obispo North Coast Scenic Byway Corridor Plan*.

Demolition

As shown in Figure 4.1-5, the Power Plant stacks are visible from SR 1. As discussed in Section 4.4, *Cultural Resources and Tribal Cultural Resources*, the Morro Bay Power Plant, which is comprised of the Power Plant Property, the electrical switchyard, and a cooling water discharge, was recommended as eligible for the National Register of Historic Places, California Register of Historical Resources, and local designation as a historical resource. The power plant building and stacks are

contributing components to the eligibility of the Power Plant Property as a historical resource pursuant to CEQA (Appendix E). However, while these structures are historic resources pursuant to CEQA, the Morro Bay Power Plant is not identified as a scenic resource in the *San Luis Obispo North Coast Scenic Byway Corridor Plan*, which regulates preservation of the scenic quality of SR 1. Furthermore, the removal of the Morro Bay Power Plant structures would remove visual obstructions currently blocking designated scenic resources visible from SR 1, such as Morro Rock. On October 26, 2021, the Morro Bay City Council voted 4:1 to authorize Vistra Corporation, the property owner and Project Applicant, to remove the power plant building and stacks. This direction is consistent with Plan Morro Bay Community Design Element Policy CD-18 (Minimize Aesthetic Impacts), Conservation Element Policies C-9.2 (Public View Protection) C-9.9 (Infrastructure and Utility Requirements), and Land Use Element Policy LU-5.4 (Vistra Energy Site Master Plan). Therefore, removal of the power plant building and stacks would not damage scenic resources within a state scenic highway.

BESS Facility Construction, Operation, and Decommissioning

To varying degrees throughout the BESS Facility construction and operation phases, as well as planned decommissioning, certain activities would be noticeable to motorists, residents, and visitors along SR 1. SR 1 is situated at a higher elevation than the Project Site, providing a more direct vantage point to the Power Plant Property than views of the Power Plant Property from the Embarcadero at street level. However, as shown in Figure 4.1-5, the BESS Facility would not be as visually prominent from SR 1 as the existing Power Plant stacks. There is an approximately 0.15-mile stretch along SR 1 where vegetation screening the BESS Site becomes sparse enough to allow intermittent views of the BESS Site between stands of trees for motorists along north and southbound SR 1. At 60 miles per hour (mph), motorist views of this stretch would last approximately 9 seconds. Existing earthen berms, vegetation, and security fencing around the Power Plant Property would obscure the BESS Site and most construction, operation, and decommissioning activities. Construction and decommissioning activities would be temporary and of short duration, particularly for any one area. Because these activities would be generally obscured from SR 1, because construction and decommissioning activities would be temporary, the visual impact of construction, operation, and decommissioning activities would not substantially damage scenic resources within a state scenic highway, and would be less than significant.

As described in Section 2, *Project Description*, up to six Monterey Cypress trees may be removed for access west of the proposed southernmost building and associated substation. Final project design would avoid the trees where possible. However, trees that would need to be removed would be replaced. The replaced trees, in addition to trees located outside of the BESS Site but on the Power Plant Property, would provide visual screening. Given the limited number of trees to be removed and replaced and the significant visual screening provided by other trees, the proposed tree removal and replacement will not substantially damage scenic resources and impacts would be less than significant. Furthermore, all tree replacements would be completed in compliance with applicable City requirements, including the Major Vegetation Guidelines, which would further ensure this impact would remain less than significant.

Master Plan

As described in Section 4.1.3, *Previous Environmental Review*, the 2021 Final EIR concluded that, while implementation of the General Plan and LCP Update could affect views of scenic resources visible from SR 1, such as Morro Rock, planned future land uses on the Power Plant Property would

be consistent with surrounding development and compliance with the General Plan and LCP Update Policies, Title 17 of the Morro Bay Municipal Code, and the City’s Residential Design Guidelines would minimize any such effects, and impacts to scenic resources within state scenic highways would be less than significant.

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use designation on the BESS Site. Therefore, the potential visual effects of this land use designation change would not result in a significant adverse effect on scenic resources within a state scenic highway.

Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the needs of residents and visitors of Morro Bay, consistent with the land uses and vision of Plan Morro Bay evaluated in the 2021 Final EIR. The Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to preservation of scenic resources within the SR 1 corridor. As a result, future development that may occur under the Master Plan would be required to comply with applicable General Plan and LCP policies related to state scenic highways. Furthermore, future development under the Master Plan would be required to address potential visual impacts on a project-by-project basis through the City’s design review process, in accordance with Chapter 17.38 of the Zoning Code as well as any analysis of any aesthetic and visual impacts that may be required by CEQA. With compliance with the applicable rules, regulations, and policies described above, impacts to scenic resources within a state scenic highway associated with the Master Plan would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 3: Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?

Impact AES-3 DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING AND STACKS AND DEVELOPMENT OF THE BESS FACILITY WOULD ALTER, BUT NOT DEGRADE, THE VISUAL CHARACTER OF PUBLIC VIEWS OF THE POWER PLANT PROPERTY. COMPLIANCE WITH EXISTING STANDARDS AND PLAN MORRO BAY GOALS AND POLICIES WOULD ENSURE THAT REDEVELOPMENT OR NEW DEVELOPMENT UNDER THE MASTER PLAN COMPLEMENTS THE EXISTING VISUAL CHARACTER AND QUALITY OF MORRO BAY. THEREFORE, THE PROJECT WOULD HAVE LESS THAN SIGNIFICANT IMPACTS ON VISUAL CHARACTER AND QUALITY.

Per *CEQA Guidelines* Section 15387, the City is not an “urbanized area” because it is not a city or part of a group of contiguous cities with a population of 50,000 or more. The City is characterized as a small-town coastal community, with low-profile structures (one to two stories in height), and small lot sizes with a mixture of styles and colors. The wetlands, agricultural areas, and coastline frame

the city's neighborhoods, providing landscape views from nearly every part of the city. As described in Section 4.1.1, the Project Site is located within the North Embarcadero community character area, which is anticipated to change substantially by 2040 due to the expected redevelopment of the Power Plant Property and surrounding areas under Plan Morro Bay.

Demolition

Demolition of the power plant building and stacks would alter the existing visual character of the North Embarcadero community character area. However, as shown in Figure 4.1-3 through Figure 4.1-7, the removal of these industrial components would open up views through the Power Plant Property by removing structures that currently obstruct public views of Morro Rock and the surrounding hills, trees, ocean, and other natural features. The degree of visual change resulting from the removal of the power plant building and stacks would be substantial; however, demolition of these structures would not result in a significant adverse impact on the existing visual character or quality of public views of the Project Site and its surroundings. This impact would be less than significant.

BESS Facility Construction and Decommissioning

To varying degrees, construction and decommissioning activities would be noticeable to motorists, residents, and recreational visitors. There is an approximately 0.15-mile stretch along SR 1 where vegetation screening the BESS Site becomes thin enough to allow intermittent views of the BESS Site between stands of trees for motorists along northbound and southbound SR 1. At 60 mph, motorist views of this stretch would last approximately 9 seconds. Existing earthen berms, vegetation, and security fencing around the Power Plant Property would obscure most construction and decommissioning activities from longer-duration viewpoints such as surface streets and distant vista points. Because construction and decommissioning activities would be generally obscured, as well as being temporary and of short duration, particularly for any one area, construction and decommissioning would not result in a significant adverse impact on the existing visual character or quality of public views of the Power Plant Property and its surroundings. This impact would be less than significant.

BESS Facility Operation

As shown in the simulations in Figure 4.1-3 and Figure 4.1-4, the BESS Facility components would be partially obscured by intervening topography, vegetation, and fencing. In the immediate vicinity of the Project Site, such as the bicycle bridge (Figure 4.1-3), the height of the proposed BESS Facility would block some pedestrian-level views of distant trees and peaks. However, the proposed BESS Facility components would be approximately the same height as existing mature trees surrounding the Project Site, providing visual consistency across the horizontal plane, in contrast to the existing Power Plant stacks which break into the skyline as dominant vertical features.

The proposed BESS Facility, as well as the gen-tie transmission line and substations, would be visually consistent with the character of the existing substation and utility infrastructure on the Power Plant Property. Required compliance with the City's updated Zoning Code requirements and the goals and policies in Plan Morro Bay, listed under Section 4.1.2, would further ensure that the BESS Facility would be visually compatible with the North Embarcadero community character area. Therefore, the operation of the proposed BESS Facility would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. This impact would be less than significant.

Master Plan

As described in Section 4.1.3, *Previous Environmental Review*, the 2021 Final EIR concluded that development and redevelopment could affect the visual character of the North Embarcadero community character area; however, consistent with the requirements of Conservation and Community Design Elements Goal CD-1, Policies CD-1.1 through CD-1.10; Goal LU-1, Policy LU-1.1; Goal LU-5, Policy LU-5.4; and Goal LU-8, Policy LU-8.9, the City has adopted design standards and guidelines for compatible development with the goal of retaining Morro Bay's visual character, while providing enhancement of public views. With implementation of the Morro Bay Municipal Code and applicable policies and regulations, the 2021 Final EIR determined that impacts related to visual character or quality of public views would be less than significant.

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use designation on the BESS Site. Therefore, the potential visual effects of this land use designation change would not result in significant adverse effects on the existing visual character or quality of public views of the site and its surroundings.

Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the needs of residents and visitors of Morro Bay, consistent with the land uses and vision of Plan Morro Bay evaluated in the 2021 Final EIR. The Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to preservation of community character. As a result, future development that may occur under the Master Plan would be required to comply with applicable General Plan and LCP policies related to scenic views and community character. Furthermore, future development under the Master Plan would be required to address potential visual impacts on a project-by-project basis through the City's design review process, in accordance with Chapter 17.38 of the Zoning Code as well as any analysis of aesthetic and visual impacts that may be required by CEQA. With compliance with the applicable rules, regulations, and policies described above, impacts to community character associated with the Master Plan would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 4: Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Impact AES-4 DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING AND STACKS, CONSTRUCTION AND DECOMMISSIONING OF THE BESS, AND THE MASTER PLAN WOULD NOT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE. OPERATION OF THE PROPOSED BESS FACILITY WOULD RESULT IN NEW SOURCES OF LIGHT AND GLARE; OPERATIONAL LEVELS OF LIGHT AND GLARE WOULD BE MINOR, SIMILAR TO EXISTING CONDITIONS, AND ALL LIGHTING ASSOCIATED WITH THE PROJECT AND FUTURE DEVELOPMENT UNDER THE MASTER PLAN WOULD BE SHIELDED AND DIRECTED DOWNWARD IN ACCORDANCE WITH THE GOALS AND POLICIES IN PLAN MORRO BAY AND THE MORRO BAY MUNICIPAL CODE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition and BESS Facility Construction and Decommissioning

The primary sources of nighttime light in the vicinity of the Power Plant Property are structure illumination, decorative landscape lighting, lighted signs, streetlights, and motor vehicle headlights, particularly from SR 1 and other high traffic roadways. The Power Plant is currently fitted with minimal security lighting around the property perimeter, and blinking, red Federal Aviation Administration (FAA) safety lights are located on each of the three stacks. Demolition of the stacks will remove the three blinking FAA red safety lights, eliminating an artificial source of nighttime light from the area. Any sources of nighttime light and glare associated with the demolition, construction, and environmental remediation of the power plant building and stacks, such as vehicular headlights and safety lighting, would be limited and temporary, and designed to reduce any effects of the light and glare.

Demolition, construction, and decommissioning activities 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. However, at limited times some activities, such as de-energizing and re-energizing lines along the project gen-tie transmission line and substations, may be required or finished at night while electrical demand is low, and these activities will require lighting for safety. Any nighttime lighting required for demolition, construction, and decommissioning would be limited to individual work areas, and would be temporary in nature. Staging yards may be lit for security. All temporary lighting would be shielded and directed downward and inward (toward the work or staging area) in accordance with Plan Morro Bay Policy C-9.5 and the Morro Bay Municipal Code requirements. With implementation of shielded, downward and project-facing lighting, temporary impacts of nighttime light and glare during demolition, construction, and decommissioning activities would not create any new source of substantial light that would adversely affect daytime or nighttime views in the area. This impact would be less than significant.

BESS Facility Operation

The exteriors of the battery storage buildings would be steel frame with pre-cast concrete sides, and would be required to be consistent with the City's viewshed protection guidelines described in General Plan and LCP Update Conservation Element Policy C-9.4 and community design policies CD-1.3, CD-1.8, and CD-1.9. The battery storage buildings would include interior lighting not visible from the exteriors of the buildings. No new continuous, exterior lighting would be implemented. Motion sensor lighting would be placed in specific locations, such as exit doors, as needed to assure safe ingress and egress from the buildings and the substation. All permanent lighting would be shielded and directed downward in accordance with Plan Morro Bay Policy C-9.5 and the Morro Bay Municipal Code, and therefore would not create a substantial new source of nighttime light or glare.

Furthermore, ground-level lighting would be obscured by existing earthen berms and existing and proposed vegetation screening the site, and would not create a new source of substantial light or glare. Some lighting from vehicular headlights from personnel entering and exiting the premises may also be present during operations. With implementation of shielded, downward and project-facing lighting, and compliance with General Plan and LCP Update Conservation Element Policy C-9.5 and the Morro Bay Municipal Code, operation of the BESS Facility would not create any new source of substantial light that would adversely affect daytime or nighttime views in the City. This impact would be less than significant.

Master Plan

As described in Section 4.1.3, *Previous Environmental Review*, the 2021 Final EIR concluded compliance with the existing regulations in the Morro Bay Municipal code and General Plan and LCP Update policies would minimize impacts to skyward nighttime views by lessening or preventing glare.

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use designation on the BESS Site. Therefore, the potential effects of light and glare resulting from this land use designation change would not create a significant new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. The Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to lighting standards. As a result, future development that may occur under the Master Plan would be required to comply with applicable General Plan and LCP policies related to lighting standards. Future development under the Master Plan would be required to address potential visual impacts on a project-by-project basis through the City's design review process, in accordance with Chapter 17.38 of the Zoning Code, as well as any analysis of aesthetic and visual impacts that may be required by CEQA. In addition, future development would be required to demonstrate compliance with Sections 17.23.080 and 17.28.080 of the Zoning Code, which regulate light and glare. With compliance with the applicable rules, regulations, and policies described above, the Master Plan would not create any new source of substantial light that would adversely affect daytime or nighttime views in the area. This impact would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

4.1.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines*, Section 15065[a][3]). The cumulative setting for potential aesthetics and visual quality impacts encompasses the City of Morro Bay and its adjacent open space from which the Power Plant Property is visible. This geographic scope is appropriate due to the project's proximity to various visual resources and planned development. Development that is considered part of the cumulative analysis includes planned and pending projects in Morro Bay, listed in Table 3-1 in Section 3, *Environmental Setting*. Cumulative impacts regarding aesthetics may occur if any of the related cumulative projects are located in close enough proximity to the Project Site to combine with the project and result in significant adverse changes in the visual quality and character of the surrounding area.

Residential cumulative projects located on the hillside north of SR 1 (301-390 Seashell Cove and Theresa Road developments) would be visible from SR 1. Development of the hotel at 295 Atascadero Road and the apartment units at 405 Atascadero Road would also be visible from SR 1. Compliance with General Plan and LCP Update and Morro Bay Municipal Code policies would ensure that these and other development projects do not adversely affect scenic vistas or damage scenic resources. Cumulative adverse impacts to scenic vistas and scenic resources within a state scenic highway would be less than significant, and the project's contribution to these impacts would not be cumulatively considerable.

As planned development occurs in the future, the overall visual environment of Morro Bay may change. Planned infill projects would increase development density, and the character of the Embarcadero could be altered as other projects located along the Embarcadero and Harbor Street are completed. Planned hillside development projects would change the character of proximate residential communities by implementing multi-unit housing on what is currently vacant land. Compliance with State, City and County policies and standards for the protection of visual resources, compatible design for new development, and maintaining visual character, would ensure that the combination of forecasted development in Morro Bay would not adversely affect the existing visual environment. Cumulative impacts associated with changes in the visual environment from planned or pending projects would be less than significant, and the project's contribution to these impacts would not be cumulatively considerable.

Although growth envisioned in Morro Bay, and specifically in the Project Site vicinity, is primarily focused on infill areas, expanded development located on the hillsides north of SR 1 would result in new sources of light and glare that would be visible from proximate roads and residences. Additionally, hillside residences with views looking down into the City may experience nighttime lighting becoming more visible or prominent, covering a larger area and/or appearing in new areas as a result of cumulative infill development. Compliance with General Plan and LCP Update and Morro Bay Municipal Code policies would minimize the creation of any substantial new sources of light and glare in the region from planned or pending development projects. Cumulative impacts associated with new sources of light and glare would be less than significant, and the project's contribution to these impacts would not be cumulatively considerable.

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4.2 Air Quality

This section of the EIR addresses the potential physical environmental effects associated with the regional air quality plan, regional air pollutant emissions, exposure of sensitive receptors to air pollutants, and the generation of odors from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24 acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site¹.

This analysis is based on the findings of the Air Quality Technical Report prepared by Ramboll America's Engineering Solutions, Inc (Ramboll) in July 2023 (Appendix B).

4.2.1 Setting

a. Climate and Meteorology

The City of Morro Bay (City) is located within the South Central Coast Air Basin ("Air Basin"), which includes all of San Luis Obispo, Santa Barbara, and Ventura Counties. The regional climate is Mediterranean in character, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures predominate throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys often exceed 90 degrees Fahrenheit. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland.

Regional meteorology is largely dominated by a persistent high-pressure area that commonly resides over the eastern Pacific Ocean (Pacific High). Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the San Luis Obispo County. About 90

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, *Project Description*, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idle Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, *Project Description*, Figure 2-8.

percent of the total annual rainfall is received during this period. Prevailing winds are onshore winds from the west and north.

Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific High in which air is heated as it is compressed and is further enhanced by the presence of relatively cold ocean waters which cool the air below the inversion. This type of inversion generally forms at 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Radiational, or surface, inversions are formed by the more rapid cooling of air near the ground at night, especially during winter. This type of inversion is typically lower and is generally accompanied by more stable air. Both types of inversions limit the dispersal of air pollutants within the regional Air Basin, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

b. Ambient Air Quality and Criteria Air Pollutants

As required by the 1970 federal Clean Air Act, the United States Environmental Protection Agency (USEPA) initially identified six criteria air pollutants that are pervasive in urban environments and for which State and federal health-based ambient air quality standards have been established: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. Since adoption of the 1970 act, subsets of PM have been identified for which permissible levels have been established. These include PM of 10 microns in diameter or less (PM₁₀) and PM of 2.5 microns in diameter or less (PM_{2.5}).

The San Luis Obispo County Air Pollution Control District (SLOAPCD) is the local agency with jurisdiction for regulating air quality within San Luis Obispo County. The SLOAPCD's air quality monitoring network provides information on ambient concentrations of criteria air pollutants at various monitoring sites. Table 4.2-1 presents the highest annual criteria air pollutant concentrations at SLOAPCD's Morro Bay monitoring site, and other available sites if the Morro Bay monitoring site data are not available. Table 4.2-1 also compares measured pollutant concentrations with the most stringent applicable ambient air quality standards (State or federal). These concentrations are health-based standards established with an adequate margin of safety. To determine attainment with air quality standards, exceedances are assessed on a region-wide basis (and in some cases over a 3-year period). Concentrations shown in boldface type indicate only a localized exceedance of the standard. Since the County has never exceeded State CO standards since 1975 and because of the consistently low lead concentration in the region, SLOAPCD does not routinely monitor ambient CO and lead concentrations.

Table 4.2-1 San Luis Obispo County Ambient Air Quality

Pollutant	Most Stringent Standard¹	Concentration Measured (2020)²
Ozone		
Maximum 1-hour concentration (ppb)	90	72
Maximum 8-hour concentration (ppb)	70	58
Suspended Particulates (PM₁₀)		
Maximum 24-hour concentration (µg/m ³)	50	131
Annual Average (µg/m ³)	20	15.8
Suspended Particulates (PM_{2.5})		
Maximum 24-hour concentration (µg/m ³)	35	113.7
Annual Average (µg/m ³)	12	7.92
Nitrogen Dioxide (NO₂)		
Maximum 1-hour concentration (ppb)	100	33

ppb = parts per billion; µg/m³ = micrograms per cubic meter

¹ The most stringent applicable standard is either the federal or California Standard, based on the San Luis Obispo Attainment Status Table available at: <https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/AttainmentStatus29January2019.pdf>

² Concentration measured are from the Morro Bay monitoring site, or other sites in San Luis Obispo County if the Morro Bay site data are not available.

Source: SLOAPCD 2022

Table 4.2-2 presents the California and federal Ambient Air Quality Standards for different criteria air pollutants and their respective attainment statuses for San Luis Obispo County. An attainment status shown in boldface type with an “N” indicates that the County has a non-attainment status for the given pollutant. These attainment statuses are based off regional-wide data for San Luis Obispo County, and thus the attainment or nonattainment designations may not reflect specific criteria pollutant concentrations in the City and if those concentrations exceed the federal or California standards.

Table 4.2-2 State and Federal Ambient Air Quality Standards and Attainment Status

Pollutant	Averaging Time	California Standard (CAAQS) ¹	Attainment Status	Federal Standard (NAAQS) ²	Attainment Status
Ozone (O ₃)	1-Hour	0.09 ppm	N	–	–
	8-Hour	0.070 ppm	N	0.070 ppm	Partial ³
Carbon Monoxide (CO)	1-Hour	20.0 ppm	A	35.0 ppm	U
	8-Hour	9.0 ppm	A	9.0 ppm	U
Nitrogen Dioxide (NO ₂)	1-Hour	0.18 ppm	A	0.100 ppm ⁴	U
	Annual	0.030 ppm	A	0.053 ppm	U
Sulfur Dioxide (SO ₂)	1-Hour	0.25 ppm	A	0.075 ppm ⁵	U
	3-Hour	–	–	0.5 ppm	U
	24-Hour	0.04 ppm	A	0.14 ppm	U
PM ₁₀	24-Hour	50 µg/m ³	N	150 µg/m ³	U
	Annual	20 µg/m ³	N	–	–
PM _{2.5}	24-Hour	–	–	35 µg/m ³	U
	Annual	12 µg/m ³	A	12 µg/m ³	A
Lead	30-Day Average	1.5 µg/m ³	A	–	–
	Rolling 3-Month Average	–	–	0.15 µg/m ³	U

ppm = parts per million; µg/m³ = micrograms per cubic meter; A = Attainment; CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; N = Non-attainment; U = Unclassified; – = not applicable/no applicable standard

¹ CAAQS for ozone, CO (except 8-hour Lake Tahoe), SO₂ (1-hour and 24-hour), NO₂, PM, and visibility reducing particles are values that are not to be exceeded. All other State standards shown are values not to be equaled or exceeded.

² NAAQS, other than ozone and particulates, and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The 8-hour ozone standard is attained when the 3-year average of the fourth highest daily concentration is 0.070 ppm or less. The 24-hour PM₁₀ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than the standard. The 24-hour PM_{2.5} standard is attained when the 3-year average of the 98th percentile is less than the standard.

³ Non-attainment in eastern San Luis Obispo County/attainment in western San Luis Obispo County.

⁴ To attain the 1-hour NO₂ NAAQS, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations must not exceed 100 parts per billion.

⁵ To attain the 1-hour SO₂ NAAQS, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations must not exceed 75 parts per billion.

Source: SLOAPCD 2019; CARB 2022

c. Additional Air Pollutants of Concern

Naturally Occurring Asbestos

Asbestos is commonly found in serpentine rock, which is present in many regions of San Luis Obispo County. If a site is located within the green “buffer” area on the SLOAPCD Naturally Occurring Asbestos (NOA) map, then project activity on the site would need to comply with the California Air Resources Board’s (CARB) Airborne Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (California Code of Regulations [CCR] Title 17, Section 93105).

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM_{2.5}. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2023a).

TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and, as a result, it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to TACs at sufficient concentrations and durations may have an increased chance of developing cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2023).

d. Existing Sources of Air Pollution

According to a public information request returned by SLOAPCD, there are up to fourteen permitted operational sources of air pollution within a one-mile radius of the Project Site (Appendix B). These sources include four gas stations and retail stores. While these sources may contribute to background levels of cancer risk, as permitted facilities, their risk would have been previously evaluated by SLOAPCD. In addition, nearby on-road traffic emits PM_{2.5}, DPM, and other air pollutants that can harm public health.

e. Sensitive Receptors

Air quality does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Population subgroups sensitive to the health effects of air pollutants include the elderly and the young, those with higher rates of respiratory disease, such as asthma and chronic obstructive pulmonary disease, and those with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases. SLOAPCD's *CEQA Guidelines* states that the proximity of sensitive individuals (receptors) to a construction site constitutes a special condition and may require a more comprehensive evaluation of toxic DPM impacts. SLOAPCD also identifies areas where sensitive receptors are most likely to spend time such as schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s).

Sensitive receptors in the vicinity of the Project Site include permanent residents living in the Morro Dune RV Park located approximately 400 feet from the northern border of the Project Site, Lila Keiser Park located approximately 400 feet from the northern border of the Project Site, and residences located approximately 500 feet southeast of the Project Site.

4.2.2 Regulatory Setting

a. Federal Regulations

Federal Clean Air Act

The 1970 Clean Air Act (last amended in 1990) requires that regional planning and air pollution control agencies prepare a regional air quality plan to outline the measures by which both stationary and mobile sources of pollutants are planned to be controlled in order to achieve all standards, known as ambient air quality standards, by the deadlines specified in the act. These ambient air quality standards are intended to protect the public health and welfare, and they specify the concentration of pollutants (with an ample margin of safety) to which the public can be exposed without adverse health effects. They are designed in consideration of those segments of the public most susceptible to respiratory distress, including asthmatics, the very young, the elderly, people weakened from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels that are somewhat above ambient air quality standards without observing adverse health effects. The federal Clean Air Act allows states to enact more stringent requirements with a waiver from USEPA.

Emissions Standards for New Off-Road Equipment

In 1994, USEPA established emission standards for hydrocarbons, oxides of nitrogen (NO_x), CO, and particulate matter to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by USEPA, as well as by CARB. Each adopted emission standard was phased in over time. For example, new engines built in or after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards. This has resulted in increasingly lower emissions from off-road equipment over time.

b. State Regulations

California Clean Air Act

California had already established its own air quality standards when the federal Clean Air Act standards were established, and because of the unique meteorological problems in California, there is considerable diversity between the State and national ambient air quality standards, as shown in Table 4.2-2. California ambient standards are at least as protective as national ambient standards, except for the 1-hour NO₂ and SO₂ standards, and are often more stringent.

The federal Clean Air Act allows states to enact more stringent requirements with a waiver from USEPA. In 1988, California passed the California Clean Air Act (California Health and Safety Code Sections 39600 et seq.), which, like its federal counterpart, requires the designation of areas as attainment or non-attainment, but based these designations on State ambient air quality standards rather than the federal standards.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the

Hot Spots Act. AB 1807 created a program with a two-step process of risk identification followed by risk management. TAC emissions are identified from a variety of sources (risk identification), after which an ATCM is developed (risk management). CARB has 26 mobile and stationary source ATCMs (CARB 2023b). To date, CARB has identified more than 21 TACs in addition to adopting USEPA's list of hazardous air pollutants as TACs.

Applicable ATCMs include the Stationary Compression Ignition Engines ATCM (CCR Title 17, Section 93115) and the NOA ATCM (CCR Title 17, Section 93105). The Stationary Compression Ignition Engines ATCM establishes fuel requirements, operating restrictions, emissions standards, and other requirements. The NOA ATCM requirements include the following:

- For grading projects qualifying for NOA ATCM exemption: Submit NOA Exemption form with geologic evaluation.
- For grading projects in serpentine rock less than 1 acre:
 - Submit Project Form with geologic evaluation
 - Mini Dust Control Measures in CCR Title 17, Section 93105(e)(A-F)
- For grading projects in serpentine rock greater than 1 acre:
 - Submit Project Form with geologic evaluation
 - Asbestos Dust Mitigation Plan

In-Use Off-Road Diesel-Fueled Fleets Regulation

In 2007, CARB adopted a regulation to reduce DPM and NO_x emissions from in-use off-road heavy-duty diesel vehicles in California (CCR Title 13, Section 2449). The regulation imposes limits on vehicle idling and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. The regulation limits idling of heavy-duty diesel construction equipment and trucks during loading and unloading to five minutes. CARB approved amendments to the off-road regulations in November 2022 to further reduce DPM, NO_x, and other criteria pollutant emissions. Key components of the amendments include restricting the addition of older vehicles to fleets; reducing emissions by retiring, replacing, or repowering older engines or installing emission control technologies; phasing out the oldest and dirtiest engines; and requiring the use of renewable diesel, with limited exceptions.

Sale of Greenhouse Gas-Emitting Cars After 2035

In August 2022, CARB issued a rule (the Advanced Clean Cars II regulations) that will require that all new cars sold in the State by 2035 be free of greenhouse gas (GHG) emissions. The rule also sets interim targets, requiring that 35 percent of new passenger vehicles sold by 2026 produce zero emissions. That requirement climbs to 68 percent by 2030. This will rapidly reduce fossil-fuel fired vehicles in the fleet in the State, which would also reduce criteria pollutant emissions from the reduction of gasoline and diesel consumption.

c. Regional and Local Regulations

SLOAPCD

SLOAPCD is the local agency charged with protecting the health of residents in San Luis Obispo County by preserving good air quality. San Luis Obispo Council of Governments, cities and counties, local transportation agencies, and various non-governmental organizations also participated in

Morro Bay Battery Energy Storage System Project

efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs. SLOAPCD is responsible for implementing regulations and programs to reduce air pollution and assist the County in reaching federal and State ambient air quality standards.

SLOAPCD does not have authority to regulate emissions from motor vehicles. Specific rules and regulations adopted by SLOAPCD limit the emissions that can be generated by various stationary sources and construction activities, and identify specific pollution reduction measures that must be implemented in association with various activities. These rules regulate emissions of the six criteria air pollutants, as well as TAC emissions sources, which are regulated through SLOAPCD's permitting process and standards of operation. SLOAPCD standard construction requirements include the following:

- Reduce the amount of the disturbed area where possible.
- Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible.
- All dirt stockpile areas should be sprayed daily as needed.
- Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.
- All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by SLOAPCD.
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- All of these fugitive dust mitigation measures shall be shown on grading and building plans.
- The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork, or demolition.

SLOAPCD Rule 402, Nuisance, restricts a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. In addition, SLOAPCD Rule 341 (performance standards for stationary internal combustion engines) implements performance standards on stationary internal combustion engines rated at greater than 50 brake horsepower and operated on any gaseous or liquid fuel.

San Luis Obispo County Ozone Emergency Episode Plan

The San Luis Obispo County Ozone Emergency Episode Plan, adopted by SLOAPCD in 2020, provides the basis for taking actions when ambient ozone concentrations reach a level that could endanger public health in the County (SLOAPCD 2020). It identifies criteria for the four levels of emergency episodes and related components for public announcements whenever an episode has been identified.

2001 Clean Air Plan

As part of the California Clean Air Act, SLOAPCD is required to develop a plan to achieve and maintain the State ozone standard by the earliest practicable date. The current 2001 Clean Air Plan was adopted by SLOAPCD in 2002. The 2001 Clean Air Plan contains a comprehensive set of control measures designed to reduce ozone precursor emissions from a wide variety of stationary and mobile sources.

Plan Morro Bay

In 2021, the City adopted Plan Morro Bay, which serves as the City's General Plan and Local Coastal Program Land Use Plan. Plan Morro Bay contains several environmental management policies aimed at improving air quality within the city. Those policies are outlined below (City of Morro Bay 2021a):

Policy C-3.1 State Attainment Levels: Reach and maintain state attainment levels for PM₁₀.

Policy C-3.2 Interagency Cooperation: Continue to cooperate with SLOAPCD and other regional, state, and national agencies to implement the County Clean Air Plan, including enforcing air quality standards and improving air quality.

Policy C-3.3 Pollutant Sites: Identify opportunities to locate new air pollutant sources away from the general population.

Policy C-3.5 Vehicle Idling. Explore and implement strategies to minimize vehicle idling.

Policy C-3.7 Park and Ride. Support the future development of park and ride lots in Morro Bay. Site lots near commuter transit service and provide bicycle storage lockers at the lots to ensure they are designed to facilitate use by transit and active transportation users.

Policy C-3.8 Telecommuting. Encourage employers to adopt teleworking, teleconferencing, and telelearning options for their employees and adopt policies and/or programs to further promote teleworking, teleconferencing, and telelearning among City staff.

Policy CIR-2.3 Active Transportation Amenities. Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. Require new developments or significant renovations to transportation facilities on private commercial or

multifamily residential land to incorporate convenient active transportation facilities where possible. (See also Policies LU-8.4 and OS-1.8.)

Policy CIR-3.2 VMT Thresholds. Achieve State-mandated reductions in vehicle miles travelled (VMT) by establishing and adopting a VMT standard.

Policy CIR-4.7 Alternative Options. Require or establish EV charging stations, bike sharing and park and ride locations throughout Morro Bay and in particular, close to transit and amenities.

4.2.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under the Plan Morro Bay to result in air quality impacts. The 2021 Final EIR concluded that emissions of criteria air pollutants associated with future growth generated by Plan Morro Bay (including construction) would be less than significant with implementation of Mitigation Measure AQ-2, Standard Mitigation for Construction Equipment (Impact AQ-2). The 2021 Final EIR determined that future development in Morro Bay facilitated by Plan Morro Bay would have the potential to place new sensitive receptors in the vicinity of stationary TAC sources but would not result in new sources of substantial TAC emissions. Plan Morro Bay would result in less than significant impacts related to the exposure of sensitive receptors to pollutant concentrations, carbon monoxide hotspots, and naturally occurring asbestos (Impact AQ-3). The 2021 Final EIR also concluded that impacts would be less than significant related to the generation of other emissions such as those leading to odors (Impact AQ-4).

The 2021 Final EIR found that Plan Morro Bay would result in an increase in VMT that would be inconsistent with the 2001 Clean Air Plan assumptions. The projected increase in VMT in the City is attributable to the large increase in customer and employee vehicle trips associated with substantial commercial growth anticipated in the City. Although Plan Morro Bay includes multiple goals and policies that would align with the measures identified in the 2001 Clean Air Plan to reduce air pollutant emissions from vehicle trips, the potential increase in VMT in Morro Bay resulting from implementation of Plan Morro Bay would obstruct implementation of the 2001 Clean Air Plan and result in a significant and unavoidable impact (Impact AQ-1) (City of Morro Bay 2021b).

4.2.4 Impact Analysis

a. Methodology

The analysis of potential air quality emissions impacts is based on the findings of the Air Quality Technical Report prepared by Ramboll in July 2023 (Appendix B). Quantification of the project's construction and operational criteria air pollutant emissions is based primarily on default values in the California Emission Estimator Model (CalEEMod) version 2022.1 and the latest version of Emission Factors Model version 2021 (EMFAC2021), as well as information provided by the Project Applicant.

Construction activities would include fencing and site preparation, foundation and pile installation, BESS Facility building construction, substation and Gen-tie installation, and demolition of the existing power plant building and stacks. The anticipated construction schedule, phases, and equipment were provided by the Project Applicant. Modeling inputs included compliance with the SLOAPCD-required fugitive dust control measures (refer to Section 4.2.2, Regulatory Setting). As described in Section 2, *Project Description*, this analysis assumes that decommissioning activities would involve the use of heavy equipment and personnel similar to that used for the BESS Facility's

construction phase. As a result, the emissions estimate conservatively assumes BESS Facility decommissioning would produce similar air pollutant emissions to project construction (excluding emissions from demolition of the existing power plant building and stacks).

Operational emissions would include mobile source emissions, area source, and stationary source emissions. Mobile source emissions would be generated by vehicle trips to and from the Project Site. Daily vehicle trip estimates for maintenance and operations were provided by the Project Applicant. Area source emissions would be generated by the use of cleaning products and architectural coatings (i.e., from assumed repainting of the BESS Facility's buildings on an ongoing basis). Stationary source emissions would include a diesel-fueled emergency fire pump; however, on a daily operational basis, the BESS Facility would not produce operational emissions from combustion of energy sources (e.g., petroleum or natural gas). For further details regarding the methodology and to view CalEEMod outputs, refer to the Air Quality Technical Report (Appendix B).

The potential for demolition, construction, and decommissioning to result in significant health risks from exposures to TACs, specifically DPM, is assessed based on the results of a Health Risk Assessment (HRA) conducted as part of the Air Quality Technical Study (Appendix B). The HRA utilized the methods outlined in the latest guidance by the California Office of Environmental Health Hazard Assessment (OEHHA) and the current SLOAPCD CEQA Air Quality Handbook, including updates from 2017, 2022, and 2023 (OEHHA 2015; SLOAPCD 2012). The HRA characterized cancer risk associated with construction activities by estimating ambient air concentrations of DPM within 1,000 feet of the Project Site. This boundary represents the "zone of influence" recommended for the cumulative evaluation of a project in the SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2012). DPM emissions were estimated based on the CalEEMod outputs, and the American Meteorological Society/Environmental Protection Agency Regulatory Air Dispersion Model (AERMOD) version 22112 was used to estimate DPM concentrations within 1,000 feet of project construction activities. Health risks were calculated using the OEHHA equations and methodology (OEHHA 2015). For further details regarding the HRA methodology and to view the calculations, refer to the Air Quality Technical Report (Appendix B).

The potential for a project to conflict with the 2001 Clean Air Plan is determined based on whether the project would (1) support the primary policy goals of the 2001 Clean Air Plan, (2) include applicable control measures identified in the 2001 Clean Air Plan, and (3) avoid disrupting or hindering implementation of control measures identified in the 2001 Clean Air Plan.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant adverse impact if it would do any of the following:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Criteria Air Pollutants

By definition, regional air pollution is a cumulative impact, in that individual projects are typically not sufficient in size to result in non-attainment of air quality standards. Instead, a project’s individual emissions are considered to contribute to the existing, cumulative air quality conditions. According to the SLOAPCD CEQA Air Quality Handbook, if a project’s contribution to cumulative air quality conditions is considerable, then the project’s impact on air quality would be considered significant (SLOAPCD 2012). Table 4.2-3 identifies quantitative criteria air pollutant significance thresholds for project construction and operation established by SLOAPCD.

SLOAPCD’s construction emission thresholds include both daily and quarterly limits. For projects lasting longer than a quarter, a quarterly threshold is applied. For construction projects, exceedance of the quarterly Tier 1 threshold requires implementation of SLOAPCD’s standard mitigation measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project. If mitigated emissions (i.e., those that include standard mitigation measures and BACT) exceed the Tier 2 threshold (6.3 tons per quarter), then implementation of a Construction Activity Management Plan (CAMP) and off-site mitigation is also required.

Table 4.2-3 SLOAPCD Criteria Air Pollutant Thresholds for Construction and Operation

Pollutant	Construction Threshold			Operational Threshold	
	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)	Daily (lbs/day)	Annual (tons/year)
ROG + NO _x (combined) ¹	137	2.50	6.30	25.00	25
Diesel Particulate Matter (DPM) ¹	7	0.13	0.32	1.25	–
Fugitive Particulate Matter (PM ₁₀), Dust	–	2.50	–	25.00	25
CO	–	–	–	550.00	–

ROG = reactive organic gas; NO_x = oxides of nitrogen; PM₁₀ = particulate matter less than 10 microns in diameter; CO = carbon monoxide; lbs = pounds

¹ SLOAPCD specifies that CalEEMod winter emission outputs should be compared to operational thresholds for these pollutants (2012). Source: SLOAPCD 2012

SLOAPCD’s operational emission thresholds include both daily and annual limits. Projects that exceed the daily limits for ROG and NO_x have the potential to cause significant air quality impacts and should be submitted to SLOAPCD for review. On-site mitigation measures are recommended to reduce air quality impacts to a level of insignificance. Projects that emit more than 1.25 lbs/day of DPM are required to implement on-site BACT measures. If sensitive receptors are within 1,000 feet of a project site, an HRA may also be required. Projects that emit more than 25 lbs/day or 25 tons/year of fugitive particulate matter need to implement permanent dust control measures to mitigate the emissions below these thresholds or provide suitable off-site mitigation approved by the SLOAPCD (SLOAPCD 2012).

Toxic Air Contaminants

USEPA considers those pollutants that could cause cancer risks between one in 10,000 (1.0×10^{-4}) and one in one million (1.0×10^{-6}) for risk management. Proposition 65 (California Health and Safety Code Section 25249.5 et seq.), enacted in 1986, prohibits a person in the course of doing business

from knowingly and intentionally exposing any individual to a chemical that has been listed as known to the State to cause cancer or reproductive toxicity without first giving clear and reasonable warning. For a chemical that is listed as a carcinogen, the “no significant risk” level under Proposition 65 is defined as the level that is calculated to result in not more than one excess case of cancer in 100,000 individuals (1.0×10^{-5}). SLOAPCD recommends the use of this risk level (also reportable as 10 in one million) as the significance threshold for TACs (SLOAPCD 2012).

Odor

The SLOAPCD CEQA Air Quality Handbook provides a list of odor-producing land use types and potential screening distances for nuisance sources. Odor-producing operations include uses such as asphalt batch plants, chemical manufacturing, solid waste facilities, and autobody shops. Projects locating sensitive receptors, or other uses where people congregate, within the screening distance of nuisance sources require further evaluation to determine whether the project would be exposed to a significant odor impact. For projects that would be located near an existing odor source, the project would have a significant odor impact if it would result in new receptors as close or closer to the source than a location that has experienced: 1) more than one confirmed complaint per year averaged over a three-year period, or 2) three unconfirmed complaints per year averaged over a three-year period. A qualitative discussion is provided to determine whether the BESS Facility would result in odor-related conflicts, or whether the Master Plan would facilitate new development that would result in odor-related conflicts.

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?
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Impact AQ-1 THE PROJECT WOULD BE CONSISTENT WITH EXISTING RULES AND MEASURES CONTAINED IN THE SLOAPCD 2001 CLEAN AIR PLAN. THROUGH REGULATORY COMPLIANCE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, Operation, and Future Decommissioning

The purpose of the 2001 Clean Air Plan is to regulate long term emissions in accordance with population and infrastructure growth in San Luis Obispo County. As such, the following analysis focuses on operational activities associated with the BESS Facility. During construction and demolition activities requiring the use of heavy construction equipment, the proposed project would be required to adhere to existing SLOAPCD rules and measures intended to reduce emissions of criteria pollutants. Emissions associated from construction activities are discussed in Impact AQ-2.

The 2001 Clean Air Plan recommends specific control measures and actions to reduce emissions and decrease concentrations of harmful air pollutants. To this end, the 2001 Clean Air Plan includes over 30 control measures aimed at reducing air pollutants in the air basin (SLOAPCD 2002). These control measures are grouped into categories, such as the stationary source sector, the transportation sector, and the land use planning sector. Primary emission control techniques used by many of the control measures in the 2001 Clean Air Plan include vapor recovery, solvent content reduction, improved transfer efficiency, improved fuel combustion, fuel-switching or electrification, chemical or catalytic reduction, reduced vehicle use, new source review, and indirect source review. Control

measures identified in the 2001 Clean Air Plan that would be most applicable to the BESS Facility are those associated with the stationary source and transportation sectors.

Stationary source sector control measures identified in the 2001 Clean Air Plan include Fueling-Switching/Electrification, Energy Conservation, and Stationary Internal Combustion Engines. The Fuel-Switching/Electrification Measure recommends retrofitting of gasoline or diesel burning internal combustion engines to burn cleaner fuels or replacement with electric motors to reduce emissions of NO_x and ROG from stationary sources. The Energy Conservation Measure recommends retrofitting/weather proofing and insulation of existing structures, incorporation of passive solar features in new construction, improving heating, ventilation, and air conditioning (HVAC) system efficiency, replacing natural gas water heaters with solar water heaters, and adding flue gas dampers to existing residential water heaters. As discussed in detail in Section 4.10.2, *Energy*, the project would be required to comply with all applicable regulations to reduce energy consumption and fossil fuel combustion. The BESS Facility would implement energy-saving measures as required by Title 24 and the California Green Building Standards Code and would utilize energy-efficient, all-electric HVAC equipment for heating and cooling. No natural gas appliances would be included in the BESS Facility. In addition, equipment used by the project would be consistent with SLOAPCD Rule 341. Therefore, the BESS Facility would not interfere with implementation of the 2001 Clean Air Plan and this impact would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.2.3, Previous Environmental Review, the 2021 Final EIR concluded that increased VMT associated with the commercial growth envisioned in Plan Morro Bay would be inconsistent with the 2001 Clean Air Plan. Although Plan Morro Bay includes multiple goals and policies that would align with the measures identified in the 2001 Clean Air Plan to reduce air pollutant emissions, the potential increase in VMT in Morro Bay was found to obstruct implementation of the 2001 Clean Air Plan and result in a significant and unavoidable impact.

Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would have the potential to result in an increase in VMT that would be inconsistent with the 2001 Clean Air Plan assumptions. However, the anticipated growth in vehicle travel associated with future development of the Master Plan area would be lower than anticipated for the Power Plant Property in the 2021 Final Plan Morro Bay EIR, due to a change in the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial. General (Light) Industrial land use typically results in lower vehicle trip generation in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses, and the BESS Facility would generate substantially fewer vehicle trips than would be anticipated from

development of the 24-acre BESS Site with Visitor Serving Commercial and, or Mixed-Use Residential land uses (refer to Section 4.9, Transportation). Therefore, the Master Plan would reduce VMT and associated air pollutant emissions in comparison to what was evaluated in the 2021 Final EIR, and would not otherwise result in any new conflicts with the 2001 Clean Air Plan.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including policy consistency analyses to ensure that projects would be consistent with the 2001 Clean Air Plan. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce air pollutant emissions associated with future development of the Master Plan area in comparison to the potential site build out under Plan Morro Bay. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

Threshold 2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

Impact AQ-2 CONSTRUCTION AND FUTURE DECOMMISSIONING OF THE BESS FACILITY AND DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING AND STACKS HAVE THE POTENTIAL TO GENERATE CRITERIA AIR POLLUTANT EMISSIONS THAT WOULD EXCEED SLOAPCD'S TIER 1 AND TIER 2 THRESHOLDS. IMPLEMENTATION OF MITIGATION MEASURES AQ-1(A) AND AQ-1(B) WOULD REDUCE ROG, NO_x, AND DPM EMISSIONS BELOW THE APPLICABLE SLOAPCD CRITERIA AIR POLLUTANT EMISSIONS THRESHOLDS. AS A RESULT, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Demolition, BESS Facility Construction, and Future Decommissioning

Demolition of the Morro Bay Power Plant building and stacks, BESS Facility construction, and future decommissioning activities would result in emissions of ozone precursors and PM in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions) primarily a result of the combustion of fuel from on-road and off-road vehicles. Construction activities would require the use of heavy trucks, graders, material loaders, dozers, forklifts, cranes, and other mobile and stationary construction equipment. Demolition would require the use of cranes, shearing machines, man lifts, cutting torches and other similar equipment. ROG would also be emitted during architectural coating and asphalt paving.

Table 4.2-4 provides the emissions associated with construction of the BESS Facility and demolition of the power plant building and stacks. Construction of the BESS Facility and demolition of the Power Plant are not planned to overlap, with the model assumptions ending construction of the BESS Facility prior to demolition of the power plant building and stacks. As shown in Table 4.2-4, construction activities would result in emissions of ROG, NO_x, and DPM that would exceed SLOAPCD Tier 1 and Tier 2 emissions thresholds.

Table 4.2-4 Demolition and BESS Facility Construction Emissions

Year ¹	Maximum Quarterly Emissions (tons/quarter)		
	ROG + NO _x	DPM ²	Fugitive PM ₁₀ ³
2024	1.75	0.07	0.14
2025	11.13	0.43	0.32
2026	14.74	0.56	0.01
2027	8.68	0.29	0.06
2028	2.19	0.09	0.26
2029	0.92	0.04	0.11
Tier 1 Significance Threshold	2.50	0.13	3.00
Threshold Exceeded?	Yes	Yes	No
Tier 2 Significance Threshold	6.30	0.32	2.50
Threshold Exceeded?	Yes	Yes	No

ROG = reactive organic gas; NO_x = oxides of nitrogen; DPM = diesel particulate matter; PM₁₀ = particulate matter less than 10 microns in diameter;

¹ Technical materials supporting this analysis (Appendix B) assumed construction may begin in 2023, the project has not been approved and no construction occurred in 2023. The construction years shown in this table have been advanced by one year relative to the emissions calculations in Appendix B to avoid confusion.

² DPM emissions shown include diesel exhaust emissions only.

³ Fugitive PM emissions shown include fugitive dust emissions only.

Source: Ramboll 2023 (Appendix B)

In addition to the construction and demolition emissions estimate, this evaluation of temporary emissions conservatively assumes BESS Facility decommissioning would produce similar air pollutant emissions to project construction (the actual emissions from decommissioning would likely be lower due to use of more efficient construction equipment at the time of future decommissioning, and potential repurposing of existing structures and infrastructure, as set forth in Section 2, *Project Description*). Therefore, criteria pollutant emissions generated from construction of the BESS Facility, demolition of the power plant building and stacks, and decommissioning would be potentially significant, requiring mitigation.

BESS Facility Operation

Table 4.2-5 provides the operational emissions associated with the BESS Facility. Assumptions for these sources are discussed in Section 4.2.4.a, Methodology. As shown in Table 4.2-5, operational emissions would not exceed the applicable SLOAPCD CEQA daily or annual emissions thresholds. As a result, criteria pollutant emissions generated during project operation would be less than significant.

Table 4.2-5 BESS Facility Operational Emissions

Emissions Source	Emissions			
	ROG + NO _x	DPM	Fugitive PM ₁₀	CO
Daily Emissions (lbs/day)				
Area	7.57	<0.01	<0.01	<0.01
Mobile	0.11	0.005	0.005	0.35
Stationary	0.18	0.01	0	0.12
Total Daily Emissions	7.86	0.01	0	0.47
Significance Threshold	25	1.25	25	550
Threshold Exceeded?	No	No	No	No
Annual Emissions (tons/year)				
Area	1.73	—	0	—
Mobile	0.02	—	0.005	—
Stationary	0.03	—	0	—
Total Annual Emissions	1.78	—	0.005	—
Significance Threshold	25	—	25	—
Threshold Exceeded?	No	—	No	—

ROG = reactive organic gas; NO_x = oxides of nitrogen; DPM = diesel particulate matter; PM₁₀ = particulate matter less than 10 microns in diameter; CO = carbon monoxide; lbs = pounds; — = not applicable/no threshold

¹ DPM emissions shown include diesel exhaust emissions only.

² Fugitive PM emissions shown include fugitive dust emissions only.

Source: Ramboll 2023 (Appendix B)

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.2.3, *Previous Environmental Review*, the 2021 Final EIR for Plan Morro Bay concluded that future development in Morro Bay facilitated by Plan Morro Bay would result in increased criteria air pollutant emissions, but impacts would be less than significant with implementation of Mitigation Measure AQ-2, Standard Mitigation for Construction Equipment. Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would have the potential to result in a long-term increase in criteria air pollutant emissions compared to existing conditions. However, the anticipated growth in air pollutant emissions associated with future development of the Master Plan area would be lower than what was anticipated for the Power Plant Property in the 2021 Final EIR, due to change the land use designation of the BESS Site from Visitor Serving Commercial to General

(Light) Industrial. General (Light) Industrial land use typically results in lower vehicle trip generation in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses. As a result of reduced VMT, the BESS Facility would result in reduced operational air pollutant emissions from vehicle trips in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses envisioned for that portion of the Power Plant Property in the 2021 Final EIR.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including mitigation to reduce criteria air pollutant emissions where potential project-level environmental impacts are identified. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce the long-term increase in criteria air pollutant emissions associated with future development of the Master Plan area. As a result, this impact would be less than significant.

Mitigation Measures

AQ-1(a) SLOAPCD Standard Mitigation Measures for Construction Equipment

The project shall implement the SLOAPCD's "Standard Mitigation Measures for Construction Equipment." These standard measures include:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with CARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
- Use diesel construction equipment that complies with the State off-Road Regulation;
- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 3 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the City's 3 minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Electrify equipment when feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

AQ-1(b) SLOAPCD Standard Mitigation Measures for Construction Equipment

Mobile off-road construction equipment (wheeled or tracked) greater than 50 hp used during construction of the project shall meet at least the U.S. EPA Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, the equipment shall, at a minimum, meet the Tier 3 standards. Zero-emissions construction equipment may be incorporated in lieu of Tier 4 final equipment. The Project Applicant shall ensure these requirements are incorporated into applicable bid documents, purchase orders,

and contracts. Contractors shall confirm the ability to supply the compliant construction equipment prior to initiation of any ground-disturbing and construction activities. A copy of each equipment’s certified tier specification or model year specification shall be available upon request at the time of mobilization of each piece of equipment.

Significance After Mitigation

Mitigation Measure AQ-1(a) would require the project to implement SLOAPCD’s “Standard Mitigation Measures for Construction Equipment.” Mitigation Measure AQ-1(b) would require the use of Tier 4 equipment during project construction, resulting in reduced ROG, NO_x, and DPM emissions. As illustrated in Table 4.2-6, with implementation of the Tier 4 requirement in Mitigation Measure AQ-1(b), demolition, BESS Facility construction, and future decommissioning activities would not exceed the SLOAPCD significance thresholds. This represents a conservative estimate of the mitigation reductions, as the standard measures required by SLOAPCD contained in Mitigation Measure AQ-1(a) are not quantified in Table 4.2-6. As shown in Table 4.2-6, implementation of required Mitigation Measure AQ-1(b) would reduce criteria pollutant emissions below SLOAPCD Tier 2 emissions thresholds. Implementation of Mitigation Measure AQ-1(a) would further reduce criteria pollutant emissions, reducing this impact to a less than significant level.

Table 4.2-6 Mitigated Demolition and Construction Emissions

Year	Maximum Quarterly Emissions (tons/quarter)		
	ROG + NO _x	DPM ¹	Fugitive PM ₁₀ ²
2023	0.8	0.01	0.14
2024	3.45	0.02	0.32
2025	1.6	0.01	0.01
2026	2.0	0.02	0.06
2027	1.6	0.02	0.26
2028	0.7	0.01	0.11
Tier 2 Significance Threshold	6.30	0.32	2.50
Threshold Exceeded?	No	No	No

ROG = reactive organic gas; NO_x = oxides of nitrogen; DPM = diesel particulate matter; PM₁₀ = particulate matter less than 10 microns in diameter;

¹ DPM emissions shown include diesel exhaust emissions only.

² Fugitive PM emissions shown include fugitive dust emissions only.

Source: Ramboll 2023 (Appendix B)

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 CONSTRUCTION ACTIVITIES INCLUDING DEMOLITION, SITE PREPARATION, GRADING, BUILDING CONSTRUCTION, PAVING, AND ARCHITECTURAL COATING HAVE THE POTENTIAL TO EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CRITERIA AIR POLLUTANT CONCENTRATIONS. IMPLEMENTATION OF MITIGATION MEASURES AQ-1(A) AND AQ-1(B) WOULD REDUCE DPM AND TAC EMISSIONS BELOW APPLICABLE SCREENING THRESHOLDS FOR ASSOCIATED HEALTH RISKS. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Demolition and BESS Facility Construction and Future Decommissioning

Construction activities including demolition, site preparation, grading, building construction, paving, and architectural coating would emit PM (PM_{2.5} and PM₁₀) and TACs such as DPM that could result in impacts to sensitive receptors in the vicinity of the Project Site. A Health Risk Assessment (HRA) was prepared for the project to determine whether the demolition of the power plant building and stacks, BESS Facility construction, and future decommissioning would result in significant health impacts (e.g., cancer risk) to sensitive receptors. The primary source of health risk during these activities is exhaust emissions from construction equipment and trucks. The potential emissions from these sources were conservatively modeled without emission control technologies, such as more stringent USEPA-tiered engines. The emissions distribution and health risk modeling was conducted using a 1,000-foot buffer from the Project Site. A 1,000-foot buffer is used because this distance represents the “zone of influence” recommended for the cumulative evaluation of a project in the SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2012). Because health risk is determined by a cumulative exposure over a long period of time, the maximally exposed individual resident is the receptor that is modeled as having the highest lifetime excess cancer risk. Based on the results of the HRA, the maximally exposed individual resident would be located at the southern boundary of the RV park located north of the Project Site (refer to Figure 4.2-1). Visitors to Coleman Park are not considered to be exposed to substantial risks of cancer due to the relatively limited periods of time that individual users spend at the park (as compared to a residential receptor) and the limited period of time that construction equipment and trucks would be operating.

The excess cancer risk for the maximally exposed individual receptor due to construction and demolition activities is shown in Table 4.2-7. As shown, BESS Facility construction activities have the potential to expose sensitive receptors to pollutant concentrations that exceed the applicable screening threshold for health risks, requiring mitigation.

Table 4.2-7 Demolition and Construction Health Risks

Source	Lifetime Excess Cancer Risk (in a million) ¹
Demolition	0.3
Construction	77.3
Total	77.7
Significance Threshold	10
Threshold Exceeded?	Yes

¹ Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to the emissions associated with the project was calculated based on the modeled annual average DPM concentration, the intake factor for a resident child, the Cancer Potency Factors for DPM, and the Age Sensitivity Factors.

Source: Ramboll 2023 (Appendix B)

Figure 4.2-1 Maximally Exposed Individual Receptor Location



BESS Facility Operation

BESS Facility Traffic

SLOAPCD does not identify specific criteria to determine roadway health risk impacts from a project's traffic increase. Bay Area Air Quality Management District (BAAQMD) CEQA Guidance (BAAQMD 2017) defines a project traffic source as a potentially significant source of health risk if the project increases traffic on nearby freeways or roadways by at least 10,000 vehicles per day. Because the BESS Facility is anticipated to generate approximately 15 operational trips per day, the project would not result in a significant operational health risk from project-generated traffic.

BESS Facility Stationary Sources

Operation and maintenance of the diesel-fueled emergency fire pump during project operations would result in some additional long-term emissions of TACs. The emergency fire pump is expected to operate 30 hours a year for emergency testing. This minor annual use for testing, which is consistent with CARB's ATCM for Stationary Compression Ignition Engines regulation (CARB 2011), would result in negligible PM and TAC emissions. The Air Quality Technical Report prepared by Ramboll in July 2023 (Appendix B) estimates the PM and TAC emissions associated with operation and maintenance of the emergency fire pump would result in 0.08 per one million excess lifetime excess cancer risk, which is substantially below the applicable SLOAPCD screening threshold for associated health risks of 10 per one million. Therefore, operation and maintenance of the emergency fire pump would not result in a significant operational health risk.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.2.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that future development in Morro Bay facilitated by Plan Morro Bay would have the potential to place new sensitive receptors in the vicinity of stationary TAC sources, but that implementation of Plan Morro Bay Policies C-3.1, C-3.2, C-3.4, and C-3.5, which require cooperation with SLOAPCD, locating sources of pollutants away from sensitive receptors, and limiting vehicle idling, would limit the potential for impacts to sensitive receptors. In addition, the 2021 Final EIR determined that development under Plan Morro Bay would not result in new sources of substantial TAC emissions or significant impacts to sensitive receptors.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including mitigation to reduce TAC emissions where potential project-level environmental impacts are identified. Future development of Visitor Serving

Commercial and Mixed-Use Residential uses on the Power Plant Property consistent with the vision of the Master Plan would occur subsequent to construction of the BESS Facility and demolition of the power plant building and stacks. Future development in the Master Plan area would include a mix of residential and commercial uses, and would not include substantial new sources of TAC emissions. Although the project includes a General Plan and Coastal Land Use Plan Map Amendment to revert the 24-acre BESS Site to General Light Industrial, which is a land use more likely to generate TAC emissions than Visitor Serving Commercial, the health risk effects associated with construction of the BESS Facility and demolition of the power plant building and stacks have been evaluated under Impact AQ-2 and determined to be less than significant with mitigation incorporated. Therefore, the overall effect of the Master Plan on air quality health risks in the vicinity of the Power Plant Property would be less than significant.

Mitigation Measures

Mitigation Measures AQ-1(a) and AQ-1(b) included under Impact AQ-2 would be required.

Significance After Mitigation

Implementation of Mitigation Measures AQ-1(a) and AQ-1(b), which require implementation of SLOAPCD’s “Standard Mitigation Measures for Construction Equipment” and the use of Tier 4 equipment during construction activities, would reduce DPM and TAC emissions during construction by using more efficient construction equipment, ensuring equipment is maintained according to manufacturer’s specifications, minimizing equipment idling, and using electrified equipment (rather than petroleum- or diesel-fueled equipment) when feasible. The excess cancer risk for the maximally exposed individual receptor during demolition and construction activities with implementation of Mitigation Measure AQ-1(b) are shown in Table 4.2-8. This represents a conservative estimate of the mitigation reductions, as the standard measures required by SLOAPCD contained in Mitigation Measure AQ-1(a) are not quantified in Table 4.2-8. With implementation of this required mitigation, excess cancer risk to sensitive receptors during demolition, construction, and future decommissioning activities would be reduced to a less than significant level.

Table 4.2-8 Mitigated Demolition and Construction Health Risks

Source	Lifetime Excess Cancer Risk (in a million) ¹
Demolition	0.02
Construction	2.47
Total	2.49
Significance Threshold	10
Threshold Exceeded?	No

¹ Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to the emissions associated with the project was calculated based on the modeled annual average DPM concentration, the intake factor for a resident child, the Cancer Potency Factors for DPM, and the Age Sensitivity Factors.
 Source: Ramboll 2023 (Appendix B)

Threshold 4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 THE PROJECT WOULD NOT RESULT IN OTHER EMISSIONS, SUCH AS ODORS OR NATURALLY OCCURRING ASBESTOS, THAT WOULD ADVERSELY AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, Operation, and Future Decommissioning

Construction of the BESS Facility and demolition of the power plant building and stacks have the potential to result in emissions leading to odors, as well as the potential to result in emissions of asbestos during ground disturbing activities due to the potential presence of naturally occurring asbestos within the area. Maintenance and operation of the emergency fire pump during BESS Facility operation has the potential to result in odors from the burning of diesel fuel.

Odors

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source, the wind speeds and direction, and the sensitivity of the receiving location each contribute to the intensity of the impact. While offensive odors rarely cause physical harm, they can be unpleasant and cause distress among the public and generate citizen complaints. SLOAPCD describes odor sources of concern in the CEQA Air Quality Handbook and provides project screening distances for various types of potentially odor-producing operations including wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, and chemical manufacturing facilities.

Diesel exhaust from construction equipment and operation of the emergency fire pump would generate some odors. Construction-related odors from these sources would be temporary, would not typically be concentrated in specific locations on the Project Site for an extended period of time, and would not persist upon construction completion. The proposed BESS Facility operation would not include any of the odor-producing uses identified by SLOAPCD. The only source of operation-related odors would be from an emergency fire pump that is expected to operate no more than 30 hours annually and would produce temporary and intermittent odors. Furthermore, construction and demolition activities would be subject to SLOAPCD Rule 402, which prohibits discharge of air contaminants or other materials, including odors, that cause injury, detriment, nuisance or annoyance to any to any considerable number of persons or to the public, or to a business or property. Therefore, odor impacts from operation and construction would be less than significant.

Naturally Occurring Asbestos

Construction activities on the BESS Site would occur outside of the SLOAPCD Naturally Occurring Asbestos buffer area. However, demolition activities on the Demolition Site would partially occur within a NOA buffer area. Therefore, demolition activities would occur in an area that may contain NOA, and without proper protocol, could result in emissions of asbestos during ground disturbing activities. Demolition activities are not anticipated to require ground-disturbing activities due to the presence of existing concrete pads below the power plant building and stacks. However, if ground disturbing activities are determined to be necessary within the NOA buffer area, contractors would be required to comply with the NOA ATCM, which includes a geologic evaluation to determine the presence of NOA on the Project Site (refer to Section 4.2.2, Regulatory Setting), before any ground

disturbing activities can commence. Compliance with the NOA ATCM would ensure appropriate dust control measures identified by SLOAPCD would be implemented during ground disturbing activities, if NOA is found to be present on the Project Site, and that construction workers and the general public would not be substantially affected by emissions of NOA. Therefore, demolition, BESS Facility construction, operation, and future decommissioning activities would not result in other emissions that would affect a substantial number of people, and impacts would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.2.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that future development in Morro Bay facilitated by Plan Morro Bay would result in less than significant impacts related to odors and other emissions with compliance with SLOAPCD Rule 402. Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would include a mix of residential and commercial uses and would not include land uses known to generate odors or other emissions that could affect a substantial number of people. Future development in the Master Plan area would not be exposed to odors from the BESS Facility, as the only source of operation-related odors from the BESS Facility would be from an emergency fire pump that would operate no more than 30 hours annually and would produce temporary and intermittent odors. Individual development projects in the Master Plan area would continue to be required to comply with SLOAPCD Rule 402 and prepare focused, project-level environmental review, including mitigation to reduce odor or other emissions where potential project-level environmental impacts are identified. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

4.2.5 Cumulative Impacts

The contribution of a project's individual air emissions to regional air quality impacts is, by its nature, a cumulative effect. Emissions from past, present, and future projects in the region also have or will contribute to adverse regional air quality impacts on a cumulative basis. By definition, regional air pollution is a cumulative impact, in that individual projects are typically not sufficient in size to result in non-attainment of air quality standards. Instead, a project's individual emissions are considered to contribute to the existing, cumulative air quality conditions. As described above, the project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria

Morro Bay Battery Energy Storage System Project

air pollutants. As discussed under Impact AQ-1, the project would not conflict with the 2001 Clean Air Plan, the purpose of which is to achieve and maintain the State ozone standard. As discussed under Impact AQ-2, criteria pollutant emissions during construction of the BESS Facility and demolition of the power plant building and stacks would not exceed the applicable project-level thresholds of significance with implementation of Mitigation Measures AQ-1(a) and AQ-1(b). Therefore, the BESS Facility would not result in a considerable contribution to cumulative regional air quality impacts or a conflict with the 2001 Clean Air Plan.

Cumulative projects could expose sensitive receivers to cancer risks that exceed the SLOACPD 10 in one million threshold. However, cumulative projects would be required to comply with SLOAPCD regulations and thresholds to reduce the potential for significant impacts to sensitive receivers. In addition, as TACs such as DPM disperse with distance, the likelihood of another project being constructed nearby that would emit substantial DPMs in proximity to the proposed project before the pollutants disperse from either project is low. As described under Impact AQ-3, construction TAC emissions from the project would be less than significant with implementation of Mitigation Measures AQ-1(a) and AQ-1(b). Therefore, with the implementation of required mitigation, the project's contribution to cumulative TAC emissions and impacts to sensitive receptors would not be cumulatively considerable.

Construction of cumulative projects would result in construction equipment-related odors and emissions from NOA. However, cumulative projects occurring in areas with potential NOA would be required to comply with the NOA ATCM and the temporary nature of construction would ensure less than significant cumulative odor and other emissions impacts. Operation of cumulative projects could adversely affect sensitive receptors from odor emissions if cumulative projects include typical odor-producing land uses. The project is not identified as an odor producing facility, and the cumulative development projects listed in Section 3, *Environmental Setting*, do not include uses that would produce significant odors. Therefore, cumulative impacts related to odors and other emissions would be less than significant.

4.3 Biological Resources

This section of the EIR addresses the potential physical environmental effects on biological resources that could result from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24 acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site¹.

This analysis is based in part on the findings of the Biological Resources Assessment Report prepared by Padre Associates, Inc. (Padre), prepared in March 2023 and revised in January 2024 (Appendix C). The Biological Resources Assessment Report evaluation of the project's potential effects on biological resources is based on a desktop data review, three field surveys completed by Padre, and Morro shoulderband snail protocol surveys completed by Ecological Assets Management, LLC (EAM) to document biological resources occurring or with potential to occur in the Biological Survey Area, which includes the Power Plant Property plus an additional buffer area around the Power Plant Property (refer to Figure 4.3-1 for the Biological Survey Area boundary).

Padre conducted a biological field survey on December 16, 2020, which served to update data from a previous field survey completed within the Power Plant Property in September 2015 and to encompass a larger study area based on the project plans. On March 30, 2021, Padre completed a supplemental spring botanical survey focused on the presence/absence of special-status plant species during the typical blooming period for many of the special-status plant species known to occur in the project region. In addition, on October 18, 2022, Padre conducted a field survey that encompassed the proposed multi-use path alignment along Embarcadero and Demolition Site that were not captured during previous field surveys. The survey was focused on the existing biological resources, potentially occurring special-status plant and wildlife species, and the suitability of the habitat to support special-status species. In August 2023, Padre completed an additional field survey of the proposed multi-use path alignment along Embarcadero, the results of which are discussed in a stand-alone memorandum included in Appendix C. Additionally, EAM conducted Morro shoulderband snail protocol surveys between December 14, 2020 and March 11, 2021 and December 28, 2022 and March 11, 2023, included as Appendices G and H to the Biological Resources Assessment Report.

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idle Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

4.3.1 Setting

a. Regional Setting

The Project Site is situated between three water bodies, including Morro Bay to the south and west, Morro Creek to the north, and the Pacific Ocean to the west. Morro Bay is a natural harbor and estuary enclosed by three promontories: Morro Rock, Cayucos Hill, and Hollister Peak. Morro Bay contains a variety of ecosystems, including salt marshes, mudflats, and eelgrass beds, and supports a diversity of wildlife, including fish, shellfish, and bird species. Morro Bay is located along a north-south migratory bird route, and is recognized as part of the National Estuary Program. Morro Creek is a seasonal stream with areas of freshwater emergent wetland and includes mostly Willow Woodland and Scrub habitat along the creek corridor.

The Morro Bay region has a mild climate with coastal fog common especially in the summer months. The prevailing wind direction is northwest off the Pacific Ocean. Annual average temperatures range from the 48 degrees Fahrenheit (°F) to 65 °F with little daily or seasonal variation. Average rainfall in Morro Bay is approximately 18 inches per year (United States Climate Data 2020).

b. Project Site Setting

The Project Site is located on the Morro Bay Power Plant Property in the City of Morro Bay (City), between State Route 1 and the Pacific Ocean. The Project Site is at an elevation of approximately 20 feet above sea level and is approximately 0.2 mile east of the Pacific Ocean. Morro Strand State Beach extends north and west of the Project Site. Morro Bay, Morro Bay State Park, Montaña de Oro State Park, and Morro Dunes Natural Preserve are located south of the Project Site. Morro Creek is northeast of the Project Site, the Coast Range hills are east of the Project Site, and single-family residences are located approximately 0.25 mile southeast of the Project Site. Morro Rock is approximately 0.6 mile west-southwest of the Project Site (Appendix C).

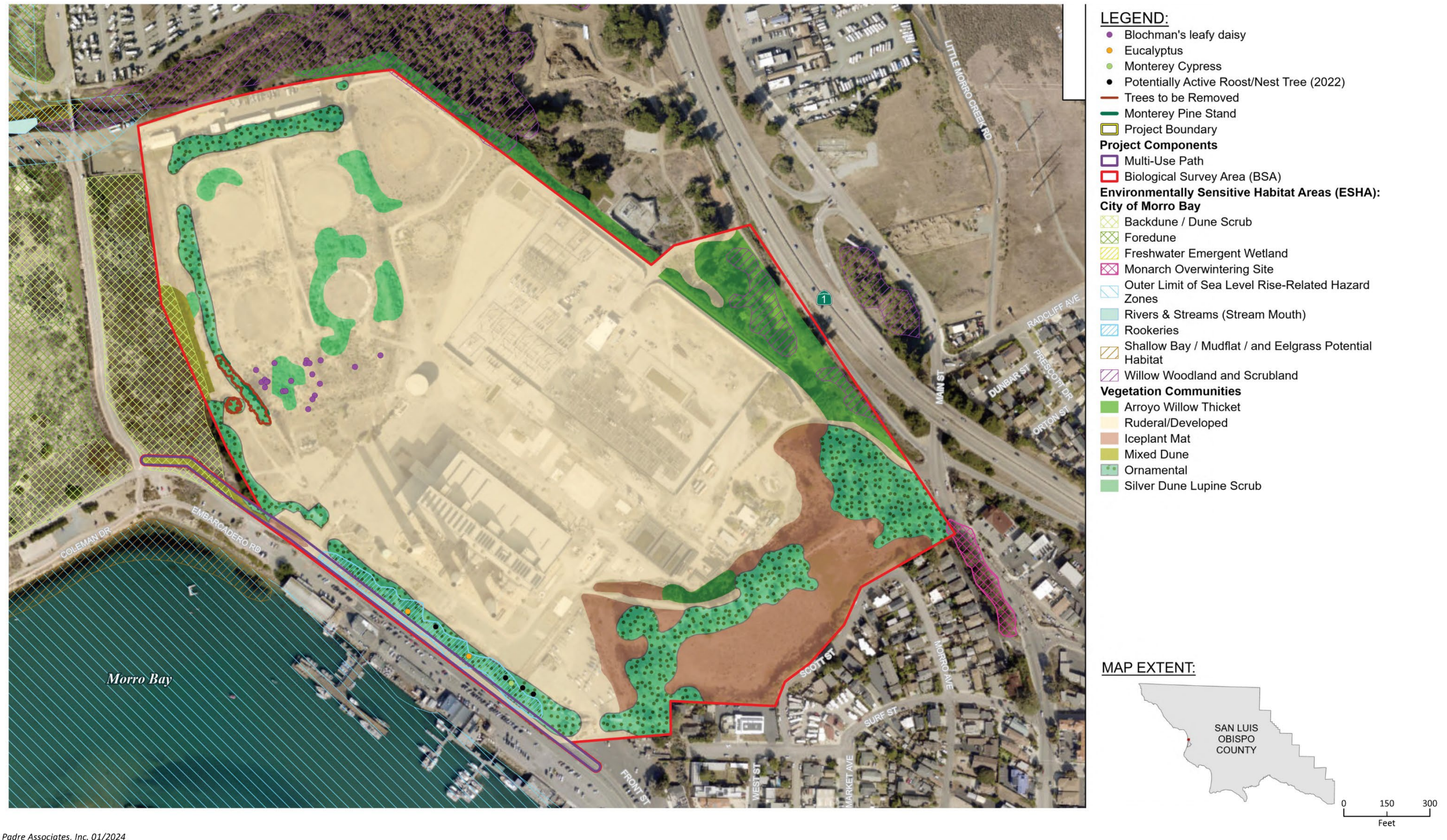
As part of the Biological Resources Assessment Report, the Project Site was surveyed by Padre in December 2020, March 2021, and October 2022 (Appendix C). Figure 4.3-1 shows an overview of identified biological resources within and surrounding the Project Site (Biological Survey Area), including special-status species, vegetation communities, and environmentally sensitive habitat areas (ESHAs).

The following subsection provides a description of vegetation types identified during the field surveys.

Vegetation Types

Based on species composition, life form, and community membership rules, the vegetation identified within the Power Plant Property can be classified into distinct vegetation types (i.e., alliances, associations) as described in the Manual of California Vegetation; Second Edition (MCV2) (Sawyer et al., 2009), or designated as site-specific vegetation types/land use areas. Vegetation types within the Power Plant Property are described below.

Figure 4.3-1 Project Site Biological Resources



Source: Padre Associates, Inc. 01/2024

Arroyo Willow Thickets

Arroyo willow (*Salix lasiolepis*) thickets occur along stream banks and benches, edges of lakes and ponds, and on slopes with seeps, and are characterized by presence of arroyo willow as the dominant or co-dominant species within the shrub or tree canopy. This vegetation type most closely corresponds to the *Salix lasiolepis* Shrubland Alliance as described in MCV2 (Sawyer et al. 2009). The field surveys identified this vegetation type along Morro Creek and Willow Camp Creek in the north and northeastern portions of the Power Plant Property (Appendix C). Associated species observed include blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), and Monterey cypress (*Hesperocyparis macrocarpa*). Arroyo willow thickets associated with riparian habitat are designated as ESHA by the City (City of Morro Bay 2021). However, this vegetation type is not identified as sensitive by the California Department of Fish and Wildlife (CDFW 2023).

Ice Plant Mats

Ice plant (*Carpobrotus edulis*) mats occur on bluffs, disturbed land, sand dunes of immediate coastline, and coastal and alkaline terraces characterized by the presence of ice plant as the dominant species in the herbaceous canopy. This vegetation type most closely corresponds to the *Mesembryanthemum* spp. – *Carpobrotus* spp. Herbaceous Semi-Natural Alliance as described in MCV2 (Sawyer et al. 2009). The field surveys identified this vegetation type primarily in the southeastern portion of the Power Plant Property (Appendix C). Associated species included telegraph weed (*Heterotheca grandiflora*), coyote brush (*Baccharis pilularis*), and remnant annual grasses. This vegetation type is not identified as sensitive by the CDFW (2023).

Silver Dune Lupine Scrub

Silver dune lupine scrub occurs on stabilized dunes, river mouths, and coastal spits, bluffs, and terraces, and is characterized by the presence of silver dune lupine as the dominant or co-dominant species in the shrub layer. As observed during the December 2020 field survey, silver dune lupine occurs in stands intermittently throughout the BESS Site where the ruderal/developed habitat has experienced natural recruitment. Silver dune lupine was identified as the dominant species, with minimal understory comprised of remnant annual grasses and ice plant. Bush lupine (*Lupinus arboreus*) was identified as a component or intermittent species within this alliance during subsequent field surveys conducted in 2021 and 2022. The Silver dune lupine scrub has established on fill soils within ruderal/developed habitat that has been disturbed during operation and decommissioning of the Morro Bay Power Plant. This vegetation type most closely corresponds to the *Lupinus chamissonis* – *Ericameria ericoides* Shrubland Alliance as described in MCV2 (Sawyer et al. 2009). The field survey identified this vegetation type in intermittent stands throughout the Power Plant Property (Appendix C). This vegetation type is identified as sensitive by the CDFW (2023).

Mixed Dune

A distinct stand of vegetation comprised of an assemblage of upland coastal species was observed along the northwestern boundary of the Power Plant Property (Appendix C). This area has been the focus of past restoration efforts, and existing vegetation varies in degree of establishment. Past studies completed in this location designated this assemblage of vegetation as Mixed Dune. This vegetation type is not described in MCV2 (Sawyer et al. 2009). As observed during the 2020, 2021, and 2022 field surveys, the composition of species within the Mixed Dune vegetation species was similar to previously assessed conditions, and consisted of ice plant, beach bur (*Ambrosia*

chamissonis), coyote brush, and remnant annual grasses. In addition to these species, dune ragwort (*Senecio blochmaniae*) was identified on the Power Plant Property during a previous survey (City of Morro Bay 2009). This alliance (referred to as Central Dune Scrub) is considered sensitive by the CDFW and is designated as ESHA by the City.

Ornamental

Several stands of trees have been planted as windrows around the Power Plant Property and are collectively referred to and mapped as ornamental. This vegetation type is not described in MCV2 (Sawyer et al. 2009). Three tree surveys were conducted to evaluate species composition and cover of this site-specific vegetation type. The tree surveys identified three distinct vegetation types including Monterey cypress stands, Eucalyptus groves, and Monterey pine stands, which were comprised of native and non-native tree species including Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and eucalyptus (*Eucalyptus globulus*) as either the dominant or component species in the tree canopy of a stand. Associated shrub and herbaceous species included silver dune lupine, ice plant, and Russian thistle (*Salsola tragus*) (Appendix C). There is a distinct stand of ornamental vegetation comprised of eucalyptus and Monterey cypress located between the Embarcadero and the southeastern Power Plant Property boundary that supports a rookery for multiple species of heron and is designated as ESHA by the City (City of Morro Bay 2021).

Ruderal/Developed

Ruderal/developed habitat is a term used to describe those areas that have been disturbed by past land-use practices, recent ground disturbance or are currently developed. Ruderal/developed habitat includes office facilities, paved and unpaved roads, industrial and commercial structures, and areas of vegetation along these features and within abandoned facilities. This vegetation/land cover type is not described in MCV2 (Sawyer et al. 2009). As observed during the 2020, 2021, and 2022 field surveys, this vegetation type consisted primarily of remnant annual grasses, pampas grass (*Cortaderia jubata*), telegraph weed, ice plant, coyote brush, and scattered volunteer eucalyptus. Developed areas within the ruderal/developed habitat type generally do not support vegetative cover due to the presence of impervious surfaces (Appendix C).

Wildlife

Wildlife observed within the Power Plant Property during the field studies included both invertebrate and vertebrate species. This includes species seen or detected by tracks, scat, skeletal remains, burrows and/or vocalization during the field surveys conducted within the Power Plant Property. Several wildlife species in the region may inhabit the Project Site seasonally, such as overwintering monarch butterfly (*Danaus plexippus*), migratory birds, and bats. The comprehensive desktop review and three field surveys conducted at various times of the year to support the Biological Resources Assessment Report have provided data to support the evaluation of resident, seasonal, and migratory wildlife species (Appendix C). Invertebrate and vertebrate species either observed or determined likely to be present within the Power Plant Property, including the Project Site, are described below.

Invertebrates

Invertebrates observed during field surveys within the Power Plant Property included European snail (*Helix aspersa*) and dentate stink beetle (*Eleodes dentipes*). In addition, the following special-status

species have the potential to occur within the Power Plant Property based on their prevalence throughout the region and/or the presence of suitable habitat: monarch butterfly (*Danaus plexippus*), globose dune beetle (*Coleus globosus*), Morro Bay blue butterfly (*Plebejus icarioides moroensis*), Morro shoulderband snail (*Helminthoglypta walkeriana*), obscure bumblebee (*Bombus caliginosus*), and sandy beach tiger beetle (*Cicindela hirticollis gravida*) (Appendix C). Five protocol surveys for Morro shoulderband snail were completed by EAM during the rainy season of December 2020 through March 2021 and five additional protocol surveys were conducted during the rainy season of December 2022 through March 2023 (included as Appendices G and H to the Biological Resources Assessment report). Morro shoulderband snails were not observed during the protocol surveys, and the Biological Resources Assessment Report concludes that this species is not likely to occur within the Project Site.

Amphibians

Amphibians detected during field surveys were limited to Sierran treefrog (*Pseudacris sierra*), which was heard calling at the north end of the Power Plant Property near Morro Creek. No additional amphibians were observed or heard during field surveys within the Power Plant Property; however, the following species have the potential to occur within Morro Creek just outside of the Power Plant Property based on their prevalence throughout the region and the presence of suitable habitat: the common amphibian species such as black-bellied slender salamander (*Batrachoseps nigriventris*), arboreal salamander (*Aneides lugubris*), and California toad (*Anaxyrus boreas halophilus*), as well as the special-status amphibian species that include Coast Range newt (*Taricha torosa*) and California red-legged frog (*Rana draytonii*). The salamander species are found in damp environments on land, under rocks, logs, and other debris and do not live or breed in water. California toad and California red-legged frog are semi-aquatic species that utilize both wetland and upland habitats for their life/reproductive cycles. The Project Site does not contain suitable aquatic and/or moist habitat for these amphibians; however, California toad and California red-legged frog have the potential to disperse and/or migrate through the upland habitat within the Project Site (Appendix C).

Fish

No aquatic habitat suitable for fish is present within the Power Plant Property (Appendix C); therefore, fish species would not occur on the Project Site.

Reptiles

No reptiles were observed during field surveys; however, coast range fence lizard (*Sceloporus occidentalis bocourtii*) has been previously documented at the Power Plant Property. In addition, the following species have the potential to occur within the Power Plant Property based on their prevalence throughout the region and/or the presence of suitable habitat: the common reptile species such as woodland alligator lizard (*Elgaria multicarinata webbii*) and San Diego gopher snake (*Pituophis catenifer annectens*), as well as the special-status reptile species that include two-striped garter snake (*Thamnophis hammondi*), coast horned lizard (*Phrynosoma blainvillii*), northern California legless lizard (*Anniella pulchra*), and southwestern pond turtle (*Actinemys pallida*) (Appendix C).

Birds

Birds observed during field surveys within the Power Plant Property include Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), American crow (*Corvus brachyrhynchos*),

yellow-rumped warbler (*Setophaga coronata*), black phoebe (*Sayornis nigricans*), California thrasher (*Toxostoma redivivum*), Hutton's vireo (*Vireo huttoni*), wrenit (*Chamaea fasciata*), blue-gray gnatcatcher (*Poliophtila caerula*), turkey vulture (*Carthartes aura*), red-tailed hawk (*Buteo jamaicensis*), Bewick's wren (*Thrymanes bewickii*), white-crowned sparrow (*Zonotrichia leucophrys*), and great blue heron (*Ardea Herodias*).

In addition, black-crowned night heron (*Nycticorax nycticorax*) individuals were observed within the Power Plant Property along the property adjacent to Embarcadero. Several large eucalyptus trees in this area have been identified as potential roost trees, based on observations of white-wash or roosting individuals (Appendix C).

Mammals

Mammals detected during field surveys within the Power Plant Property include raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), Virginia opossum (*Didelphis virginiana*), and coyote (*Canis latrans*). Other common mammal species expected to occur within the Power Plant Property based on the presence of suitable habitat include California ground squirrel (*Otospermophilus beecheyi*), California vole (*Microtus californicus*), brush rabbit (*Sylvilagus bachmani*), black-tailed jackrabbit (*Lepus californicus*), and striped skunk (*Mephitis mephitis*) (Appendix C).

Marine Mammals and Reptiles

No marine mammals or reptiles were observed during the field surveys conducted on the Power Plant Property. The Project Site is situated within approximately 220 feet of Morro Bay but does not include marine or shoreline habitats with the potential to support marine mammals or reptiles (Appendix C).

Wildlife Corridors

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local, such as those between foraging and nesting/denning areas or may be regional in nature. Migration corridors are not unidirectional access routes (i.e., only north to south), and reference is usually made to source and receiver populations in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. These natural linkages provide cover and forage sufficient for temporary inhabitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional fitness of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

The region surrounding the Project Site includes the Santa Lucia Range with drainages flowing west into the Pacific Ocean, and coastal bluffs and beach habitat, which provide open spaces that serve as movement and dispersal corridors for a variety of wildlife species. However, the Project Site is situated in a substantially urbanized area, and land uses surrounding the Project Site consist of roads, residential development, and commercial development, all of which restrict regional wildlife movement and dispersal into the Project Site. There is potential for wildlife to migrate through offsite habitats such as Morro Creek and/or mature stands of eucalyptus trees to the west and south to temporarily utilize the Project Site for roosting, foraging, and/or denning (Appendix C).

Sensitive Habitats and Natural Communities

Within five miles of the Project Site, there are five United States Fish and Wildlife (USFWS)-designated and three National Marine Fisheries Service (NMFS)-designated critical habitat areas. However, none of these critical habitat areas occur within the Power Plant Property or the Project Site itself (Appendix C). These critical habitat areas are listed below for informational purposes and are discussed in greater detail in Appendix C.

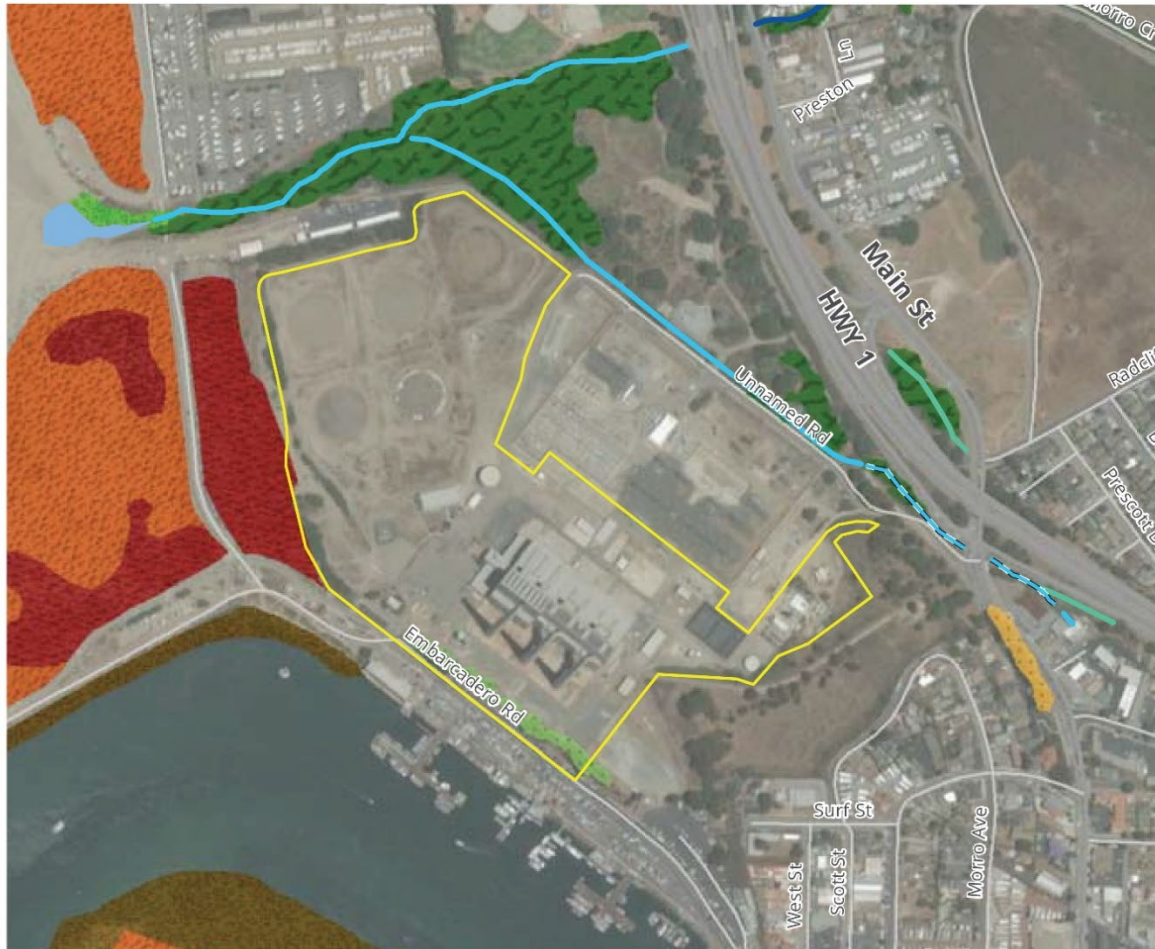
- California red-legged frog USFWS-designated critical habitat
- Tidewater goby (*Eucyclogobius newberryi*) USFWS-designated critical habitat
- Morro shoulderband snail (*Helminthoglypta walkeriana*) USFWS-designated critical habitat
- Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*) USFWS-designated critical habitat
- Western snowy plover (*Charadrius alexandrinus nivosus*) USFWS-designated critical habitat
- Steelhead trout, south-central California coast Distinct Population Segment (*Oncorhynchus mykiss irideus*) NMFS-designated critical habitat
- Leatherback sea turtle (*Dermochelys coriacea*) NMFS-designated critical habitat
- Central America and Mexico humpback whale Distinct Population Segment (*Megaptera novaeangliae*) NMFS-designated critical habitat

The only CDFW sensitive natural community identified on the Power Plant Property is Silver Dune Lupine Scrub. The ESHAs designated by the City and identified within the Power Plant Property include Silver Dune Lupine Scrub as well as Rookeries (black-crowned night herons within the eucalyptus and Monterey cypress trees located between the Embarcadero and Power Plant Property), Back Dune/Dune Scrub (i.e., Mixed Dune), Willow Woodland and Scrub (i.e., Arroyo Willow Thickets), and Monarch Overwintering Site (Appendix C). The areas of City-designated ESHA within and surrounding the Project Site are depicted in Figure 4.3-2.

Special-Status Species

Federal, State, and local authorities under a variety of legislative acts share regulatory authority over biological resources. For the purpose of this EIR, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by USFWS under the Endangered Species Act; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); and animals designated as “Species of Special Concern” (SSC) or “Fully Protected” by the CDFW, and those locally designated as having special status, including monarch butterfly (*Danaus plexippus*). SSC is a category used by the CDFW for those species that are identified as indicators of regional habitat changes or are identified as potential future protected species. SSC do not have any special legal status except that which may be afforded by the California Fish and Game Code (CFGC). The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands, and these species are identified as sensitive under the CEQA Appendix G questions.

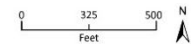
Figure 4.3-2 Project Site and Surrounding ESHA



Source: City of Morro Bay, 2018; Rincon Consultants, Inc., 2023.

LEGEND

- Project Site
- Aquatic Resources & Wetland Habitats ESHA**
 - Rivers & Streams - Perennial
 - Rivers & Streams - Seasonal
 - Rivers & Streams - Seasonal (Channelized)
 - Stormwater Channel - Seasonal
 - Rivers & Streams (Stream mouth)
 - Freshwater Emergent Wetland
 - Shallow Bay/ Mudflat/ and Eelgrass Potential Habitat
 - Willow Woodland & Scrub
- Breeding and Overwintering Sites ESHA**
 - Monarch Overwintering Sites
 - Morro Rock (Peregrine Falcon Nest Site)
 - Rookeries
- Other Sensitive Natural Communities ESHA**
 - Foredune
 - Backdune / Dune Scrub



Additionally, special status plants with California Rare Plant Rank (CRPR) of 1 and 2 are special status species. CDFW standards state that plants with a CRPR 1A, 1B, 2A, and 2B may meet definitions of rare or endangered under *CEQA Guidelines* Sections 15380 (b) and (d). By California Native Plant Society standards, the plants of CRPR Ranks 1A, 1B, 2A and 2B may meet the definitions of Sections 2062 and 2067 (CESA) of the CFGC, and are eligible for State listing, and thus should be included under *CEQA Guidelines* Section 15380. In some circumstances, plants with CRPR 3 or 4 may also warrant inclusion under *CEQA Guidelines* Section 15380 if cumulative impacts to such plants are significant enough to affect their overall rarity.

Special-Status Plants

The Biological Resources Assessment Report identified 49 special-status plant species within approximately five miles of the Power Plant Property (Appendix C). Seven species have the potential to occur on the Project Site – sticky sand verbena (*Abronia maritima*), Miles' milk vetch (*Astragalus didymocarpus* var. *milesianus*), Kellogg's horkelia (*Horkelia cuneata* var. *sericea*), dune ragwort (*Senecio blochmaniae*), Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and Blochman's leafy daisy (*Erigeron blochmaniae*). Of these seven species, Monterey cypress, Monterey pine, and Blochman's leafy daisy were observed on the Project Site during the December 2020, March 2021, and October 2022 field surveys conducted in support of the Biological Resources Assessment Report (Appendix C); these three species are discussed further below.

MONTEREY CYPRESS

Monterey cypress is a perennial evergreen tree in the Cypress Family (Cupressaceae) that is native to California and endemic to the central coast of California, occurring in coastal pine forest habitats. As observed during the field surveys, there were several stands and individual trees that appeared to be planted as landscape trees within the Power Plant Property. There were approximately 43 individual trees within the stands. All appeared healthy and ranged in height from approximately 10 to 30 feet tall. (Appendix C).

MONTEREY PINE

Monterey pine is a perennial evergreen tree in the Pine Family (Pinaceae) that is native to California, occurring in coastal pine forest habitats. As observed during the field surveys, there were several stands and individual trees that appeared to be planted as landscape trees within the Power Plant Property. There were approximately 17 individual trees within the stand. All appeared healthy and ranged in height from approximately 10 to 20 feet tall (Appendix C).

BLOCHMAN'S LEAFY DAISY

Blochman's leafy daisy is a perennial herb in the Sunflower Family (Asteraceae) that occurs in coastal dune and strand habitats and typically blooms from June through October. This species was observed in ruderal and Silver Dune Lupine Scrub situated on remnant tank ring berms within the Project Site. Seed was collected from donor plants in August 2021 for future mitigation restoration activities (Appendix C).

Special-Status Wildlife

The Biological Resources Assessment Report (Appendix C) identified 52 special-status wildlife species with the potential to occur within the Power Plant Property. Although no special-status wildlife species were observed during the 2020, 2021, 2022, and 2023 field surveys, the Project Site

may provide suitable habitat to support several special-status wildlife species that are documented to occur in vicinity of the Power Plant Property (Appendix C). The following discussion provides an overview of the general habitat requirements for these species and further detail on the potential for each of these species to occur in the Project Site.

OBSCURE BUMBLEBEE

The obscure bumblebee is identified as a Special Animal by the CDFW. Historically, this species' range extended from northern Washington to southern California along the Pacific Coast and inland to the Central Valley of California, but that range is decreasing. Like other species of bumblebees, it lives in annual colonies with only new queens overwintering to nest the following spring. This species was not observed during prior field surveys; however, based on the presence of suitable habitat, as well as nearby occurrences and their transitory nature, this species has the potential to occur on the Project Site (Appendix C).

MORRO SHOULDERBAND SNAIL

Morro shoulderband snail is a federally endangered species, and USFWS-designated Critical Habitat exists within five miles of the Power Plant Property. The Morro shoulderband snail occurs in coastal dune and scrub communities. The snail is most closely associated with the dominant shrub, mock heather (*Ericameria ericoides*); however, the snail is also associated with several other shrub and succulent species, including non-native ice plant. The current range for the snail includes western San Luis Obispo County in Morro Bay; specifically, areas south of Morro Bay, west of Los Osos Creek, and north of Hazard Canyon. Numerous protocol-level surveys and habitat assessments were completed within the Project Site area between 1999 and 2023, with the most recent surveys completed in 2020 /2021 and 2023. All such surveys reported negative findings for presence of Morro shoulderband snail and the species is not likely to occur on the Project Site (Appendix C).

MONARCH BUTTERFLY

The monarch butterfly is not formally listed as an endangered or threatened species; however, the species is a candidate for federal listing and over-wintering monarch butterflies are identified as a Special Animal by the CDFW. Monarch butterflies will begin to abandon autumnal roosts within the northern United States and Canada in early November to December to over-wintering sites in the warmer climates in southern California and Mexico. Monarch butterflies will fly north for breeding as milkweed plants come into bloom in the spring.

Wintering aggregations of monarch butterflies in California can primarily be found on Monterey pines and in eucalyptus groves. Wintering habitat components frequently include sources of moisture such as streams, ponds, or abundant morning dew. Other habitat preferences include little direct sunlight, minimal wind, and moist ambient conditions. Monarch butterflies are commonly observed throughout the region and are known to roost in eucalyptus planted within the southeast corner of the Power Plant Property, although these are identified as fall aggregation sites rather than wintering roosts (Appendix C). As observed during the field survey, there were stands of eucalyptus, Monterey cypress, and Monterey pine (ornamental) trees within the Project Site. Although no monarchs were observed during field surveys of the Project Site, this species has the potential to occur transiently during migration or movement throughout the region (Appendix C).

MORRO BAY BLUE BUTTERFLY

The Morro Bay blue butterfly is identified as a Species of Special Concern by the CDFW. This species occurs in coastal dune scrub areas within the region and is closely associated with its food host plant, silver dune lupine. Silver Dune Lupine Scrub vegetation occurs scattered throughout the Project Site. Focused surveys were not conducted for Morro Bay blue butterfly within the Power Plant Property, and this species was not observed during the field surveys; however, due to its close association with silver dune lupine and nearby occurrences, this species has the potential to occur within the Project Site (Appendix C).

CALIFORNIA RED-LEGGED FROG

The California red-legged frog is a federally threatened species, and USFWS-designated Critical Habitat for this species occurs within one mile of the Power Plant Property. California red-legged frogs use a variety of aquatic and terrestrial habitats, including streams, marshes, ponds, riparian woodlands, springs, lagoons, irrigation canals, wells, reservoirs, and even sewage treatment ponds, as well as upland habitats for dispersal/migration. California red-legged frogs have been documented less than one-mile northeast of the Power Plant Property within wetland habitat in Morro Strand State Park. Although no California red-legged frogs were observed during any of the field surveys; due to nearby occurrences, as well as potentially suitable habitat within Morro Creek, California red-legged frogs have the potential to occur transiently on the Project Site during upland dispersal/migration (Appendix C).

NORTHERN CALIFORNIA LEGLESS LIZARD

The northern California legless lizard is identified as a SSC by the CDFW. This species lives mostly underground, burrowing in moist warm loose soil in sparsely vegetated areas of beach dunes, chaparral, sandy washes, and stream terraces with oaks. These lizards range from four to seven inches in snout to vent length and are often found under rocks, boards, driftwood, and logs. This species does not bask in direct sunlight and feeds primarily on larval insects, beetles, termites, and spiders. Legless lizards are sometimes active on the surface at dusk and at night and remain below ground during the day. No legless lizards were observed during the field surveys; however, due to the presence of suitable habitat on the Project Site, as well as nearby occurrences, this species has the potential to occur on the Project Site (Appendix C).

COAST HORNED LIZARD

Coast horned lizard is identified as a SSC by the CDFW and has been documented in various places throughout San Luis Obispo County, including localities around Morro Bay and Los Osos. Within its range it can be found in a variety of habitats; along the coast of California this lizard is often associated with shrublands and grasslands. In addition to being found in sandy washes, they are found in areas with a substrate of fine loose soil. The coast horned lizard's diet consists of native ants and other insects. Focused surveys were not conducted for coast horned lizards within the Power Plant Property, and this species was not observed during the field surveys; however, due to the presence of suitable habitat, as well as nearby occurrences, this species has the potential to occur on the Project Site (Appendix C).

WESTERN SNOWY PLOVER

The Pacific coast population of western snowy plover is federally listed as threatened, and USFWS-designated Critical Habitat for this species includes the beach and foredune habitats adjacent to and

west of the Power Plant Property. This species inhabits sandy beaches and shores of alkali lakes along the coast of California and feeds on small aquatic prey and requires sandy, gravelly, or friable soils for nesting. Nests, which consist of a shallow scrape lined with bits of shell or stone, are easily disturbed by human activity. Western snowy plovers are also known to be heavily impacted by natural predators, such as raccoons, coyotes, and foxes. Western snowy plovers are known to breed along the Morro Bay Sand Spit and along the dune complex of Morro Strand State Beach. No western snowy plovers were observed within the Power Plant Property during the field surveys, and it is not likely that this species would occur based on past land use and the current disturbance level of potential adjacent suitable habitat for this species. Suitable nesting habitat for western snowy plover does not occur on the Project Site (Appendix C).

SPECIAL-STATUS BIRDS OF PREY

Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*) and peregrine falcon (*Falco peregrinus*) are well-documented within the vicinity of the Project Site; and the peregrine falcon is known to nest at Morro Rock (pers. Obs. C. Boggs). These species may also utilize habitat within and adjacent to the Project Site for nesting and are protected by State and federal agencies, including the CDFW and USFWS. No suitable nesting sites are located within the BESS Site or Demolition Site; however, due to the mobility of these species, as well as nearby occurrences, there is potential for these special-status birds of prey to occur transiently on the Project Site during foraging and/or movement throughout the region (Appendix C).

SPECIAL-STATUS BAT SPECIES

The pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendi*), and big free-tailed bat (*Nyctinomops macrotis*) are all identified as SSC by the CDFW. These special-status bats occupy a wide-range of different habitats and utilize various types of roosts, including but not limited to cliffsides, trees, and manmade structures/buildings. Suitable roosting (including maternity roosts)/foraging habitat for the special-status bats listed above are present throughout the Project Site including trees, buildings, and water sources. No bats were observed during prior field surveys; however, there is potential for bats to roost within the existing abandoned power plant building and stacks, facility structures, and groves of trees within and adjacent to the Project Site (Appendix C).

4.3.2 Regulatory Setting

a. Federal Regulations

Federal Endangered Species Act of 1973

The Federal Endangered Species Act (FESA), administered by the USFWS and NMFS, provides protection to species listed as threatened or endangered. The FESA also provides protection to those species proposed to be listed under FESA or critical habitats proposed to be designated for such species. In addition to the listed species, the federal government also maintains lists of species that are neither formally listed nor proposed but could potentially be listed in the future. Species on this list receive special attention from federal agencies during environmental review, although they are not protected otherwise under FESA. Candidate species include taxa for which substantial information on biological vulnerability and potential threats exist and are maintained in order to support the appropriateness of proposing to list the taxa as an endangered or threatened species.

Section 9 of FESA prohibits the “take” of any member of a listed species. Take is defined as, “...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harass is “an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering.” Harm is defined as “...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.”

Projects that would result in the take of a federally listed or proposed species are required to consult with the USFWS and/or NMFS. The objective of consultation is to determine whether the project would jeopardize the continued existence of a listed or proposed species, and to determine what measures would be required to avoid jeopardy.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it is unlawful, except as permitted by regulations, “to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or any part, nest, or egg of any such bird” (16 United States Code Section 703[a]). The USFWS implements the MBTA (16 United States Code Section 703-711).

Clean Water Act

Congress enacted the Clean Water Act (CWA) “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Under Section 404 of the Clean Water Act, the United States Army Corps of Engineers (USACE) has authority to regulate activities that result in discharge of dredged or fill material into “waters of the United States” including wetlands. In achieving the goals of the CWA, the USACE seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional waters of the United States requires a permit from the USACE prior to the start of work.

Amendments to the CWA in 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program, which prohibits discharge of pollutants into the nation’s waters without procurement of a NPDES permit from the United States Environmental Protection Agency (USEPA). The purpose of the permit is to translate general requirements of the CWA into specific provisions tailored to the operations of each organization that discharges pollutants. Although federally mandated, the NPDES permit program is generally administered at the State and regional levels.

USEPA’s NPDES Program requires NPDES permits for: (1) Municipal Separate Storm Sewer Systems (MS4) Permit generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs 5.0 acres or more of land. As of March 2003, Phase II of the NPDES Program extended the requirements for NPDES permits to numerous small municipal separate storm sewer systems, construction sites of 1.0 to 5.0 acres, and industrial facilities owned or operated by small municipal separate storm sewer systems, which were previously exempted from permitting.

b. State Regulations

California Coastal Act

The California Coastal Commission (CCC) derives its authority from the California Coastal Act (CCA). The CCA places a high priority on the protection of biological and natural resources. Strict limits are placed on development in ESHAs. The CCA (Section 30107.5) defines an ESHA as: “[a]ny area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.” Very limited types of development are allowed in ESHAs and then only where there is no feasible less environmentally damaging alternative and feasible mitigation measures have been adopted. In general, only land uses that are dependent on the habitat resources are allowable within ESHAs.

California Endangered Species Act

CESA (CFGF Section 2050 et seq.) prohibits the take of State-listed threatened and endangered species without a CDFW incidental take permit. “Take” under the CESA is defined as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” and is therefore restricted to direct harm of a listed species. Take under the CESA does not prohibit indirect harm by way of habitat modification (CFGF Section 86).

CFGF Section 2081(b) and (c) allow CDFW to issue an incidental take permit for a State-listed threatened and endangered species only if specific criteria are met. These criteria can be found in 14 C.C.R. Section 783.4(a) and (b). Historically, no Section 2081(b) permit could authorize the taking of fully protected species and “specified birds.” However, Senate Bill 147, which was signed into law on July 10, 2023, authorizes the permitted take of fully protected species for specified projects. If a non-specified project (i.e., project not specified by SB 147) is planned in an area where a fully protected species or specified bird occurs, an applicant must design the project to avoid all takings; the CDFW cannot authorize takings under these circumstances. Requirements for the protection of fully protected species are described in CFGF (Sections 3511, 4700, 5050 and 5515). These statutes prohibit the take or possession of fully protected species for most projects. Incidental take of fully protected species may only be authorized under SB 147 as an eligible “specified project” or an approved Natural Community Conservation Plan.

Native Plant Protection Act

The CDFW has authority to administer the Native Plant Protection Act (NPPA; CFGF Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under NPPA Section 1913, the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use of a property to allow for salvage of the plant(s).

California Fish and Game Code

Sections 3503, 3503.5 and 3511 of the CFGF describe unlawful take, possession, or destruction of birds, nests, and eggs. CFGF Section 3503.5 protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Section 1600 et seq. prohibits the substantial diversion or obstruction of the natural flow of, or substantial change to or use of any material from the bed, channel, or bank of any river, stream, or

lake; or deposit or disposal of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake without prior notification to CDFW. In order for these activities to occur lawfully, the CDFW must receive written notification regarding the activity in the prescribed manner and may require a lake or streambed alteration agreement. Lakes, ponds, perennial and intermittent streams and associated riparian vegetation, when present, are subject to this regulation.

California Environmental Quality Act

Project-related adverse impacts on special-status species are determined to be significant for CEQA purposes. Section 15065 of the *CEQA Guidelines* states that a Lead Agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where the project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, and/or reduce the number or restrict the range of a rare or endangered plant or animal.

c. Local Regulations

Plan Morro Bay

Plan Morro Bay, which was adopted by the City in May 2021, serves as the City's General Plan and Local Coastal Program (LCP) and Coastal Land Use Plan. The following biological resource policies from Plan Morro Bay are applicable to the project:

Goal C-1: Sensitive habitats are protected from potential negative impacts of land use and development.

Policy C-1.1: Environmentally Sensitive Habitat Areas. Protect Environmentally Sensitive Habitat Areas, or "ESHAs," defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. In the Morro Bay coastal zone, these areas include, but are not limited to:

- a. Aquatic Resources and Wetland Habitats, which include all year-round and seasonal rivers and streams, wetlands (including fresh and saltwater marshes), and riparian vegetation.
- b. Other Sensitive Natural Communities, which include foredune, backdune/dune scrub, coastal bluff faces, and coastal strand environments.
- c. Breeding and Overwintering Sites, which include all roosts, nests, and rookeries for such species as herons, egrets, cormorants, and peregrine falcons, and all documented monarch butterfly overwintering roosts.

Policy C-1.2: Development in ESHA. Development in ESHA (as defined in Policy C-1.1 and Coastal Act Section 30107.5) shall be limited to uses dependent on the resource (e.g., habitat restoration, scientific research, and low-intensity public access and recreation), as well as the uses specified in Coastal Act Sections 30233 and 30236 for wetlands and streams, respectively. All allowable development in ESHA shall be sited and designed to protect against significant disruption of habitat values, including to rare and endangered species. Development in areas adjacent to ESHA shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitats.

Policy C-1.3: Biological Site Assessments. A biological assessment shall be required for any development proposed on sites that include or are within 100 feet of mapped ESHA in Figure C-2, and all other sites with natural vegetation regardless of whether ESHA has been mapped in Figure C-2, and for all other projects for which evidence indicates that ESHA may be present either on or adjacent to the site. The best available information about the location of ESHA in the City shall be used. Such assessment shall be prepared at the owner's expense by a qualified biologist approved by the City and shall, at minimum:

- a. Identify and confirm the extent of the ESHA,
- b. Document any site constraints and the presence of sensitive plant or animal species,
- c. Recommend buffers and development setbacks and standards to protect the ESHA,
- d. Recommend mitigation measures to address any allowable impacts, and
- e. Include any other information and analyses necessary to understand potential ESHA impacts as well as measures necessary to protect the resource as required by the Local Coastal Program.

If the site contains the potential for monarch overwintering or rookeries due to the presence of appropriately sized trees and groves, a seasonally timed survey appropriate for detecting the target species must also be included in the study.

Policy C-1.4: Dune ESHA. For all new development within dune ESHA that could impact dune ESHA, and in addition to the biological assessment described above, a qualified, City-approved biologist shall prepare a dune stabilization and/or restoration plan. The dune stabilization/restoration plan shall include, at minimum:

- a. The removal of all nonnative and invasive plants species,
- b. Revegetation with native plant species, including rare and/or endangered species,
- c. Maintenance and monitoring requirements,
- d. Methods for directing public access, and
- e. A schedule for plant establishment including targets for plant variation and density, contingency measures, and reporting.

The dune stabilization/restoration plan shall prohibit the use of any nonnative plant species and shall require that all nonnative species be removed and not allowed to persist. Initiation of restoration activities shall be required prior to occupancy/use of any allowable new development.

Policy C-1.5: ESHA Buffers. Development shall be set back from ESHA through buffers of a sufficient width and design to protect ESHA sensitive resources from the impacts of adjacent uses, including impacts from construction and post-construction activities, and such buffers shall be maintained in a natural condition, with the only allowed uses being the ones allowed in the ESHA itself.

For aquatic resources and wetlands, the buffer shall be the following, whichever is wider, on both sides of the stream:

- a. For rivers, streams and riparian areas, the required buffer shall extend at least 50 feet from the outer edge of the riparian vegetation on both sides of the river, stream, and/or riparian area or 50 feet itself [measured perpendicularly from the top of the river, stream, or measure from riparian area bank for areas without riparian direction of the vegetation]) or

Morro Bay Battery Energy Storage System Project

- b. For wetlands, the required buffer shall extend at least 100 feet from the edge of the wetland (measured perpendicularly from the direction of the wetland itself).
- c. For dunes, the required buffer shall extend at least 50 feet from the edge of the wetland.

For all other ESHA, the buffer shall be a minimum of 50 feet. These widths may be adjusted by the City as appropriate to protect the ESHA habitat value of the resource, but shall not be less than 25 feet. Such a reduction shall only be allowed if the reduced buffer provides the same or greater protection to the ESHA than the required buffer. Such adjustment shall be made on the basis of a biological site assessment supported by substantial evidence that includes but is not limited to:

- a. Sensitivity of the ESHA, including any sensitive species, to disturbance.
- b. Habitat requirements of the ESHA, including the migratory patterns of affected species and tendency to return each season to the same nest site or breeding colony.
- c. Topography of the site.
- d. Movement of stormwater.
- e. Permeability of the soils and depth to water table.
- f. Vegetation present.
- g. Unique site conditions.
- h. Whether vegetative, natural topographic, or built features (e.g., roads, structures) provide a physical barrier between the proposed development and the ESHA.
- i. The likelihood of increased human activity and disturbance resulting from the project relative to existing development.

Policy C-1.8: Takings. If development in ESHA and/or required ESHA buffers must be allowed to avoid an unconstitutional taking of private property without just compensation, the amount and type of development allowed shall be the least necessary to avoid a taking, and shall be as consistent with LCP policies as possible. Unavoidable impacts must be minimized; temporary impact areas within ESHA and required ESHA buffers must be restored upon completion; and all adverse impacts to ESHA must be fully mitigated in kind (e.g., the mitigation must replace lost habitat functions and values at a minimum 2:1 ratio).

Policy C-1.16: Tree Planting and Removal. Certain trees are “major vegetation,” where the removal of which constitutes development and requires a Coastal Development Permit. A Coastal Development Permit is required for removal of all native trees and all trees that measure 6 inches in diameter at 54 inches above grade. Replanting of a tree as a replacement for an existing tree is required. Dead trees (snags) on City property in the coastal zone should be retained, where possible, to provide habitat, including for cavity-nesting birds. No permit is required for removal of dead, dying, and diseased trees or trees that pose a health, life, and safety issue. These trees must be inspected and verified by an International Society of Arboriculture (ISA) certified arborist or Registered Professional Forester (RFP).

Policy C-1.17: Project Design for Wildlife Connectivity. Design new stream crossing structures and extensions or modifications of existing structures to accommodate wildlife movement. At a minimum, structures within steelhead streams must be designed in consultation with a fisheries biologist and shall not impede movement. New projects with long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing or other project components shall not block wildlife movement through riparian or other natural habitat. Where fencing or

other project components that may disrupt wildlife movement are required for public safety concerns, they shall be designed to permit wildlife movement.

City of Morro Bay Municipal Code

The Zoning Code (Title 17) of the Morro Bay Municipal Code implements the applicable portions of Plan Morro Bay.² Chapter 17.14.080 (Environmentally Sensitive Habitat) of the Zoning Code identifies ESHAs to be protected and preserved, including buffers, outlines allowed uses, and restricts new uses and expansions of existing uses in these areas. Reduction of buffers requires consultation with CDFW, mitigation, and consistency with existing policies in the General Plan and LCP (i.e., Plan Morro Bay). This chapter also outlines performance standards for new developments with regard to protecting ESHAs.

4.3.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under Plan Morro Bay to result in impacts to biological resources within the City. The 2021 Final EIR concluded that Plan Morro Bay goals and policies would minimize impacts to riparian habitats, sensitive natural communities, and wetlands. Specifically, Policy C-1.1 Sensitive Habitats, Policy C-1.2 Habitat Protection, Policy C-1.3 ESHA Protection, Policy C-1.4 Biological Site Assessments, Policy C-1.5 ESHA Buffers, Policy C-1.6 Structures in ESHA Buffers, and Policy C-1.15 Wetlands, would require protection of sensitive habitats, including wetlands and riparian areas, would require a site assessment to complete a detailed inventory of sensitive habitats prior to new development and specify buffers from ESHA, and would require mitigation for situations in which full avoidance is determined by the City to be infeasible to avoid a taking.

The 2021 Final EIR also concluded that development facilitated by Plan Morro Bay would not conflict with applicable local policies protecting biological resources or an approved local, regional, or state habitat conservation plan. Impacts to special-status species would be mitigated through language revisions to Policies C-1.3 and OS-7.1, and impacts to wildlife corridors would be mitigated through the addition of Policy C-1.17. The 2021 Final EIR determined that these policies, as well as compliance with applicable federal and State regulations for biological resources, would ensure that future development under Plan Morro Bay would result in less than significant impacts related to biological resources.

4.3.4 Impact Analysis

a. Methodology

In March 2023, Padre prepared a Biological Resources Assessment Report (revised in January 2024) in connection with the project, which evaluated the Project Site and surrounding areas. This report included a desktop review of aerial imagery of the Power Plant Property and surrounding area, a query of the CDFW California Natural Diversity Database (CNDDDB) to identify reported occurrences of special-status plant and wildlife species and sensitive habitats within the project region, a review of the USFWS Critical Habitat Portal to determine location of Critical Habitat for federally protected species that may potentially occur in the region, a query of the USFWS Information for Planning and Consultation platform, a query of the USFWS National Wetlands Inventory (NWI) to identify

² The references in this section are to the comprehensive update to the Zoning Code/Implementation Plan adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662), which is currently anticipated to be certified by the California Coastal Commission in March 2024.

potential wetlands, and an examination of multiple sources of technical survey information completed in the vicinity of the Power Plant Property. Several field surveys were also completed to assess the biological resources of the Project Site, which consisted of pedestrian-level observations and identification. These surveys occurred in September 2015, December 2020, March 2021, October 2022, and August 2023. The September 2015 and December 2020 surveys consisted of general biological field surveys, the March 2021 survey consisted of a supplemental spring botanical survey, and the October 2022 and August 2023 surveys consisted of focused surveys on the proposed multi-use path alignment and stacks that were not captured during previous field surveys. The analysis of biological resource impacts in this section is based on information presented in the Biological Resources Assessment Report and August 2023 memorandum for the multi-use path alignment, included as Appendix C.

Environmental impacts to biological resources may be assessed using impact significance criteria encompassing *CEQA Guidelines* and federal, State and local plans, regulations, and ordinances. *CEQA Guidelines*, Chapter 1, Section 21001 (c) states that it is the policy of the State of California to “prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.”

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant adverse impact if it would do any of the following:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
3. Have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Because the project would not result in significant adverse effects regarding any conflicts with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan, an analysis of potential impacts under Threshold 6 is not included in this section. This topic is briefly discussed in Section 4.10, *Effects Found Not to be Significant*.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-1 CONSTRUCTION AND FUTURE DECOMMISSIONING OF THE BESS FACILITY AND DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING AND STACKS HAVE THE POTENTIAL TO RESULT IN TEMPORARY AND PERMANENT IMPACTS TO SPECIAL-STATUS PLANT AND WILDLIFE SPECIES. IMPLEMENTATION OF REQUIRED MITIGATION WOULD REDUCE THIS IMPACT TO A LESS THAN SIGNIFICANT LEVEL.

Special-Status Plants

Botanical surveys completed in December 2020, March 2021, and October 2022 identified one special-status plant species (Blochman's leafy daisy) and two native trees (Monterey cypress and Monterey pine) on the Power Plant Property, along with four other special-status plant species with potential to occur on the Project Site (sticky sand verbena, Miles' milk vetch, Kellogg's horkelia, and dune ragwort).

Demolition, BESS Facility Construction, and Future Decommissioning

Demolition activities performed in connection with the project would not directly impact special-status plant species, as demolition would occur at locations that are already paved and disturbed. Compliance with the San Luis Obispo County Air Pollution Control District (SLOAPCD)-required fugitive dust control measures and NPDES-required Stormwater Pollution Prevention Plan (SWPPP) during demolition and construction activities would include use of water trucks or sprinkler systems to prevent airborne dust from leaving the Project Site; covering trucks hauling dirt, sand, soil, or other loose materials to prevent dust and sediment runoff; implementing Best Management Practices (BMPs) to prevent erosion and contaminated runoff from construction areas; revegetation of exposed ground areas; permanent dust control measures with respect to any revegetation and landscape plans to be implemented following soil disturbing activities; and dust monitoring to reduce visible emissions below 20 percent opacity and to prevent transport of dust offsite. As a result, project demolition would have a less than significant impact on special-status plant species.

BESS Facility construction would involve vegetation removal and ground disturbance during site preparation, which would impact existing vegetation, including special-status plant species, on the BESS Site. Approximately 6 mature Monterey cypress and 17 Monterey pine trees are expected to be removed during site preparation for construction of the BESS Facility. In accordance with City regulations, a Coastal Development Permit would be required prior to removal of any tree with a minimum of six-inch diameter at 54-inches above grade. The replacement ratio for tree removal would be specified by the Coastal Development Permit. Compliance with City regulations and the Coastal Development Permit related to tree removal and replacement would minimize loss of trees and ensure impacts regarding removal of these native trees would be less than significant.

The BESS Site contains Blochman's leafy daisy, a special-status plant species. BESS Facility construction would impact existing specimens of Blochman's leafy daisy. Direct construction impacts would include damage to or removal of Blochman's leafy daisy through vegetation clearing or ground disturbance, and indirect impacts would include soil compaction from heavy machinery or vehicles, soil contamination from construction materials, and the potential introduction of invasive

species through construction equipment. In addition, four special-status plant species were identified as having the potential to occur on the Project Site – sticky sand verbena, Miles’ milk vetch, Kellogg’s horkelia, and dune ragwort. None of these four species were observed on the BESS Site during the March 2021 botanical survey, and as a result, it is unlikely that these species are present. However, construction of the BESS Facility could impact one or more of these species, if they become established in this area prior to construction. This is a potentially significant impact, requiring mitigation. Implementation of Mitigation Measures BIO-1(a), BIO-1(b), BIO-1(d), BIO-1(i), and BIO-1(j) would minimize the potential impact to special-status plant species, including Blochman’s leafy daisy, sticky sand verbena, Miles’ milk vetch, Kellogg’s horkelia, and dune ragwort, reducing impacts to less than significant.

As described in Section 2, *Project Description*, this analysis assumes that at the end of the BESS Facility’s operating life, the facility would be decommissioned, which may require the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations if such improvements are not identified for potential future redevelopment by the City, as well as restoration of site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property, in accordance with the Reclamation and Decommissioning Plan. All unpaved areas of the Project Site compacted during construction, operations, or by equipment used for decommissioning would be tilled in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. Decommissioning activities would involve the use of heavy equipment and personnel similar to that used for the BESS Facility’s construction phase. Similar to project demolition activities, decommissioning activities would occur at locations that would already be paved and disturbed, and would implement BMPs to control dust, erosion, and stormwater discharges from the construction site in accordance with the SLOAPCD and NPDES requirements. Therefore, future decommissioning activities would have a less than significant impact on special-status plant species.

BESS Facility Operation

Operation of the BESS Facility would include routine inspection and testing; vegetation, weed, and pest management; routine maintenance; occasional equipment repair and replacement; and security. These operational activities would be limited to the developed portion of the Project Site, and would not have a substantial adverse effect, including both temporary and permanent effects, on special-status plant species. Therefore, impacts from project operation would be less than significant.

Special-Status Wildlife

The Biological Resources Assessment Report (Appendix C) identified 52 special-status wildlife species with the potential to occur within the Power Plant Property. Although no special-status wildlife species were observed during the field surveys, the Project Site may provide suitable habitat to support several special-status wildlife species that are documented to occur in the vicinity of the Power Plant Property (Refer to Section 4.3.1(b), subsection “Special Status Wildlife”).

Demolition, BESS Facility Construction, and Future Decommissioning

LOSS OF ROOSTING HABITAT AND NESTING BIRD HABITAT

Special-status bat species including pallid bat, Townsend’s big-eared bat, and big free tailed bat, as well as nesting birds, could be directly and/or indirectly impacted during demolition and removal of

the existing power plant building and stacks. No focused bat surveys were completed as part of the 2020, 2021, and 2022 field surveys; however, the power plant building and stacks may provide suitable roosting habitat for both nesting bird and bat species known to be present in the vicinity of the Project Site. Removal of these structures may result in a loss of roosting habitat that would be potentially significant, requiring mitigation. Implementation of Mitigation Measures BIO-1(a), BIO-1(b), BIO-1(d), BIO-1(g), BIO-1(h), and BIO-1(j) would minimize the potential impact to roosting bats and nesting birds, reducing impacts to less than significant levels.

DEGRADED OR REDUCED HABITAT FOR SPECIAL-STATUS WILDLIFE

BESS Facility construction would include development of above-ground facilities, associated lighting, and impervious surfaces that may result in permanent impacts to special-status wildlife species by degrading or reducing habitat. The permanent loss of potential habitat may reduce the available suitable habitat for special-status wildlife including the obscure bumblebee, Morro Bay blue butterfly, coast horned lizard, legless lizard, migratory birds and raptors, California red-legged frog, pallid bat, Townsend's big-eared bat, and big free-tailed bat. These permanent impacts would be potentially significant, requiring mitigation.

This analysis assumes that future decommissioning of the BESS Facility would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations. Similar to project demolition activities, decommissioning activities would occur at locations that would already be paved and disturbed, and would include surveys prior to project construction to identify potential wildlife on-site, including nesting birds and bats. Therefore, future decommissioning activities would have a potentially significant impact, similar to project demolition. Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) would minimize the potential construction, demolition, and future decommissioning impacts to habitat that supports special-status wildlife, including the obscure bumblebee, Morro Bay blue butterfly, coast horned lizard, legless lizard, migratory birds and raptors, California red-legged frog, pallid bat, Townsend's big-eared bat, and big free-tailed bat, reducing impacts to less than significant levels.

TEMPORARY DISTURBANCE OF SPECIAL-STATUS SPECIES

Although not identified during prior surveys of the Project Site, BESS Facility construction has the potential to result in temporary impacts to special-status wildlife species known to be present in the vicinity of the Project Site, including obscure bumblebee, Morro Bay blue butterfly, coast horned lizard, legless lizard, migratory birds and raptors, California red-legged frog, pallid bat, Townsend's big-eared bat, and big free-tailed bat. Generally, heavy equipment used during construction of the BESS Facility may temporarily increase noise, increase the potential for vehicle strikes, and would have the potential to disrupt wildlife behavior. Ground disturbance could result in injury or death of wildlife and/or destruction of bird nests. Noise generated during construction, including noise from installation of steel piles, could disturb or displace wildlife breeding or nesting in the BESS Site vicinity.

Potential noise and vibration levels that would be generated during construction and demolition activities on the Project Site are discussed in Section 4.8, *Noise*. The portion of the Project Site that would be actively generating noise and vibration during construction of the BESS Facility is located a minimum of approximately 500 feet from the coastline and associated marine resources, such as pinnipeds, mustelids (sea otters), cetaceans, and fish. The portion of the Project Site that would be actively generating noise and vibration during demolition of the power plant building and stacks is located a minimum of approximately 300 feet from the coastline. As discussed in Section 4.8, *Noise*,

the highest noise and vibration levels during construction of the BESS Facility and demolition of the power plant building and stacks would result from foundation and pile installation, which would occur on the BESS Site, a minimum of 500 feet from marine resources. At this distance, airborne noise levels affecting marine resources would not be expected to exceed 75 dBA L_{eq} ,³ and groundborne vibration levels would not be expected to exceed 0.042 PPV.⁴ The difference in the impedance values of air and water causes a sound transmission loss between air and water of approximately 30 dB (Caltrans 2020). As a result, in-water noise levels affecting marine resources would not be expected to exceed 45 dBA. Similarly, the characteristic impedance values of the ground and water would reduce vibration by 50-75 percent, resulting in an in-water vibration level that would not exceed 0.02 PPV, and would rapidly attenuate at further distances from the coastline.

Potential thresholds of significance for noise and hydroacoustic sound level effects on marine resources can vary substantially among pinnipeds, mustelids, cetaceans, and fish. Typically, it is more protective of marine resources, and therefore a more conservative analytical approach to evaluating potential environmental impacts, to consider behavioral thresholds (the noise level at which an organism or species may be startled and stress) rather than injury thresholds (the noise level that would cause direct physical harm to an organism or species). NMFS and USFWS generally have used 150 dB RMS as the threshold for behavioral effects on fish species for most biological opinions evaluating pile driving, citing that sound pressure levels in excess of 150 dB RMS can cause temporary behavioral changes that could decrease a fish's ability to avoid predators (Caltrans 2020). NMFS has used 160 dB RMS as the in-water behavioral disturbance threshold for impulsive sound (impact pile driving) for cetaceans, and 120 dB RMS as the in-water behavioral disturbance threshold for non-impulsive sound (vibratory pile driving) for cetaceans (NMFS 2018). NMFS has used 90 dB RMS as the in-air disturbance threshold for harbor seals and 120 dB RMS for non-harbor seals (NMFS 2018). For sea otters, similar weighting functions conservatively fit with those used by NMFS for pinnipeds in air and under water (U.S. Department of the Interior, Bureau of Ocean Energy Management 2021). As discussed above, and presented in detail in Section 4.8, *Noise*, potential noise levels during construction of the BESS Facility, including pile driving activities, or demolition of the power plant building and stacks, would not meet or exceed any these recommended behavioral thresholds. Therefore, construction and demolition activities would not result in a significant impact on marine resources, such as pinnipeds, mustelids, cetaceans, and fish.

Construction activities would also have the potential to introduce non-native plant and wildlife species, for example through dirt and plant materials that may be transported from one construction site to another on the tread and machinery of construction equipment, that may displace native wildlife. Food waste and other construction related trash would have the potential to attract nuisance wildlife and increase presence of predators that may reduce fecundity of special-status wildlife. Wildlife may be temporarily displaced into adjacent habitats and may experience greater competition for food and nest sites. These potential temporary effects are typical and expected for construction activities and can be addressed through mitigation measures requiring construction BMPs. Therefore, project construction and demolition activities would have a potentially significant temporary impact to special-status species, requiring mitigation.

³ L_{eq} (equivalent sound level) is defined as the single steady level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). The duration of sound is important since sounds that occur over a long period of time are more likely to cause annoyance, direct physical damage, or environmental stress. L_{eq} is the root mean squared (RMS) sound level with the measurement duration used as the averaging time. Typically, L_{eq} is summed over a one-hour period.

⁴ Construction-related groundborne vibration in relation to its potential for building damage is measured in inches per second (in/sec) PPV.

Compliance with the SLOAPCD-required fugitive dust control measures during demolition and construction activities would include use of water trucks or sprinkler systems to prevent airborne dust from leaving the Project Site; covering trucks hauling dirt, sand, soil, or other loose materials; revegetation of exposed ground areas; permanent dust control measures in project revegetation and landscape plans to be implemented following soil disturbing activities; and dust monitoring to reduce visible emissions below 20 percent opacity and to prevent transport of dust offsite.

This analysis assumes that future decommissioning of the BESS Facility would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations, and restoration of site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. Similar to project construction and demolition activities, decommissioning activities would have the potential to result in temporary impacts to special-status wildlife species. Therefore, future decommissioning activities would have a potentially significant impact, requiring mitigation, similar to project construction and demolition. However, temporary impacts to special-status wildlife during construction, demolition, and future decommissioning activities would be reduced to a less than significant level with implementation of Mitigation Measures BIO-1(a) through BIO-1(j).

TEMPORARY EROSION AND SEDIMENTATION

Construction activities would not have the potential to cause temporary indirect impacts such as erosion or sedimentation to Morro Bay, given the presence of existing berms and the Embarcadero between the Project Site and Morro Bay. However, special-status wildlife species associated with Morro Creek may be indirectly impacted during construction activities if erosion causes sediment to enter the waterway. South-central California coast steelhead have been observed within Morro Creek as recently as July 2000, and during years of sufficient inundation, portions of Morro Creek may still support inland migrating and/or reproducing fish. Tidewater goby also has the potential to occur within Morro Creek due to the periodic formation of a brackish lagoon at the mouth of Morro Creek and identification of individuals during a prior survey on the Power Plant Property (Appendix C, Subappendix G).

Construction activities would be required to obtain and comply with the NPDES Construction General Permit. This would include development and implementation of a SWPPP that would adhere to the California Stormwater Quality Association Construction BMP Handbook and would take effect when construction commences. The SWPPP must include erosion and sediment control BMPs to reduce potential construction and demolition impacts such as the installation of silt fences prior to commencement of ground-disturbing activities to trap sediments, slope stabilization, regular sweeping to control dust, proper handling and storage of chemicals used during construction to prevent spills and discharges, and measures to implement in the event of a spill. The project would be required to comply with the Morro Bay Municipal Code Sections 14.48.140 through 14.48.180, which establish local requirements for stormwater control including minimization of erosion and pollutants during construction and operation. The existing approximately 33-foot berms along the northern, northeastern, and western boundaries of the BESS Site would further reduce the potential for stormwater flows and associated sediments to reach Morro Creek. Compliance with the NPDES Construction General Permit and implementation of a SWPPP would ensure BESS Facility construction would result in less than significant temporary erosion and sedimentation-related impacts to special-status wildlife species.

This analysis assumes that future decommissioning of the BESS Facility would involve the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations, and restoration of

site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. Similar to project construction and demolition activities, decommissioning activities would be required to implement a SWPPP, which would limit temporary indirect impacts such as erosion or sedimentation. With compliance with the NPDES Construction General Permit and implementation of a SWPPP, future decommissioning activities would result in less than significant temporary erosion and sedimentation-related impacts to special-status wildlife species.

BESS Facility Operation

Operation of the BESS Facility would include routine inspection and testing; vegetation, weed, and pest management; routine maintenance; occasional equipment repair and replacement; and security. These operational activities would be limited to the developed portion of the Project Site, and would not have a substantial adverse effect, including both temporary and permanent effects, on special-status wildlife species. Therefore, impacts from project operation would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.3.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that implementation of Plan Morro Bay goals and policies would minimize impacts associated with special-status plant and wildlife species. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of the City, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could potentially impact special-status plant and wildlife species through demolition, ground disturbance and earth-moving activities, or tree removal. Mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan's potential impact on special-status species would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) would avoid, minimize, and/or mitigate potential impacts to special-status plant and wildlife species and associated sensitive habitats.

BIO-1(a) Worker Environmental Awareness Program

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status species (e.g., California red-legged frog, Blochman's leafy daisy), nesting birds, and other sensitive biological resources that may occur within the Project Site. The specifics of this program will include identification of special-status species with potential to occur, a description of their regulatory status and habitat requirements, general ecological characteristics of any other sensitive resources, and a review of the limits of construction and measures required to avoid and/or reduce impacts to biological resources within the Project Site. A fact sheet conveying this information will also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the biologist indicating they have attended the WEAP training and understand the information presented to them. The construction foreman will be responsible to ensure crew members are aware of project boundaries and adhere to the mitigation measures designed to avoid or minimize effects to listed species, nesting birds, and other special-status species and sensitive biological resources.

BIO-1(b) Construction General Best Management Practices

The Project Applicant and developer shall ensure implementation of the following general best management practices (BMPs) during vegetation removal, ground disturbing activities, and construction of the BESS Facility. Prior to issuance of grading and building permits, applicable best management practices shall be included on all land use, grading, and building plans.

1. Prior to the initiation of construction activities, high-visibility orange construction fencing shall be installed along the limits of the project disturbance area to ensure avoidance of sensitive resources to the maximum extent feasible. A qualified biologist will facilitate installation of the avoidance fencing and will conduct periodic site visits to ensure that the fencing remains intact for the duration of project activities.
2. Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to biological resources.
3. Exterior lighting during any nighttime construction activities shall consist of motion sensor lighting that is shielded to prevent light pollution in adjacent wildlife habitat and ESHAs.
4. All food waste and other construction-related trash shall be contained in secured waste bins and regularly removed from the Project Site.

BIO-1(c) Pre-Construction Survey for Special-Status Wildlife Species

A qualified biologist approved by the City shall conduct a pre-construction survey of the Project Site and adjacent habitat no more than two weeks prior to the start of project activities. The biologist will document the presence or absence of any special-status wildlife species with potential to occur within the Project Site and/or within 50 feet of the Project Site. If special-status species are observed onsite during the pre-construction surveys, they will be allowed time to leave or be relocated prior to the initiation of construction activities. Special-status wildlife will not be handled without prior permission from the necessary regulatory agencies, if applicable. If obscure bumblebee and/or Morro Bay blue butterfly is/are detected onsite, suitable habitat (e.g., Silver Dune Lupine Scrub) impacted will be mitigated through development and implementation of a Habitat Mitigation and Monitoring Plan (HMMP), as described in Mitigation Measure BIO-1(j) which includes the required content of an HMMP. Species-specific survey requirements are addressed in

BIO-1(e) through BIO-1(i) and may be superseded or added to by resource agency permits and/or incidental take authorizations.

BIO-1(d) Biological Monitoring

A qualified biologist approved by the City shall be onsite during all vegetation removal, initial ground disturbing activities, and/or during any construction activities that may impact sensitive biological resources. The biologist will be responsible for ensuring project compliance with biologically related measures and permit conditions, relocating wildlife species out of the impact area, and surveying and documenting wildlife species occurring onsite or in the immediate vicinity. The biologist will have the authority to temporarily halt or redirect work to avoid potential impacts to special-status species or other protected biological resources. Special-status wildlife will not be handled without prior permission from the necessary regulatory agencies. Species-specific monitoring requirements are addressed in BIO-1(e) through BIO-1(i) and may be superseded or added to by resource agency permits and/or incidental take authorizations.

BIO-1(e) Avoidance, Minimization, and/or Mitigation Measures for the California Red-legged Frog

The Project Applicant and developer shall ensure implementation of the following measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:

- a. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and other actions resulting in a “take” of California red-legged frog (CRLF). “Take” authorization would be applied for through Section 7 or Section 10 of the FESA.
- b. A City-approved biologist shall survey the Project Site no more than 48 hours before the onset of work activities. If any life stage of the CRLF is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the work site before work begins. The City-approved biologist will relocate the CRLF individuals the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with project development. The relocation site shall be in the same drainage and will be determined and approved by the USFWS prior to the capture of any CRLFs.
- c. As described in BIO-1(c), a City-approved biologist shall be present at the work site until all known CRLFs have been relocated (if relocation is authorized by the USFWS) and disturbance of habitat has been completed. After this time, the City-approved biologist shall designate a monitor to document on-site compliance with all measures. The City-approved biologist will ensure that the monitor receives appropriate training in the identification of CRLFs.
- d. Work activities shall be scheduled for times of the year when impacts to the CRLF would be minimal, to the extent feasible. For example, work that would affect dispersal habitat shall be minimized during the breeding season (November through May).
- e. Unless approved by the USFWS, water shall not be impounded in a manner that may attract CRLFs.
- f. Herbicides should not be used as the primary method used to control invasive, exotic plants. If it is determined that the use of herbicides is the only feasible method for controlling invasive plants at the Project Site, herbicides shall be applied in accordance with USFWS-approved methods.

BIO-1(f) Avoidance, Minimization, and/or Mitigation Measures for Special-Status Reptiles

The Project Applicant and developer shall ensure implementation of the following measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:

- a. As described in BIO-1(c), prior to the onset of construction activities, a qualified biologist shall conduct focused surveys for the legless lizard and coast horned lizard within all potentially suitable habitat onsite. Cover boards will be placed within suitable habitat for such species thirty days in advance of the start of construction and shall be checked one week prior to the start of construction. If no legless lizards or coast horned lizards are observed, no further efforts are required.
- b. If legless lizards and/or coast horned lizards are observed onsite, the qualified biologist shall map their locations using a GPS unit with sub-meter accuracy. A technical report (or memorandum) shall be prepared and submitted to the City that documents the survey results prior to the onset of construction activities. Mapped locations of special-status reptile species shall be integrated into the WEAP training (refer to Mitigation Measure BIO-1[a]).
- c. If it is determined that complete avoidance of an identified legless lizard and/or coast horned lizard individual(s) is not feasible, then a qualified biologist shall carefully rake or use an equivalent method to scarify the ground surface within suitable habitat to encourage the reptiles to vacate the area prior to construction initiation. At this time, the qualified biologist may also capture and relocate lizards to suitable habitat outside the work areas. This shall occur at least 48 hours prior to the construction activities and shall be repeated if construction is halted for more than 48 hours. Alternatively, or in conjunction with the aforementioned ground-scarifying and capture/relocation efforts, the qualified biologist shall facilitate the installation of drift/silt fencing around the occupied habitat, before construction begins, to exclude the reptiles from entering the work areas.
- d. A qualified biologist will be present to monitor during all vegetation clearing activities and scarifying the ground surface and shall capture and relocate any legless lizards and/or coast horned lizards to suitable habitat outside the work areas.

BIO-1(g) Avoidance, Minimization, and/or Mitigation Measures for Special-Status Birds and Other Nesting Birds

The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:

- a. Above-ground electrical transmission lines shall be designed using industry best practices to minimize bird electrocution hazards. These may include, but are not limited to, adequate phase-to-phase or phase-to-ground separation and/or appropriate insulation of components. Where insulation is not feasible near perching locations, bird deterrent materials may be used as an alternative.
- b. If at any time during project operations special-status bird species are observed within the work area, work shall be stopped and/or redirected to an area that would not pose a danger to the bird(s). Special-status birds will be monitored and upon its/their flight out of the work area, work activities may resume.

Morro Bay Battery Energy Storage System Project

- c. If ground-disturbing and/or noise-producing activities occur within nesting bird season (i.e., February 1 through August 31), the following conditions shall be implemented to protect all nesting birds during project activities:
 1. A pre-construction nesting bird survey shall be conducted by a qualified avian biologist no more than 14 days prior to initiation of project activities. The survey shall be conducted within the Project Site and include a 100-foot buffer for passerines and a 500-foot buffer for raptors. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in the region and shall focus on trees, vegetated areas, and other potential nesting habitat within the vicinity of the Project Site. If active nests are found, an appropriate avoidance buffer (typically 100 feet for passerine species and 500 feet for raptors) will be determined and demarcated by the biologist with high visibility material located within or adjacent to the Project Site. The nest buffer may be reduced based on the species, activities that occurred prior to and/or during nest building, ambient conditions (e.g., existing elevated noise due to proximity to a roadway/highway), and the biologist's professional opinion and City's concurrence.
 2. All project personnel shall be notified as to the existence of the exclusionary buffer zone and no project activities shall occur within the buffer until the avian biologist has confirmed that breeding/nesting is complete, and the young have fledged the nest. This buffer may be reduced as described above. The nest shall be monitored by the qualified avian biologist and if the monitoring biologist observes signs of distress, then they shall stop construction work within the buffer and coordinate with the City and/or one or more regulatory agencies (i.e., CDFW and USFWS) to establish additional protection measures to ensure avoidance of nest abandonment prior to the re-start of project activities within the exclusionary buffer.

BIO-1(h) Avoidance, Minimization, and/or Mitigation Measures for Pallid Bat, Townsend's Big-Eared Bat, and Big Free-tailed Bat

The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility, to avoid potential impacts to pallid bat, Townsend's big-eared bat, and big free-tailed bat:

- a. An acoustic survey shall be conducted by a qualified biologist to identify bat species prior to the maternity roosting season (approximately mid-May to August) of the year that demolition of existing structures is scheduled, or the year prior if demolition is planned to occur before mid-May. The survey shall occur over at least three nights to determine presence/absence of bats within the structures.
- b. If bats are not detected, buildings and the stacks shall be sealed off to prevent entry of bats (exclusion materials may consist of wood, plastic, or other suitable exclusion devices).
- c. If bats are detected, the buildings and the stacks shall be partially sealed off until bats leave the structures to forage, during which time the remaining openings will be sealed off with one-way door systems installed to allow bats to leave the structures but to prevent re-entry. This procedure would only be done during the non-maternity roosting season, which is typically from September 1 to February 15. Demolition of the existing structures would not occur until a qualified biologist has determined that roosting bats are no longer present.
- d. If bats are using the Project Site as a maternity location, a qualified biologist will monitor the colony and provide a written report to the City that concludes the bats are no longer rearing

young and recommends that demolition activities may commence. In this instance, demolition activities cannot occur without written approval from the City and CDFW.

BIO-1 (i) Avoidance, Minimization, and/or Mitigation Measures for Blochman's Leafy Daisy and/or Other Special-Status Plants

The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility, to avoid potential impacts to Blochman's leafy daisy and/or other special-status plants (i.e., sticky sand verbena, Miles' milk vetch, Kellogg's horkelia, and dune ragwort).

- a. Prior to initiation of construction activities (any vegetation removal, grubbing, or grading), a pre-construction botanical survey shall be conducted within the Silver Dune Lupine Scrub and Mixed Dune habitats onsite. This survey shall be conducted within the appropriate bloom period for Blochman's leafy daisy and the other potentially occurring special-status plants, typically June through October. The botanical survey shall be conducted by a qualified botanist. The purpose of the survey will be to document the location(s), aerial extent(s), and number(s) of individuals for Blochman's leafy daisy and other special-status plant occurrence(s) within the construction footprint. All individuals identified onsite shall be mapped using a GPS unit with sub-meter accuracy.
- b. If Blochman's leafy daisy and/or any other special-status plant species is(are) observed during the botanical survey described above, the Project Applicant shall reconfigure and redesign the development footprint to avoid impacts to special-status plants to the maximum extent feasible. Avoidance shall be accomplished by installation of high visibility fencing around areas that are occupied by Blochman's leafy daisy and/or other special-status plant species. A qualified botanist shall oversee, direct, and generally facilitate fence installation and will monitor the fencing periodically to ensure that it remains intact and is effective for the intended avoidance throughout the duration of construction activities within this location. After construction within this area is complete, the fencing may be removed by construction personnel under the supervision of the qualified botanist.
- c. If avoidance of Blochman's leafy daisy and/or any other special-status plant species is not feasible, seed shall be collected from each individual Blochman's leafy daisy and/or any other special-status plant species observed within the project footprint by a qualified botanist. Seed collection shall be conducted prior to initial grading, when seed is ripe, typically at the end and/or after the typical blooming season (e.g., August through November for Blochman's leafy daisy). In addition, individual plants may be salvaged and transplanted to containers, if feasible. The seed and/or salvaged plants would be used for future habitat restoration as mitigation for removal of Blochman's leafy daisy and/or any other special-status plant species.
- d. The HMMP prepared for the project (required in Mitigation Measure BIO-1[k]) shall include details on the seed salvage, transplantation, and habitat restoration that shall be implemented as compensatory mitigation for any impacts to Blochman's leafy daisy and/or any other special-status plant species.

BIO-1 (j) Habitat Mitigation and Monitoring Plan

The Project Applicant shall prepare a Habitat Mitigation and Monitoring Plan (HMMP) for any ESHAs, sensitive plant communities and/or sensitive plant species permanently impacted by the project. The HMMP shall be prepared by a qualified biologist/restoration ecologist and approved by

the City prior to the initiation of any ground disturbing activities. At a minimum, the HMMP shall include the following:

- A description of the ESHAs, sensitive plant communities and/or sensitive plant species permanently impacted by the project.
- An acreage calculation of all ESHAs, sensitive plant communities and/or sensitive plant species that will be permanently impacted by the project, as determined through the surveys called for in Mitigation Measure BIO-1(c) and Mitigation Measure BIO-1(i), as well as Mitigation Measure BIO-2.
- A plant palette and methods of salvaging, propagating, seeding, and/or planting any sensitive plant species (e.g., Blochman's leafy daisy) or sensitive plant communities (e.g., silver dune lupine scrub) permanently impacted by the project.
- Compensatory replanting for the removal of all native trees that are 6 inches or greater at 54 inches above grade, as per City and LCP requirements. The trees shall be irrigated for a period of three years, or until deemed self-sufficient by a qualified biological monitor.
- The locations for onsite or offsite mitigation (mitigation areas) for all permanent impacts to ESHAs, sensitive plant communities and/or sensitive plant species. Onsite mitigation through enhancement, restoration, and/or creation of suitable habitat on the Project Site or other areas of the Power Plant Property is preferred. The City may also approve off-site mitigation at a location in the same watershed that meets applicable City policy requirements and resource agency permitting requirements. Mitigation for permanent impacts shall be at a minimum ratio of 3:1 (area enhanced, restored, and/or created: area/individuals permanently impacted).
- Measures to avoid inadvertent impacts to sensitive plant or wildlife species in connection with establishing and maintaining onsite or offsite mitigation.
- A description of the activities necessary to ensure the establishment, long-term success and maintenance of any onsite or offsite mitigation areas. Such necessary activities may include weed abatement, propagating and planting, soil preparation, erosion control, and periodic monitoring.
- A schedule for periodic maintenance and monitoring activities.
- Contingency and adaptive management measures to address unforeseen changes in conditions on the Project Site and/or mitigation areas.

Significance After Mitigation

Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) would reduce the impacts of project construction activities to the extent feasible by requiring a WEAP training for all project construction personnel (BIO-1[a]); implementing general BMPs to avoid biological resources (BIO-1[b]); requiring a qualified biological monitor during construction activities (BIO-1[d]); requiring a pre-construction survey prior to project construction (BIO-1[c]); implementing avoidance, minimization, and/or mitigation measures for the California red-legged frog (BIO-1[e]), special-status reptiles (BIO-1[f]), special-status birds (BIO-1[g]), special-status bats (BIO-1[h]), and Blochman's leafy daisy and/or other special-status plants (BIO-1[i]); and by implementing a Habitat Mitigation and Monitoring Plan, which would also reduce impacts to obscure bumblebee and Morro Bay blue butterfly from permanent loss of habitat (BIO-1[j]). With implementation of these required mitigation measures, potential impacts to special-status species would be reduced to a less than significant level.

Threshold 2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-2 PROJECT CONSTRUCTION, DEMOLITION, AND FUTURE DECOMMISSIONING ACTIVITIES HAVE THE POTENTIAL TO RESULT IN DIRECT AND INDIRECT IMPACTS TO RIPARIAN HABITATS AND SENSITIVE NATURAL COMMUNITIES. IMPLEMENTATION OF REQUIRED MITIGATION WOULD REDUCE THIS IMPACT TO A LESS THAN SIGNIFICANT LEVEL.

The Project Site contains one special-status vegetation type (Silver Dune Lupine Scrub), and two designated ESHAs (Back Dune/Dune Scrub and Rookeries). The Project Site is in the vicinity of Willow Woodland and Scrub and Monarch Overwintering Site ESHAs. Given the distance of the Project Site to Monarch Overwintering Site ESHA, impacts to Monarch Overwintering Site are not anticipated and the following analysis focuses on impacts to Silver Dune Lupine Scrub, Back Dune/Dune Scrub, Rookeries, and Willow Woodland and Scrub,

Demolition and BESS Facility Construction, and Future Decommissioning

Project demolition would not affect riparian habitat or sensitive natural communities, as demolition would occur at locations that are already paved and disturbed. As a result, project demolition would have a less than significant impact on riparian habitat or sensitive natural communities.

BESS Facility construction activities, including vegetation removal and ground disturbance, would impact the existing vegetation and habitat function. Approximately 2.27 acres of Silver Dune Lupine Scrub located in the central portion of the BESS Site where the battery storage buildings would be constructed would be removed from the BESS Site. The Silver Dune Lupine Scrub has established on fill soils within ruderal/developed habitat that had previously been developed and was disturbed during operation and decommissioning of the Morro Bay Power Plant. Additionally, there would be impacts to Rookeries and Back Dune/Dune Scrub during construction of the multi-use path to be used by the public. Approximately 0.31 acre of Rookery ESHA would be temporarily disturbed by construction of the multi-use path, and there would be permanent impacts to approximately 0.23 acre of Rookery ESHA due to the removal of seven trees and temporary impacts to 13 trees within the Rookery ESHA. There would also be approximately 0.08 acre (3,600 square feet) of permanent impacts to Backdune/Dune Scrub ESHA consisting of permanent removal of the Mixed Dune shrub vegetation for development of the multi-use path (Appendix C). These impacts would be potentially significant, requiring mitigation.

Temporary impacts to adjacent ESHAs may occur during project construction. These potential temporary impacts include construction stormwater runoff and introduction of non-native plant and wildlife species. Construction activities have the potential to introduce non-native plant species, for example through dirt and plant materials that may be transported from one construction site to another on the tread and machinery of construction equipment, that could alter adjacent ESHA. Temporary impacts to ESHA during construction activities would be potentially significant, requiring mitigation.

The Project Site does not contain natural aquatic features. However, a riparian corridor associated with Morro Creek and Willow Camp Creek is located near the BESS Site to the northwest and northeast. Ground disturbing activities during project construction, demolition, and future decommissioning has the potential to result in erosion and sedimentation of the adjacent Morro

Morro Bay Battery Energy Storage System Project

Creek and Willow Camp Creek. The riparian corridor, Morro Creek, and Willow Camp Creek are identified as Willow Woodland and Scrub ESHA, as well as sensitive habitats by other federal, State, and local agencies, and provide suitable habitat for special-status aquatic and riparian plants and wildlife. As described above under Impact BIO-1 and in Section 4.10.6, *Hydrology and Water Quality*, the project would be required to obtain coverage under a Construction General Permit to comply with NPDES requirements. Under the conditions of the Construction General Permit, implementation of a SWPPP during construction, demolition, and future decommissioning activities would be required. The SWPPP would contain stormwater management measures such as silt fences and gravel bag berms to prevent or minimize the discharge of eroded soils from the project site to off-site surface waters such as Morro Creek and Willow Camp Creek. With compliance with NPDES, temporary erosion-related impacts to the riparian corridor, including the Willow Woodland and Scrub ESHA as well as Morro Creek and Willow Camp Creek, would be less than significant.

BESS Facility Operation

Operation of the BESS Facility would include routine inspection and testing; vegetation, weed, and pest management; routine maintenance; occasional equipment repair and replacement; and security. Stormwater runoff from impervious surfaces on the Project Site would flow to permeable soils, gravel, and vegetated areas within the Project Site for infiltration. Overflow would be directed to storm drains throughout the site and conveyed and discharged through the existing storm drainage system operated by the City. The project would be subject to the post construction requirements of the Regional Water Quality Control Board (RWQCB) and would implement a Safe Clean Water Program (SCWP) for the control of storm water during project operation. Therefore, operation of the project would not have a substantial adverse effect on riparian habitat or sensitive natural communities, including from stormwater runoff. Impacts from operation of the BESS Facility would be less than significant, and no mitigation for operational impacts would be required.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.3.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that implementation of Plan Morro Bay goals and policies would minimize impacts associated with riparian habitats and sensitive natural communities. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could potentially impact riparian habitats and

sensitive natural communities through demolition, ground disturbance and earth-moving activities, direct vegetation or tree removal, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan's impact on riparian habitats and sensitive natural communities would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measures BIO-1(a), BIO-1(b), BIO-1(d), BIO-1(j), and BIO-2 would reduce potential impacts associated with riparian habitats and sensitive natural communities.

BIO-2 Avoidance, Minimization, and Mitigation Measures for Sensitive Natural Communities and Environmentally Sensitive Habitat Areas

The Project Applicant and developer shall ensure implementation of the following avoidance and minimization measures prior to and during vegetation removal, ground disturbing activities, and construction of the BESS Facility:

- a. All development in and impacts to sensitive plant communities and/or ESHAs shall be avoided to the maximum extent feasible.
- b. Prior to the start of project construction, all sensitive plant community and/or ESHA boundaries that are not separated from work/staging areas or access routes by the existing permanent fencing shall be clearly delineated with orange construction fencing or other high visibility materials.
- c. The use of heavy equipment and vehicles shall be limited to the Project Site limits, existing roadways, and defined staging areas/access points with the exception of construction activities in support of the multi-use path along the Embarcadero. No unauthorized personnel or equipment shall be allowed within delineated sensitive plant communities and/or ESHAs.
- d. Drainage plans shall be designed to prevent runoff into adjacent sensitive plant community and/or ESHA.
- e. The following BMPs shall be implemented throughout the construction phase of the project to curtail the spread of invasive plant species:
 - No fill shall be imported and soils currently existing on-site shall be used for fill material. If the use of imported fill material is necessary, the imported material must be obtained from a source that is known to be free of invasive plant species; or the material must consist of purchased clean material such as crushed aggregate, sorted rock, or other similar substances.
 - Any removed topsoil shall be stockpiled and redeposited onsite or transported to a certified landfill for disposal.
 - All erosion control materials including straw bales, straw wattles, or mulch used on-site shall be free of invasive species seed to the maximum extent practicable.
 - Exotic and invasive plant species shall be excluded from any erosion control seed mixes and/or landscaping plant palettes associated with the project.
- f. The use of heavy equipment to construct the pathway under the Rookery ESHA shall be minimized to the greatest extent feasible and shall be scheduled to avoid the nesting bird season, typically February 1 through August 31.

- g. The HMMP prepared for the project (required in Mitigation Measure BIO-1[k]) will include compensatory mitigation for any impacts to Silver Dune Lupine Scrub and ESHAs.

Significance After Mitigation

Implementation of Mitigation Measures BIO-1(a), BIO-1(b), BIO-1(d), BIO-1(j), and BIO-2 would reduce the impacts of project construction activities to the extent feasible by requiring a Worker Environmental Awareness Program for all project construction personnel (BIO-1[a]); implementing general best management practices to avoid biological resources (BIO-1[b]); requiring a pre-construction survey prior to project construction (BIO-1[c]); requiring a qualified biological monitor during construction activities (BIO-1[d]); implementing a Habitat Mitigation and Monitoring Plan (BIO-1[j]); and by implementing avoidance, minimization, and mitigation measures to reduce impacts to Silver Dune Lupine Scrub, Back Dune/Dune Scrub, Willow Woodland and Scrub, Rookeries, and Monarch Overwintering Sites (BIO-2). With implementation of these required mitigation measures, potential impacts to riparian habitats and sensitive natural communities, including ESHA, would be reduced to a less than significant level.

Threshold 3: Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
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Impact BIO-3 THE PROJECT SITE DOES NOT CONTAIN WETLANDS BUT IS ADJACENT TO FRESHWATER WETLANDS AND ESTUARINE WETLANDS OF MORRO BAY. PROJECT CONSTRUCTION, DEMOLITION, AND FUTURE DECOMMISSIONING ACTIVITIES COULD POTENTIALLY INDIRECTLY IMPACT WETLANDS. HOWEVER, WITH IMPLEMENTATION OF A SWPPP IN COMPLIANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT, POTENTIAL IMPACTS TO WETLANDS WOULD BE LESS THAN SIGNIFICANT.

The Project Site is adjacent to Morro Bay to the south and west; and Morro Creek, to the north. Morro Bay is recognized as part of the National Estuary Program. Morro Creek is a seasonal stream with areas of freshwater emergent wetland and includes mostly Willow Woodland and Scrub habitat along the creek corridor. Based on the query of the USFWS NWI database and field survey observations, aquatic features recorded within the vicinity of the Power Plant Property include the Pacific Ocean (Estuarine and Marine Deepwater), Morro Bay (Estuarine and Marine Wetland), Morro Creek (Riverine) and the surrounding riparian corridor (Freshwater/Forested Shrub Wetland). However, there are no NWI aquatic features located within the Project Site. In addition, no aquatic features or vernal pool habitat were observed during the 2020, 2021, or 2022 field surveys of the Power Plant Property.

Demolition, BESS Facility Construction, and Future Decommissioning

Project demolition would not affect wetlands, as demolition would occur at locations that are already paved and disturbed. As a result, project demolition would have a less than significant impact on wetlands.

The Biological Resources Assessment Report (Appendix C) determined that no aquatic features or wetlands are located on the BESS Site. As a result, construction of the BESS Facility would not have a substantial adverse effect on State or federally protected wetlands. Construction activities would not have the potential to cause temporary indirect impacts such as erosion or sedimentation to Morro Bay, given the presence of the Embarcadero between the Project Site and Morro Bay. However, construction activities have the potential to cause erosion and sedimentation to Morro

Creek, thereby potentially impacting areas of freshwater emergent wetland/riverine habitat within Morro Creek. As described above under Responses BIO-1 and BIO-2, the project would be required to comply with NPDES requirements and implementation of a SWPPP during construction, demolition, and future decommissioning activities would be required. The SWPPP would contain stormwater management measures such as silt fences and gravel bag berms to prevent or minimize the discharge of eroded soils from the project site to Morro Creek and the associated freshwater emergent wetland/riverine habitat. With compliance with NPDES, temporary erosion-related impacts to Morro Creek and wetlands would be less than significant.

This analysis assumes that future decommissioning of the BESS Facility would involve the removal of all above-grade facilities, buried electrical conduit, all concrete foundations, and placement of clean topsoil. Similar to demolition activities, decommissioning activities would occur at locations that would already be paved and disturbed. Future decommissioning activities would also be required to implement a SWPPP, which would limit temporary indirect impacts to wetlands from erosion or sedimentation. As a result, future decommissioning would have a less than significant impact on wetlands.

BESS Facility Operation

Operation of the BESS Facility would include routine inspection and testing; vegetation, weed, and pest management; routine maintenance; occasional equipment repair and replacement; and security. The project would be subject to the post construction requirements of the RWQCB and would implement a SCWP for the control of storm water during project operation, which would minimize long-term impacts to water quality and runoff. Operation of the BESS Facility would not have a substantial adverse effect, including both temporary and permanent effects, on wetlands. Impacts from project operation would be less than significant and no mitigation for operational impacts would be required.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use for the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.3.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that implementation of Plan Morro Bay goals and policies would minimize impacts associated with wetlands. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could potentially impact wetlands through demolition, ground disturbance and earth-moving

activities, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan's impact on wetlands would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measure BIO-1(b) and BIO-1(d) would reduce potential impacts to wetlands. Mitigation Measure BIO-1(b) requires construction BMPs to avoid or reduce impacts on biological resources, including wetlands. Mitigation Measure BIO-1(d) requires a qualified biological monitor during construction activities.

Significance After Mitigation

Implementation of Mitigation Measures BIO-1(b) and BIO-1(d) would reduce the impacts of project construction activities by implementing general BMPs to avoid biological resources, including wetlands (BIO-1[b]) and requiring a qualified biological monitor during construction activities (BIO-1[d]). Implementation of required mitigation would reduce impacts to wetlands to a less than significant level.

Threshold 4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact BIO-4 SEVERAL SPECIES MAY USE THE PROJECT SITE DURING MOVEMENT OR MIGRATION THROUGHOUT THE REGION. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Demolition, BESS Facility Construction, and Future Decommissioning

Land uses in the vicinity of the Power Plant Property consist of roads, residential development, commercial development, dune open space, a riparian corridor, and aquatic uses in Morro Bay. The surrounding development and roadways would restrict regional wildlife movement and dispersal into the Project Site and nearby land uses. However, there is potential for wildlife, including birds of prey, monarch butterfly, and California red-legged frog, to occur within the BESS Site and Power Plant Property during movement or migration throughout the region. Wildlife, including the aforementioned species, would temporarily utilize the Project Site for roosting, foraging, and/or denning, and may also migrate through off-site habitats such as Morro Creek, and/or mature stands of eucalyptus trees to the west and south of the Power Plant Property. Project construction activities, including demolition, grading and BESS Facility construction, and future decommissioning, have the potential to temporarily alter the natural movement of wildlife through the installation of fencing or other barriers, habitat fragmentation during ground disturbance and grading activities, and introduction of new, albeit temporary, sources of noise and light from construction equipment. This impact would be potentially significant, requiring mitigation.

BESS Facility Operation

Operation of the BESS Facility would include routine inspection and testing; vegetation, weed, and pest management; routine maintenance; occasional equipment repair and replacement; and security. Operation of the BESS Facility would involve interior lighting, but no new, continuous exterior lighting would be installed. All permanent lighting would be shielded and directed downward in accordance with Plan Morro Bay Policy C-9.5 and the Morro Bay Municipal Code.

Operational noise from the BESS Facility would be minimal and would not interfere with wildlife movement. Therefore, operation of the BESS Facility, including lighting, would not have a substantial adverse effect, including both temporary and permanent effects, on wildlife movement. Impacts from project operation would be less than significant and no mitigation for operational impacts would be required.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.3.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that implementation of Plan Morro Bay goals and policies would minimize impacts associated with wildlife movement. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could potentially impact wildlife movement through building construction and new sources of lighting, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan's potential impact on wildlife movement would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measures BIO-1(a) through BIO-1(h) and BIO-2 would reduce potential project impacts to wildlife movement by requiring a Worker Environmental Awareness Program for all project construction personnel (BIO-1[a]); implementing general best management practices to avoid biological resources, including the use of motion sensor lighting (BIO-1[b]); requiring a qualified biological monitor during construction activities (BIO-1[d]); requiring a pre-construction survey prior to project construction (BIO-1[c]); by implementing avoidance, minimization, and mitigation measures for the California red-legged frog (BIO-1[e]), special-status reptiles (BIO-1[f]), special-status birds (BIO-1[g]), and special-status bats (BIO-1[h]); and by implementing measures to avoid and reduce impacts to nearby wildlife communities and habitat areas (BIO-2).

Significance After Mitigation

Implementation of Mitigation Measures BIO-1(b) through BIO-1(h) would reduce the impacts of project construction activities to wetlands to a less than significant level.

Threshold 5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact BIO-5 THE PROJECT WOULD POTENTIALLY CONFLICT WITH PLAN MORRO BAY AND THE MORRO BAY MUNICIPAL CODE. HOWEVER, IMPLEMENTATION OF REQUIRED MITIGATION TO MINIMIZE POTENTIAL IMPACTS ON BIOLOGICAL RESOURCES WOULD ENSURE THE PROJECT WOULD NOT CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Project Demolition, Construction, and Future Decommissioning

Local policies or ordinances that protect biological resources that would pertain to the project include Plan Morro Bay and the Morro Bay Municipal Code. The project would result in potentially significant impacts to special-status plants and special-status wildlife (Impact BIO-1), ESHA and other sensitive natural communities (Impact BIO-2 and Impact BIO-3), and wildlife movement (Impact BIO-4). Thus, the project has the potential to conflict with Plan Morro Bay policies protecting biological resources.

Plan Morro Bay policies related to ESHA that are applicable to the project include Policy C-1.1, Environmentally Sensitive Habitat Areas; Policy C-1.2, Development in ESHA; Policy C-1.3, Biological Site Assessments; Policy C-1.4, Dune ESHA; Policy C-1.5, ESHA Buffers; and Policy C-1.8, Takings. These policies are listed under Section 4.3.2, *Regulatory Setting*, and are designed to protect ESHA within the City and include identification and protection of ESHA (Policy C-1.1), allowable development within ESHA (Policy C-1.2), study requirements for development that could impact ESHA (Policy C-1.3), development standards within dune ESHA (Policy C-1.4), development buffers from ESHA (Policy C-1.5), and mitigation of impacts to ESHA, if unavoidable (Policy C-1.8). As described under Section 4.3.1, *Setting*, a Biological Resources Assessment report was prepared for the proposed project that meets the requirements of Policy C-1.3. Therefore, the project would not conflict with this policy. Policy C-1.2 permits low-intensity public access and recreation within dune ESHA, and the proposed multi-use path would be consistent with this type of use and would not conflict with this policy. However, the BESS facility would also potentially impact dune ESHA (silver dune lupine scrub) through removal of silver dune lupine scrub in portions of the BESS Site where the battery storage buildings would be constructed; therefore, the project would potentially conflict with Policy C-1.2. given the Project Site includes and is adjacent to ESHA, and this ESHA would have the potential to be adversely impacted during construction, demolition, and future decommissioning activities (refer to Impacts BIO-2 and BIO-3, above), the project would potentially conflict with Policies C-1.1, C-1.2, C-1.4, and C-1.5.

Additional relevant Plan Morro Bay policies related to the protection of biological resources include Policy C-1.17, Project Design for Wildlife Connectivity, and C-1.16, Tree Planting and Removal. Project impacts to wildlife movement (refer to Impact BIO-4, above) would potentially conflict with Policy C-1.17, Project Design for Wildlife Connectivity, which requires new projects to accommodate wildlife movement. Given that wildlife movement could be impacted during construction activities, the project would also have the potential to conflict with this policy. Although the project would remove up to six mature Monterey cypress and 17 Monterey pine trees, the Project Applicant would obtain a Coastal Development Permit prior to removal, pursuant to Policy C-1.16, Tree Planting and Removal. Therefore, the project would not conflict with Policy C-1.16. However, conflicts with ESHA and wildlife movement policies in Plan Morro Bay would result in a potentially significant impact, requiring mitigation.

Chapter 17.14.080 of the Morro Bay Municipal Code identifies ESHA for protection and preservation and includes requirements for projects within and adjacent to ESHA. For example, Section 17.14.080(E) requires protection of ESHA through buffers, project design, land use limits, and lighting design and Section 17.14.080(H) requires implementation of mitigation and monitoring programs for projects that would impact ESHA, such as the proposed project. As Project impacts to ESHA would be potentially significant (refer to Impact BIO-2 and Impact BIO-3), the project may conflict with Morro Bay Municipal Code provisions related to ESHA buffers, protection, and development within ESHA. This conflict would be potentially significant, requiring mitigation.

Project Operation

Operational activities would include routine inspection, maintenance, and testing of the BESS Facility. Operation of the BESS Facility would not conflict with Plan Morro Bay or the Morro Bay Municipal Code. Impacts from project operation would be less than significant and no mitigation for operational impacts would be required.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.3.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that implementation of Plan Morro Bay goals and policies would minimize impacts regarding conflict with biological resource plans or policies. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could potentially conflict with biological resource plans or policies, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan's potential impact regarding conflict with biological resource plans or policies would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) and BIO-2 would reduce the impacts of project construction activities to the extent feasible by requiring a Worker Environmental Awareness Program for all project construction personnel (BIO-1[a]); implementing general best management practices to avoid biological resources (BIO-1[b]); requiring a qualified biological monitor during construction activities (BIO-1[d]); requiring a preconstruction survey prior to project

construction (BIO-1[c]); implementing a Habitat Mitigation and Monitoring Plan (BIO-1[j]); and by implementing avoidance, minimization, and mitigation measures to reduce impacts to Silver Dune Lupine Scrub, Back Dune/Dune Scrub, Willow Woodland and Scrub, Rookeries, and Monarch Overwintering Sites (BIO-2). Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) and BIO-2 would reduce potential project impacts regarding conflicts with Plan Morro Bay and the Morro Bay Municipal Code.

Significance After Mitigation

Implementation of required mitigation would reduce potential impacts regarding conflict with Plan Morro Bay and the Morro Bay Municipal Code to a less than significant level.

4.3.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic setting for potential cumulative impacts to biological resources is the City. Adjacent development that is determined to be part of the cumulative analysis includes planned and pending projects in the City, listed in Table 3-1 in Section 3, Environmental Setting.

Cumulative development in the City would continue to disturb special-status species, riparian habitats, sensitive natural communities, wetlands, and wildlife movement. Cumulative development may conflict with biological resource plans and policies; however, there would be no cumulative impact regarding conflict with adopted Habitat Conservation Plans or Natural Community Conservation Plans, as no such plans are implemented within the geographic scope of cumulative impacts to biological resources. Existing City policies as well as federal and State regulations would protect special-status species, riparian habitats, sensitive natural communities, wetlands, and wildlife movement during the course of project development. Individual development proposals are reviewed separately by the City and must undergo environmental review when it is determined that the potential for significant impacts exists.

The project has the potential to impact special-status species, riparian habitats, sensitive natural communities, wetlands, and wildlife movement, and would be required to implement Mitigation Measures BIO-1(a) through BIO-1(j) and BIO-2 to reduce impacts of the project on biological resources. Following the implementation of these mitigation measures, the project-level impact would be reduced to less than significant, and the project would thus have a less than significant impact involving conflict with biological resource plans or policies. It can be reasonably assumed similar measures would be required for cumulative development projects given the standards set forth in Plan Morro Bay and the Morro Bay Municipal Code. The project would not considerably contribute to a regional impact to biological resources in combination with other projects. Implementation of Mitigation Measures BIO-1(a) through BIO-1(j) and BIO-2 would ensure the project would not have a cumulatively considerable contribution to cumulative impacts involving special-status species, riparian habitats, sensitive natural communities, wetlands, and wildlife movement. The project would also not have a cumulatively considerable contribution to cumulative impacts involving conflict with biological resource plans or policies.

Consistent with the conclusions of the 2021 Final EIR, future development under the Master Plan would not result in a cumulatively considerable contribution to a significant impact related to biological resources.

4.4 Cultural Resources and Tribal Cultural Resources

This section of the EIR addresses the potential physical environmental effects on historical resources (including built environmental resources), archaeological resources, human remains, and tribal cultural resources, which could result from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24-acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

This analysis is based in part on the findings of the Cultural Resources Report prepared by Padre Associates, Inc. (Padre Associates) in April 2023 (Appendix D-1), the Supplemental Cultural Resources Report, Pedestrian Path prepared by Padre Associates in September 2023 (Appendix D-2), and the Historical Resource Evaluation Report prepared by Rincon Consultants, Inc. (Rincon) in December 2022 (Appendix E). The Cultural Resources Report and Supplemental Cultural Resources Report, Pedestrian Path contain confidential cultural resources information and are therefore not available for public review. The findings of these reports are summarized in this section, and the Cultural Resources Report and Supplemental Cultural Resources Report, Pedestrian Path can be provided upon request to qualified cultural resource specialists and Native American tribal representatives.

4.4.1 Setting

a. Regional Setting

Morro Bay, located on the central coast of California, contains a rich landscape of cultural resources. The area's cultural resources are deeply rooted in its indigenous heritage, with the Chumash and Salinan peoples having inhabited the region for thousands of years. The ethnography, prehistory, and history of the region are described below.

Ethnography

According to the Native American Heritage Commission (NAHC), both the Chumash and Salinan tribes claim affiliation in and around the Project Site. Information for the Chumash and Salinan

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

tribes in the following subsections is excerpted from the Cultural Resources Report prepared for the project.

Chumash Ethnography

The ethnographic territory of the Chumash is considered the Coast Ranges between San Simeon and Malibu. The Chumash have been divided into several geographic groups, each associated with a distinct language dialect. The Obispeño Chumash, the northernmost of the Chumash speakers, occupied land from the Pacific coast east to the crest of the Coast Range and from the Santa Maria River north to approximately Point Estero. This group was named for their association with the Spanish Mission of San Luis Obispo de Tolosa, founded in 1772.

The Chumash were a non-agrarian culture and relied on hunting and gathering for their sustenance. Archaeological evidence indicates that the Chumash exploited marine food resources from the earliest occupation of the coast at least 9,000 years ago. Much of their subsistence was derived from pelagic fish, particularly during the late summer and early fall. Shellfish were also exploited, including mussel and abalone from rocky shores and cockle and clams from sandy beaches. Acorns were a food staple; they were ground into flour using stone mortars and pestles and then leached to remove tannic acid. In addition, a wide variety of seeds, including chia from various species of sage, was used. An abundance of plant species were harvested for their roots, tubers, or greens.

The coastal Chumash practiced a regular seasonal round of population dispersal and aggregation in response to the location and seasonal availability of different food resources. In this way, large coastal villages would have been fully populated only in the late summer when pelagic fishing was at its peak. Through winter, the Chumash depended largely on stored food resources. During the spring and summer, the population dispersed through inland valleys to harvest wild plant resources.

The Chumash lived in large, hemispherical houses constructed by planting willows or other poles in a circle and bending and tying them together at the top. These structures were then covered with tule mats or thatch. Structures such as this housed 40 to 50 individuals, consisting of family groups of three to four members each. Dance houses and sweathouses are also important structures within the Chumash village. Archaeological evidence supports observations that twin or split villages existed on opposite sides of streams or other natural features, possibly reflecting the moiety system of native California.

Salinan Ethnography

In general, Salinan prehistory is poorly understood due to the limited number of sites excavated and the frequent lack of cultural stratigraphy and chronological control. Cultural historic approaches have had limited success in tying ethnographic Salinan settlement with archaeological sites. Notable exceptions include a list of sites recorded in Monterey County that can be associated with recorded Salinan place names collected by Harrington in 1942.

Salinan is part of the Hokan language family, which has been in the American Southwest for around 9,000 years. Salinan may have become a distinct language 6000 to 8000 (before present) (B.P.) or earlier. At the time of contact, there were at least two mutually intelligible Salinan dialects. The northern dialect is referred to as Antoniaño due to its association with the Mission of San Antonio de Padua; the southern dialect was associated with the San Miguel Mission, which lends the name Migueleño.

The largest part of Salinan subsistence came from gathering nuts and seeds, particularly acorns. The acorns were stored in bent twig granaries before processing. Wild oats, fruit, sage seeds, and berries

were also collected. Wild game was hunted, such as deer and rabbit, and fishing was practiced by both coastal and inland groups using C-shaped fishhooks.

Because the northern boundaries of the Obispeño and the southern boundaries of the Salinans were so close, and most likely very fluid through time, extensive trade was practiced between the groups. The establishment of the missions had a direct impact on the native people of the region, as they were forced to convert and live within the mission grounds. The combined effects of forced acculturation, disease, and outright conflict rapidly reduced both the Salinan and Obispeño Chumash populations.

Prehistory

Prehistoric chronology for central California is generally divided into six distinct periods: Paleo-Indian Period (ca. 25,000 – 9,950 B.P.), Millingstone Period (ca. 9,950 – 5,450 B.P.), Early Period (ca. 5,450 – 2,550 B.P.), Middle Period (ca. 2,550 – 950 B.P.), Middle to Late Transition Period (ca. 950 – 700 B.P.), and Late Period (ca. 700 – 181 B.P.). The following subsections provide information on each of these prehistoric periods, excerpted from the Cultural Resources Report prepared for the project.

Paleo-Indian Period (ca. 25,000 – 9,950 B.P.)

The Paleo-Indian Period represents the earliest human occupation in North America, beginning no earlier than 40,000 years B.P. and perhaps as recently as 25,000 to 20,000 B.P. This period coincides with the entry of people into the Americas during the latter part of the Wisconsin glaciation. At the end of this glacial period, the sea level began rising, submerging, and eroding the flat coastal terraces at a rate of up to two meters per year.

Conclusive evidence of human occupation during the Paleo-Indian Period has been found at several coastal sites dating to the early Holocene, prior to 8,450 B.P. The paucity of sites and materials from this time, termed the “Paleocoastal”, suggests that population density was low, and settlements were impermanent. People used relatively simple technology to procure plant foods, shellfish, and a limited variety of vertebrate species.

Millingstone Period (ca. 9,950 – 5,450 B.P.)

Appropriately named, the Millingstone Period is defined by the predominance of hand stones and milling slabs in the archaeological record, indicating a reliance on hard seeds and other plant foods. A variety of flaked stone tools including leaf-shaped bifaces, oval bifacial knives, choppers, and scrapers is also present. This period was a time of rising sea levels that created additional lagoons and estuaries. Although deer are represented in the archaeological record, hunting and fishing contributed little to the diet, with the faunal diet relying heavily on mussels and Pismo clams. Bone gorges occur and *Olivella* spp. spire-lopped shell beads appear in burials. Residential bases are presumed to have been comprised of extended families during this period.

Early Period (ca. 5,450 – 2,550 B.P.)

Cultural changes after 5,450 B.P. are thought to be a response to environmental shifts, rising sea levels, and an increase in population. Diagnostic artifacts of the Early Period include large side-notched, square stem, and contracting stem projectile points, as well as *Olivella* spp. beads. Although milling slabs and hand stones continued as the primary plant processing tools, mortars and pestles were added to the tool kit, probably indicating the systematic use of acorns. In response to

climatic changes, local residential sites appear more settled, but not permanent, with an increase in logistical organization of economic activities. The greater diversity of site types during this period reflects an increasing number of short-term occupations near labor-intensive resources. Trade and exchange also increased in importance as population mobility decreased, as evidenced by exotic shell beads and obsidian materials in midden deposits.

Middle Period (ca. 2,550 – 950 B.P.)

Prehistoric technology and economy became markedly more complex after 2,550 B.P. The artifact assemblage contains shellfish hooks and other fishing gear, saucer-type *Olivella* spp. beads, and contracting-stemmed projectile points. Subsistence practices emphasized fish and acorns, with a greater use of seasonal resources and the first attempts at food storage. Continuation of trade relationships is evident in the increased number and diversity of obsidian items and beads associated with this period. Settlement patterns were similar to those of the prior period. Sites were occupied on an extensive basis, but not as permanent settlements. These residential bases functioned in conjunction with short-term, smaller occupations at specialized resource processing areas.

Middle to Late Transition Period (ca. 950 – 700 B.P.)

Around 950 B.P. the Medieval Climatic Anomaly, a 300-year period of warmer temperatures and drier climate, caused consequential, adverse environmental conditions, particularly intermittent droughts. This transition period was a time of emergent political complexity, development of social ranking, and the rapid development of craft specialization. In San Luis Obispo County, settlement appears to have shifted away from the coast, perhaps reflecting adaptations to warmer temperatures and changes in available resources on the coast. Artifact assemblages contain a mixture of earlier artifact types such as stemmed projectile points, milling slabs, hand stones, bowl mortars, and *Olivella* spp. beads. Moreover, the absence of imported obsidian after 950 B.P. suggests a change in trade relationships, likely associated with the shift in settlement patterns. The prehistoric population in San Luis Obispo County may have decreased during this time, as villages became temporary hunting camps and native inhabitants increasingly relied on terrestrial mammals for subsistence.

Late Period (ca. 700 – 181 B.P.)

The Late Period is poorly understood in San Luis Obispo County as prehistoric occupations from this period do not exhibit well-defined cultural stratigraphy. The few intact Late Period sites have produced artifact assemblages containing small side-notched, triangular, contracting stem, and leaf shaped projectile points, some ground stone, and late prehistoric bead types. The conversion to concave-based projectile points led to the abandonment of asphaltum, which had been used for hafting. Shellfish remained the principal protein food. A ranked society with hereditary elite was established. Population growth and socioeconomic complexity transpires, along with environmental change.

History

Post-Contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). The following subsections provide information on each of these historic periods, excerpted from the Historical Resource Evaluation Report prepared for the project (see Appendix E).

Spanish Period (1769-1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. For more than 200 years, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements. By the 18th century, Spain developed a three-pronged approach to secure its hold on the territory and counter against other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout California. Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns; just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles).

Mexican Period (1822-1848)

Several factors kept growth within California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period (1848-Present)

The United States went to war with Mexico in 1846. The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period. Early American-period development of what is now Morro Bay was principally agricultural. The San Luis Obispo County Board of Supervisors established Morro Township in 1870. That same year, Franklin Riley constructed the settlement's embarcadero along the shore of Morro Bay. Riley's dock primarily served dairy farmers shipping their produce to market (Historical Society of Morro Bay [HSMB] 1982; Rossell and Peterson 2001). Alongside shipping and agriculture, fishing emerged as an important facet of the local economy. A post office was soon established, with Ezra Stocking appointed as its first postmaster. Stocking and his brother, J.C. Stocking, soon founded the community's first general store. Morro Bay's population grew to around 250 by 1874, and the following year developer C.H. Phillips subdivided the nearby Rancho Morro y Cayucos for residential uses. By the early 1880s, there were three schools serving the community. In 1889, growth was such that the town of El Moro was plotted along the bay (HSMB 1982).

In the early twentieth century, tourism and recreation made up a growing segment of the local economy. Construction of the state highway through the region began in 1920, improving access to the region. Five years later, the E.G. Lewis Company built the Morro Beach Inn, a no-longer-extant hotel also known as the Cloisters. In 1928, the first nine holes of what is now Morro Bay Golf Course were completed. In 1934, the state acquired land adjacent to the golf course for development of Morro Bay State Park and Campground, and in 1936, the golf course was redesigned as a project of the Works Progress Administration (HSMB 1982).

Other public works of the Great Depression and World War II were more prosaic. In 1933, the Works Progress Administration filled the north channel of the bay and constructed a causeway between the waterfront and Morro Rock using materials excavated from the east face of the rock. Improvements to the causeway, completed in the 1940s, resulted in the existing pedestrian and vehicle access route. In the early years of World War II, the United States Navy Twelfth District developed lands along the bayfront, including the site of Morro Bay Power Plant Property, as an Inshore Patrol Base for training related to amphibious operations. While the installation is no longer present, existing improvements to the bay, including the T-Pier and a portion of the north breakwater, remain as testament to the scale of the Navy's short-lived involvement in Morro Bay (HSMB 1982; Rossell and Peterson 2001). In 1948, the base was sold to the County of San Luis Obispo as surplus property and the buildings and structures were dismantled (HSMB 2019; Rossell, 2005).

In the years following World War II, the Morro Bay community grew significantly (prior to the City of Morro Bay's incorporation), which was supported by an expanding tourist economy. As recorded in the 1950 census, 200 of the 800 residences south of Morro Bay Boulevard were vacation homes with no permanent residents. In spite of this, the community grew quickly in the 1950s, fueled by land sales in new subdivisions, such as Serrano Heights. Between 1950 and 1960, Morro Bay's population more than doubled from 1,700 to 3,700. In a sign of the importance of tourism to the town, local leaders stopped a proposal to develop a six-acre lumber yard on the Embarcadero. Instead, locals preferred the area to be reserved for tourism-related uses. City of Morro Bay (City) voters approved incorporation of the City in 1964 (HSMB 1982). Morro Bay's growth slowed after the 1960s but reached a population of about 10,000 in 2000. Tourism and commercial fishing remain anchors of the local economy.

b. Project Site Setting

A records search of the California Historical Resources Information System (CHRIS) was conducted in 2019 to identify previously conducted cultural resource studies and previously recorded cultural resources within a 0.25-mile radius of the Project Site. The results from the CHRIS records search identified two resources (CA-SLO-2124 and P-40-041228) within the Project Site. Both CA-SLO-2124, a Native American archaeological site (discussed below), and P-40-041228, the Morro Bay Power Plant, have been previously determined eligible for listing on the California Register of Historical Resources (CRHR). In addition, four Native American archaeological resources have been recorded within 0.25-mile of the Project Site. Two of the sites, CA-SLO-16 and CA-SLO-239, are adjacent the Project Site, while the other two (CA-SLO-29 and CA-SLO-2845) are further away. The records search also revealed that a total of 25 previous cultural resource studies have been completed within 0.25-mile of the Project Site. Of these, 16 previous cultural resource studies have been completed within the Project Site. The remaining nine studies were completed outside of the Project Site but are within the 0.25-mile search radius. The locations of cultural resources cannot be shared and are exempt from the California Public Records Act.

In March 2021 Padre Associates and representatives of the *yak tit^yu tit^yu yak tithini* Northern Chumash Tribe of the San Luis Obispo County region implemented an Extended Phase I Testing Program to determine the presence and absence of buried cultural deposits within the BESS Site. Twenty-six soil samples were submitted for geochemical analysis and these data were reviewed for a geoarchaeological and soil chemistry evaluation, which identified four cultural loci that were associated with CA-SLO-2124. A fifth cultural locus appears to be associated with site CA-SLO-16, a Native American site recorded adjacent the Project Site. Although CA-SLO-16 has not been formally

evaluated for the CRHR, previous studies indicate that the site likely meets the criteria for CRHR eligibility, and it is considered an eligible resource for the purpose of this EIR. Padre Associates completed an intensive pedestrian survey of the Project Site and observed no new prehistoric or historic materials.

Fieldwork and background research resulted in the identification of one historic-age property on the Power Plant property: the Morro Bay Power Plant (P-40-041228) at 1290 Embarcadero (APN 066-331-046). The Morro Bay Power Plant is located entirely within the Project Site; however, the functionally related cooling water intake screenhouse is on a parcel directly south across Embarcadero (APN 066-461-016). Both the Power Plant and cooling water intake screenhouse are on the Power Plant Property. Additionally, there is an associated electrical switchyard located on the parcel immediately adjacent to the east (APN 066-331-036) and a cooling water discharge structure on unparcelled land on Morro Bay Beach that were included in the survey due to their historic association with the Morro Bay Power Plant. Although both features are outside the Power Plant property and under separate ownership, they were included as part of the Study Area. The Morro Bay Power Plant, which is comprised of the Power Plant Property, the electrical switchyard, and a cooling water discharge, was recorded and evaluated for listing in the National Register of Historic Places (NRHP) and the CRHR. It was recommended eligible for potential inclusion in the NRHP and CRHR, and local designation of cultural significance, and is, therefore, a historical resource pursuant to CEQA (Appendix E).

c. Native American Consultation

Padre Associates sent a Sacred Lands File search to the NAHC on October 5, 2022, to request information about sacred or traditional cultural properties potentially located on the Project Site. The NAHC responded on November 2, 2022, and stated that the results of the Sacred Lands File search indicate that Native American cultural resources are present within the project's geographical area. The NAHC did not provide additional information regarding the type or location of these resources, but did provide a list of local groups and individuals to contact for further information regarding local knowledge of sacred lands. The City, as the CEQA Lead Agency, has conducted all remaining tribal consultation pursuant to the requirements of Assembly Bill 52 and Senate Bill 18. Additional information on the requirements of tribal consultation as it relates to the project is included in Section 4.4.2, *Regulatory Setting*, and Section 4.4.4, *Impact Analysis* below.

4.4.2 Regulatory Setting

a. Federal Regulations

National Register of Historic Places

The NRHP was established by the National Historic Preservation Act (NHPA) of 1966 as “an authoritative guide to be used by federal, State, and local governments, private groups, and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment” (Title 36 of the Code of Federal Regulations [36 CFR 60.2]). The NRHP recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture (36 CFR 60.4). Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. Additionally, a property must be at least 50 years of age to

be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluate significance (National Park Service 1997). Properties which are less than 50 years must be determined to have “exceptional importance” to be considered eligible for NRHP listing.

b. State Regulations

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (PRC Section 21084.1), a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. The *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15064.5) recognize historical resources include:

1. *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register,*
2. *A resource included in a local register of historical resources, as defined in PRC subdivision 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC subdivision 5024.1(g), and*
3. *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. The fact a resource does not meet the three criteria outlined above does not preclude the lead agency from determining the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.*

If a lead agency determines an archaeological site is a historical resource, then the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of Section 21083.2, which is as a unique archaeological resource. As defined in Section 21083.2 of CEQA a “unique” archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: “an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. *Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.*
2. *Has a special and particular quality such as being the oldest of its type or the best available example of its type.*
3. *Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2[g]).”*

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, then mitigation measures shall be required. The *CEQA Guidelines* note if an archaeological resource is neither a unique archaeological nor a historical resource, then the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* subdivision 15064.5(c)(4)).

Section 15126.4(b)(3) of the *CEQA Guidelines* state that if significant cultural resources are identified within a proposed project site, the lead agency is required to identify potentially feasible mitigation measures and ensure that these measures are enforceable through permit conditions. Preservation in place is the preferred mitigation for archaeological sites, which can be accomplished by capping or covering the site with sterile soil (PRC Section 21083.2[b]; *CEQA Guidelines* Section 15126.4[b](3)).

California Register of Historical Resources

CEQA (PRC Section 21084.1) requires that a lead agency determine whether a project could have a substantial adverse change in the significance of historical resources. A substantial adverse change in the significance of an historical resource qualifies as a significant effect on the environment for the purposes of CEQA. A historical resource is a resource listed in or determined to be eligible for listing in the CRHR (PRC Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a](2)), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (PRC Section 15064.5[a](3)).

PRC Section 5024.1 recommends an evaluation of potential historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the State's historical resources and to indicate which properties are to be protected from substantial adverse change. A property is eligible for listing in the CRHR if it meets one of more of the following criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: Is associated with the lives of persons important to our past.

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for State use in order to include a range of historical resources that better reflect the history of California (PRC Section 5024.1[b]). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2006). Furthermore, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources

over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it does one or more of the following:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (*CEQA Guidelines*, Section 15064.5 [b][1], 2000). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion or eligibility for inclusion in the CRHR (*CEQA Guidelines*, Section 15064.5[b][2][A]).

Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) established a formal consultation process for California tribes within the CEQA process. AB 52 specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” According to the legislative intent for AB 52, “tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the CRHR or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC Section 21074 (a)(1)(A)-(B).

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, the intent of AB 52 is to accomplish all of the following:

- 1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
- 2) Establish a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

- 3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
- 4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. (Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.)
- 5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
- 6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
- 7) Ensure that local and tribal governments, public agencies, and project proponents have information available early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
- 8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
- 9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

Senate Bill 18

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the NAHC. As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places." SB 18 refers to PRC Sections 5097.9 and 5097.995 to define cultural places as a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9) and Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the CRHR pursuant to PRC Section 5024.1, including any historic or prehistoric ruins, any burial ground, and any archaeological or historic site (PRC Section 5097.95).

Codes Governing Human Remains

PRC Section 5097.98 (Notification of Native American human remains, descendants; disposition of human remains and associated grave goods) mandates that the lead agency adhere to the following

regulations when a project results in the identification or disturbance of Native American human remains:

- a. Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 48 hours of their ability to gain access to the location of the finds. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- b. Whenever the NAHC is unable to identify a descendant, or the descendant identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendant, and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- c. Notwithstanding the provisions of Section 5097.9, the provisions of this section (including those actions taken by the landowner or his or her authorized representative to implement this section), and any action taken to implement an agreement developed pursuant to subdivision (l) of Section 5097.94, shall be exempt from the requirements of the California Environmental Quality Act (Division 13, commencing with Section 21000).
- d. Notwithstanding the provisions of Section 30244, the provisions of this section (including those actions taken by the landowner or his or her authorized representative to implement this section), and any action taken to implement an agreement developed pursuant to subdivision (1) of Section 5097.94 shall be exempt from the requirements of the California Coastal Act of 1976 (Division 20, commencing with Section 30000).

c. Local Regulations

City of Morro Bay General Plan/Local Coastal Program Coastal Land Use Plan

Although the City does not have a historic preservation ordinance with criteria for a local designation of cultural or historic significance, Plan Morro Bay, the City's General Plan/Local Coastal Program (LCP) and Coastal Land Use Plan, which was adopted in 2021, includes goals, policies, and implementing actions relating to cultural resources (City of Morro Bay 2021). These include:

Goal C-2: Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay history.

Policy C-2.1: Historic and Cultural Resources Strategy. Develop a plan to address historic and cultural resource issues in Morro Bay, which may include conducting and updating inventories, exploring certification options, and developing context statements.

Policy C-2.2: Interagency Cooperation. Work with the Historical Society of Morro Bay and other local groups on historic preservation objectives.

Policy C-2.3: Protection of Cultural Resources. Ensure the protection of historic, cultural, and archaeological resources during development, construction, and other similar activities. Development shall avoid, to the maximum extent feasible, adversely impacting historic, cultural, and/or archaeological resources, and shall include adequate BMPs to address any such resources that may be identified during construction, including avoidance, minimization, and mitigation measures sufficient to allow documentation, preservation, and other forms of mitigation. If the resource(s) in question are of Native American origin, develop avoidance or minimization measures in consultation with appropriate Native American tribe(s).

Policy C-2.4: Cultural Resources Overlay. Develop a cultural resources overlay to protect cultural, archaeological, and paleontological resources in Morro Bay.

Implementing Action C-1: Become a Certified Local Government (CLG) by developing a historic preservation ordinance, establishing a historic preservation committee, and maintaining a system to regularly update cultural resources.

Implementing Action C-2: Conduct inventories of historic and cultural resources in Morro Bay. Update these inventories as needed to ensure up-to-date information.

Implementing Action C-3: Establish a local register that mimics requirements of the California Register of Historical Resources and the National Register of Historic Places, but focuses on locally important historic themes, such as Morro Bay's legacy as a fishing village.

Implementing Action C-4: Identify historical themes and develop a historic context statement that is used to identify significant historical themes within a community that are often represented in the built environment, such as houses and infrastructure.

Implementing Action C-5: Require all discretionary proposals within the cultural resources overlay to consider the potential to disturb cultural resources. If preliminary reconnaissance suggests that cultural resources may exist, a Phase I cultural resources study shall be performed by a qualified professional meeting the Secretary of the Interior's Professional Qualification Standard for archaeology and/or architectural history, as appropriate. A Phase I cultural resources study shall include a pedestrian survey of the project site and sufficient background research and field sampling to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a records search at the Central Coast Information Center and a Sacred Lands File search with the Native American Heritage Commission. Where identified or potential resources are of Native American origin, the appropriate Native American tribe(s) will participate with the qualified professional. The technical report documenting the study shall include recommendations to avoid or, if avoidance is not feasible, reduce impacts to cultural resources.

City of Morro Bay Zoning Code

The City's Zoning Code (Section 17.14.070) contains the following applicable regulations concerning archaeological resources, with the goal of the protection of cultural resources.²

B. Requirements.

1. **New Development.** New development shall be sited and designed to avoid adverse impacts to cultural, archaeological, and paleontological resources to the maximum extent feasible. If there

² The references in this section are to the comprehensive update to the Zoning Code/Implementation Plan adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662), which is currently anticipated to be certified by the California Coastal Commission in March 2024 (City of Morro Bay 2023).

is no feasible alternative that can eliminate all impacts to cultural, archaeological, and paleontological resources, then the alternative that would result in the fewest or least significant impacts shall be selected. Reasonable mitigation measures shall be required for proposed developments where impacts to cultural, archaeological, and paleontological resources cannot be avoided through siting and design alternatives.

2. **Preliminary Site Survey Required.** Before issuance of a land use or construction permit for development within the Coastal Resource Protection-Cultural Resource (CRP-CR) Overlay District, a preliminary site survey shall be required. The survey shall be conducted by a qualified archaeologist knowledgeable in local Native American culture, paleontologist, or other qualified expert subject to the approval of the Director. Any affected Native American Tribes with cultural affiliation to the project site should be consulted during the preliminary site survey.
3. **Mitigation Plan.** If the preliminary site survey determines that proposed development may have an adverse impact on existing, known or suspected cultural resources and avoidance is infeasible, a plan for mitigation shall be prepared by a qualified archaeologist, paleontologist, or other qualified expert subject to the approval of the Director. The purpose of the plan is to protect the resource through construction activities, project redesign, or other actions to avoid (or mitigate if avoidance is not feasible) the impacts on the resource. Highest priority shall be given to avoiding disturbance of sensitive resources. Lower priority mitigation measures may include use of fill to cap the sensitive resources. As a last resort, the review authority may permit excavation and recovery of those resources. The mitigation plan shall be submitted to and approved by the Director, and considered in the evaluation of the development request by the review authority. Any affected Native American Tribes associated with cultural affiliation to the project site shall be consulted in the development of the mitigation plan and during its implementation.
4. **Archaeological Resources Discovery.** In the event archaeological resources are unearthed or discovered during any construction activities, the following standards shall apply.
 - a. Construction activities shall cease, and the Community Development Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archeologist, and disposition of artifacts may be accomplished in accordance with State and federal law.
 - b. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner is to be notified in addition to the Community Development Department so that proper disposition may be accomplished. City of Morro Bay Division II, Page 104.
 - c. Construction activities shall not commence until a mitigation plan, prepared by a qualified professional archaeologist reviewed and approved by the Director, is completed and implemented. If applicable, the Director shall provide pertinent project information to the affected Native American tribe(s) and consider comments prior to approval of the mitigation plan and continue consulting with affected Native American Tribes during plan implementation. The mitigation plan shall include measures to avoid the resources to the maximum degree feasible and shall provide mitigation for unavoidable impacts. A report verifying that the approved mitigation plan has been completed shall be submitted to the Director prior to occupancy or final inspection, whichever occurs first.

4.4.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay (2021 Final EIR) programmatically assessed the potential for future development under the General Plan and LCP Update to result in impacts to cultural and tribal cultural resources within Morro Bay. The 2021 Final EIR concluded that General Plan and LCP goals and policies would minimize impacts to historical resources, archaeological resources, human remains, and tribal cultural resources. Specifically, Policy C-2.3 of the Conservation Element states, “ensure the protection of cultural and archaeological resources during development, construction, and other similar activities.” Policies C-2.1 through C-2.4 outline City actions for identification of cultural resources, protection of cultural resources, and mitigation for development that could impact cultural resources. The 2021 Final EIR determined that these policies, as well as compliance with applicable federal and State regulations for cultural resources and human remains, would ensure that future development under the General Plan would result in less than significant impacts related to cultural and tribal cultural resources.

4.4.4 Impact Analysis

a. Methodology

In December 2022, Rincon prepared a Historical Resource Evaluation Report in support of the project, which included a pedestrian survey of the Power Plant Property in June 2022 and background and archival research. In April 2023 Padre Associates prepared a Cultural Resources Report for the project. The Cultural Resources Report included a cultural resources records search, Sacred Lands File search, a Phase I pedestrian survey, and extended Phase I testing. The analysis of cultural resources impacts in this section is based on information presented in the Cultural Resources Report (Appendix D-1), the Supplemental Cultural Resources Report, Pedestrian Path (Appendix D-2), and the Historical Resource Evaluation Report (Appendix E).

b. Significance Thresholds

The significance of a cultural resource and impacts to the resource is determined by whether or not that resource can increase the collective knowledge regarding the past. The primary determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the *CEQA Guidelines*.

The following thresholds of significance are based on Appendix G to the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant effect on the environment if it would do any of the following:

1. Cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* §15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to *CEQA Guidelines* §15064.5; or
3. Disturb any human remains, including those interred outside of formal cemeteries.

In accordance with Appendix G of the *CEQA Guidelines*, an impact to tribal cultural resources is considered significant if the project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact CUL-1 THE PROJECT WOULD RESULT IN THE DEMOLITION OF BUILDINGS AND STRUCTURES THAT CONTRIBUTE TO THE MORRO BAY POWER PLANT'S ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES AND CALIFORNIA REGISTER OF HISTORICAL RESOURCES. AS A RESULT, THE PROJECT WOULD RESULT IN A SIGNIFICANT AND UNAVOIDABLE IMPACT TO HISTORICAL RESOURCES.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

The field survey and background research identified one built environment historical resource within the Project Site; the Morro Bay Power Plant (APN 066-331-046). The Morro Bay Power Plant, including the stacks, was recommended eligible for listing in the NRHP and CRHR and is considered a historical resource pursuant to *CEQA Guidelines* Section 15064.5. The Power Plant Property is located entirely within the Project Site; however, the functionally-related cooling water intake screenhouse is on a parcel directly south across Embarcadero (APN 066-461-016). Both the Power Plant and cooling water intake screenhouse are on the Power Plant Property. In addition, two prehistoric archaeological resources (CA-SLO-16 and CA-SLO-2124) are located on the Project Site and meet the eligibility criteria for listing in the CRHR as a historical resource. Potential impacts to these resources are discussed under Impact CUL-2, below.

The project would result in demolition and removal of the Morro Bay Power Plant building; the adjoining building containing the office, warehouse, and machine shop; the No. 1 Firehouse building located southwest of the power plant building; the three reinforced-concrete boiler stacks in front (south) of the power plant building; as well as some other secondary features within the approximately 19-acre Demolition Site on the Power Plant Property (refer to Figure 2-9 in Section 2, *Project Description*). 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.

The Morro Bay Power Plant was previously recommended eligible for the NRHP in 2001, with revised evaluations in 2020 and 2022 recommending the power plant building and stacks as eligible for its engineering and architectural merit (refer to Appendix E). As a result, the Morro Bay Power Plant qualifies as a historical resource as defined by CEQA. The project would result in the demolition of buildings and structures that contribute to Morro Bay Power Plant's eligibility for

potential inclusion in the NRHP and CRHR. As a result, the project would cause the material impairment of this resource, meaning it would alter in an adverse manner those physical characteristics that convey its historical significance and that justify its inclusion in the NRHP and CRHR. Therefore, the project would result in a substantial adverse change to the significance of a historical resource resulting in a significant impact to historical resources pursuant to CEQA.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The proposed BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.4.3, *Previous Environmental Review*, the 2021 Final EIR concluded that implementation of General Plan and LCP goals and policies would minimize impacts associated with cultural resources, including historical resources. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan following removal of the power plant building and stacks could impact other secondary features associated with the Morro Bay Power Plant historical resource, and mitigation for future development that would modify or impact secondary features associated with the Morro Bay Power Plant historical resource on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan has the potential to result in a significant impact to historical resources.

Mitigation Measures

Implementation of Mitigation Measures CUL-1(a) and CUL-1(b) would require the Project Applicant to prepare archival documentation for the Morro Bay Power Plant and install an interpretative display to educate the public about the Morro Bay Power Plant.

CUL-1(a) Building Recordation

Impacts resulting from the proposed demolition of the Morro Bay Power Plant's building and boiler stacks shall be minimized through archival documentation of the as-built and as-found condition. Prior to issuance of demolition permits, the lead agency shall ensure that the existing Historic American Engineering Record (HAER) be updated and shall document the buildings and structures proposed for demolition. The Level-III documentation shall be completed to National Park Service (NPS) Heritage Documentation Program-like standards and include high resolution digital photographic recordation, an outline format historical report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets

the Secretary of the Interior’s Professional Qualification Standards for History and/or Architectural History. The documentation shall be offered as donated material by the lead agency to repositories, such as the Historical Society of Morro Bay and the San Luis Obispo County Historical Society, that will make it available for current and future generations. Receiving repositories may specify preferred format, including digital copies, to accommodate their capacity and/or needs. Original archival quality copies of the documentation also shall be submitted to the City of Morro Bay and the Morro Bay Public Library, where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Morro Bay or designee.

CUL-1(b) Interpretative Display

Impacts resulting from the demolition of the Morro Bay Power Plant shall be minimized through the installation of a high-quality, on-site interpretive display in a publicly accessible location within the Power Plant Property at the Project Applicant’s expense to be installed within one year of the removal of the structures proposed for demolition as part of the project. The display shall focus on the Power Plant’s history, particularly its engineering features. The content for the interpretive display shall be prepared by a historian, and the interpretive display shall be designed by a professional exhibit designer. Historic information contained in the Historical Resource Evaluation can serve as the basis for the interpretive display. The goal of the interpretive display will be to educate the public about the Power Plant’s historic themes and associations within broader cultural contexts. The content of the display shall be approved by the City of Morro Bay or designee.

Significance After Mitigation

Implementation of Mitigation Measures CUL-1(a) and CUL-1(b) would reduce the impacts of the demolition of buildings and structures that contribute to Morro Bay Power Plant’s eligibility for potential inclusion in the NRHP and CRHR to the extent feasible; however, this impact would remain significant and unavoidable. No other feasible mitigation measures are available to reduce the identified impact below thresholds of significance. Because the impact cannot be reduced below a level of significance, this impact remains significant and unavoidable, and a Statement of Overriding Considerations would be required.

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
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Impact CUL-2 THE PROJECT WOULD INVOLVE GROUND DISTURBANCE AND CONSTRUCTION ACTIVITIES THAT COULD IMPACT BURIED ARCHAEOLOGICAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

The Project Site contains buried cultural loci associated with two identified Native American archaeological resources (CA-SLO-16 and CA-SLO-2124) that may be eligible for listing in the CRHR. The Project Site stratigraphy observed during the Extended Phase I Testing Program consisted of hydraulic fill and sterile dune sands, characterized as loose, dry to moist light-colored beach sands, within the first five to ten feet of soil. Below this stratum, the soils transitioned to darker silty sands that were sometimes interbedded with coarse sands and gravels. Below 20 feet the soils transitioned to a dense blue-black clay indicative of an ancient wetland. The cultural resources

identified on the Project Site by the Extended Phase I Testing Program occurred within darker silty sands, approximately 5 to 10 feet below ground level.

Construction of the BESS Facility, which includes the driving of up to 6,500 8-inch piles up to a maximum depth of approximately 70 feet for the BESS Facility buildings, would have the potential to impact buried cultural deposits identified in the Project Site. Once the piles are in place, a concrete foundation of 36 inches thick would be poured. These construction activities may impact deposits associated with on-site archaeological resources. Based on the findings of the Extended Phase I Testing Program, the approximate volume of CA-SLO-2124 deposits that may be impacted by the installation of piles is approximately 8.7 cubic yards and the approximate volume of CA-SLO-16 deposits that may be impacted by the installation of piles is 5.9 cubic yards. The depth of ground disturbance to install the 36-inch concrete foundation is not expected to exceed 36 inches (3 feet) into the hydraulic fill and sterile dune sands; thus, impacts to archaeological deposits from this activity are not anticipated. Other impacts to these buried archaeological deposits may occur with the installation of new storm water drainage systems. At this time, the design of the storm drains is only conceptual; however, if these facilities are designed to be installed below a depth of five feet from the current ground surface (excluding berm areas), they would also have the potential to impact buried cultural deposits.

Following construction of the BESS Facility, the Project Applicant would remediate and demolish the existing Power Plant building and stacks. The main plant structure may be brought down by implosion or mechanical means based on engineering evaluation. The stacks would be removed by conventional means without using explosives, one stack at a time. All existing buildings of the Power Plant would be demolished to the ground level and, due to the thickness of the concrete, the existing foundation would be left in place. Demolition of these structures would not involve excavation below ground level. As mentioned above, archaeological resources are located approximately 5 to 10 feet below ground level. Therefore, no impacts to potential buried cultural deposits from demolition are anticipated.

Overall, the project has the potential to impact buried archaeological resources through driven pile and stormwater drainage system installation. This impact would be potentially significant, requiring mitigation.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.4.3, *Previous Environmental Review*, the 2021 Final EIR concluded that implementation of General Plan and LCP goals and policies would minimize impacts associated with cultural resources, including archaeological resources. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or

apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could impact archaeological resources through earth-moving or ground disturbance activities, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan has the potential to result in a significant impact to archaeological resources.

Mitigation Measures

Implementation of Mitigation Measures CUL-2(a), CUL-2(b), and CUL-2(c), CUL-2(d), and CUL-2(e) would reduce potential project impacts associated with archaeological resources.

CUL-2(a) Cultural Resource Avoidance

To minimize potential impacts to buried cultural deposits, the Master Plan shall specify that new development on the Morro Bay Power Plant Property shall be designed and engineered to minimize disturbance below the uppermost five feet of soil at the Project Site. This recommendation is consistent with Policy C-2.3 of Plan Morro Bay's Conservation Element.

CUL-2(b) Construction Monitoring Treatment Plan

A Construction Monitoring Treatment Plan shall be developed and implemented to ensure that any new discoveries of archeological materials are adequately recorded, evaluated, and if significant, mitigated. The Construction Monitoring Treatment Plan shall provide the following:

- a. All ground disturbances shall be monitored by a qualified archaeologist and Native American observer.
- b. Procedures for notifying the City and other involved or interested parties in case of a new discovery. The qualified archaeologist and/or Native American observer shall have the authority to temporarily halt or redirect construction in the vicinity of any potentially significant discovery to allow for adequate recordation and evaluation.
- c. Preparation and approval of a plan that identifies procedures that shall be used to promptly record, evaluate, and mitigate unanticipated discoveries of archaeological materials during ground disturbing construction activities with a minimum of delay. Procedures may include, but would not be limited to, a temporary work stoppage within the vicinity of the unanticipated discovery and a Phase II Archaeological Investigation to assess the California Register of Historical Resources eligibility of the unanticipated discovery, if warranted.
- d. Procedures that shall be followed in case of discovery of human remains. In the event that isolated human remains are encountered, consultation with the most likely Native American descendant, pursuant to Public Resources Code Section 5097.97 and 5097.98, shall apply.
- e. Results of the monitoring program shall be documented in a technical report after completion of all ground disturbances.

CUL-2(c) Worker's Environmental Awareness Program

A qualified archaeologist shall be retained to conduct Worker Environmental Awareness Program training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. The training shall be conducted by an archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology (NPS 1983)

and a Native American representative. Archaeological sensitivity training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find of archeological materials.

CUL-2(d) Cultural Resource Monitoring

All construction-related ground disturbance, including clearing/grubbing, shall be monitored by a qualified archaeologist and a Native American representative, consistent with the Construction Monitoring Treatment Plan prepared under Mitigation Measure CUL-2(b). Depending on the type of work, multiple teams of monitors may be necessary to observe construction activities occurring in separate areas. Although sterile deposits were encountered up to 10 feet below surface, monitoring below 5 feet is required due to the variation in fill cover and the unpredictable nature of the depth of sterile soils in the areas. In the event of an unanticipated discovery of archaeological materials during ground disturbing construction activities, the Construction Monitoring Treatment Plan may require the implementation of procedures including, but not limited to, a temporary work stoppage in the vicinity of the unanticipated discovery and a Phase II Archaeological Investigation.

CUL-2(e) Phase III Data Recovery Excavations

In the event that prehistoric materials associated with CA-SLO-2124 or CA-SLO-16 are encountered during construction-related ground disturbances, a Phase II Archaeological Testing and Evaluation would be required. If the materials are determined to be significant and avoidance is not possible, a Phase III Data Recovery Excavation would be required. The Phase III Data Recovery Excavation will collect and analyze data from cultural resource deposits and loci, to preserve important information that will be lost during construction activities.

The Phase II Archaeological Testing and Evaluation and Phase III Data Recovery Excavations shall be directed by a qualified archaeologist, and the Phase III Data Recovery Excavations shall be carried out in accordance with a research design and testing plan prepared in advance by the qualified archaeologist and approved by the City of Morro Bay and consulting Native American tribes, as applicable. Data recovery investigations shall use a combination of excavation techniques such as excavation units and collection units with the number and location of each testing technique to be determined once Phase III Data Recovery Excavations commence.

Any formed tools exposed during Phase III Data Recovery Excavations shall be collected. If archaeological features are exposed (including but not limited to hearths, storage pits, or midden deposits), each feature shall be exposed, recorded, and sampled according to standard archaeological procedures. Organic remains shall be dated using the radiocarbon method and technical analyses of plant remains, bone and shell dietary debris, and other important materials shall also be performed. A final technical report shall be prepared that describes field and laboratory methods, results of technical analysis of recovered materials, and site interpretations. Artifacts, records, and other associated materials shall be deposited with an appropriate curation facility following completion of the work; the Project Applicant shall be responsible for all curation costs.

Significance After Mitigation

Implementation of Mitigation Measures CUL-2(a) through CUL-2(e) would reduce the impacts of project construction activities to the extent feasible by implementing a construction environmental awareness training (CUL-2[c]), requiring new development on the Morro Bay Power Plant Property to be designed and engineered to minimize disturbance to cultural resources (CUL-2[a]), and by

requiring Phase II Archaeological Testing and Evaluation and, if necessary, Phase III Data Recovery Excavations that would collect and curate unanticipated on-site archaeological resources (CUL-2[e]). Implementation of construction monitoring (CUL-2[d]) and the Construction Monitoring Treatment Plan (CUL-2[b]) would ensure appropriate precautions and protection measures are in-place for unanticipated discoveries. With implementation of these measures, impacts to archaeological resources would be reduced to a less than significant level.

Threshold 3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-3 CONSTRUCTION OF THE PROJECT WOULD INVOLVE GROUND DISTURBING ACTIVITIES SUCH AS GRADING AND SURFACE EXCAVATION, WHICH HAVE THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED HUMAN REMAINS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

Human burials are not known to exist within the Project Site. However, as described in the Cultural Resources Report (Appendix D-1), human remains were identified during construction activities just southeast of the Project Site, and the project area has a rich history of occupation by the Chumash and Salinan Tribes, indicating that there is the potential for human remains to be located on the Project Site and its vicinity. In the event of an unanticipated discovery of human remains during project construction activities, such as during ground-disturbing activities, the California Health and Safety Code Section 7050.5 requires that all construction activities halt in the vicinity of the discovery and the County Coroner be contacted immediately. The County Coroner would make a determination of origin and disposition of the human remains pursuant to PRC Section 5097.98. If the human remains are determined to be prehistoric, the coroner would notify the NAHC, which would determine and notify a most likely descendant (MLD). The MLD would complete an inspection of the site within 48 hours of being granted access to the site. The MLD would be responsible for the ultimate disposition of the remains, as required by PRC Section 5097.98. Recommendations by the MLD may include: (1) the nondestructive removal and analysis of human remains and items associated with Native American human remains; (2) preservation of Native American human remains and associated items in place; (3) relinquishment of Native American human remains and associated items to the descendants for treatment; or (4) other culturally appropriate treatment.

With compliance with existing regulations prescribed in the California Health and Safety Code Section 7050.5 and PRC Section 5097.98, impacts to human remains would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The proposed BESS Facility would be

consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.4.3, *Previous Environmental Review*, the 2021 Final EIR concluded that implementation of General Plan and LCP goals and policies would minimize impacts associated with cultural resources, including human remains. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could impact potential human remains through earth-moving or ground disturbance activities. However, with compliance with existing regulations prescribed in the State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98, the Master Plan's potential impact to human remains would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

Threshold 4a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Threshold 4b: Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Impact CUL-4 PROJECT CONSTRUCTION ACTIVITIES HAVE THE POTENTIAL TO DISTURB BURIED TRIBAL CULTURAL RESOURCES. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

As part of its tribal cultural resource identification process pursuant to AB 52 and SB 18, the City sent letters via certified mail on March 21, 2021, to the following ten Native American tribes identified by the NAHC as being traditionally and culturally affiliated with the project vicinity:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Northern Chumash Tribal Council
- Salinan Tribe of Monterey and San Luis Obispo Counties
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians
- Tule River Indian Tribe
- Xolon-Salinan Tribe
- yak tit^yu tit^yu yak tithini-Northern Chumash Tribe

On March 15, 2021 and April 26, 2021, the City received responses from the Salinan Tribe of Monterey and San Luis Obispo Counties requesting to be included as a monitor for potential development and construction taking place on the Power Plant Property. On March 18, 2021, the City received a response from the yak tit^yu tit^yu yak ti^hini-Northern Chumash Tribe requesting formal consultation and a copy of any cultural resources studies prepared for the project. The City responded to this request on two occasions asking the yak tit^yu tit^yu yak ti^hini-Northern Chumash Tribe in what format the requested cultural resources studies should be provided, and did not receive a response from the yak tit^yu tit^yu yak ti^hini-Northern Chumash Tribe. On March 24, 2021, the City received a response from the Barbareño/Ventureño Band of Mission Indians indicating that they will not be consulting on the proposed project and defer to the Bands in the Northern region. On March 30, 2021, the City received a response from the Northern Chumash Tribal Council providing comments on the proposed project and requesting that the City inform the tribe of any future meetings and decisions regarding the project. On January 1, 2024, the City received a response from the Santa Ynez Band of Chumash Indians providing comments on the proposed project and requesting to be included as a monitor for any ground disturbance on the Power Plant Property and recommending against any Phase III work.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

The Salinan Tribe of Monterey and San Luis Obispo Counties, yak tit^yu tit^yu yak ti^hini-Northern Chumash Tribe, and Northern Chumash Tribal Council have indicated that the Project Site is located in an area of high cultural and spiritual importance. As discussed under Impact CUL-2, project construction activities have the potential to disturb buried archaeological resources, including tribal cultural resources. Therefore, project construction has the potential to result in a significant impact to tribal cultural resources.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The proposed BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.4.3, *Previous Environmental Review*, the 2021 Final EIR concluded that implementation of General Plan and LCP goals and policies would minimize impacts associated with cultural resources, including tribal cultural resources. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. As a result, future development of the remainder of the Power Plant Property under the Master Plan could impact potential tribal cultural resources through earth-

moving or ground disturbance activities, and mitigation for future development on the Power Plant Property would be required on a project-by-project basis to reduce potential impacts. Therefore, the Master Plan has the potential to result in a significant impact to tribal cultural resources.

Mitigation Measures

Implementation of Mitigation Measures CUL-2(a) through CUL-2(e), listed above under Impact CUL-2, would be required.

Significance After Mitigation

Mitigation Measures CUL-2(a) through CUL-2(e) would reduce the impacts of project construction activities and implementation of the Master Plan by requiring new development on the Morro Bay Power Plant Property to either be redesigned to avoid tribal cultural resources (CUL-2[a]) if any, or by requiring Phase II Archaeological Testing and Evaluation and, if necessary, Phase III Data Recovery Excavations that would collect and curate any on-site tribal cultural resources (CUL-2[e]). Additionally, all construction personnel would be trained in tribal cultural resources awareness and undergo a sensitivity program (CUL-2[a]) and a qualified archaeologist and Native American monitor would monitor construction activities for tribal cultural resources (CUL-2[d]). Finally, if human remains of tribal importance are discovered during construction, the NAHC would be contacted, and such remains would be handled in accordance with the California Health and Safety Code and Public Resources Code and all other applicable laws. With implementation of these measures, impacts to tribal cultural resources would be reduced to a less than significant level.

4.4.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative cultural resource and tribal cultural resource impacts is based on the ethnographic use patterns of the Project Site and surrounding region. For the ethnographic period, the geographic extent includes the entire traditional Chumash and Salinan territory. This geographic scope is appropriate because increases in growth in previously undisturbed areas of the City can contribute to regional impacts on existing and previously undisturbed and undiscovered historical and archaeological resources in a cumulative manner. Adjacent development that is considered part of the cumulative analysis includes planned and pending projects in the City, listed in Table 3-1 in Section 3, Environmental Setting.

Cumulative development in Morro Bay would continue to disturb areas that may potentially contain cultural resources, and contribute to the loss of Chumash and Salinan tribal cultural resources from the landscape. However, existing City policies and regulations and trainings and best practices implemented by project applicants and associated contractors would protect or mitigate impacts to any unknown resources that might be uncovered in the course of project development. Individual development proposals are reviewed separately by the City and undergo environmental review when it is determined that the potential for significant impacts exists.

None of the planned and pending projects in Morro Bay have been identified as having the potential to result in impacts to/loss of any identified historical resources. The project would result in a significant impact to the Morro Bay Power Plant historical resource, and would be required to implement Mitigation Measures CUL-1(a) and CUL-1(b) to reduce impacts of the project on this local historical resource. It can be reasonably assumed similar measures would be required for

Morro Bay Battery Energy Storage System Project

cumulative development projects that have the potential to impact historical resources. The significant and unavoidable historical resource impact from the project is specific to the Project Site, and because the impacted Morro Bay Power Plant historical resource is located entirely on the Power Plant Property, the project would not contribute to a regional impact to historical resources in combination with other projects. As a result, implementation of Mitigation Measures CUL-1(a) and CUL-1(b) would ensure the project would not have a cumulatively considerable contribution to this cumulative impact.

The project has the potential to impact archaeological and tribal cultural resources, and would be required to implement Mitigation Measures CUL-2(a) through CUL-2(e) to reduce potential impacts of the project on any archaeological and tribal cultural resources to a less than significant level. It can be reasonably assumed similar measures would be required for cumulative development projects. Therefore, although cumulative projects may result in significant cumulative impacts to archaeological and tribal cultural resources, project-specific mitigation for cumulative development would limit this impact to less than significant, and implementation of Mitigation Measures CUL-2(a) through CUL-2(e) would ensure the project would not have a cumulatively considerable contribution to a significant cumulative impact related to archaeological and tribal cultural resources.

Furthermore, compliance with the provisions of AB 52 would ensure that any known or potential tribal cultural resources are treated in consultation with local Native American groups. Compliance with AB 52, implementation of project-specific measures to protect tribal cultural resources on a case-by-case basis, and continued involvement by local Native American groups in regional planning would generally limit the destruction of tribal cultural resources such that cumulative impacts would be less than significant. Through adherence to City policies and incorporation of mitigation measures, the project would not have a contribution to cumulative tribal cultural resource impacts.

Consistent with the conclusions of the 2021 Final EIR for Plan Morro Bay, future development under the Master Plan would not result in a cumulatively considerable contribution to a significant impact related to cultural resources or tribal cultural resources.

4.5 Geology and Soils

This section of the EIR analyzes the potential physical environmental effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, and paleontological resources from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24-acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

This analysis is based in part on the findings of the Geologic and Soils Hazards Evaluation Report prepared by Rincon Consultants, Inc. (Rincon) in April 2023 (Appendix F) and the Paleontological Resources Evaluation prepared by Rincon in December 2022 (Appendix G).

4.5.1 Setting

a. Regional Geologic Setting

The Project Site is located in the Coast Ranges of the California Geomorphic Provinces (California Geological Survey [CGS] 2002), which are characterized by northwesterly-trending mountains and valleys. The Coast Ranges extend from the Pacific Ocean east to the San Joaquin Valley. On the Central Coast, the mountains are primarily composed of sedimentary strata dating to Mesozoic and Cenozoic eras. Several major fault traces run parallel to the Coast Ranges, including the San Andreas, the Rinconada, the Hosgri, and the La Panza fault zones. The closest fault zones to the Project Site are the Cambria fault zone, the Hosgri fault zone, and the Los Osos fault zone. Figure 4.5-1 shows these regional fault zones in relation to the Project Site. Currently, no known faults have been mapped through the Power Plant Property. A map illustrating the locations and magnitudes of historical earthquakes, occurring between 1900 and 2022, within 50 miles of the Project Site and having a magnitude of 4.5 or greater earthquakes is presented on Figure 4.5-2.

¹ Following are definitions for several key terms used in this EIR:

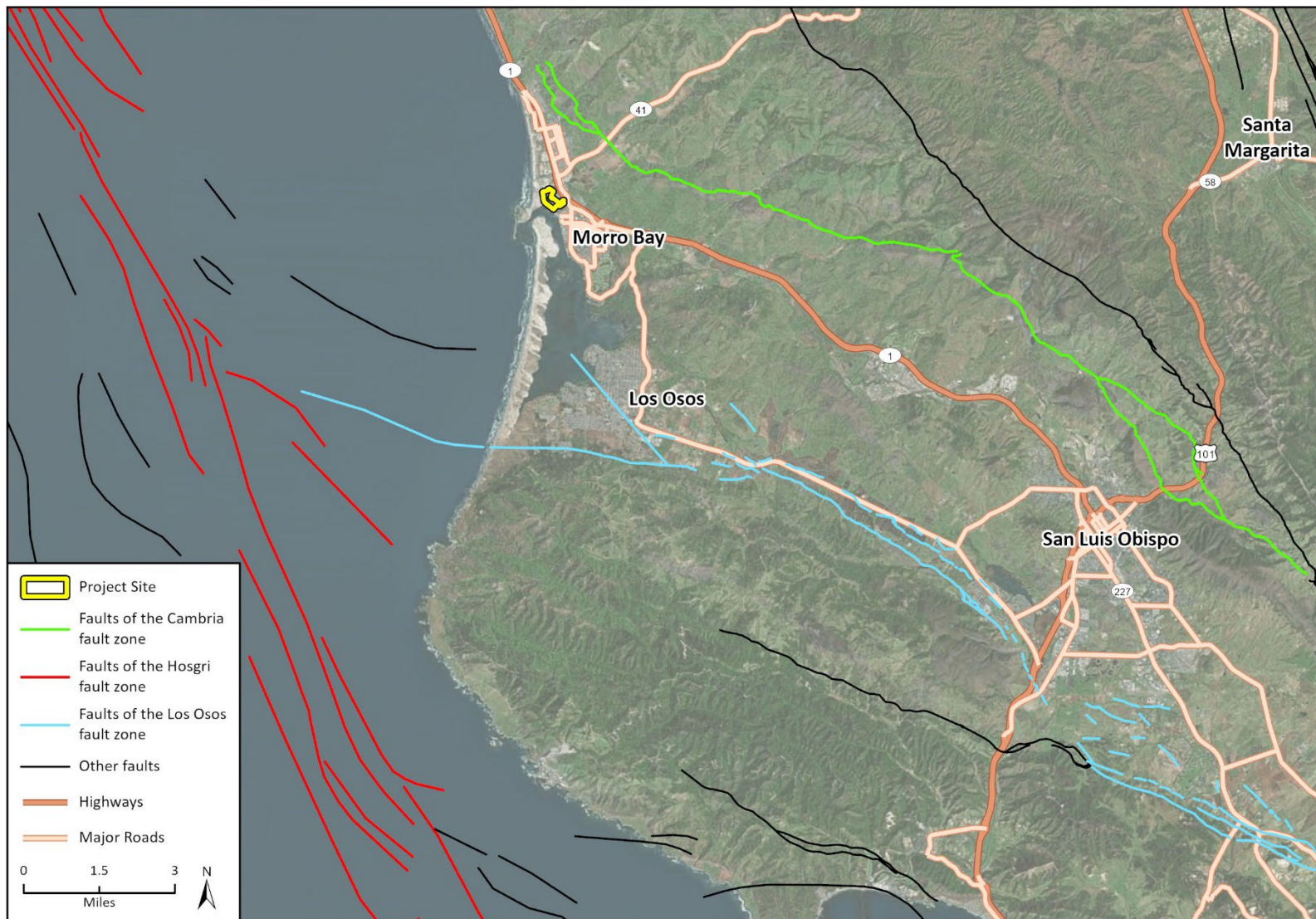
Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

Figure 4.5-1 Regional Quaternary Fault Zones



Imagery provided by Microsoft Bing and its licensors © 2023.
Fault zone data provided by California Geological Survey, 2010.

Geology Hazards Figures
Regional Quaternary Fault Traces

Figure 4.5-2 Historical Regional Earthquakes



Imagery provided by Microsoft Bing and its licensors © 2023.

Morro Rock, along with eight other hills, form a line of volcanic plugs extending towards the southeast known as the Nine Sisters. The Franciscan Complex is the predominant geologic formation on the portion of the Central Coast where the Power Plant Property is located, and it is marked by a *mélange* (or mixture) of marine sediments that have experienced varying grades of metamorphism (Raymond 2019). Younger intrusive volcanic units are also present in localized areas. Morro Rock is an example of such volcanic plug.

b. Project Site Geologic Setting

The Project Site lies at an average elevation of approximately 10 feet above NAVD88² (USGS 2021) and is generally flat with a gradual southwesterly slope towards the Pacific Ocean and the estuary of Morro Bay, which bounds the Power Plant Property to the west. Morro Rock, a prominent volcanic plug, is located west of the Power Plant Property, and sits at the mouth of Morro Bay. Morro Bay extends south and roughly parallel to the shore for approximately 3.5 miles before terminating at the unincorporated community of Los Osos. The margins of Morro Bay are underlain by alluvium, beach, and dune deposits. The hills of the Coast Ranges lie to the east of the Project Site.

The Project Site is underlain by Quaternary-age alluvium, composed of gravel, sand, and clay derived from Morro Creek (Dibblee 2006). The Project Site has been mapped in an area containing soils predominantly classified in the psamment and fluvent sub-orders with highly variable profiles, and with small areas of Corralitos and Tujunga series soils (Figure 4.5-3, U.S. Department of Agriculture [USDA] 1984). Psamments are characterized by low-water holding capacity sands, commonly associated with dunes, and fluvents by typically stratified floodplain deposits containing clayey and loamy material (USDA National Resources Conservation Service [NRCS] 1999). The Project Site is surrounded by beach and dune sand deposits, metamorphosed *mélange* units of the Franciscan Complex, and intrusive dacite blocks and volcanic plugs.

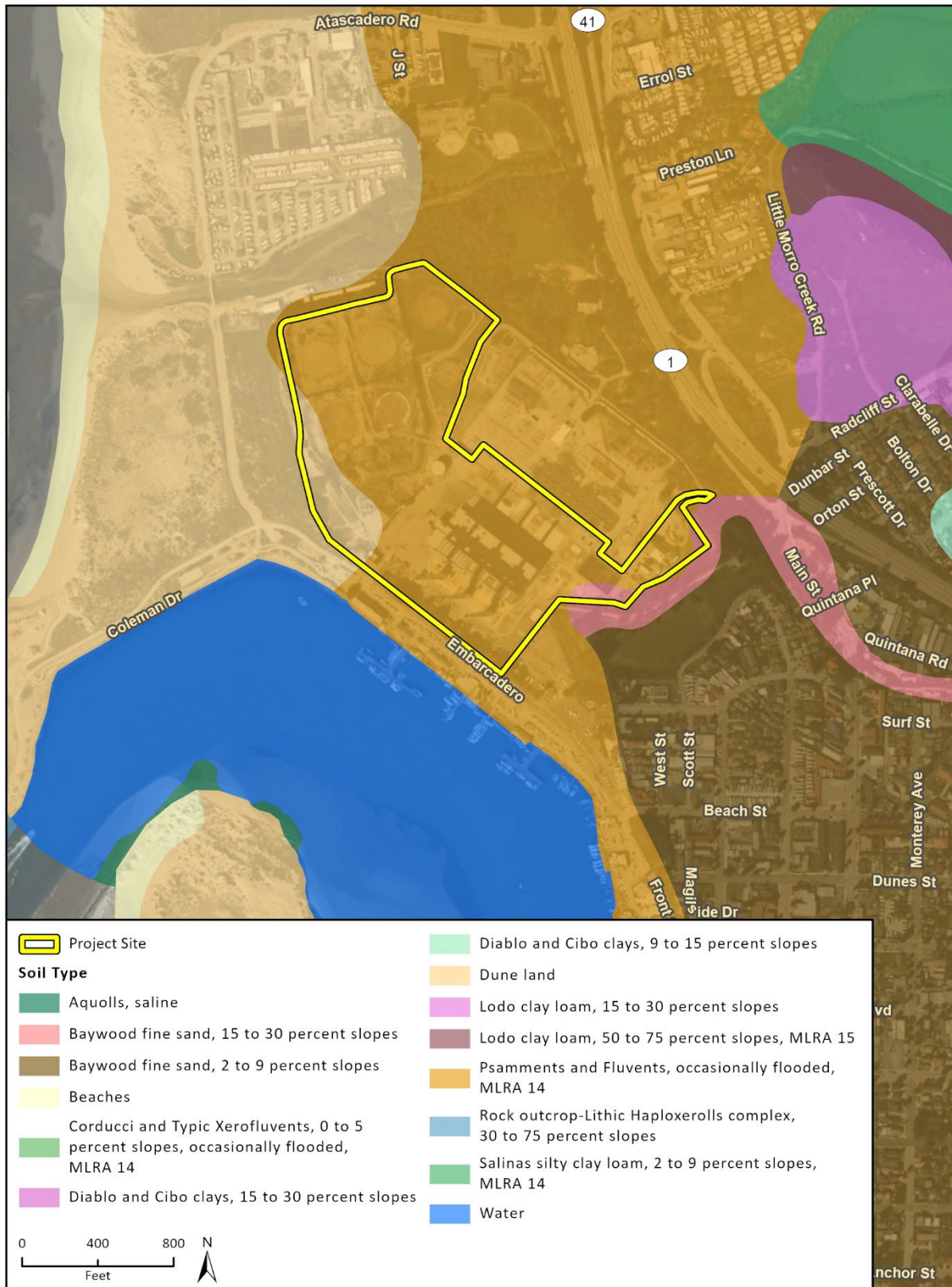
A number of site-specific geologic investigations have been conducted at the Power Plant Property in support of historical Power Plant construction and improvement activities not associated with the current project, including:

- Geotechnical Studies and Evaluations of Two Fuel Oil Tank Farms at Morro Bay Power Plant, Roger Foott Associates, August 31, 1993
- Application for Certification, California Energy Commission, Morro Bay Power Plant Project, Duke Energy, October 2000

These investigations included the advancement of nearly 100 soil borings and 13 groundwater monitoring points to depths of up to approximately 75 feet below ground surface (ft bgs). Based on these historical boring logs, the Project Site overlies material predominantly composed of silty sand and sand mixtures with some thick zones (greater than 5 feet) of clay. A geologic cross section based on a subset of the borings, which was prepared for the former Tank Farm area, shows that subsurface material consists of dune sand and silt, which lie over fine-grained estuarine deposits, medium to coarse grained marine terrace deposits, and shale bedrock (Duke Energy 2000). A Geotechnical Report for Morro Creek Multi-Use Trail and Bridge Project located adjacent to the Project Site included three hollow-stem auger borings that indicate the subsurface is composed of dune sand with deeper zones of silty sand and clayey sand (Bengal 2014).

² North American Vertical Datum of 1988, as referenced on the Morro Bay South topographic map (USGS 2021).

Figure 4.5-3 Soil Classifications



c. Paleontological Setting

Most of the geologic units mapped in the City have not produced any fossils. However, the Pismo Formation and Pleistocene-aged alluvial deposit geologic units located in the vicinity of Morro Bay can contain substantial paleontological resources. Six known vertebrate fossil localities have been identified near the City from the Pismo Formation, although this formation does not occur in the City itself. Quaternary older alluvium (Pleistocene-age) is highly sensitive for paleontological resources in California, but no records of fossil localities from this geologic unit have been identified in the vicinity of the City (Morro Bay 2017).

The Society for Vertebrate Paleontology (SVP) outlines guidelines for categorizing paleontological sensitivity of geologic units in its Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The SVP describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrates or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically, stratigraphically, taxonomically, or regionally (SVP 2010). The paleontological sensitivity of the geologic units within the Project Site has been evaluated according to the following categories:

- **High Potential (Sensitivity).** Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils.
- **Low Potential (Sensitivity).** Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past; contain common and/or widespread invertebrate fossils of well documented and understood taphonomic (processes affecting an organism following death, burial, and removal from the ground), phylogenetic relationships (evolutionary relationships among organisms), and paleoecology; or are believed to be too young to preserve paleontological resources (i.e., less than 5,000 years old).
- **Undetermined Potential (Sensitivity).** Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials.
- **No Potential.** Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

The Project Site is situated in the Coast Ranges, one of the 11 geomorphic provinces of California (CGS 2002), defined as a region of unique topography and geology that is distinguished from other regions based on its landforms and geologic history. The Coast Ranges extend along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Project Site is in the *Morro Bay North* and *Morro Bay South* United States Geological Survey 7.5-minute topographic quadrangles.

Underlying Geology of the Project Site

The geology of the region around the Project Site was mapped at a scale of 1:100,000 by Wiegiers (2021), who identified two geologic units, Quaternary young alluvial floodplain deposits and Quaternary old eolian deposits, underlying the Project Site (Figure 4.5-4). The distribution, characteristics, and paleontological sensitivity of each of these geologic units is discussed below.

Quaternary Young Alluvial Floodplain Deposits

Quaternary young alluvial floodplain deposits (Qya) underlie the majority of the Project Site. These deposits consist of unconsolidated clay, silt, and sand, that was deposited in floodplains and valley floors and is Holocene to late Pleistocene in age (Wiegiers 2021). Quaternary young alluvial floodplain deposits are too young (i.e., less than 5,000 years old) to preserve paleontological resources at the surface, but may have increased sensitivity at depth. These deposits have low paleontological sensitivity from the surface to 19 feet below the surface and undetermined paleontological sensitivity greater than 19 feet below the surface (SVP 2010). Therefore, Quaternary young alluvial floodplain deposits have low paleontological sensitivity. However, at some depth in the subsurface, they will likely become old enough to preserve paleontological resources.

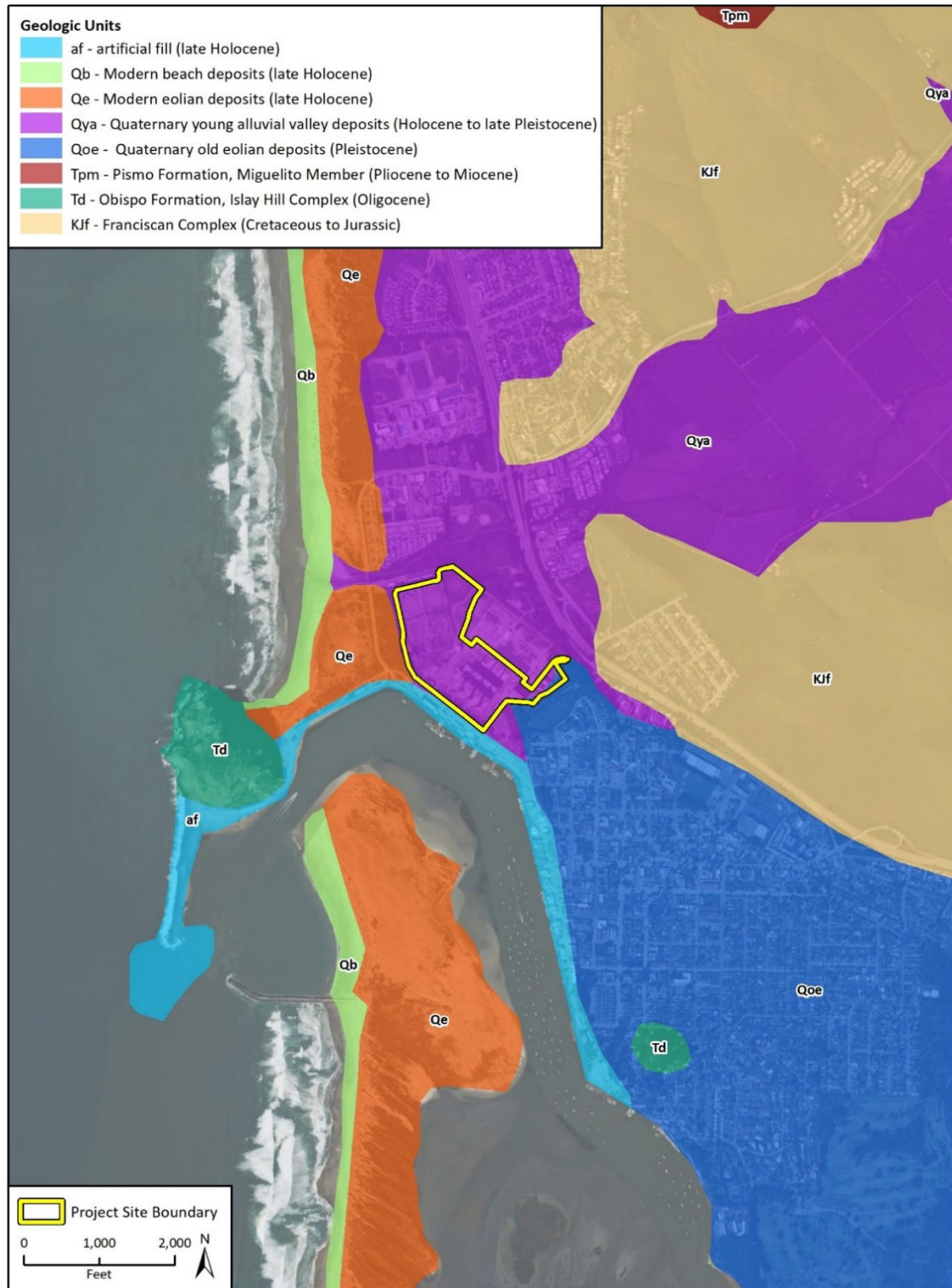
Quaternary Old Eolian Deposits

Quaternary old eolian deposits (Qoe) underlie the eastern edge of the Project Site. Quaternary old eolian deposits consist of brown, moderately consolidated, well-sorted sand that represent stabilized dune deposits that are late to middle Pleistocene in age (Wiegiers 2021). Quaternary old eolian deposits are of appropriate age to contain paleontological resources, but coastal dune deposits very rarely preserve fossils in California (Jefferson 2010; Paleobiology Database [PBDB] 2024; University of California Museum of Paleontology [UCMP] 2022). Therefore, Quaternary old eolian deposits have low paleontological sensitivity.

Paleontology of the Project Site

The results of the fossil locality searches of the Santa Barbara Museum of Natural History (SBMNH), University of California Museum of Paleontology, and Paleobiology Database recovered no fossil localities within the Project Site or from sediments similar to those found within the Project Site (i.e., Holocene-aged alluvial sediments or Pleistocene eolian sediments) in San Luis Obispo County (Hoffman 2022; UCMP 2022; PBDB 2024; refer to Appendix G).

Figure 4.5-4 Regional Underlying Geologic Units



4.5.2 Regulatory Setting

a. Federal Regulations

Clean Water Act

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). Morro Bay is within a watershed administered by the Central Coast RWQCB.

Individual projects within the City that disturb more than one acre of land are required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing Best Management Practices (BMPs) the discharger would use to prevent and retain storm water runoff and to prevent soil erosion.

b. State Regulations

California Building Code

The California Building Code (CBC), Title 24, Part 2 provides building codes and standards for the design and construction of structures in California. The 2022 CBC is based on the 2018 International Building Code with the addition of more extensive structural seismic provisions, and incorporates elements of the International Building Code (IBC), American Society for Testing Materials (ASTM), and International and the American Society of Civil Engineers (ASCE) standards. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

Greenbook Committee of Standard Specifications for Public Works Projects

The Standard Specifications for Public Works Construction, or “Greenbook,” is produced by a committee of experts from the American Public Works Association, Engineering Contractors Association, Southern California Contractors Association, and others. The Greenbook provides standards for construction materials and methods, engineering, construction activities, and protocols for assessing and mitigating geologic and soil hazards. The Greenbook is widely adopted by regulatory agencies.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act) was passed into law by the State following the destructive February 9, 1971 San Fernando earthquake. The Alquist-Priolo Act provides a mechanism for minimizing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures

for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The Alquist-Priolo Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHM Act) of 1990 was passed into law following the destructive October 17, 1989 Loma Prieta earthquake. The SHM Act directs the CGS to delineate Seismic Hazard Zones. The purpose of the SHM Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The SHM Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones.

California Environmental Quality Act

The *CEQA Guidelines* (Section 15002[a][3]) state that CEQA is intended to “prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when [a] governmental agency finds the changes to be feasible.” Paleontological resources are protected under CEQA, which states a project would “normally” have a significant effect on the environment if project effects exceed an identified threshold of significance (*CEQA Guidelines* Section 15064.7[a]).

California Public Resources Code

California Public Resources Code (PRC) Section 5097.5 states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

“Public lands” means those owned by, or under the jurisdiction of, the State or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

California Coastal Management Program

The California Coastal Commission was established in 1972 and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. The Coastal Commission regulates the use of land and water in the Coastal Zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal development permit from either the Coastal Commission or the local government with a certified Local Coastal Program. The Coastal Act includes specific policies (see Division 20 of

the PRC) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the Commission and by local governments, pursuant to the Coastal Act. PRC Section 30253 states that new development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard. Development should be prevented or limited in high hazard areas whenever possible. However, where development cannot be prevented or limited, land use density, building value, and occupancy should be kept at a minimum.

The California Coastal Act defines the Coastal Appeals Jurisdiction to include the land between the sea and the first public road paralleling the sea or within three hundred feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greater distance (PRC Section 30603[a][1]) or within one hundred feet of any stream, wetland, estuary or on any tidelands or public trust lands. For those projects within the Coastal Appeals Jurisdiction, any individual, including the applicant, may appeal to the Coastal Commission in writing within ten working days of the receipt of the Final Action Notice by the Coastal Commission.

State Water Quality Control Board Construction Stormwater Program

Construction General Permit Order 2009-0009-DWQ requires dischargers whose projects disturb one or more acres of soil obtain a Construction General Permit to comply with the NPDES program. The Construction General Permit requires the development of a SWPPP to protect against the discharge of pollutants during construction.

c. Local Regulations

Plan Morro Bay

Plan Morro Bay is the City of Morro Bay's General Plan/Local Coastal Program (LCP) and Coastal Land Use Plan, and it provides direction and resources intended to mitigate death, injuries, and environmental and economic damage. In response to the Coastal Act (PRC Section 30253), which requires new development to minimize risks to life and property in areas of high geologic hazards and to avoid erosion, geologic instability, or destruction of natural landforms along bluffs and cliffs, LCPs require that safety and stability be assured for the life of any new coastal development. The Public Safety Element of Plan Morro Bay addresses geologic and seismic hazards and coastal hazards. Goal PS-2 states: "Damage from natural disasters is minimized and repaired quickly." Policies PS-2.8 through PS-2.13 require new developments to complete soils reports and ensure structural designs address seismic, liquefaction, and other geologic hazards. Goal PS-2 states: "Damage from natural disasters is minimized and repaired quickly." Policies PS-3.6 through PS-3.11 require new developments to incorporate design elements that address coastal hazards associated with natural disasters and climate change.

The Conservation Element of Plan Morro Bay addresses paleontological resources. Goal C-2 states: "Cultural and historic resources are identified for protection and showcased as a vital part of Morro Bay history." Policy C-2.4 and Implementation Action C-5 also address paleontological resources:

Policy C-2.4: Cultural Resources Overlay. Develop a cultural resources overlay to protect cultural, archaeological, and paleontological resources in Morro Bay.

Implementation Action C-5: Require all discretionary proposals within the cultural resources overlay to consider the potential to disturb cultural resources. If preliminary reconnaissance suggests that cultural resources may exist, a Phase I cultural resources study shall be performed by a qualified professional meeting the United States Secretary of the Interior’s (SOI) Professional Qualification Standard (PQS) for archaeology and/or architectural history, as appropriate (U.S. National Park Service [USNPS] 1983).

City of Morro Bay Municipal Code

The Buildings and Construction Ordinance, Title 14 of the Morro Bay Municipal Code, adopts by reference the 2019 CBC (Volumes 1 and 2). Chapter 14 of the Municipal Code includes building and construction requirements to reduce hazard potential that are applicable to all new construction, including the City’s Seismic Safety Program (Chapter 14.18) and Flood Damage Prevention requirements (Chapter 14.72, Sections 14.72.010 – 14.72.060). Municipal Code Section 14.18.010 includes design standards for seismic safety requiring structural analysis of buildings to be conducted by a civil or structural engineer or architect licensed by the State and requires any noncomplying structures to be altered or demolished.

4.5.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under the General Plan and LCP Update to be exposed to geological and seismic hazards, as well as the potential for future development to result in significant impacts to paleontological resources within Morro Bay. The 2021 Final EIR concluded that General Plan and LCP goals and policies minimized risks associated with potential fault rupture, seismic shaking, landslide, lateral spreading, subsidence, liquefaction, collapse, and/or expansive soils. Specifically, Goal PS-2 of the Public Safety Element states: “Development is protected from natural disasters and hazards to the greatest extent possible” and Policies PS-2.2 and PS-2.8 through PS-2.13 require new developments to be sited to minimize risks from natural hazards, complete soils reports, and ensure structural designs address seismic, liquefaction, and other geologic hazards. The 2021 Final EIR determined that these policies, as well as compliance with CBC and Morro Bay Municipal Code requirements for structural analysis and design, would ensure that future development under the General Plan would result in less than significant impacts related to seismic, soils, and geotechnical hazards.

The 2021 Final EIR noted that fossil-bearing sediments in Morro Bay are predominantly located in State parks and offshore areas, which would not be affected by implementation of the General Plan. The Final Plan Morro Bay EIR determined that implementation of the General Plan and LCP Update goals and policies related to cultural resources, specifically the policies under Goal C-2 which include requirements for best management practices and/or mitigation measures to avoid or minimize impacts to buried archaeological resources, would reduce the potential for impacts to paleontological resources in Morro Bay.

4.5.4 Impact Analysis

a. Methodology

This impact analysis is based on the existing conditions of the Project Site and vicinity, including topography, geologic and soil conditions, and seismic hazards, as described under Section 4.5.1, *Setting*. This analysis identifies potential impacts based on the reasonably anticipated interaction

between the affected environment and construction, operation, and maintenance activities related to the project.

Geology and Soils

The project is subject to federal and State regulatory requirements that are intended to characterize and reduce the risks posed by geologic and other natural hazards. Mandatory compliance with current State and local construction, engineering, and geotechnical building standards, which are based on the best available science and technology, provide additional protection against such hazards. Regulatory requirements and industry standards address these risks primarily via design and construction techniques, which are confirmed and approved by regulatory entities at various stages of the project's planning and implementation phases.

Generally, these regulatory requirements and industry standards are delineated in several documents; sources that contain guidelines and/or requirements that are applicable to the project include, but are not limited to: the Morro Bay Municipal Code; the International Code Council, Inc. (ICC) IBC (most recent update) as adopted by the California Building Code (CBC; Title 24 of the California Code of Regulations); Plan Morro Bay; the Greenbook Committee of Standard Specifications for Public Works Projects (Greenbook Specifications; most recent update), and the California State Water Resources Control Board's Construction Stormwater Program. The evaluation of geology and soils impacts assumes that the construction and development of the project would adhere to all applicable federal, State, and local regulations, and conform to the current required State and local construction, engineering, and geotechnical building standards, as appropriate.

Paleontological Resources

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Because fossils are the remains of prehistoric animal and plant life, they are considered to be nonrenewable. These activities may constitute significant impacts under CEQA or adverse effects under federal environmental protection laws and may require mitigation. Sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. Paleontological sensitivity ratings of the geological formations that underlie the Project Site were assigned based on the findings of the records search and literature review conducted as part of the Paleontological Resources Evaluation (Appendix G of this EIR) following SVP guidelines.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the taxa, their radiometric age, evolutionary characteristics, depositional environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur more rarely than invertebrates or plants. Thus, geological units having the potential to contain vertebrate fossils are considered the most sensitive.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant effect on the environment if it would do any of the following:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mine and Geology Special Publication 42)
 - ii. Strong seismic ground shaking
 - iii. Seismic-related ground failure, including liquefaction
 - iv. Landslides
2. Result in substantial soil erosion or the loss of topsoil
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Because the project would not result in significant adverse effects, including the risk of loss, injury, or death involving surface fault rupture (Threshold 1.i), seismic ground shaking (Threshold 1.ii), or landslides (Threshold 1.iv), or result in substantial soil erosion or the loss of topsoil (Threshold 2), a discussion of these effects is not included in this section. Because the project does not propose the use of septic tank or any alternative wastewater disposal systems, an analysis of potential impacts related to septic tanks or alternative wastewater disposal systems (Threshold 5) is not included in this section. These topics are briefly discussed in Section 4.10, *Effects Found Not to be Significant*.

For the purpose of the impact analysis in this section, “potentially significant impacts” are potentially substantial adverse physical changes to the environment that would result in the loss or degradation of public health and safety or conflict with local, State, or federal agency regulations. The discussion and analysis presented herein is based on the results of previous investigative studies. Supplementary information on local and on-site geology and hydrogeologic conditions was obtained through review of maps, online databases, articles, reports, and published research papers as described in Appendix F and Appendix G of this EIR.

To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). Therefore, CEQA mandates mitigation of adverse impacts, to the extent practicable, to paleontological resources.

The SVP has defined a “significant paleontological resource” in the context of environmental review as follows (SVP 2010):

Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information.

Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

The loss of paleontological resources meeting the criteria outlined above (i.e., a significant paleontological resource) would be a significant impact under CEQA, and the CEQA lead agency is responsible for mitigating impacts to paleontological resources, where practicable, in compliance with CEQA and other applicable statutes.

c. Project Impacts and Mitigation Measures

Threshold 1.iii: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Threshold 3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Impact GEO-1 THE PROJECT SITE IS IN AN AREA WITH THE POTENTIAL FOR GROUND SHAKING, WHICH CAN CAUSE LIQUEFACTION, SETTLEMENT, LATERAL SPREADING, SUBSIDENCE, AND/OR COLLAPSE IN AREAS WITH LOOSE SAND OR SILT WHERE GROUNDWATER IS SHALLOW. WITH IMPLEMENTATION OF MITIGATION REQUIRING THE PROJECT APPLICANT TO IMPLEMENT PROJECT-SPECIFIC DESIGN RECOMMENDATIONS TO TREAT THE PROJECT SITE IN SUCH A MANNER AS TO ADDRESS SEISMICALLY INDUCED GEOLOGIC HAZARDS, THIS IMPACT WOULD BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL.

As discussed in Section 4.5.1, *Setting*, there are no faults mapped through the Power Plant Property. A map illustrating the locations and magnitudes of historical earthquakes, occurring between 1900 and 2022, within 50 miles of the Project Site and having a magnitude of 4.5 or greater is presented on Figure 4.5-2 (USGS 2023). As discussed in Section 4.10, *Effects Found Not to be Significant*, the Project Site has a “low potential” for landslide risks (SLO County 2024). However, the Project Site is located in an area with the potential for ground shaking, which can cause liquefaction, settlement, lateral spreading, subsidence, and collapse in areas with loose sand or silt where groundwater is shallow.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

Liquefaction and Settlement

The Project Site overlies Quaternary-aged alluvium composed of gravel, sand, and clay, and the material in the immediate vicinity of the Project Site is beach and dune sands. Areas containing beach and dune sand deposits have a high liquefaction potential (SLO County 1999) and the Project Site has a “moderate potential” liquefaction risk (SLO County 2024). Additionally, as of the most

recent gauging event in 2018, groundwater depths and elevations ranged from approximately 6 to 30 ft bgs, and 3.2 to 13.2 feet above mean sea level³ (ft amsl), respectively (ETIC Engineering 2018). Borings advanced on an adjacent site encountered groundwater at depths of 10 to 14 ft bgs in 2014 (Bengal 2014). The Project Site soils are susceptible to liquefaction and associated settlement that may result from a seismic event. Therefore, this impact is potentially significant, requiring mitigation.

Subsidence and Collapse

Subsidence is the differential (lateral or vertical) movement of the ground due to the collapse of soil pore space, which occurs without the application of an external load, such as a building. Subsidence can also occur during the compressive ground shaking of an earthquake. The Project Site is not located in an area with known locally specific subsidence risks (Department of Water Resources [DWR] 2023; DWR 2024; SLO County 1999; USGS 2024). However, the Project Site overlies a mix of cohesive and cohesionless soils containing silty sands and some clays, which may be susceptible to subsidence in the event of dewatering or ground shaking. Additionally, organic estuarine deposits were encountered in select borings, which may contain peat that could compress and lead to subsidence as organic matter decays. The building pads and concrete pads for the transformers would be supported by drilled pilings installed into bedrock. The depth of each pile will be determined during the final design-level geotechnical work based on loads and other location-specific analysis. The design-level geotechnical work will include engineering specifications that will need to be met to ensure potential subsidence or collapse impacts would be reduced to a less than significant level. Therefore, this impact is potentially significant, requiring mitigation.

Lateral Spreading

Lateral spreading can occur when liquefiable soils present on a slope are subject to ground shaking. If the liquified soil is not laterally contained, it can deform and translate horizontally. The Project Site soils are susceptible to liquefaction; however, since the topography is generally flat, lateral spreading during an earthquake is not likely. In addition, the design-level geotechnical work will include engineering specifications to further minimize potential lateral spreading and liquefaction impacts. Therefore, impacts from lateral spreading would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

³ A vertical reference datum was not provided in ETIC Engineering's 2018 Transmittal (ETIC 2018).

As described in Section 4.5.3, *Previous Environmental Review*, the 2021 Final EIR for Plan Morro Bay concluded that General Plan and LCP goals and policies minimize risks associated with potential fault rupture, seismic shaking, and other geologic hazards in Morro Bay. Plan Morro Bay identified the land use designations in the Master Plan area as Visitor Serving Commercial and Mixed-Use Residential Overlay. The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to potential geologic hazards. However, site-specific geotechnical studies prepared for the project have identified the potential for subsidence, collapse, liquefaction, and settlement on the Power Plant Property. As a result, future development that may occur under the Master Plan could potentially result in significant risk of loss, injury, or death due to these geological hazards, and mitigation for the project and any future development of the Power Plant Property would be required on a project-by-project basis.

Mitigation Measures

Implementation of Mitigation Measure GEO-1 would require the Project Applicant, as well as future applicants for development proposals on the Power Plant Property, to prepare a geotechnical assessment according to the most current analytical procedures and industry standards, and to implement project- and site-specific design recommendations to withstand existing conditions or treat the Power Plant Property in such a manner as to address seismically induced geologic hazards, including liquefaction and associated settlement conditions and subsidence conditions.

GEO-1 Geotechnical Assessments

Future development proposals on the Power Plant Property, including the BESS Facility, shall require a project-specific geotechnical assessment to be prepared by a qualified engineer prior to issuance of grading permits. Geotechnical assessments shall include onsite sampling of existing soil to ascertain current conditions and characterize the potential for risks associated with liquefaction (such as lateral spreading, sand boils, etc.) and implications for future building foundation elements (including drilled piles). The analysis of the onsite potential for liquefaction, settlement, lateral spreading, and the presence of expansive soils, will be based on laboratory results generated in accordance with current procedures and applicable State and local construction, engineering, and geotechnical building standards at the time the assessment is prepared. Project design and construction shall incorporate all recommendations of the project-specific geotechnical assessment by a California-licensed geotechnical engineer. The design shall be prepared by a California-licensed engineer, and shall comply with current State and Local Building Codes and Department of Transportation design standards. The design of all building foundations, subgrades, and transportation infrastructure shall be such that they can withstand existing conditions, or the site shall be treated in such a manner as to address the conditions.

Suitable measures to reduce impacts include, but are not limited to, the following:

- Specialized design of foundations by a structural engineer
- Removal or treatment of liquefiable soils
- In-situ densification of soils or other alterations to soil characteristics
- Excavation and recompaction of onsite or imported soils
- Treatment of existing soils with fixing agents prior to recompaction

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the potential for impacts associated with seismically induced geologic hazards, including liquefaction and associated settlement, lateral spreading, and subsidence conditions, by requiring project- and site-specific design recommendations to withstand or address existing conditions. With implementation of this required mitigation, the project would result in less than significant impacts associated with liquefaction and associated settlement conditions and subsidence conditions.

Threshold 4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Impact GEO-2 THE PROJECT SITE IS IN AN AREA WITH EXPANSIVE SOILS WITH THE POTENTIAL TO SHRINK AND SWELL. WITH IMPLEMENTATION OF MITIGATION REQUIRING THE PROJECT APPLICANT TO IMPLEMENT PROJECT-SPECIFIC DESIGN RECOMMENDATIONS TO TREAT THE PROJECT SITE IN SUCH A MANNER AS TO ADDRESS EXPANSIVE SOIL CONDITIONS, THIS IMPACT WOULD BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

Soils with relatively high clay content that contain specific clay minerals (such as smectite clays) are considered expansive, which indicates that they shrink and swell in response to changing water content. This action is characterized by a soil's "shrink-swell potential," and can damage building and structural foundations via the differential movement of soil. As discussed in Section 4.5.1, *Setting*, the Project Site has been mapped in an area containing soil classified as psamments and fluvents (Figure 4.5-3; USDA 1984). The specific soil profiles of psamments and fluvents are highly variable and include small areas of Corralitos and Tunjunga series soils. Corralitos and Tunjunga soils have low shrink-swell potential; however, fluvents contain flood-plain deposits that include zones of clay (USDA NRCS 1999). Based on a review of historical boring logs, the Project Site overlies soil with a mix of cohesive and cohesionless soils containing silty sands and undifferentiated clays. The high plasticity of these clays indicates the presence of expansive soils with the potential to shrink and swell. The building foundations and concrete pads for the transformers would be supported by drilled pilings installed into bedrock. The depth of the piles is currently expected to be approximately 70 feet, though the depth of each pile would be determined during the final design-level geotechnical work based on loads and other location-specific analysis. The design-level geotechnical work will include engineering specifications that will need to be met to ensure potential impacts associated with ensuring expansive soils would not pose a significant risk to life and property during demolition, construction, operation and future decommissioning of the BESS Facility. Therefore, this impact would be reduced to a less than significant level with implementation of required mitigation.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses,

infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

As described in Section 4.5.3, *Previous Environmental Review*, the 2021 Final EIR for Plan Morro Bay concluded that compliance with the soil-related hazard requirements of the CBC and Section 14.18.010 of the Morro Bay Municipal Code, as well as the General Plan and LCP goals and policies minimize risks associated with expansive soils in Morro Bay. The Master Plan would carry forward and would not modify recently adopted General Plan and LCP goals and policies related to expansive soils, however, the site-specific soils assessment prepared for the project identified expansive soils on the Power Plant Property. As a result, future development that may occur under the Master Plan could potentially result in significant risk to life and property, and mitigation may be required to reduce potential impacts for any future development of the Power Plant Property which will be analyzed on a project-by-project basis.

Mitigation Measures

Implementation of Mitigation Measure GEO-1, described above, would require the Project Applicant, as well as future applicants for development proposals on the Power Plant Property, to prepare a project-specific geotechnical assessment according to the most current analytical procedures and industry standards, and to implement project- and site-specific design recommendations to withstand existing conditions or treat the Power Plant Property in such a manner as to address expansive soil conditions.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the potential for impacts associated with expansive soil conditions by requiring project- and site-specific design recommendations to withstand or address existing conditions. With implementation of this required mitigation, the project would result in less than significant impacts associated with expansive soil conditions.

Threshold 6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
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Impact GEO-3 CONSTRUCTION OF THE BESS FACILITY HAS THE POTENTIAL TO IMPACT PREVIOUSLY UNDISCOVERED PALEONTOLOGICAL RESOURCES DURING MASS GRADING ON THE PROJECT SITE. WITH IMPLEMENTATION OF MITIGATION REQUIRING THE PROJECT APPLICANT TO ESTABLISH A PROTOCOL TO FOLLOW IF A PALEONTOLOGICAL RESOURCE IS ENCOUNTERED DURING PROJECT CONSTRUCTION, THIS IMPACT WOULD BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL.

The Project Site is underlain by two geologic units with low paleontological sensitivity, Quaternary young alluvial floodplain deposits and Quaternary old eolian deposits (refer to Figure 4.5-4). Quaternary young alluvial floodplain deposits consists of sediments that are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources at the surface, but may have increased sensitivity at depth. These deposits have low paleontological sensitivity from the surface to 19 feet below the surface and undetermined paleontological sensitivity greater than 19 feet

below the surface. Quaternary old eolian deposits represent coastal dune deposits, which rarely produce fossils in California.

The types of ground-disturbing activities typically associated with construction of building foundations that can be monitored for paleontological resources include but are not limited to mass grading for creation of level building pads and roadways, excavation of stormwater management basins, trenching for underground wet and dry utilities, and large-diameter drilling (greater than about 18 inches in diameter) for foundation supports. Notably, not all types of ground-disturbing activities can be feasibly monitored for paleontological resources. For example, it is not practical to monitor pile installation or drilling with a small-diameter auger (less than about 18 inches) for paleontological resources. Paleontological monitoring of boreholes is typically conducted by examining spoils brought up during the drilling process for any contained fossil remains. For pile installation, no spoils are produced, thus paleontological monitoring cannot occur.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

Mass Grading

The Project Site is currently occupied by the Morro Bay Power Plant, and large portions (including the berms that would be graded) of the Project Site are previously disturbed and therefore have no paleontological sensitivity. Additionally, ground-disturbing activities (i.e., grading, excavation) in previously undisturbed portions of the Project Site are unlikely to result in destruction, damage, or loss of scientifically important paleontological resources due to the low paleontological sensitivity of surface sediments at the Project Site. These low-sensitivity sediments may be underlain by older sediments with undetermined paleontological sensitivity at an estimated depth of 19 feet. The final depth below surface required for mass grading associated with construction and future decommissioning of the BESS Facility building foundations is not yet known, but it is unlikely to reach 19 feet below the surface, the depth at which sediments within the Project Site have undetermined paleontological sensitivity. However, the 19-foot depth is an estimate based on sediment cores elsewhere in Morro Bay, so it is possible that the depth at which the sediments become old enough to preserve paleontological resources (i.e., 5,000 years old) is shallower than 19 feet within the Project Site. Therefore, while it is unlikely that construction and future BESS Facility decommissioning activities would result in significant impacts to paleontological resources, the potential remains for mass grading to result in the destruction, damage, or loss of previously undiscovered paleontological resources and associated stratigraphic and paleontological data, which would be a potentially significant impact, requiring mitigation.

Pile Installation

Construction of the BESS buildings are expected to require 5,500 to 6,500 pilings to be driven into the ground to depths approximately 70 feet (the depth of each pile will be determined during the final design-level geotechnical work based on loads and other location-specific analysis). At this depth, older sediments and/or a geological units other than Quaternary young alluvial floodplain deposits and Quaternary old eolian deposits could occur, which may have higher paleontological sensitivity. However, pilings would be driven into the ground, with no sediment excavated and no exposures of bedrock; therefore, paleontological monitoring of pile installation cannot result in quantitative or qualitative evaluations of potential impacts to paleontological resources. There is no reasonably foreseeable scenario in which fossils that may be present at depth in older sediments under the Project Site would be uncovered for scientific analysis. As defined by SVP (2010) a fossil's

significance is tied directly to its scientific value; as such, fossils that would not be exposed during project activity or reasonably could be anticipated to be exposed as a result of future human or natural events lack the access to scientific inquiry necessary to be fined as significant under CEQA. Because no known paleontological resources would be impacted and any undiscovered resources that may be present in older sediments under the Project Site would not otherwise be encountered, pile installation activities would not result in destruction, damage, or loss of known scientifically important paleontological resources. Therefore, potential impacts to paleontological resources associated with pile installation and future piling removals for BESS Facility decommissioning would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

As described in Section 4.5.3, *Previous Environmental Review*, the 2021 Final EIR for Plan Morro Bay concluded that fossil-bearing sediments in Morro Bay would generally not be affected by implementation of the General Plan and that implementation of the General Plan and LCP Update goals and policies related to cultural resources minimize the potential for impacts to paleontological resources in Morro Bay. Nonetheless, site-specific analysis of sediments on the Power Plant Property indicates that there is the potential for future development under the Master Plan to encounter previously undiscovered fossils. As a result, future development that may occur under the Master Plan could potentially result in impacts to paleontological resources, and mitigation for future development of the Power Plant Property on a project-by-project basis would be required to reduce potential impacts.

Mitigation Measures

Implementation of Mitigation Measures GEO-2 and GEO-3 would reduce potentially significant impacts to paleontological resources by requiring training for construction personnel so that they can identify paleontological resources if encountered during project construction and requiring the Project Applicant, as well as future applicants for development proposals on the Power Plant Property, to establish a protocol to follow if a paleontological resource is encountered during project construction.

GEO-2 Paleontological Worker Environmental Awareness Program

Future development proposals on the Power Plant Property, including the BESS Facility, shall require a paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of construction, a Qualified Professional Paleontologist (as defined by the Society for Vertebrate

Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources [SVP 2010]) or their designee shall conduct a paleontological WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.

GEO-3 Unanticipated Discovery of Paleontological Resources

In the event a fossil is discovered during construction of a project on the Power Plant Property, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a Qualified Professional Paleontologist. The Project Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant, the applicant shall retain a Qualified Professional Paleontologist to direct all mitigation measures related to paleontological resources. The Qualified Professional Paleontologist shall design and carry out a data recovery plan consistent with the SVP (2010) standards.

Significance After Mitigation

Implementation of Mitigation Measures GEO-2 and GEO-3 would reduce the potential for impacts to paleontological resources encountered during project ground-disturbing activities. With implementation of this required mitigation, the project would result in less than significant impacts associated with the destruction, damage, or loss of scientifically important paleontological resources.

4.5.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative geology and soils impacts is limited to development sites in close proximity to the Project Site. This geographic scope is appropriate for geology and soils because geology and soils impacts such as erosion and loss of topsoil can affect adjacent sites but do not typically impact regional areas in a cumulative manner. Adjacent development that is considered part of the cumulative analysis includes planned and pending projects in Morro Bay, listed in Table 3-1 in Section 3, *Environmental Setting*.

Cumulative development in the project vicinity would gradually increase the City's population and workforce, and would therefore gradually increase the number of people exposed to potential geological hazards, including effects associated with seismic events such as ground rupture, seismic shaking, liquefaction, and expansive soils. The magnitude of geologic hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Any specific geologic hazards associated with each individual site would be limited to that site without affecting other areas. Seismic and geologic hazards would be addressed on a case-by-case basis and would not result in cumulatively considerable impacts. Additionally, cumulative development projects would be required to conform with the current CBC, Plan Morro Bay, and the Morro Bay Municipal Code, as well as other laws and regulations mentioned above, ensuring that cumulative impacts associated with ground rupture, seismic shaking, liquefaction, and expansive soils would be less than significant. Therefore, potential cumulative impacts would be less than significant, and construction, demolition, operation, and future decommissioning associated

with the BESS Facility would not have a cumulatively considerable contribution to a significant cumulative impact related to seismic and geological hazards.

Cumulative development would also increase ground disturbance in the vicinity of the Project Site, which would contribute to erosion and loss of topsoil in the area. However, cumulative development projects would be required to obtain coverage under the NPDES Construction General Permit and conform to the Morro Bay Municipal Code. In compliance with these regulations, each construction project would be required to prepare a SWPPP and implement site-specific BMPs designed to reduce erosion. These standard requirements would ensure that cumulative impacts associated with erosion and loss of topsoil would be less than significant. Therefore, potential cumulative impacts would be less than significant, and construction, demolition, operation, and future decommissioning associated with the BESS Facility would not have a cumulatively considerable contribution to a significant cumulative impact related to erosion and loss of topsoil.

Cumulative projects would also increase the potential for impacts to paleontological resources through construction activities in the area. The project has the potential to impact sediments with higher paleontological sensitivity, and the project would be required to implement Mitigation Measures GEO-2 and GEO-3 to reduce impacts of the project on paleontological resources to a less than significant level. It can be reasonably assumed similar measures would be taken for cumulative development projects. Therefore, although cumulative projects would result in significant cumulative impacts to paleontological resources, project-specific mitigation for cumulative development would limit this impact to less than significant, and implementation of Mitigation Measures GEO-2 and GEO-3 would ensure the project would not have a cumulatively considerable contribution to a significant cumulative impact related to paleontological resources.

Consistent with the conclusions of the 2021 Final EIR for Plan Morro Bay, future development under the Master Plan would not result in a cumulatively considerable contribution to a significant impact related to seismic and geological hazards, erosion, loss of topsoil, or unique geologic features.

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4.6 Greenhouse Gas Emissions

This section of the EIR addresses the potential physical environmental effects associated with greenhouse gas (GHG) emissions from implementation of the proposed project.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24-acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site¹.

This analysis is based on the findings of the Greenhouse Gas Technical Report prepared by Ramboll America's Engineering Solutions, Inc. (Ramboll) in November 2023 (Appendix H).

4.6.1 Setting

a. Climate Change and Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 30, meaning its global warming effect is 30 times greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The baseline against which these changes are measured originates

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idle Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The IPCC expressed that the rise and continued growth of atmospheric CO₂ concentrations is unequivocally due to human activities (IPCC 2021). It is estimated that between the period of 1850 through 2019 a total of 2,390 gigatonnes of anthropogenic CO₂ was emitted. GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of GHGs in the atmosphere beyond the level of concentrations that occur naturally. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021).

b. Greenhouse Gas Emissions Inventory

Global Emissions

In 2015, worldwide anthropogenic GHG emissions totaled 47,000 million metric tons (MMT) of CO₂e, which is a 43 percent increase from 1990 GHG levels. The largest source of GHG emissions were energy production and use (including fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively, while waste sources contributed three percent. These sources account for approximately 96 percent of all worldwide GHG emissions (United States Environmental Protection Agency [USEPA] 2023a).

United States Emissions

United States GHG emissions were 6,347.7 MMT of CO₂e in 2021 (or 5,593.5 MMT CO₂e after accounting for sequestration), a 6.8 percent increase from 2020 emissions. The increase from 2020 to 2021 was driven by an increase in CO₂ emissions from fossil fuel combustion, which increased 7 percent relative to previous years and is primarily due to the economic rebound after the COVID-19 pandemic. In 2020, the energy sector (including transportation) accounted for 81 percent of nationwide GHG emissions while agriculture, industrial and waste accounted for approximately 10 percent, 6 percent, and 3 percent respectively (USEPA 2023b).

California Emissions Inventory

Based on a review of the California Air Resource Board (CARB) California Greenhouse Gas Inventory for the years between 2000-2020, California produced 369.2 MMT of CO₂e in 2020, which is 35.3 MMT of CO₂e lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the State's GHG emissions while electric power accounts for approximately 16 percent. The magnitude of California's total GHG emissions is due in part to its large geographic size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its

2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO₂e (CARB 2022). The annual 2030 statewide target emissions level is 260 MMT of CO₂e (CARB 2017).

Local Emissions Inventory

The City of Morro Bay developed a Climate Action Plan in 2014, which includes the most recent City-wide GHG emissions inventory.² According to the Climate Action Plan inventory, the largest contributors of GHG emissions in Morro Bay were transportation (40 percent of GHG emissions), followed by residential (29 percent of GHG emissions), industrial sources (21 percent of GHG emissions), off-road sources (5 percent of GHG emissions), and solid waste (5 percent of GHG emissions) (City of Morro Bay 2014). The residential and industrial sources include indirect GHG emissions from the energy used by those sources.

c. Potential Effects of Climate Change

Globally, climate change has the potential to affect a variety of environmental resources, including potential changes to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. The year 2023 was the warmest year since global records began in 1880 at 1.18°C (2.12°F) above the 20th century average of 13.9°C (57.0°F). This value is 0.15°C (0.27°F) more than the record set in 2016 and 0.32°C (0.57°F) higher than the 2022 average temperature, which now ranks as the seventh highest (National Oceanic and Atmospheric Administration [NOAA] 2024). Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014 and 2018).

Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise and flooding, more extreme heat days per year, more large forest fires, more drought years, reduced agricultural production, and disruption of ecosystems. California's Fourth Climate Change Assessment (California Natural Resource Agency 2019) includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies. However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy.

4.6.2 Regulatory Setting

a. Federal Regulations

Federal Clean Air Act

The United States Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* (549 U.S. 497 [2007]) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas

² An update to the 2014 Morro Bay Climate Action Plan is currently in progress.

suppliers, direct emitters of substantial quantities of GHGs, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (573 U.S. 302 [2014]), the United States Supreme Court held that the USEPA could not look to a source's GHG emissions alone for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Energy Independence and Security Act

The Energy Independence and Security Act (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions; promote research for alternative energy, carbon capture, and international energy programs; and incentivize the creation of "green jobs."

b. State Regulations

Executive Order S-3-05

In 2005, the governor signed Executive Order (EO) S-3-05, which identified the following statewide GHG emission reduction goals for California: (1) by 2010, reduce GHG emissions to 2000 levels; (2) by 2020, reduce GHG emissions to 1990 levels; and (3) by 2050, reduce GHG emissions to 80 percent below 1990 levels.

California Global Warming Solutions Act (Assembly Bill 32, Senate Bill 32, Assembly Bill 1279)

The “California Global Warming Solutions Act of 2006,” (Assembly Bill [AB] 32), represents California’s major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions.

In September 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged).

As a follow up to SB 32, AB 1279, “The California Climate Crisis Act,” was passed in September 2022, and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and would achieve and maintain net negative GHG emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045. In November 2022, CARB published California’s 2022 Scoping Plan for Achieving Carbon Neutrality (Third Update). This update extends the previous Scoping Plans and lays out a path to achieve carbon neutrality no later than 2045, as directed by AB 1279. The previous 2017 Scoping Plan lays out a technologically feasible and cost-effective path to achieve the 2030 GHG reduction target by leveraging existing programs such as the Renewables Portfolio Standard (RPS), Advanced Clean Cars, Low Carbon Fuel Standard, Short-Lived Climate Pollutant Reduction Strategy, Cap-and-Trade Program, and Mobile Source Strategy that includes strategies targeted to increase zero emission vehicle fleet penetration. The 2022 Scoping Plan looks toward the 2045 climate goals and the deeper GHG reductions needed to meet the State’s statutory carbon neutrality target specified in AB 1279 and EO B-55-18 (CARB 2022).

Executive Order B-55-18

In September 2018, the governor issued EO B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the State’s ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline California Environmental Quality Act (CEQA) processing.

In March 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The San Luis Obispo Council of Governments (SLOCOG) was assigned

targets of a 3 percent reduction in per capita GHG emissions from passenger vehicles by 2020 and an 11 percent reduction in per capita GHG emissions from passenger vehicles by 2035 (CARB 2023).

California Advanced Clean Cars Program

AB 1493 (2002), California’s Advanced Clean Cars program, requires CARB to develop and adopt regulations (referred to as the “Pavley regulation”) to achieve “the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.” In June 2009, USEPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the USEPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as “Low Emission Vehicle III GHG,” regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emission Vehicle, Zero Emissions Vehicles, and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

Executive Order N-79-20

In September 2020, the governor issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the state to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor’s Office of Business and Economic Development, the California Energy Commission (CEC), the California Department of Transportation, and other State agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

Senate Bill 100

Adopted in September 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020)

Adopted in September 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all State agencies by 2035. This bill shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.

California Building Standards Codes

Title 24 of the California Code of Regulations (CCR) is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

Part 6 Building Energy Efficiency Standards/Energy Code

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The 2022 Title 24 standards became effective on January 1, 2023.

Part 11 California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory as of January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local

jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt amendments for stricter requirements.

Regulation for Reducing SF₆ Emissions from Gas Insulated Switchgear

CARB adopted the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (CCR Title 17, Sections 95350-95359.1) in 2010. The regulation was further amended in 2021 in response to emerging technologies using lower or zero GWPs in gas-insulated equipment (GIE). Key components of the regulation include phasing-out acquisition of SF₆ GIE and expanding the scope of the regulation to include other GHGs used in GIE. While phaseout dates vary based on the configuration (aboveground or belowground) and voltage of the GIE, acquisition of SF₆ GIE will be fully phased out by 2033 unless exempt.

c. Regional and Local Regulations

San Luis Obispo County Air Pollution Control District Clean Air Plan

San Luis Obispo County Air Pollution Control District (SLOAPCD) and other air districts prepare clean air plans in accordance with the State and federal Clean Air Acts. The Clean Air Plan is a comprehensive plan that focuses on the closely related goals of protecting public health and air quality. The most recent Clean Air Plan is the 2001 Clean Air Plan adopted by SLOAPCD in December 2001 (SLOAPCD 2001). The 2001 Clean Air Plan mainly addresses reducing reactive organic gases (ROG) and oxides of nitrogen (NO_x) emissions to meet the State ozone standard in San Luis Obispo County, but states that implementing the Plan will also have the ancillary benefit of reducing GHG emissions.

In November 2005, SLOAPCD published Options for Addressing Climate Change in San Luis Obispo County summarizing current programs that have an ancillary benefit of reducing GHG emissions and potential district actions to specifically address GHG emissions (SLOAPCD 2005). Current programs that have been implemented to reduce GHG emissions include the CEQA review process to mitigate emission impacts from land use development projects, District rules to regulate combustion sources, and involvement in the Central Coast Clean Cities Coalition (C5) to promote cleaner alternative fuel technologies.

SLOAPCD CEQA Air Quality Handbook

SLOAPCD developed quantitative thresholds of significance to assist in the review of projects under CEQA in 2012 in their CEQA Air Quality Handbook. SLOAPCD presents its current thresholds of significance along with methods for evaluating compliance in its 2023 Administrative Update (SLOAPCD 2023). The most recent SLOAPCD CEQA Air Quality Handbook, last updated in 2023, provides two thresholds for land use projects through 2045 based on if the project is a permitted stationary source, or if it is residential or commercial. Permitted stationary sources have a significance threshold of 10,000 MT CO₂e per year based on emission reductions necessary to meet the EO S-03-05 goal to reduce GHG emissions 80% below 1990 levels by 2050. For residential and commercial projects, the SLOAPCD CEQA Air Quality Handbook provides bright line and efficiency thresholds to meet GHG emission reduction targets in 2030 and 2045, with interpolated thresholds for each possible buildout year. The SLOAPCD GHG thresholds are detailed further below under Section 4.6.4, *Impact Analysis*.

SLOCOG Sustainable Communities Strategy

SB 375 requires each MPO in California to develop a SCS as part of its RTP that will achieve the GHG reduction targets required by AB 32. In June 2023, SLOCOG adopted the 2023-2045 RTP, which includes a SCS. The SCS is intended to guide future planning efforts and policy decisions that affect transportation, including its relationship with housing and land use that will reduce greenhouse gas emissions in the region. The 2023 RTP identified and tested growth scenarios to accommodate an anticipated 42,000 new people, 18,000 new homes, and 18,000 new jobs in the region (SLOCOG 2023).

Plan Morro Bay

In 2021, the City adopted Plan Morro Bay, which serves as the City's General Plan and Local Coastal Program Land Use Plan. Plan Morro Bay contains several environmental management policies aimed at sustainability within the City. They are outlined below:

Policy CD-2.2 Flexible Use. Identify potential buildings for future adaptive reuse, and encourage incorporating flexibility in building designs to maximize the future use of buildings.

Policy CIR-1.12 Climate Change Impacts on Transportation. Require ongoing evaluation of the transportation infrastructure system and its ability to withstand future effects of climate change. Identify future points to begin incorporating resilient strategies and materials into design, using the most up-to-date guidance from the Federal Highway Administration.

Policy CIR-2.3 Active Transportation Amenities. Provide facilities and amenities for active transportation users at public facilities, including bicycle storage and seating areas. Require new developments or significant renovations to transportation facilities on private commercial or multifamily residential land to incorporate convenient active transportation facilities where possible. (See also Policies LU-8.4 and OS-1.8.)

Policy CIR-3.2 VMT Thresholds. Achieve State-mandated reductions in VMT by establishing and adopting a VMT standard.

Policy CIR-4.7 Alternative Options. Require or establish EV charging stations, bike sharing and park and ride locations throughout Morro Bay and in particular, close to transit and amenities.

Policy C-3.5 Vehicle Idling. Explore and implement strategies to minimize vehicle idling.

Policy C-3.7 Park and Ride. Support the future development of park and ride lots in Morro Bay. Site lots near commuter transit service and provide bicycle storage lockers at the lots to ensure they are designed to facilitate use by transit and active transportation users.

Policy C-3.8 Telecommuting. Encourage employers to adopt teleworking, teleconferencing, and telelearning options for their employees and adopt policies and/or programs to further promote teleworking, teleconferencing, and telelearning among City staff.

Policy C-4.1 Emissions Reduction Target. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the State's 2050 greenhouse gas emissions reduction goals.

Policy C-4.2 Climate Action Plan. Continue to implement and regularly evaluate the Morro Bay Climate Action Plan and greenhouse gas inventory to evaluate progress, celebrate successes, and adjust strategies as needed to meet emissions goals.

Policy C-4.3 Greenhouse Gas Inventory. Continue to update the greenhouse gas inventory to determine whether emissions are within recommended levels.

Policy C-4.4 Greenhouse Gas Reduction Strategies. Pursue a variety of greenhouse gas reduction strategies across the transportation, residential, waste, and commercial sectors, commensurate with their share of the community's greenhouse gas emissions.

Policy C-4.5 Grant Funding. Seek grant funding to support implementation of greenhouse gas reduction projects for the City, as well as for residents and businesses.

Policy C-6.1 Renewable Energy Incentive Programs. Create incentives that promote renewable and sustainable energy systems as a component of new development or reuse projects. Require water- and energy-efficient features in all new and significantly renovated development, such as low-flow and energy-efficient appliances, drought-tolerant vegetation, rooftop solar, and passive heating and cooling features.

Policy C-6.2 Renewable Energy in Home and Commercial Uses. Encourage the use of solar energy systems in homes and commercial businesses as a form of renewable energy, including in support of zero net energy goals.

Policy C-6.4 Partnerships. Support public/private partnerships to implement energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.

Policy C-8.1 Disposal Rates. Continue to reduce disposal rates to zero.

Policy PS-1.4 Climate Change. Consider how climate change impacts may change anticipated hazard conditions when planning for emergency response.

Policy EJ-4.1 Plan Updates. Recognize and address the health effects of climate change when updating local hazard mitigation plans, hazard emergency plans, specific plans, and other policies and ordinances (City of Morro Bay 2021).

Morro Bay Climate Action Plan

In 2014, the City of Morro Bay adopted a Climate Action Plan (CAP) to guide the reduction of GHG emissions in accordance with AB 32.³ The CAP describes community and municipal GHG emissions, compares future emissions to State-designated targets, and defines actions and strategies the City will take to meet both State and local GHG reduction goals. Both community-wide and government operations emissions were inventoried for the CAP, studying emissions from energy use, transportation, waste, water, and off-road emissions, resulting in specific and attainable goals for GHG reductions. The CAP identifies measures and implementation actions to achieve the GHG emissions reduction goals across several categories including City Government Operations, Energy, Transportation and Land Use, Off-Road Equipment, Solid Waste, and Tree Planting, as well as climate adaptation measures. Measures applicable to the project include the following (City of Morro Bay 2014):

Measure TL-1 Bicycle Network: Continue to improve and expand the city's bicycle network and infrastructure.

Measure TL-2 Pedestrian Network: Continue to improve and expand the City's pedestrian network.

³ An update to the 2014 Morro Bay Climate Action Plan is currently in progress.

Measure TL-6 Smart Growth: Facilitate mixed-use, higher density, and infill development near transit stops, in existing community centers/downtown, and in other designated areas.

Measure O-1 Construction Vehicles and Equipment: Reduce GHG emissions from construction vehicles and equipment by requiring various actions as appropriate to the construction project.

Measure T-1 Tree Planting Program: Facilitate voluntary tree planting within the community, working with local non-profit organizations and community partners.

Measure A-4 Infrastructure: Work to improve the resilience of systems that provide the resources and services critical to community function.

4.6.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under Plan Morro Bay to result in GHG emissions impacts. The 2021 Final EIR concluded that Plan Morro Bay includes multiple goals and policies that would align with the measure and implementation actions identified in the Morro Bay CAP to reduce GHG emissions. Policy C-4.1 establishes new GHG reductions goals for 2040 and 2050 to build upon the Morro Bay CAP and meet the State's post-2020 GHG emissions reduction goals. Policy C-4.2 requires the City to continue implementing and updating the CAP. In addition to goals and policies that relate specifically to the CAP, Plan Morro Bay also includes a variety of transportation and land use and energy policies that align with the measures and actions of the Morro Bay CAP.

The 2021 Final EIR concluded that land use growth and associated future development in Morro Bay would result in a permanent long-term increase in GHG emissions and that there is the potential for individual projects to exceed the applicable thresholds on a project-by-project basis. Nonetheless, Plan Morro Bay was found to be consistent with local, regional, and State plans, policies, and regulations adopted for the purpose of reducing GHG emissions, and impacts related to GHG emissions were found to be less than significant.

4.6.4 Impact Analysis

a. Methodology

The analysis of potential GHG emissions impacts is based on the findings of the Greenhouse Gas Technical Report prepared by Ramboll in November 2023 (Appendix H). Quantification of the project's construction and operational GHG emissions is based primarily on default values in the California Emission Estimator Model (CalEEMod) version 2022.1 and the latest version of Emission Factors Model version 2021 (EMFAC 2021). Construction and operational emissions estimates are presented as annual averages (MT CO₂e per year), with construction emissions being amortized over the operational lifetime of the project (SLOAPCD recommends the use of a 25-year lifetime for non-residential projects). As described in Section 2, *Project Description*, this analysis assumes that decommissioning activities would involve the use of heavy equipment and personnel similar to that used for the BESS Facility's construction phase. As a result, the emission estimate conservatively assumes BESS Facility decommissioning would involve similar types of activities and equipment as BESS Facility construction and, therefore, would produce similar GHG emissions as BESS Facility construction.

CalEEMod and EMFAC 2021 have not been updated for the most recent executive orders, specifically EO N-79-20 which bans the sale of gasoline-powered cars in California by 2035 and EO B-55-18 which set as a goal carbon neutrality in California by 2045. Both EOs, if implemented, would

change the energy mix in California for the BESS Facility. However, as there is currently insufficient information to incorporate these executive orders into this analysis, to do so would be speculative. Accordingly, this GHG analysis has been conducted using the most recent available emissions inventory tools prepared and accepted by the regulatory agencies. For further details regarding the methodology and to view CalEEMod outputs, refer to the Greenhouse Gas Technical Report (Appendix H).

For the purpose of assessing whether the project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, this analysis considers the potential for any component of the project to conflict with the Morro Bay CAP, applicable provisions of Plan Morro Bay, SLOCOG's 2023 RTP, or the 2022 Scoping Plan.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant adverse impact if it would do either of the following:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

CEQA Guidelines Section 15064.4(b) states that in evaluating the significance of impacts from GHG emissions, the lead agency should consider the following factors, among others:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions.

SLOAPCD Guidance for Significance Thresholds

SLOAPCD presents its GHG emissions thresholds in Section 3.5.6 of its CEQA Air Quality Handbook (SLOAPCD 2023). The thresholds were updated in 2023 to be consistent with emission reduction targets specified in SB 32 for 2030 and AB 1279 for 2045. Although the project would not require a SLOAPCD permit to operate, in October 2023 SLOAPCD recommended that the proposed BESS Facility be evaluated under the SLOAPCD industrial threshold for stationary source (industrial) projects that accommodate processes and equipment that emit GHG emissions (A. Mutziger, SLOAPCD Division Manager, personal communication, October 10, 2023). The City has elected to use these thresholds of significance for this EIR. Therefore, this analysis compares quantified GHG emissions to SLOAPCD's 10,000 MT CO₂e per year threshold described above and set forth in the SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2023).

Threshold 1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact GHG-1 DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING, AND CONSTRUCTION, OPERATION, AND DECOMMISSIONING OF THE BESS FACILITY WOULD NOT GENERATE GHG EMISSIONS THAT EXCEED APPLICABLE GHG THRESHOLDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, and Future Decommissioning

As shown in Appendix H, the use of heavy equipment during construction of the BESS Facility and demolition of the Morro Bay Power Plant building and stacks would result in approximately 510 MT CO₂e per year (combined GHG emissions from construction and demolition activities amortized over an estimated 40-year project lifetime for the BESS Facility). Future decommissioning of the BESS Facility may require the removal of all above-grade facilities, buried electrical conduit, and concrete foundations if such improvements are not identified for potential future redevelopment by the City, as well as restoration of site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property, in accordance with the Reclamation and Decommissioning Plan (see Section 2, *Project Description*). As a result, this analysis assumes BESS Facility decommissioning would produce similar GHG emissions as BESS Facility construction, which would be approximately 402 MT CO₂e per year (accounting for the estimated 510 MT CO₂e from BESS Facility construction and demolition of the power plant building and stacks, less emissions associated only with demolition activities).

BESS Facility Operation

GHG emissions from operation of the BESS Facility would include emissions from mobile sources (worker trips), area sources (landscaping equipment), stationary equipment (emergency fire pump), and energy consumption (the energy used to power typical daily operations and activity at the BESS Facility). As shown in Appendix H, the combined annual GHG emissions from these sources would total approximately 279 MT CO₂e per year.

Total annual emissions from operation of the BESS Facility, including amortized GHG emissions from construction, demolition, and potential future decommissioning, are included in Table 4.6-1.

As shown in Table 4.6-1, the project would result in combined annual GHG emissions totaling approximately 1,191 MT CO₂e, which would not exceed the applicable SLOAPCD threshold for stationary source (industrial) projects of 10,000 MT CO₂e per year.

The GHG emissions estimate does not account for the fact that the BESS Facility would be used to store renewable 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. As a result, the BESS Facility would accelerate California's decarbonization efforts by increasing the battery storage capacity in the State. Therefore, the project emissions estimate shown in Table 4.6-1 should be considered conservative, as the project would support a long-term reduction in GHG emissions associated with the energy sector, resulting in statewide GHG emissions reductions that are not quantified in the project-level emissions estimate.

Table 4.6-1 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT CO₂e)
Construction and Demolition	510
Decommissioning	402
Operational	279
Area	7
Energy	257
Mobile	10
Stationary	4
Total	1,191
SLOAPCD Threshold	10,000
Exceed Threshold?	No

MT CO₂e = metric tons of carbon dioxide equivalent
¹ Amortized construction related GHG emissions over 30 years
 Source: Appendix B.

Because the project would not generate GHG emissions that would exceed the applicable SLOAPCD GHG emissions threshold for stationary source (industrial) projects, and because the project would support a long-term reduction in GHG emissions associated with the energy sector, the BESS Facility would result in less than significant impacts related to GHG emissions.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.6.3, *Previous Environmental Review*, the 2021 Final EIR for Plan Morro Bay concluded that land use growth and associated future development in Morro Bay would result in a long-term increase in GHG emissions. The increase in GHG emissions identified in the 2021 Final EIR is largely attributable to the commercial growth envisioned in the Plan Morro Bay land use plan. Plan Morro Bay identified the land use designations in the Master Plan area as Visitor Serving Commercial and Mixed-Use Residential Overlay, which would contribute to the increase in GHG emissions. Nonetheless, Plan Morro Bay includes goals and policies that would reduce GHG emissions and require the continued assessment and updating of the Morro Bay CAP. Therefore, the 2021 Final EIR determined that Plan Morro Bay would result in less than significant GHG emissions impacts.

Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would have the potential to result in a long-term increase in GHG emissions compared to existing conditions. However, the anticipated growth in GHG emissions associated with future development of the Master Plan area would be lower than anticipated for the Power Plant Property in the 2021 Final EIR, due to a change in the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial. The BESS Facility would result in lower vehicle trip generation and associated operational GHG emissions in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses envisioned for that portion of the Power Plant Property in the 2021 Final EIR.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including mitigation to reduce GHG emissions where potential project-level environmental impacts are identified. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce the long-term increase in GHG emissions associated with future development of the Master Plan area compared to the Visitor Serving Commercial land use and zoning evaluated in the Plan Morro Bay EIR. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

Threshold 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-2 THE PROJECT WOULD NOT CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, Operation, and Future Decommissioning

This analysis pertains to the BESS Facility as a whole, including construction, operation, and future decommissioning as well demolition of the existing power plant building and stacks that would occur following the construction of the BESS Facility. Demolition of the power plant building and stacks, BESS Facility construction, and decommissioning activities would be required to comply with all applicable regulations, policies, and plans such as construction and demolition waste diversion requirements, idling limits, and off-road vehicle equipment regulations that reduce the GHG emissions associated with construction activities.

During operation, the BESS Facility would be used to store renewable 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. As a result, the BESS Facility would accelerate California's decarbonization efforts by increasing the battery storage capacity in the State, supporting a long-term reduction in GHG emissions associated with the energy sector. Operation of the BESS Facility would not conflict with applicable regulations, policies, and plans,

including the 2022 Scoping Plan, SLOCOG 2023 RTP, Plan Morro Bay, and the Morro Bay CAP, as discussed further below.

2022 Scoping Plan

The 2022 Scoping Plan lays out a path for California to achieve carbon neutrality by 2045. The Scoping Plan identifies actions related to sectors in smart growth/VMT reductions, light-duty vehicles and ZEVs, truck ZEVs, aviation fuel, ocean-going vessel fuel and electricity usage, port operations, freight and passenger rail, oil and gas extraction, petroleum refining, electricity generation, electrical appliances in new and existing residential and commercial buildings, electrification for food product industry, electrification for construction equipment, chemicals and allied products, pulp and paper, stone/clay/glass/cement, electrification of other industrial manufacturing, retiring of combined heat and power facilities, electrification of agricultural energy use, low carbon fuels for transportation, low carbon fuels for business and industry, non-combustion methane emissions, and introduction of low GWP refrigerants. As shown in Table 4.6-2, the BESS Facility would not conflict with the applicable provisions of the Scoping Plan.

Table 4.6-2 2022 Scoping Plan Conflict Analysis

Scoping Plan Reduction Measure	Project Consistency
Deploy Zero Emission Vehicles (ZEVs) for light-duty and heavy-duty vehicles: The ZEV mandates requires 100% of light-duty vehicle sales are ZEV by 2035, and 100% of medium-duty/heavy-duty vehicles sales are ZEV by 2040.	No Conflict: The project would be required to meet the most up to date CALGreen Tier 2 requirements, which will improve EV charging infrastructure and contribute to State ZEV goals. Parking spaces would be required to be EV Ready (locations where drivers can use portable chargers for EV charging).
Smart Growth / Vehicle Miles Traveled (VMT): Expanding the SB 375, the 2022 Scoping Plan requires VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	No Conflict: As described in detail in Section 4.9, <i>Transportation</i> , the BESS Facility would not substantially increase VMT because only minor work-related trips would occur long-term at the BESS Facility.
Electricity Generation: As required by SB 350, SB 100, and SB 1020, utilities subject to the legislation will be required to increase their renewable energy share and reduce GHG in the electric generation sector to 38 MMT CO ₂ e in 2030 and 30 MMT CO ₂ e in 2035.	No Conflict: As described in Section 2, <i>Project Description</i> , the purpose of the BESS Facility is to maximize the use of energy from renewable sources, assist California utilities and government authorities in meeting their obligations to develop and use more renewable energy and locally-site energy storage systems, and improve grid reliability.
Decarbonize Residential and Commercial Buildings: New residential buildings to use all electric appliances beginning in 2026 and new commercial buildings to use all electric appliances beginning in 2029.	No Conflict: This measure is not directly applicable to the BESS Facility; however, the project would not be designed or constructed with natural gas infrastructure and would contribute to decarbonization and GHG reduction goals by increasing capacity for renewable energy in the State.
Construction Equipment: Reduce demand for fossil energy and GHGs and improve air quality.	No Conflict: BESS Facility construction and demolition of the power plant building and stacks would be required to utilize equipment with engines that are compliant with current CARB standards. As discussed above, construction activities would not exceed the applicable GHG threshold, and operation of the BESS Facility would accelerate California’s decarbonization efforts by increasing the battery storage capacity in the State, supporting a long-term reduction in GHG emissions associated with the energy sector.

Source: CARB 2022; Ramboll 2023

SLOCOG 2023 RTP/SCS

SB 375 requires MPOs, including SLOCOG, to incorporate a Sustainable Communities Strategy (SCS) in their Regional Transportation Plan (RTP) that will achieve the GHG emission reduction targets set by CARB, primarily by reducing VMT from light-duty vehicles through development of more compact, complete, and efficient communities. SLOCOG’s 2023 RTP/SCS establishes goals and policies to achieve the GHG emissions reduction targets for the region. As shown in Table 4.6-3, the BESS Facility would not conflict with the applicable goals and policy objectives of the 2023 RTP/SCS.

Table 4.6-3 SLOCOG 2023 RTP/SCS Conflict Analysis

Goal	#	Policy Objectives	Project Consistency
Mobility			
Improve intermodal mobility and accessibility for all people.	2.1	Provide reliable, integrated, and flexible travel choices across and between modes.	No Conflict: The project includes public access improvements along the project’s Embarcadero frontage, including a 12-foot multi-use path with storm drainage and street trees. These improvements were identified in the Circulation Element as a planned transportation improvement.
	2.5	Support cooperative planning activities that lead to an integrated intermodal transportation system.	
Safety			
Improve public safety and security.	4.1	Reduce fatalities, serious injuries, and collisions for motorized and non-motorized users.	No Conflict: Currently, the portion of Embarcadero fronting the Project Site does not have sidewalk or bicycle facilities. The project would result in a new 12-foot multi-use path along the Embarcadero frontage, which would provide safe and secure travel for pedestrians and bicyclists.
	4.3	Enhance public safety and security in all modes of transportation	
Healthy Communities			
Foster livable, healthy communities and promote social equity.	5.4	Make investments and develop programs that support local land use decisions that implement the SCS and other strategies to reduce GHG emissions and make our communities more healthy, livable, sustainable, and mobile.	No Conflict: The BESS Facility would reduce the amount of fossil fuels consumed during peak hours and maximize renewable energy usage, thereby reducing GHG and other emissions associated with energy use.
Environment			
Practice environmental stewardship.	6.1	Integrate environmental considerations in all stages of planning and implementation.	No Conflict: As discussed throughout this Draft EIR, the project would be designed, constructed, and operated in a sustainable manner that minimizes impacts to the environment to the extent feasible.

Source: SLOCOG 2023; Ramboll 2023

Plan Morro Bay

Plan Morro Bay includes several goals and policies aimed at reducing GHG emissions that are applicable to the BESS Facility. As shown in Table 4.6-4, the BESS Facility would not conflict with the applicable policies of Plan Morro Bay.

Table 4.6-4 Plan Morro Bay Conflict Analysis

Plan Morro Bay Element	Policies	Project Consistency
Economic Development	ED-3.1 Sustainable Businesses: Attract and retain environmentally conscious businesses that contribute to the long-term economic and environmental sustainability of Morro Bay.	No Conflict: The BESS Facility would support achievement of the State’s renewable portfolio standard. Therefore, the project would contribute to the long-term economic and environmental sustainability of Morro Bay.
Circulation	CIR-1.3 System Connectivity: Develop a complete and connected network of accessible sidewalks, crossings, paths, and separated bike lanes that are convenient and attractive throughout the City. CIR-1.4 Future Enhancements: Identify streets in the city that can be made “complete,” and plan for new bikeways, sidewalks, and crosswalks on those streets by reallocating how space within the public right-of-way is used.	No Conflict: Currently, the portion of Embarcadero fronting the Project Site does not have sidewalk or bicycle facilities. The project would result in a new a 12-foot multi-use path along the Embarcadero frontage, which would provide safe and convenient travel for pedestrians and bicyclists. Improvements to the multi-modal system encourage reduced VMT and associated GHG emissions.
Conservation	C-3.2 Interagency Cooperation: Continue to cooperate with the SLOAPCD and other regional, State, and national agencies to implement the County Clean Air Plan, including enforcing air quality standards and improving air quality. C-3.5 Vehicle Idling: Explore and implement strategies to minimize vehicle idling. C-4.1 Emissions Reduction Target: By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the State’s 2050 greenhouse gas emissions reduction goals. C-4.4 Greenhouse Gas Reduction Strategies: Pursue a variety of greenhouse gas reduction strategies across the transportation, residential, waste, and commercial sectors, commensurate with their share of the community’s greenhouse gas emissions.	No Conflict: As described in detail in Section 4.2, <i>Air Quality</i> , the project would not conflict with the Clean Air Plan. No Conflict: Vehicles and equipment during construction and demolition would be limited from idling for more than three minutes at any given location pursuant to (i) the 2004 CARB Airborne Toxics Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling, and (ii) Implementation of Measure O-1 (specifically Action O-1.2) of the City’s Climate Action Plan. No Conflict: As described above under Impact GHG-1, the project would not exceed SLOAPCD GHG thresholds and would be consistent with SLOAPCD guidelines. No Conflict: As described throughout this section, the project would be required to implement GHG reduction measures through compliance with CALGreen, waste diversion, and compliance with other State and local regulatory requirements. In addition, the project would contribute to reducing fossil fuel use, reducing GHG emissions associated with energy production and consumption.

Plan Morro Bay Element	Policies	Project Consistency
	<p>C-6.1 Renewable Energy Incentive Programs: Create incentives that promote renewable and sustainable energy systems as a component of new development or reuse projects. Require water- and energy-efficient features in all new and significantly renovated development, such as low-flow and energy-efficient appliances, drought-tolerant vegetation, rooftop solar, and passive heating and cooling features.</p> <hr/> <p>C-6.4 Partnerships: Support public/private partnerships to implement energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.</p> <hr/> <p>C-8.1 Disposal Rates: Continue to reduce disposal rates to zero.</p>	<p>No Conflict: The project would support renewable energy systems by storing energy from renewable sources for more efficient use during peak periods. In addition, the BESS Facility would be required to comply with the Title 24 and CALGreen energy- and water-efficiency requirements.</p> <hr/> <p>No Conflict: The project would facilitate the use of renewable energy and improve energy reliability.</p> <hr/> <p>No Conflict: The project will include recycling and organic waste trash receptacles in compliance with the organic waste and recycling goals and requirements established by AB 341, AB 939, AB 1826, SB 1383, and CALGreen.</p>
Public Safety	<p>PS-1.4 Climate Change: Consider how climate change impacts may change anticipated hazard conditions when planning for emergency response.</p>	<p>No Conflict: The project would improve grid reliability and the availability of energy supply for critical facilities in the event of a climate change-induced extreme heat and natural disaster. Improved grid reliability can facilitate emergency response in the event of climate-related hazards.</p>
Environmental Justice	<p>EJ-4.1 Plan Updates: Recognize and address the health effects of climate change when updating local hazard mitigation plans, hazard emergency plans, specific plans, and other policies and ordinances</p>	<p>No Conflict: The project would improve grid reliability and the availability of energy supply for air conditioning and continued operation of critical facilities in the event of a climate change-induced extreme heat and natural disaster.</p>

Source: Morro Bay 2021; Ramboll 2023

Morro Bay Climate Action Plan

The Morro Bay CAP establishes goals, measures, and actions to reduce GHG emissions within the city. As shown in Table 4.6-5 the project would not conflict with the applicable measures of the Morro Bay CAP.

Table 4.6-5 Morro Bay CAP Conflict Analysis

Reduction Measure	Project Consistency
<p>Measure TL-1 Bicycle Network: Continue to improve and expand the city's bicycle network and infrastructure.</p> <p>Measure TL-2 Pedestrian Network: Continue to improve and expand the City's pedestrian network.</p>	<p>No Conflict: Currently, the portion of Embarcadero fronting the Project Site does not have sidewalk or bicycle facilities. The project would add a 12-foot multi-use path along the Embarcadero frontage, which would provide safe and convenient attractive travel for pedestrians and bicyclists. Improvements to the multi-modal system encourage reduced VMT and associated GHG emissions.</p>
<p>Measure O-1 Construction Vehicles and Equipment: Reduce GHG emissions from construction vehicles and equipment by requiring various actions as appropriate to the construction project.</p>	<p>No Conflict: Construction of the BESS Facility and demolition of the power plant building and stacks would be required to utilize construction equipment with engines that are compliant with CARB standards. As discussed above and in Section 4.2, <i>Air Quality</i> construction activities would not exceed the applicable GHG threshold or result in significant air quality impacts.</p>
<p>Measure T-1 Tree Planting Program: Facilitate voluntary tree planting within the community, working with local non-profit organizations and community partners.</p>	<p>No Conflict: The purpose of the BESS Facility is to store renewable electricity (e.g., from solar panels) to maximize the use of energy from renewable sources, assist California utilities in meeting their obligations related to renewable energy and locally-site energy storage systems, and improve grid reliability.</p>
<p>Measure A-4 Infrastructure: Work to improve the resilience of systems that provide the resources and services critical to community function.</p>	<p>No Conflict: The purpose of the BESS Facility is to store renewable electricity (e.g., from solar panels) to maximize the production and use of energy from renewable sources, assist California utilities in meeting their obligations related to renewable energy and locally-site energy storage systems, and improve grid reliability and the availability of energy supply for private and public uses, particularly during peak energy usage periods.</p>

Source: Morro Bay 2014

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would substantially reduce the long-term increase in GHG emissions associated with potential future development of the Master Plan area due to the reduction in commercial uses as compared to the uses analyzed in the 2021 Final EIR for Plan Morro Bay.

As described in Section 4.6.3, *Previous Environmental Review*, the 2021 Final EIR concluded that land use growth and associated future development in Morro Bay would result in a long-term increase in GHG emissions, largely attributable to the commercial growth envisioned in the Plan Morro Bay land

use plan. Nonetheless, Plan Morro Bay includes goals and policies that would reduce GHG emissions and are consistent with the goals, policies, and measures established by existing GHG emissions reduction regulations, plans, and policies such as the 2022 Scoping Plan, SLOCOG 2023 RTP, Plan Morro Bay, and the Morro Bay CAP. Although the 2022 Scoping Plan has been adopted since the 2021 Final EIR was certified, the Master Plan would not involve any changes to land use other than the change to the BESS Site, which would serve to reduce GHG emissions in comparison to what was evaluated in the 2021 Final EIR, and would not otherwise result in any new conflicts with the Scoping Plan.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review pursuant to CEQA, including policy consistency analyses to ensure that projects would be consistent with the applicable local, regional, and State GHG emissions reductions regulations, plans, and policies. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce GHG emissions associated with future development of the Master Plan area in comparison to the potential site build out under Plan Morro Bay, and as described above, the BESS Facility would not conflict with the applicable GHG regulations, plans, and policies. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

4.6.5 Cumulative Impacts

The geographic scope for projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed under Impacts GHG-1 and GHG-2, project's impacts related to GHG emissions would be less than significant, as project-related GHG emissions would not exceed the applicable GHG thresholds of significance, and no component of the project would conflict with State and local plans for reducing GHG emissions. Therefore, the project's incremental contribution to cumulative GHG impacts would not be cumulatively considerable.

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4.7 Hazards and Hazardous Materials

This section of the EIR addresses the potential physical environmental effects associated with hazardous materials use and transportation, the accidental release of hazardous materials, new development or re-development on contaminated sites, and interference with emergency response and evacuation plans, from implementation of the proposed project. The project's potential to result in air traffic hazards and the risk of exposure to wildland fires are addressed in Section 4.10, *Effects Found Not to be Significant*.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24 acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing power plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

This analysis is based in part on the findings of the Hazardous Materials Technical Study prepared by Rincon Consultants, Inc. (Rincon) in April 2023 (Appendix I) and the Geologic and Soils Hazards Evaluation Report prepared by Rincon in April 2023 (Appendix F).

4.7.1 Setting

a. Definition of Hazardous Materials

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (CCR Title 22, Section 66261.10).

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosiveness, and reactivity. CCR Title 22, Sections 66261.20 through

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

66261.24 defines the aforementioned properties. The release of hazardous materials into the environment can contaminate soils, surface water, and groundwater supplies.

b. Known Hazardous Material Contamination in Morro Bay

Past and present land use patterns are good predictors of the potential for past contamination by hazardous materials and the current use and storage of hazardous materials. Military, industrial, and certain commercial land uses, such as dry cleaners and auto service, are more likely to use and store large quantities of hazardous materials than residential land uses. Small quantities of hazardous materials are also routinely used and stored in other commercial and retail businesses, educational facilities, medical facilities, and households. Commercial land uses in Morro Bay are concentrated along major transportation corridors, such as State Route (SR) 1, Main Street, and Morro Bay Boulevard. Light industrial and warehousing uses are located mainly along the north end of the Embarcadero.

Identified hazardous waste sites in Morro Bay are primarily located in the Embarcadero area of the City of Morro Bay (City), with two military cleanup sites located in the southern and western parts of the City. Of the hazardous waste sites in the City, there are no federal Superfund sites.

The Southern California Gas Company (SoCalGas), which provides natural gas service to Morro Bay, operates pipelines in the community. A large natural gas transmission line enters Morro Bay from the east along SR 1, running alongside SR 1 until it terminates near where Main Street crosses under SR 1. Two high-volume distribution lines run north from this point: one continuing along SR 1 north to Cambria, the other running northeast toward Atascadero (Appendix B). The City designates these pipelines as very low risk. There are a number of abandoned pipelines in the community, some of which have been fully decontaminated and decommissioned (City of Morro Bay 2019).

c. Known Release Sites at the Morro Bay Power Plant

Project Site

A review of the State Water Resources Control Board (SWRCB) online GeoTracker database and the California Department of Toxic Substances Control (DTSC) online EnviroStor database indicates that the Project Site is associated with the following known release cases:

- An open Cleanup Program Site case for Morro Bay Power Plant – Pacific Gas and Electric Company (PG&E) with oversight by the DTSC (lead), case #40490006, and the Central Coast Regional Water Quality Control Board (RWQCB), case #SL203431377 (SWRCB 2022a)
- An open Corrective Action case for Dynegy Morro Bay LLC with oversight by the DTSC, case #100220/102365 (DTSC 2022a)
- A closed Historical Permitted Hazardous Waste Facility case for Dynegy Morro Bay LLC with oversight by the DTSC (DTSC 2022a)

Select environmental documents available for the cases listed above are available at the SWRCB GeoTracker website and the DTSC EnviroStor websites and are summarized in the April 2023 Hazardous Materials Technical Study (Appendix I) and below. Areas of hazardous materials concern are depicted on Figure 4.7-1.

Figure 4.7-1 Areas of Hazardous Materials Concern



Final Screening-Level Human Health Risk Assessment Report – Dynegy-Owned Portion of the Former Morro Bay Power Plant (March 2020)

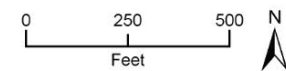
This report, prepared for the Power Plant Property (the Project Site plus additional offsite areas to the north and south of the Project Site), evaluated potential risks associated with residential and construction worker exposure to soil in areas of the former Power Plant owned by Dynegy Morro Bay, LLC. The report indicates that the Power Plant Property was owned and occupied by the United States Navy and used as an amphibious training base prior to 1951, PG&E purchased the Power Plant Property in 1951, and the Power Plant operated on the Power Plant Property from 1955 to 2014 (Terraphase Engineering Inc. 2020).

According to the report, soil and groundwater conditions at the Power Plant Property have been investigated since 1986. In 2006, PG&E and the DTSC entered into a Corrective Action Consent Agreement to investigate and clean up releases of chemicals at the Power Plant. Eight “Areas of Concern” (AOCs) were identified as warranting further evaluation, all of which are located within the Project Site (excluding the northern part of AOC 1 and the majority of AOC 5) (Figure 4.7-2):

- AOC 1, Former Tank Farm, comprises six former aboveground storage tanks (ASTs), five of which stored “No. 6 fuel oil” and one stored “No. 2 fuel oil.” An oil/water separator unit and an “oil transfer pond” were also formerly located in AOC 1. Undifferentiated total petroleum hydrocarbons (TPH-u), middle distillate TPH (TPH-md) (comparative to diesel-range TPH), and residual TPH (TPH-r) (comparable to motor oil-range TPH) have been detected in soil at AOC 1 at concentrations up to 20,000 milligrams per kilogram (mg/kg), and the highest concentrations detected are correlated with the former AST footprints in the top 2 feet of soil at AOC 1. The portion of AOC 1 located on the Project Site is consistent with the boundaries of the BESS Site.
- AOC 2, Beach Valve Area, contained a former septic system leach field and a pipeline to deliver fuel to the ASTs in AOC 1.
- AOC 3, Fire House No. 1, formerly contained equipment with pumps and diesel fuel for Power Plant emergencies.
- AOC 4, Storage Area, is a less-than-1,000-square-foot area located adjacent to the lube storage area, hazardous waste storage building, and other storage buildings.
- AOC 5, Switchyard, is the 75-foot-wide section of the switchyard.
- AOC 6, Multi-Use Area, comprised buildings used in routine maintenance operations for the Power Plant, including painting and sandblasting.
- AOC 7, Power Building, comprises the Demolition Site and cannot be assessed for purposes of characterization until it is demolished and foundation is removed; soil samples have been collected immediately adjacent to the Power Building (within and adjacent to AOC 7) and “generally did not indicate the presence of TPH in soil at concentrations greater than commercial/industrial (2019 San Francisco Bay RWQCB Environmental Screening Levels [ESLs]).”
- AOC 8, Metal Cleaning Waste Ponds, was issued “clean closure”² by the DTSC in 2008 and was not evaluated as part of the 2020 Human Health Risk Assessment (HHRA).

² According to DTSC, “Clean closure means the owners [of a hazardous waste management site] remove all wastes from the [site] and decontaminate or remove equipment, structures, and contaminated soil” (DTSC 2022e).

Figure 4.7-2 Former Tank Farm and Areas of Concern 1 through 8



Source: Terraphase Engineering, 2022.

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The report indicates that polychlorinated biphenyls and asbestos were not screened as part of the HHRA “because they have not been detected in soil at the [Power Plant Property].” Site-specific soil screening levels (SSLs) were calculated for the selected contaminants of concern at the Project Site based on the most conservative scenarios for generic regulatory screening levels (i.e., residential and construction worker ESLs, residential DTSC Screening Levels, and residential USEPA Regional Screening Levels). According to the report, detected concentrations of constituents in soil at the Project Site exceeded the SSLs at the following AOCs and depths:

- TPH-u was detected above the SSL of 255 mg/kg in shallow soil (1 foot or less) in or adjacent to AOCs 1, 2, 4, 6, 7, and 8 and at 12 to 12.5 feet below ground surface (bgs) in AOC 3. The maximum concentration of TPH-u detected was 2,593 mg/kg.
- TPH-md was detected above the SSL of 255 mg/kg in shallow soil (1 foot or less) in or adjacent to AOCs 1, 5, and 7; at 4.5 to 6 feet bgs in AOC 5; and at 11 to 12 feet and 14 feet bgs in AOC 3. The maximum concentration of TPH-md detected was 18,000 mg/kg.
- TPH-r was detected above the SSL of 12,000 mg/kg at 1-foot bgs in AOC 1. The maximum concentration of TPH-r detected was 20,000 mg/kg.
- Arsenic was detected above the SSL of 7.54 mg/kg at depths ranging from 0.5-foot bgs to 14 feet bgs in AOCs 3 and 5, adjacent to AOC 7, and nearby to the southwest of AOC 8. The maximum concentration of arsenic detected was 24 mg/kg.
- Cobalt was detected above the SSL of 34.3 mg/kg in shallow soil (1 foot or less) in AOCs 1, 5, and 7 and nearby to AOCs 6, 7, and 8, in addition in AOC 1 at 5 feet bgs and 8.5 to 9 feet bgs. The maximum concentration of cobalt detected was 51 mg/kg.
- Hexavalent chromium was detected above the SSL of 0.3 mg/kg at depths ranging from 1 to 17 feet bgs in AOC 1, at 2.5 feet bgs adjacent to AOC 3, and at 1-foot bgs and 2.5 feet bgs nearby to the south of AOC 6. The maximum concentration of hexavalent chromium detected was 0.86 mg/kg.
- Lead was detected above the SSL of 80 mg/kg at depths of 0.5-to-1-foot bgs in AOC 1 and between AOC 6 and AOC 8, and at 4.5 to 5 feet bgs in AOC 5. The maximum concentration of lead detected was 120 mg/kg.
- Nickel was detected above the SSL of 216 mg/kg at 0.5-to-1-foot bgs and 3 to 3.5 feet bgs in AOC 1, and at depths ranging from 0.5 foot to 18 feet bgs nearby to AOCs 1, 3, 6, 7, and 8. The maximum concentration of nickel detected was 320 mg/kg.
- Thallium was detected above the SSL of 1 mg/kg at 1-foot bgs in AOC 1. The maximum concentration of thallium detected was 2 mg/kg.
- The polycyclic aromatic hydrocarbon (PAH) benzo(a)pyrene was detected above the SSL of 0.11 mg/kg in shallow soil (less than 1-foot bgs) in AOC 2 and adjacent to AOC 6. The maximum concentration of benzo(a)pyrene detected was 0.4 mg/kg.
- The PAH dibenz(a,h)anthracene was detected above the SSL of 0.028 mg/kg in shallow soil (less than 1 foot bgs) adjacent to AOC 6. The maximum concentration of dibenz(a,h)anthracene detected was 0.06 mg/kg.

The report indicates that the detected concentrations of volatile organic compounds and chlordane in soil at the Project Site were below their respective SSLs. PCBs were not detected in soil at the Project Site. The report also indicates that based on a data distribution/outlier evaluation for the detections of arsenic in soil borings located outside of AOC 1, “apart from the two outliers (detections above the SSL in soil borings located adjacent to AOC 7), all remaining non-Tank-Farm

soil arsenic data represent background soil conditions.” The two arsenic outliers are concluded to not be “indicative of soil contamination resulting from site activities.”

The report concludes that the findings of the HHRA “demonstrate that a Land Use Covenant (LUC) and a Soil Management Plan (SMP) may be needed for the Former Tank Farm area, but not for the entire AOC 1, which includes areas outside of the Former Tank Farm area (and outside of the Project Site)” and “a separate SMP may be needed for soil in AOC 7, depending on the results of future investigations” (Terraphase Engineering Inc. 2020).

DTSC approved the report in a letter dated July 16, 2020 and made a discretionary decision that “while AOC 1 will still need a LUC for soil within it, AOCs 2 through 4 and 6 will no longer need to be incorporated into the LUC for soil” (DTSC 2020a).

Responsiveness Summary to Draft Statement of Basis – Areas of Concern 1 Through 4 and 6, Morro Bay Power Plant (December 2020)

This report, prepared by the DTSC for AOCs 1 through 4 and 6 at the Power Plant, indicates the public-reviewed Statement of Basis recommended that a LUC be recorded to address TPH and arsenic in soil and groundwater at the Power Plant, which would restrict land and groundwater uses and would require a SMP and annual inspections. According to the report, the DTSC recommends that this proposed remedy be revised to require a LUC and SMP only for soil at AOC 1, and that “the other AOCs at the [Power Plant] will be appropriate for Corrective Action Complete without Controls determinations for soil” (DTSC 2020b).

Determination of Corrective Action Complete Without Controls Status for Soil at Areas of Concern 2, 3, 4, and 6 – Morro Bay Power Plant (April 2021)

This letter, prepared by the DTSC for AOCs 2 through 4 and 6 at the Power Plant Property, indicates that based on the DTSC’s assessment of existing documents, including the December 2020 Draft Responsiveness Summary (in which the DTSC indicated that “the Screening-Level HHRA concluded that the only AOC that requires a LUC for soil is AOC 1”), DTSC considered corrective action for AOCs 2 through 4 and 6 as “Corrective Action Complete without Controls” (DTSC 2021a).

Determination of Corrective Action Complete Without Controls Status for Groundwater at Areas of Concern 1 through 6, Soil at Portions of Areas of Concern 1 and 5 – Morro Bay Power Plant (October 2022)

This letter, prepared by the DTSC for AOCs 1 through 6 at the Power Plant Property, indicates that based on the DTSC’s assessment of existing documents, DTSC considered corrective action for groundwater at AOCs 1 through 6, soil at a portion of AOC 1, and soil at a portion of AOC 5, as “Corrective Action Complete without Controls” (DTSC 2022a).

Final Soil Management Plan – Former Tank Farm Area, MBPC-Owned Portion of the Former Morro Bay Power Plant (May 2021)

This report, prepared by Terraphase Engineering Inc. for the former tank farm portion of AOC 1 at the Power Plant, indicates that “in the event of future excavation and/or soil movement within the [former tank farm area], appropriate precautions and controls should be instituted to protect construction workers and the environment from exposure to residual concentrations of TPH in soil” (Terraphase Engineering Inc. 2021a). According to the report, “only diesel-range TPH concentrations at the [former tank farm area] pose a potential risk to construction workers.” The SMP outlines dust

and stormwater control measures to be performed during soil-disturbing activities, the management and storage of excavated soil, excavated soil reuse within the former tank farm area, excavated soil characterization and profiling for offsite disposal, waste transport and disposal, project personnel training requirements, and annual reporting for years during which soil-disturbing activities occur at the former tank farm area.

Final Screening-Level Human Health Risk Assessment Report for Groundwater – MBPC-Owned Portion of the Former Morro Bay Power Plant (June 2021)

This report, prepared for the Project Site, indicates that previous investigations conducted at the Power Plant “identified the presence of petroleum hydrocarbons and arsenic in groundwater in select wells” and that “the Former Tank Farm in AOC 1 has been identified as the primary source of petroleum hydrocarbons in [Project Site] soil and groundwater” (Terraphase Engineering Inc. 2021b). According to the report, groundwater sampling was conducted at the Project Site between 1984 and 2018 and all 22 groundwater monitoring wells on the Project Site were destroyed in July 2020 after approval from the DTSC. During the most recent groundwater sampling event in May 2018, TPH was detected at concentrations ranging from 22 to 1,400 micrograms per liter (µg/L) of diesel-range TPH and 58 to 1,100 µg/L of motor oil-range TPH in five groundwater monitoring wells located in the southwestern portion of the Project Site, within AOC 1, AOC 2, and adjacent to AOC 3 and AOC 7. The report also indicates that “between 2011 and 2018, there were sporadic, very low detections of arsenic in some [groundwater monitoring] wells” and because the detected concentrations of arsenic in the three groundwater monitoring wells that previously had detections above the SSL were below the SSL during the May 2018 groundwater sampling event, and no other metals exceeded SSLs in groundwater during the May 2018 groundwater sampling event, “the potential significance of potable use exposure to metals in groundwater has not been evaluated in this Screening Level HHRA” (Terraphase Engineering Inc. 2021b). The report concluded that a LUC was not warranted for groundwater use at the Project Site to protect human health based on several reasons, including that the calculated exposure concentrations for diesel- and motor oil-range TPH are “highly conservative,” and the use of shallow groundwater at the Project Site for water supply is impractical and inconsistent with state and local regulations.

DTSC approved the report in a letter dated August 25, 2021, which also indicated that Power Plant “groundwater will not need to be incorporated into the proposed LUC to be recorded for a portion of AOC 1” and that “DTSC is determining that since [Power Plant] groundwater meets potable and non-potable groundwater use, No Further Action is necessary for [Power Plant] groundwater” (DTSC 2021b).

Responsiveness Summary to Draft Revised Statement of Basis – Areas of Concern 1 Through 4 and 6, Morro Bay Power Plant (June 2022)

This report, prepared by the DTSC for AOCs 1 through 4 and 6 at the Power Plant, indicates the public-reviewed, revised Statement of Basis proposed implementation of a LUC that restricts the former tank farm portion of AOC 1 soil to future commercial/industrial use, establishment of a SMP for the safe handling and disposal of contaminated soil, and a requirement of annual inspections and reporting to ensure compliance with the LUC (DTSC 2022b).

DTSC approved the report in a letter dated June 21, 2022, which also indicated that “the rest of AOC 1 (i.e., portion of AOC outside of the former tank farm) and AOCs 2 through 6 were determined to be appropriate for unrestricted/residential use of both soil and groundwater” (DTSC 2022c).

The current regulatory status of the AOCs discussed above is summarized in Table 4.7-1.

Table 4.7-1 Current Status of AOCs

Area of Concern	Description	Current Status
AOC 1	Former Tank Farm	Former tank farm portion (within the Project Site and consistent with the BESS Site) requires a LUC for commercial/industrial use only and a SMP. Remainder (outside of the Project Site) was given a determination of No Further Action and unrestricted/residential land use.
AOC 2	Beach Valve Area	Given a determination of No Further Action and unrestricted/residential land use by DTSC.
AOC 3	Fire House No. 1	Given a determination of No Further Action and unrestricted/residential land use by DTSC.
AOC 4	Storage Area	Given a determination of No Further Action and unrestricted/residential land use by DTSC.
AOC 5	Switchyard	Portion on the Project Site only given a determination of No Further Action and unrestricted/residential land use by DTSC.
AOC 6	Multi-Use Area	Given a determination of No Further Action and unrestricted/residential land use by DTSC.
AOC 7	Power Plant Building Site	Has not been assessed due to the presence of the power plant building. ¹

¹ Will need to be assessed after demolition of the power plant building/stacks and/or in connection with future redevelopment to receive a No Further Action determination from DTSC.

Adjacent Release Sites

A review of the SWRCB online GeoTracker database and the DTSC online EnviroStor database indicates that one adjacent property is associated with a known release case: the Morro Bay Amphibious Training Site, a Formerly Used Defense Sites (FUDS) case with oversight by the DTSC and an “inactive: needs evaluation” status as of July 1, 2005. That case is mapped as located adjacent to the southwest of the Project Site (DTSC 2022a). The potential contaminants of concern are listed as explosives (unexploded ordnance, and munitions and explosives of concern). No case documents or other information is available on EnviroStor. A FUDS Program Management Action Plan report available on the United States Army Corps of Engineers’ online FUDS database indicates that small arms and high-explosive magazines were stored at this amphibious training base during its operation in the 1940s; however, “no reports were found of ordnance left on this site” (United States Army Corps of Engineers 2019).

d. Project Site Land Use Restrictions

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

PG&E Deed Restriction

In connection with the subsequent sale of the property to Duke Energy in 1997, PG&E imposed a deed restriction across much of the approximately 95-acre Power Plant Property, including the entire Project Site. That deed restriction prohibits developing portions of the Power Plant Property (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. Figure 4.7-2 shows the location of these restrictions on the Power Plant Property.

DTSC Land Use Restriction

In 2006, PG&E entered into a Corrective Action Consent Agreement with DTSC to address areas of the Power Plant Property 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 Property. This report, prepared by the DTSC for five AOCs at the Power Plant, indicates the public-reviewed Statement of Basis recommended that a LUC³ be recorded to address TPH and arsenic in soil and groundwater at the Power Plant, which would restrict land and groundwater uses and would require a SMP and annual inspections. In the Revised Statement of Basis, DTSC recommends that this proposed remedy be revised to require a LUC and SMP only for soil at AOC 1, and that “the other AOCs at the [Power Plant] will be appropriate for Corrective Action Complete without Controls determinations for soil” (DTSC 2020b).⁴ The SMP was prepared in May 2021 and the final LUC was recorded in July 2022. The LUC restricts future land uses in the former tank farm area of AOC 1 and the entirety of the 24-acre BESS Site to commercial/industrial uses and prohibits future development of the property for permanent or temporary lodging, school, day care centers, recreation, or hospital uses. Figure 4.7-2 shows the location of these restrictions on the Power Plant Property. The current regulatory status of the AOCs discussed above is summarized in Table 4.7-1.

e. Asbestos-Containing Materials and Lead-Based Paint

Asbestos surveys conducted at the Project Site in 2014 and 2019 indicated the presence of asbestos containing materials (ACM) in the power plant building. The power plant building is also assumed to include lead-based paint. Asbestos fibers are very strong and heat resistant. When broken apart, such as during demolition and construction activities, microscopic asbestos particles may become airborne and pose a threat to human health. Inhalation of asbestos fibers can lead to various health problems, the most serious of which include lung cancer. Adults exposed to lead paint can suffer from high blood pressure, headaches, dizziness, diminished motor skills, fatigue and memory loss.

f. Coastal Hazards

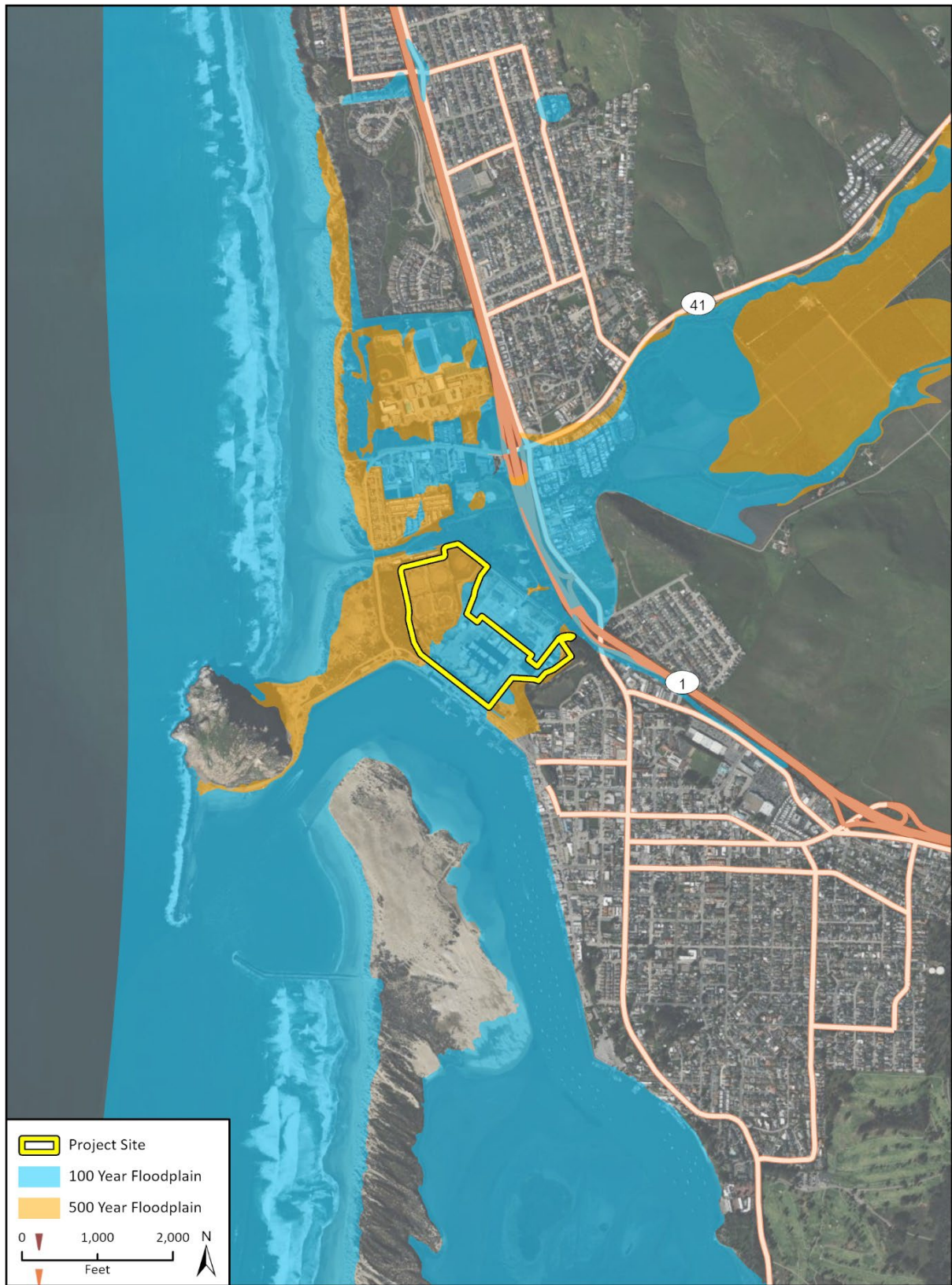
Coastal hazards in Morro Bay pose a threat due to risk of coastal flooding. Coastal flooding has occurred on occasion in the past and strong storm events may become more frequent and/or more severe in Morro Bay (Oskin 2014). The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards as part of the National Flood Insurance Program. FEMA identifies flood hazard risks through its Flood Insurance Rate Map (FIRM) program. Higher flood risk zones are called Special Flood Hazard Areas; these areas have a 1 percent chance or greater of flooding in any given year (also called the 100-year flood). Figure 4.7-3 shows the portions of the planning area that are located within the 100-year and 500-year FEMA designated flood hazard zones.

Additional flood hazards are posed by tsunamis and seiches. A tsunami is a wave generated by the sudden displacement of a large amount of water. Tsunamis can be triggered by earthquakes, volcanic eruptions, or similar events that occur under the water or the shore. Impacts of tsunamis can be both immediate and long-term. Seiches are a related hazard that can occur when a sudden displacement event or very strong winds happen in an enclosed or semi-enclosed body of water such as a lake or bay. While tsunamis are relatively rare, they pose risks to the entire waterfront commercial area and other low-lying areas of the City.

³ According to DTSC, “LUCs are used when DTSC has determined that it is safe to leave specific types of contamination at a property as long as defined restrictions are adhered to” (DTSC 2022d).

⁴ A “Corrective Action Complete without Controls” determination indicates that the DTSC has determined that institutional or engineering controls are not required for corrective action at a hazardous materials/waste release site to be considered complete.

Figure 4.7-3 Base Flood Elevations



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Floodplain data provided by FEMA, 2021.

Geology Hazards Figures
Base Flood Elevations

These risks are generally greater in the northern portion of Morro Bay, which is directly exposed to the ocean and is not protected by the bay and sandspit. Some residential neighborhoods in northern Morro Bay near Beachcomber Street lie within the tsunami inundation zone. Figure 4.7-4 shows the potential tsunami inundation zone in Morro Bay.

4.7.2 Regulatory Setting

a. Federal Regulations

United States Environmental Protection Agency (USEPA)

USEPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR). Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 United States Code [USC] Section 6901 et seq.);
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC Section 9601 et seq.);
- Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99 499); and
- Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (40 CFR 370).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. USEPA provides oversight and supervision for federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

The Resource Conservation and Recovery Act of 1976

This act established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

The Comprehensive Environmental Response, Compensation and Liability Act, amended by the Superfund Amendments and Reauthorization Act

This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Among other things, CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled revision of the National Contingency Plan (NCP), which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List (NPL).

Figure 4.7-4 Tsunami Inundation Zones



Imagery provided by Microsoft Bing and its licensors © 2022.
Tsunami data provided by California Geological Survey, 2021.

Geology Hazards Figures
Tsunami Hazard Area

Emergency Planning and Community Right-to-Know Act

Emergency Planning and Community Right-to-Know Act (EPCRA) act, authorized by SARA Title III, was passed in 1986 and established requirements for federal, state, and local governments, tribes, and industry with regard to emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. These provisions are designed to help increase the public’s knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. EPCRA is implemented by state requirements to appoint a State Emergency Response Commission (SERC), which are required to divide their state into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. EPCRA Sections 311 and 312 contain emergency and hazardous chemical inventory reporting requirements, including maintenance of safety data sheets for hazardous chemicals used or stored at a facility and annual submittal of hazardous chemicals to the local fire department, SERC, and LEPC.

Occupational Safety and Health Act

The Occupational Safety and Health Act of 1970 (OSHA), which is implemented by the federal Occupational Safety and Health Administration, contains provisions with respect to hazardous materials handling. OSHA was created to assure safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. OSHA provides standards for general industry and construction industry on hazardous waste operations and emergency responses. OSHA requirements, as set forth in 29 CFR 1910, et. seq., are designed to promote worker safety, worker training, and a worker’s right-to-know. The United States Department of Labor has delegated the authority to administer OSHA regulations to the State of California. The California OSHA program (Cal/OSHA) (codified in CCR Title 8 generally and in the Labor Code Sections 6300-6719) is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA is very similar to the OSHA program. Among other provisions, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program for potential workplace hazards, including those associated with hazardous materials.

In addition, pursuant to OSHA, a developer that undertakes a construction project that involves the handling of contaminated site conditions must prepare and implement a Health and Safety Plan (HASP) that sets forth the measures that would be undertaken to protect those that may be affected by the construction project. While a HASP is prepared and implemented pursuant to OSHA, the HASP is not subject to regulatory review and approval, although a HASP is typically appended to a Site Management Plan if this document is required by the Certified Unified Program Agency (CUPA), which is the San Luis Obispo County Environmental Health Services Division (EHS). HASPs must comply with the most current OSHA regulations, including 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response and 29 CFR 1926, Construction Industry Standards, as well as other applicable federal, State, and local laws and regulations.

Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations

Regulations for lead-based paint (LBP) are contained in the Lead-Based Paint Elimination Final Rule 24 CFR 33, governed by the United States Department of Housing and Urban Development (HUD), which requires sellers and lessors to disclose known LBP and LBP hazards to prospective purchasers and lessees. Additionally, all LBP abatement activities must comply with California and federal OSHA and with the State of California Department of Health Services requirements. Only LBP-trained and -certified abatement personnel are allowed to perform abatement activities. All LBP removed from

structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

Toxic Substances Control Act

In 1976, the Toxic Substances Control Act (TSCA) (15 USC Sections 2601–2671) established a system of evaluation in order to identify chemicals which may pose hazards. TSCA is enforced by the USEPA through inspections of places in which regulated chemicals such as ACM are manufactured, processed, and stored and through the assessment of administrative and civil penalties and fines, as well as injunctions against violators. TSCA establishes a process by which public exposure to hazards may be reduced through manufacturing, distribution, use and disposal restrictions or labeling of products. PCBs are hazardous materials regulated by the USEPA under the TSCA. These regulations ban the manufacture of PCBs although the continued use of existing PCB-containing equipment is allowed. PCBs were formerly used in applications such as hydraulic fluids, plasticizers, adhesives, fire retardants, and electrical transformers, among others. TSCA also contains provisions controlling the continued use and disposal of existing PCB-containing equipment. The disposal of PCB wastes is also regulated by TSCA (40 CFR 761), which contains life cycle provisions similar to those in RCRA. In addition to TSCA, provisions relating to PCBs are contained in the Hazardous Waste Control Law, which lists PCBs as hazardous waste.

Under TSCA, the USEPA has enacted strict requirements on the use, handling, and disposal of ACMs. These regulations include the phasing out of friable asbestos and ACMs in new construction materials beginning in 1979. In 1989, the USEPA banned most uses of asbestos in the country. Although most of the ban was overturned in 1991, the current banned product categories include corrugated paper, rollboard, commercial paper, specialty paper, flooring felt, and any new uses. TSCA also establishes USEPA's Lead Abatement Program regulations, which provide a framework for lead abatement, risk assessment, and inspections. Those performing these services are required to be trained and certified by USEPA.

Hazardous Materials Transportation Act

The United States Department of Transportation (USDOT) prescribes strict regulations for the safe transportation of hazardous materials, including requirements for hazardous waste containers and licensed haulers who transport hazardous waste on public roads. The Secretary of the USDOT receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 USC Section 5101 et seq. The Secretary of Transportation is authorized to issue regulations to implement the requirements of 49 USC. The Pipeline and Hazardous Materials Safety Administration, formerly the Research and Special Provisions Administration, was delegated the responsibility to write the hazardous materials regulations, which are contained in Title 49 CFR Parts 100-180 (USDOT 2021). Title 49 of the CFR, which contains the regulations set forth by the HMTA, specifies requirements and regulations with respect to the transport of hazardous materials. It requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Under the HMTA, the Secretary of Transportation "may authorize any officer, employee, or agent to enter upon, inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties relate to: (1) the manufacture, fabrication, marking, maintenance, reconditioning, repair, testing, or distribution of packages or containers for use by any "person" in the

transportation of hazardous materials in commerce; or (2) the transportation or shipment by any "person" of hazardous materials in commerce."

Other Hazardous Materials Regulations

In addition to the USDOT regulations for the safe transportation of hazardous materials, other applicable federal laws that also address hazardous materials include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act

b. State Regulations

The primary State agencies with jurisdiction over hazardous chemical materials management are DTSC and the SWRCB. Other state agencies involved in hazardous materials management include Cal/OSHA and the California Office of Emergency Services (CalOES).

Authority for the statewide administration and enforcement of RCRA rests with DTSC. While DTSC has primary state responsibility in regulating the generation, storage, and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, DTSC is responsible and/or provides oversight for contamination cleanup and administers statewide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) manage the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The storage of hazardous materials in underground storage tanks (USTs) is regulated by the SWRCB, which delegates authority to the RWQCB on the regional level, and typically to the local fire department on the local level.

The Cal/OSHA program is administered and enforced by the DOSH. Cal/OSHA is very similar to the federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The CalOES Hazardous Materials section under the Fire and Rescue Division coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the Hazardous Materials section staff is called upon to provide state and local emergency managers with emergency coordination and technical assistance.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the SWRCB, and the California Department of Resources, Recycling, and Recovery to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Secretary for Environmental Protection consolidates the information submitted by these agencies and distributes it to each city and county where sites on the lists are located. Before a lead agency accepts an application for any development project as complete, an applicant must consult these lists to determine if the site at issue is included.

California Hazardous Materials Release Response Plans and Inventory Law

The Hazardous Materials Release Response Plans and Inventory Act of 1985, also known as the Business Plan Act, requires the preparation of hazardous materials business plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures for businesses that handle, store, or transport hazardous materials in amounts exceeding specified minimums (California Health and Safety Code [HSC], Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State. Local agencies are responsible for administering these regulations.

Several State agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and the California Emergency Management Agency. The California Highway Patrol and California Department of Transportation (Caltrans) enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways.

Hazardous Waste Control Act

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (HSC Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. This State program is similar to, but more stringent than, the federal program under RCRA. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. In addition, as required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State, which is generally referenced by CalEPA as the “Cortese List”.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria in CCR Title 22. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

California Hazardous Material Management Act

The Hazardous Material Management Act (HMMA) requires that businesses handling or storing certain amounts of hazardous materials in amounts exceeding specified minimums (HSC Division 20, Chapter 6.95, Article 1) prepare a Hazardous Materials Business Emergency Plan (HMBEP), which includes an inventory of hazardous materials handled onsite, plans showing where hazardous materials are stored, an emergency response plan, and an employee training program. An HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and State community right-to-know laws and to provide detailed information for use by emergency responders.

A HMBEP must be prepared prior to facility operation. In addition, any business subject to HMBEP requirements is also required to certify the inventory of hazardous materials handled at the business every year. Businesses are also required to review their HMBEP at least once every three years to determine if a revision is necessary. Once the review has been conducted, the business must certify in writing to the local implementing agency that a review has been completed and necessary changes were made.

Underground Storage Tanks Program

The State regulates USTs through a program pursuant to HSC, Division 20, Chapter 6.7, and CCR Title 23, Division 3, Chapter 16 and Chapter 18. The State's UST program regulations include among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the SWRCB which has delegated authority to the RWQCB and typically on the local level, to the fire department. EHS administers and enforces federal and State laws and local ordinances for USTs in San Luis Obispo County. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by EHS inspectors. If a release affecting groundwater is documented, the project file is transferred to the appropriate RWQCB for oversight.

Aboveground Petroleum Storage Act

In 1989, California established the Aboveground Petroleum Storage Act instituting a regulatory program covering ASTs containing specified petroleum products (HSC Sections 25270–25270.13). The Aboveground Petroleum Storage Act applies to facilities with storage capacities of 10,000 gallons or more or are subject to oil pollution prevention and response requirements under 40 CFR Part 112. Under the Aboveground Petroleum Storage Act, each owner or operator of a regulated AST facility must file biennially a storage statement with the SWRCB disclosing the name and address of the AST facility; the contact person for the facility; and the location, size, age, and contents of each AST that exceeds 10,000 gallons in capacity and that holds materials that are at least five percent petroleum. In addition, each owner or operator of a regulated AST must prepare a Spill Prevention Control and Countermeasure Plan (SPCC) in accordance with federal and State requirements (40 CFR Part 112 and HSC Section 25270.5[c]). The responsibility for inspecting ASTs and ensuring that SPCCs have been prepared lies with the RWQCBs.

Lead-Based Paint Regulations

The United States Consumer Product Safety Commission (16 CFR 1303) banned paint containing more than 0.06 percent lead for residential use in 1978. The demolition of buildings containing LBP is subject to a comprehensive set of California regulatory requirements that are designed to assure the safe handling and disposal of these materials. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes, which provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead, particularly since demolition workers are at greatest risk of adverse exposure. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California HSC.

California Occupational Safety and Health Act

The California Occupational Safety and Health Act of 1973 addresses California employee working conditions, enables the enforcement of workplace standards, and provides for advancements in the field of occupational health and safety (California Labor Code, Section 6300 et seq). The Act also created Cal/OSHA, the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA's standards are generally more stringent than federal regulations. Under the Cal/OSHA standards, the employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure. The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. At sites known or suspected to be contaminated by hazardous materials, workers must have training in hazardous materials operations and a Site Health and Safety Plan must be prepared. The Health and Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

Cal/OSHA is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials (CCR Title 8, Section 1529). Among other requirements, Cal/OSHA requires entities handling specified amounts of certain hazardous chemicals to prepare injury and illness prevention plans, chemical hygiene plans, and emergency response plans to respond to accidental spills, and provides specific regulations to limit exposure of construction workers to lead.

Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (HSC Section 25249.5, et seq.), commonly known as Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or deleterious reproductive effects in humans. It also restricts the discharges of listed chemicals into known drinking water sources above the regulatory levels of concern, requires public notification of any unauthorized discharge of hazardous waste, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

California Water Code

The California Water Code (CWC) authorizes the SWRCB to implement provisions of the Clean Water Act, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. Groundwater may be encountered during deeper excavations for the subterranean parking structure, building foundations, or other subterranean building components. Under the CWC, discharges of any such groundwater to surface waters, or any point sources hydrologically connected to surface waters, such as storm drains, is prohibited unless conducted in compliance with a Waste Discharge Requirement permit. In addition to the CWC, these permits implement and are in compliance with the federal Clean Water Act's NPDES program.

California Fire Code (2022)

The California Fire Code is based on the 2018 International Fire Code. The California Fire Code establishes the minimum requirements consistent with nationally recognized best practices to safeguard the public health, safety, and general welfare for the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The

provisions of this code apply to the construction, alteration, movement enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

Uniform Fire Code

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to HSC Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

- Separation of incompatible materials with a noncombustible partition;
- Spill control in all storage, handling, and dispensing areas; and
- Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill.

State Emergency Plan

The foundation of California's emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to use within their jurisdiction, and outside their area. These plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the "California Emergency Services Act," states that "the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." The California Emergency Services Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the Act are further reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California's Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies (California Emergency Management Agency [CalEMA]⁵ 2009). The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement (MMAA), existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state

⁵ California Emergency Management Agency is now called CalOES.

disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and state. CalOES divides the state into several mutual aid regions. The City of Morro Bay is located in Mutual Aid Region I, which includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange Counties (CalEMA 2020).

c. Local Regulations

Certified Unified Program Agency

The primary local agency with responsibility for implementing federal and State laws and regulations pertaining to hazardous materials management is the San Luis Obispo County Environmental Health Services (EHS). EHS is the CUPA for San Luis Obispo County. A CUPA is a local agency that has been certified by CalEPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California HSC made by Senate Bill 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory (Business Plans);
- California Accidental Release Prevention (CalARP);
- Hazardous Waste (including Tiered Permitting);
- USTs;
- ASTs (SPCC requirements); and
- UFC Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS).

As the CUPA for San Luis Obispo County, EHS maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. By designating a CUPA, San Luis Obispo County has accurate and adequate information to plan for emergencies and/or disasters and to plan for public and firefighter safety.

In addition, EHS, in their role as the CUPA, also oversees and addresses issues relating to the presence and handling of contaminated soils that may be present at sites within San Luis Obispo County. Any such hazardous materials that may be encountered would be managed (using tools, such as a SMP) in accordance with all relevant and applicable federal, State, and local laws and regulations that pertain to the use, storage, transportation and disposal of hazardous materials and waste. In addition, EHS may consult with other agencies (e.g., DTSC and the Central Coast RWQCB) if the nature of the contamination warrants the involvement of these agencies.

The Household Hazardous Waste Disposal program of the CUPA is implemented by the San Luis Obispo County Integrated Waste Management Authority.

Plan Morro Bay

Plan Morro Bay is the City's General Plan/Local Coastal Program (LCP) and Coastal Land Use Plan, and it provides direction and resources intended to mitigate death, injuries, and environmental and economic damage. Coastal Act Section 30253 provides, in part, that new development minimize risks to life and property in areas of high geologic, flood, and fire hazards and neither create nor contribute significantly to erosion, geologic instability, or destruction of natural landforms along bluffs and cliffs. In response to this requirement LCPs require that safety and stability be assured for

the life of new coastal development. The Public Safety Element addresses coastal hazards. Goal PS-2 states, “Damage from natural disasters is minimized and repaired quickly.” Goal PS-2 states, “Damage from natural disasters is minimized and repaired quickly.” Policies PS-3.6 through PS-3.11 require new developments to incorporate design elements that address coastal hazards associated with natural disasters and climate change.

Morro Bay Local Hazard Mitigation Plan

The City developed its own Local Hazard Mitigation Plan (LHMP) in 2006, which was most recently updated in 2019. The LHMP is a plan to improve resiliency for the community by identifying natural hazards present in Morro Bay, determining the community’s vulnerability to each hazard, and identifying development mitigation strategies to reduce vulnerability before emergency situations develop. Although the LHMP is meant to be a multi-hazard plan, its primary function is to address mitigation for natural hazards and other environmentally related, human caused events or incidents (City of Morro Bay 2019). The LHMP identifies earthquakes (including fault rupture and liquefaction), floods, landslides, and hazardous materials releases as the most significant hazards present in the community and contains nine goals to improve resiliency to these hazards (City of Morro Bay 2019). One of the main goals of the LHMP is to speed recovery and redevelopment following future disaster events. The LHMP incorporates applicable operations, plans, hazard mitigation ordinances, regulations, and plans. The LHMP coordinates activities between agencies, provides safety information, and establishes training and exercise goals related to emergency management. The City’s LHMP is part of the County of San Luis Obispo’s Multi-Jurisdictional LHMP.

Morro Bay Multi-Hazard Emergency Response Plan

The City has adopted a Multi-Hazard Emergency Response Plan, most recently revised in 2008 and developed by the Morro Bay Fire Department (MBFD). The Emergency Response Plan covers City policies and concepts for responding to any and all emergencies that could affect the health, safety, and property of the public within City limits, including earthquakes, hazardous materials, multi-casualty events, storms and floods, wildland fires, terrorism, nuclear power plant events, and tsunamis (City of Morro Bay 2008). Most of the hazards in the response plan are also contained in the LHMP. The policies and general approach to emergency situations delineated in the Response Plan follow a number of widely adopted emergency response standards and operations protocols, including the National Incident Management System, the State Emergency Management System, and the Incident Command System.

4.7.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under the General Plan and LCP Update to create a significant hazard to the public or environment due to the use, transport, or disposal of hazardous materials and existing site contamination, as well as the potential for future development in flood hazards, tsunami, or seiche zones to risk the release of pollutants due to project inundation. In addition, the 2021 Final EIR discussed the potential for future development in Morro Bay to physically impair emergency response and evacuation plans.

The 2021 Final EIR concluded that, while implementation of the General Plan and LCP Update could result in an incremental increase in the routine use, storage, and disposal of hazardous materials and increased risk of release of hazardous materials, compliance with existing regulations and implementation of the General Plan and LCP goals and policies would minimize such risks.

Specifically, Goal PS-4 of the Public Safety Element states, “Response to emergencies is quick, efficient, and effective” and Policies PS-4.1 through PS-4.5 include requirements such as regular updates to the City’s Emergency Response Plans, establishing and enforcing hazardous water transport routes to avoid sensitive land uses, requiring safety measures for businesses that use, store and transport hazardous materials, and interagency cooperation to ensure that contaminated sites are addressed in accordance with the requirements of federal and state regulatory requirements. The 2021 Final EIR determined that these policies, as well as compliance with existing regulations and requirements governing hazardous materials and contamination, would minimize the potential for implementation of the General Plan and LCP Update to result in significant impacts.

The 2021 Final EIR also determined that population growth and increased development in the City could impact evacuation routes and increase the number of residents susceptible to hazards, particularly coastal hazards such as flooding and tsunamis. However, the 2021 Final EIR concluded that such impacts would be less than significant with implementation of Goal PS-4 and policies PS-4.1 through PS-4.5 and Policies PS-4.6 and PS-5.7, which direct the City to increase resiliency hubs and require resiliency features for new and remodeled buildings to provide access to water, electricity, and heating in the event of an emergency. The 2021 Final EIR concluded that MBFD review of new development applications for adequate emergency access and evacuation routes, in addition to implementation of the General Plan and LCP Update Public Safety Element policies discussed above, would ensure adequate emergency response. Likewise, Plan Morro Bay contains Goal PS-2 and Policies PS-2.2 and PS-2.8 through PS-2.13 that would ensure that new development is properly designed in accordance with California Building Code (CBC) requirements and is constructed such that exposure to and risk of pollutant release due to seiche, tsunami, or flooding is not exacerbated as a result of the General Plan and LCP Update.

4.7.4 Impact Analysis

a. Methodology

This impact analysis is based on the existing conditions of the Project Site and vicinity, including locations of hazardous materials use and storage, existing contaminated sites, hydrogeologic hazards, and emergency response and evacuation plan requirements, as described under Section 4.7.1, *Setting*. This analysis identifies potential impacts based on the predicted interaction between the affected physical environment and construction, operation, and maintenance activities related to the project. This section describes impacts in terms of location, context, duration, and intensity, based on the findings of the April 2023 Hazardous Materials Technical Study (Appendix I) and the April 2023 Geologic and Soils Hazards Evaluation Report (Appendix F).

Hazardous Materials

The purpose of the Hazardous Materials Technical Study is to provide a preliminary evaluation of the potential for environmental effects from hazardous materials and hazardous wastes for the project as a result of past or current activities in the area. The Hazardous Materials Technical Study documents areas of potential environmental concern within the Project Site, which have or may have been impacted by hazardous materials or wastes, and identifies environmental concerns that have the potential to impact the operation or construction of the project. The hazardous materials analysis conducted as part of the Hazardous Materials Technical Study included review of the following data sources:

- Project Site environmental documents provided by the Project Applicant.
- SWRCB GeoTracker website and DTSC EnviroStor website to identify known onsite and adjacent releases (including Cortese sites).
- Agency records regarding the onsite and adjacent release sites.
- California Department of Resources, Recycling, and Recovery (CalRecycle) Solid Waste Information System (SWIS) website for data on solid waste landfills near the Project Site.
- California Geologic Energy Management Division (CalGEM) website for data on oil and gas wells and oil fields near the Project Site.
- USDOT, Pipeline and Hazardous Materials Safety Administration (PHMSA) and National Pipeline Mapping System (NPMS) website for data on buried hazardous material pipelines near the Project Site.
- Per- and polyfluoroalkyl substances investigations near the Project Site using the SWRCB website.
- Reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps) to assess the historical land use of the Project Site and adjacent properties.
- Airports and educational facilities in the vicinity of the Project Site.
- Demolition surveys for ACM and LBP provided by the Project Applicant.

Hydrogeologic Hazards

To identify and assess hydrogeologic hazards, Rincon's geologists reviewed previous investigative studies, as well as publicly available information, including maps, online databases, articles, reports, and published research papers. Information sources used in this analysis include, but are not limited to, the following:

- U.S. Geological Survey (USGS) topographic maps
- Landslide and tsunami hazard maps
- Natural Resources Conservation Services soils maps
- FEMA flood maps
- Safety Elements of the General Plans for the County of San Luis Obispo and the City of Morro Bay
- County of San Luis Obispo's Department of Planning and Building Land Use View interactive map application

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the California Environmental Quality Act *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant effect on the environment if it would do any of the following:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

Morro Bay Battery Energy Storage System Project

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Because the Project Site is not located within one-quarter mile of a school (Threshold 3), within an airport land use plan or within two miles of a public airport or public use airport (Threshold 5), a discussion of these effects is not included in this section. Because the Project Site is not within the vicinity of a very high fire hazard severity zone, the project is not at significant risk of wildland fires and would not expose people or structures to significant risk of loss, injury, or death involving wildland fires (Threshold 7), a discussion of wildland fires is not included in this section. These topics are briefly discussed in Section 4.10, *Effects Found Not to be Significant*.

In addition to these thresholds of significance, hazards associated with tsunamis, seiches, and floods described in Appendix G of the *CEQA Guidelines* are also addressed in this section. Accordingly, implementation of the Morro Bay Battery Energy Storage System Project may have a significant adverse impact related to hydrology and water quality if it would:

8. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

For the purpose of the impact analysis in this section, “potentially significant impacts” are physical changes to the environment that would result in the loss or degradation of public health and safety or conflict with local, State, or federal agency regulations. The discussion and analysis of potential hazards, hazardous materials, and hydrogeological impacts that follows is based on the results of previous investigative studies. Supplementary information on local and on-site hazards and hazardous materials conditions was obtained through review of maps, online databases, articles, reports, and published research papers as described in the April 2023 Hazardous Materials Technical Study (Appendix I) and the April 2023 Geologic and Soils Hazards Evaluation Report (Appendix F).

c. Project Impacts and Mitigation Measures

- Threshold 1:** Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Threshold 2:** Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact HAZ-1 CONSTRUCTION AND OPERATION OF THE BESS FACILITY, DEMOLITION OF THE MORRO BAY POWER PLANT BUILDING AND STACKS, AND FUTURE LAND USES DEVELOPED UNDER THE MASTER PLAN WOULD INCLUDE ROUTINE TRANSPORT, USE, STORAGE, AND DISPOSAL OF HAZARDOUS MATERIALS. COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, STANDARDS, AND GUIDELINES RELATED TO THE HANDLING, TRANSPORT, DISPOSAL, AND STORAGE OF HAZARDOUS MATERIALS WOULD MINIMIZE THE RISK OF PUBLIC EXPOSURE TO THESE SUBSTANCES AND REDUCE THE RISK OF SIGNIFICANT HAZARDS TO THE PUBLIC OR THE ENVIRONMENT FROM HAZARDOUS MATERIALS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition

Asbestos surveys conducted at the Project Site in 2014 and 2019 indicated the presence of ACM in the Morro Bay Power Plant building (AOC 7; Demolition Site). There is also the potential for LBP and other hazardous materials to be present in Demolition Site building materials. Due to the presence of ACM and the potential for LBP, demolition of the power plant building and stacks has the potential to release LBP dust and asbestos fibers into the atmosphere if not remediated prior to demolition, exposing workers and the community to health hazards. In addition, demolition of these structures has the potential to release other toxic constituents in building components, including PCBs from electrical and other components. Demolition activities may also include temporary storage or transport of these hazardous materials.

In California, any facility known to contain ACMs is required to have a written asbestos management plan (also known as an Operations and Maintenance Program). The San Luis Obispo Air Pollution Control District (SLOAPCD) enforces Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), which regulate the control of asbestos during the renovation and demolition of buildings under the federal Clean Air Act (SLOAPCD 2022). The federal Clean Air Act requires a thorough inspection for asbestos where demolition will occur and specifies work practices to control emissions, such as removing all asbestos-containing materials, wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expeditiously as practicable (USEPA 2022).

Similarly, the removal of LBP containing materials would be subject to specific and detailed Cal/OSHA requirements to ensure proper containment, handling, notification, and monitoring, and removal would be performed by a licensed LBP abatement contractor. CCR Title 8, Section 1532.1 requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed Cal/OSHA standards. Under this rule, construction workers may not be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an eight-hour period and exposure must be reduced to lower concentrations if the workday exceeds eight hours. CCR Title 8, Section 1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers. Similarly, federal and State regulations would apply

to handling of LBP and PCBs (e.g., 40 CFR, CCR Title 22, TSCA, and HMTA, described in Section 4.7.2, *Regulatory Setting*, above).

All regulated materials would be required to be removed from the Demolition Site prior to demolition. Additionally, the City would require, as a standard Condition of Approval for the project, that the Project Applicant prepare a Demolition Materials Management Plan for review and approval by the Fire Chief, Police Chief, Harbor Director, and the Community Development Director. The Demolition Materials Management Plan would describe project-specific asbestos and lead abatement activities to be completed in accordance with the requirements of the applicable regulating agencies, such as the local CUPA and SLOAPCD, and would require approval from the City prior to issuance of a demolition permit. The Demolition Materials Management Plan would be required to be used by the Project Construction Manager for verification that demolition activities are followed consistent with federal and State regulations regarding abatement of asbestos, lead paint, and other hazardous materials.

Compliance with FCCA and Cal/OSHA requirements to ensure proper training, containment, handling, notification, and disposal of ACM and LPB would ensure that impacts associated with ACM, LBPs and other lead-containing materials, or PCBs would be less than significant.

BESS Facility Construction and Future Decommissioning

Construction of the BESS Facility and future BESS Facility decommissioning activities may involve the routine use, storage, and disposal of hazardous materials, such as construction equipment fuels and lubricants. During project construction and future decommissioning, accidental conditions could occur as a result of any of the following: direct dermal contact with hazardous materials, incidental ingestion of hazardous materials, or inhalation of airborne dust released from dried hazardous materials. The use and transport of hazardous materials could also result in accidental spills, leaks, toxic releases, fire, or explosion.

Appropriate documentation for all hazardous waste that is transported, stored, or used in connection with project construction and future decommissioning activities would be provided as required for compliance with existing hazardous materials regulations codified in the CCR. Additionally, as described in Section 4.10, *Effects Found Not to be Significant*, project construction and future decommissioning activities would comply with Clean Water Act National Pollutant Discharge Elimination System requirements. During project construction and decommissioning, a Stormwater Pollution Prevention Plan would be implemented that includes Best Management Practices for reducing the potential for spills and leaks, as well as procedures for the proper clean up in the event of an accidental release of hazardous materials. Compliance with federal, State, and local laws, regulations, and Cal/OSHA training programs would minimize potential impacts associated with the routine transport, use, or disposal or accidental release of hazardous materials during construction and future decommissioning activities. Therefore, hazards and hazardous materials impacts associated with project construction would be less than significant.

BESS Facility Operation

Operation of the BESS Facility would involve the use and storage of lithium-ion batteries, which may pose a risk of upset and accidental release of hazardous chemicals contained within the batteries (e.g., in the event of a fire). Damage to lithium-ion batteries can also occur from physical impact, exposure to certain temperatures, and/or improper charging, which can result in a fire and/or explosion hazard.

Lithium-ion batteries are regulated by the USDOT as Class 9 Miscellaneous Dangerous Goods. The transport, use, storage, and disposal of batteries during operation and maintenance of the project would be subject to all applicable federal, State, and local laws, regulations, standards, and guidelines established by the USEPA, the State of California, San Luis Obispo County, and the City related to storage, use, and disposal of hazardous materials. Applicable laws include the HMTA, RCRA, HMMA, 40 CFR, and CCR Title 22 (as described in Section 4.7.2, Regulatory Setting). The San Luis Obispo County EHS regulates businesses that handle and store hazardous materials above threshold quantities and requires the preparation and certification of a Hazardous Materials Handler Annual Business Plan for such businesses (San Luis Obispo County EHS 2018). The San Luis Obispo County EHS is designated as the local CUPA and performs inspections to prevent exposure to environmental health hazards for businesses and residents in San Luis Obispo County, including in the City. CalOES provides emergency response to hazardous materials incidents occurring in the applicable planning area. Adherence to applicable regulations, including preparation of a Hazardous Materials Handler Annual Business Plan, would be required to reduce potential consequences of operational accidents involving hazardous materials and the potential consequences of any such accidents.

The goals and policies in the General Plan and LCP Update Public Safety Element described below would minimize risks to the public related to the use, storage, transport, and release of hazardous materials in the vicinity of the Project Site. These policies direct the City to identify hazardous waste transportation routes, work cooperatively with other public agencies in emergency response, update the Emergency Response Plan and require businesses to take appropriate measures to protect public health and safety:

Goal PS-4: Response to emergencies is quick, efficient, and effective.

Policy PS-4.1: Update Emergency Response Plan. Regularly update the Morro Bay Emergency Response Plan with updated evacuation routes and hazard information. Publicize evacuation routes and other relevant emergency procedures.

Policy PS-4.2: Hazardous Waste Transportation Routes. Identify and establish specific routes for transporting hazardous materials and wastes. Consider avoiding residential areas, instead using state divided highways as preferred routes.

Policy PS-4.3: Use, Storage, and Transportation of Hazardous Materials. Require businesses that use, store, or transport hazardous materials to take adequate measures to protect public health and safety. Restrict access to these materials through setbacks and other measures.

Policy PS-4.4: Interagency Cooperation. Work cooperatively with public agencies with responsibility for natural and environmental hazards.

The BESS Facility would incorporate multi-tiered safety and accident prevention systems based on best practices in the energy industry and in consultation with the MBFD. Safety systems would incorporate operational measures, maintenance standards, and passive design considerations, including monitoring, automatic and manual protection elements, engineering designs, site layout designs (e.g., battery spacing and orientation), and explosion prevention protection, among other features, further described below.

▪ **Passive Design Considerations:**

- Compartmentalization is one of the passive methods of fire protection that would be used to confine batteries into zones or areas. Each zone would be separated by fire barriers with

fire resistance ratings greater or equal to two hours in accordance with the California Fire Code.

- The BESS Facility would not locate any new structures in FEMA Flood Zone AE or any other FEMA-designated Special Flood Hazard Area, and has been sited to mitigate sea-level rise and tsunami risk. The former fuel oil tank farm area, including the west, north, and northeast sides of the BESS Site facing the ocean, is protected by existing berms that are approximately 33 feet in height. These external berms will remain intact and only the berms inside the former fuel oil tank farm area would be modified.
 - **Monitoring and Detection:**
 - The fire protection systems would be continually monitored at multiple levels (i.e., at the cell, module, rack and building levels, as well as within various building systems such as HVAC systems). All these levels and systems would be monitored for electrical, gas/smoke, and thermal variations as appropriate and would trigger a corresponding response.
 - The BESS Facility would also contain battery management systems with battery protection units. Battery protection units actively monitor each battery's operating conditions at all times and are programmed to warn, alarm, and automatically take preventive action if certain metrics exceed programmed tolerance levels. This preventive monitoring system can automatically shut down batteries if any measured parameters reach certain risk levels, as well as trigger other early safety responses.
 - BESS Facility monitoring systems will monitor temperature, smoke, gas, heat, and air pressure drops in water lines to provide an additional layer of protection in the event a shutdown does not resolve the issue. Appropriate monitoring systems will be identified during final project design and will incorporate technologies such as Very Early Smoke Detection Apparatus (VESDA) systems that continually sample the air to detect an impending fire hazard as soon as possible and provide a warning before there is visible smoke, which is before conventional detectors would provide warnings. VESDA systems have a wide range of sensitivities allowing very small levels of smoke to be detected and responded to before a fire has time to escalate.
 - **Automatic Protection and Suppression:**
 - The BESS Facility would incorporate fire suppression for the various areas within each building based on the type of hazard. The design would incorporate automatic sprinkler systems with sprinklers located throughout the buildings and, if required, within individual battery modules. There would be one system dedicated to suppression at the battery/rack level and, if required, another system to protect the building.
 - Additional response measures would include automatic battery shutdowns, detection systems, and ventilation systems. Additional safety systems such as water and clean agent injection systems, roof level wet systems (which spray certain building areas if triggered), and vacuum purge systems may also be required depending on final battery system configuration.
 - **Manual Protection.** The BESS Facility would include on-site fire hydrants, automatic wet standpipes, Class III hose stations, and hand-held portable fire extinguishers.
 - **Explosion Prevention Protection.** The batteries selected for use at the BESS Facility, such as lithium-ion or other technologies, would incorporate explosion prevention and protection measures (e.g., venting) pursuant to the NFPA 855 or International Fire Code Chapter 12.
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- **Prevention:** In addition to the measures described above, potential battery module overheating would be addressed by preventive measures including site specific engineering designs addressing battery spacing, battery orientation and cooling designs, as well as other preventative measures such as hazard mitigation analyses and emergency planning.
- **Emergency Planning:** The Project Applicant would be required to prepare and implement BESS Facility emergency plans and emergency evacuation plans. The Project Applicant would also be required to provide training to MBFD personnel, including walk throughs, visual inspections, construction inspections, formal in class trainings regarding batteries, with specific instructions regarding addressing potential incidents and utilizing the BESS Facility's resources. Personal protective equipment and life safety equipment for personnel safety and other equipment to address emergencies all will be stored and accessible at the BESS Facility and at additional locations on the Project Site as needed.

In addition to the Project Applicant's proposed safety and accident prevention systems, the MBFD has retained DNV Energy USA, Inc. (DNV), an independent engineering and safety consultant, to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization. The independent public safety analysis is anticipated to be complete in 2024, and any additional emergency preparedness and response features recommended in the analysis, which may include but would not be limited to fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be required by the MBFD to be incorporated into the final BESS Facility design and plans prior to issuance of a building permit. The MBFD would be responsible for final review and approval of the Project Applicant's building plans, and any safety features required by the MBFD would be required to be implemented by the BESS Facility developer/operator prior to issuance of a building permit.

Operation of the BESS Facility may involve the use and/or storage of potential hazardous materials, such as fuels/oils, paint products, lubricants, solvents, cleaning products, and pesticides/herbicides, in regular industrial facility maintenance. Similar to the use and storage of lithium-ion batteries, potential hazardous materials may pose a risk of upset and accidental release. Transport, use, and storage of hazardous materials during operation of the BESS Facility would be conducted pursuant to all applicable local, state, and federal laws, including 40 CFR, CFR Title 49 implemented by CCR Title 13, CCR Title 22, HMTA, RCRA, and the California Hazardous Material Management Act. As required by HSC Section 25507, a business shall establish and implement a HMBEP for emergency response to a release or threatened release of a hazardous material. As required, hazardous materials would be stored in locations according to compatibility and in storage enclosures (i.e., flammable material storage cabinets and biological safety cabinets) or in areas or rooms specially designed, protected, and contained for such storage, in accordance with applicable regulations. Additionally, Safety Data Sheets for all applicable materials present on-site are required to be readily available to on-site personnel and emergency services.

During standard operation of the BESS Facility, lithium-ion batteries and potentially hazardous materials would not represent a risk of chemical release that may affect on-site or off-site receptors or involve hazardous emissions, and safety standards and features incorporated into the project would prevent any reasonable possibility of a substantial adverse effect on human health or the environment related to the lithium-ion batteries and potential hazardous materials stored onsite.

Compliance with applicable State and federal regulations and General Plan and LCP policies related to the transport, use, or disposal of hazardous materials would minimize risks to on-site and off-site

receptors from routine use, transport, handling, storage, disposal, and release of hazardous materials during normal operations. Oversight by the appropriate federal, State, and local agencies would minimize the risk of the public's potential exposure to hazardous materials. Therefore, impacts associated with operation of the BESS Facility would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

As described in Section 4.7.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded compliance with existing regulations and implementation of the General Plan and LCP goals and policies described above would minimize risks associated with hazardous materials use, transport, disposal, and accidental release in Morro Bay. Future land uses developed on the remainder of the Power Plant Property under the Master Plan could include uses such as condominiums or apartments above retail, restaurants, and other ground-floor commercial uses that would serve the typical needs of residents and visitors of Morro Bay, consistent with the vision of Plan Morro Bay evaluated in the 2021 Final EIR. These types of land uses would typically use and store small quantities of common hazardous materials utilized for the maintenance of homes and commercial spaces, such as cleaning and degreasing solvents. Use of these materials would be subject to compliance with existing regulations, standards, and guidelines established by federal, State, and local agencies related to storage, use, and disposal of hazardous materials. Furthermore, the Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to hazardous materials. As a result, future development that may occur under the Master Plan would continue to comply with applicable State and federal regulations and General Plan and LCP policies related to hazardous materials to minimize risks to on-site and off-site receptors from routine use, transport, handling, storage, disposal, and accidental release of hazardous materials on the Power Plant Property. Although buildout of the Master Plan would increase the quantity of hazardous materials used, stored on, and transported to the Power Plant Property compared to the existing undeveloped condition of the property, compliance with the applicable rules, regulations, and policies described above, would ensure potential impacts from the routine use or upset release hazardous materials associated with the Master Plan would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Impact HAZ-2 PORTIONS OF THE PROJECT SITE ARE KNOWN TO CONTAIN SOIL CONTAMINANTS INCLUDING METALS AND PETROLEUM. PROJECT CONSTRUCTION AND OPERATIONAL ACTIVITIES COULD EXPOSE CONSTRUCTION WORKERS, FUTURE BESS FACILITY EMPLOYEES, AND THE ENVIRONMENT TO CONTAMINANTS, RESULTING IN POTENTIALLY SIGNIFICANT IMPACTS. IMPLEMENTATION OF MITIGATION MEASURES HAZ-1 AND HAZ-2, WHICH REQUIRE IMPLEMENTATION OF ALL REMEDIAL MEASURES AND SOIL MANAGEMENT PRACTICES DESCRIBED IN THE DTSC-APPROVED SMP, WOULD REDUCE CONSTRUCTION AND OPERATIONAL HAZARDOUS MATERIAL IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.

The decommissioned Morro Bay Power Plant has undergone remediation to remove hazardous materials. The Project Site is listed on the GeoTracker and EnviroStor databases as an open Cleanup Program Site (DTSC case #40490006, RWQCB case #SL203431377) and an active Corrective Action Site (DTSC case #100220 and #102365). The DTSC is the lead agency for both cases. As discussed in 4.7.1 above, the DTSC has issued a “Corrective Action Complete Without Controls” determination for a portion of AOC 1 and AOCs 2 through 6 at the Project Site, AOC 7 will be evaluated once the existing building is demolished, and the DTSC has issued “clean closure” for AOC 8. The DTSC also determined that a LUC and a SMP are appropriate for the onsite portion of AOC 1 (i.e., BESS Site). The SMP was approved in June 2022 and the LUC was recorded in July 2022. The DTSC would continue to provide agency oversight of assessment and remediation of the open cases through case closure.

One adjacent property is identified on the EnviroStor database: the southwestern adjacent Morro Bay Amphibious Training Site, a FUDS case with oversight by the DTSC and an “inactive: needs evaluation” status as of July 1, 2005. Based on a FUDS Program Management Action Plan for the site, “no reports were found of ordnance left on this site” (United States Army Corps of Engineers 2019). Therefore, this adjacent site is not expected to affect the project.

Beginning in 2019, the SWRCB issued letters to property owners of sites that may be potential sources of per- and polyfluoroalkyl substances (PFAS). The Project Site has not been identified as a potential source of PFAS, but there is one public works treatment facility PFAS order located adjacent to the north of the Project Site: the Morro Bay Wastewater Treatment Plant (160 Atascadero Road). According to GeoTracker, the facility is active and has a NPDES permit with oversight by the Central Coast RWQCB. A PFAS order was issued for the facility in September 2020. Water quality laboratory results for the facility were submitted to GeoTracker in July 2021, which include one influent and one effluent composite water sample analyzed for PFAS. Perfluorooctanoic acid (PFOA) was detected in these samples at a maximum concentration equal to its SWRCB response level, and perfluorooctanesulfonic acid (PFOS) was detected in these samples at a maximum concentration below its SWRCB notification level (SWRCB 2022b). Although the wastewater treatment plant is located in close proximity to the Project Site, because effluent is discharged to the Pacific Ocean in accordance with the facility’s NPDES permit (SWRCB 2017), PFAS-impacted groundwater is not anticipated to be migrating beneath the Project Site.

Demolition and BESS Facility Construction, Operation, and Future Decommissioning

Based on the results of the soil investigations conducted at the Project Site, there are known metals, TPH (undifferentiated, middle distillate, and residual [comparative to gasoline, diesel, and motor oil, respectively]), and PAHs in onsite soil at concentrations exceeding the SSLs calculated for the Project Site.

The DTSC has issued a No Further Action determination with unrestricted/residential land use for the majority of the Project Site (the offsite portion of AOC 1, and AOCs 2 through 6 and 8). The onsite portion of AOC 1 (i.e., BESS Site) requires a LUC for commercial/industrial use only and a SMP, and the remainder of AOC 1 (outside of the Project Site) was issued a No Further Action determination with unrestricted/residential land use by the DTSC. AOC 7 has not yet been assessed due to the presence of the power plant building. Additionally, diesel- and motor oil-range TPH have been detected in groundwater monitoring wells at the Project Site; however, the DTSC has issued a No Further Action determination for groundwater at the Project Site.

Impacted soil may be encountered during grading, construction, and future decommissioning activities at the onsite portion of AOC 1. Demolition of the power plant building and stacks would not involve removal of the concrete base underlying the stacks and the power plant building, so any impacted soil would not be encountered during demolition or construction related work at AOC 7. The project does not propose any soil import or export; any potentially impacted soil encountered during grading/construction related work would be handled on the Project Site to the maximum extent practicable. Consequently, there is a potential for construction workers to be exposed to contaminants (e.g., metals, TPH, and PAHs) via dust or soil within the former tank farm portion of AOC 1 (i.e., BESS Site) on the Project Site. There is also a potential for BESS Facility maintenance workers to be exposed to contaminants via dust and soil within the onsite portion of AOC 1 during BESS Facility operation. Compliance with the DTSC-approved SMP during BESS Facility construction, operation, and future decommissioning activities would ensure that potential impacts to workers would be less than significant. Any contaminated soil requiring off-site disposal would be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste, following USDOT and Caltrans regulations for the safe transportation of hazardous materials on public roadways.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

The DTSC has issued a No Further Action determination with unrestricted/residential land use for the majority of the Project Site (the offsite portion of AOC 1, and AOCs 2 through 6 and 8), indicating that the majority of the Project Site is safe for future development under the Master Plan and would not pose a risk to future site occupants or the environment. The 2021 Final EIR for Plan Morro Bay concluded that compliance with regulations governing site cleanup and implementation of General Plan and LCP goals and policies minimized risks associated with contaminated sites in the City. Although the Master Plan would carry forward or would not modify any General Plan and LCP goals and policies related to contamination on the Power Plant Property, site-specific hazardous materials evaluations prepared for the project have identified existing hazardous materials contamination on the Power Plant Property in AOC 1. Potential contamination in AOC 7 has not yet been assessed due to the presence of the power plant building and stacks. Contamination in AOC 1, which is located within the BESS Site, is addressed in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning. AOC 7 is located on the remainder of the Power Plant Property, and as a result, future development that may occur under the Master Plan within AOC 7 would require site-specific development review by the City and, if required, cleanup of contamination on a project-by-project basis for structures that would be located in areas that may contain hazardous materials contaminants. The City's development review process for future development would also require site-specific environmental review when it is determined that the potential for significant impacts exists. Therefore, future development in the vicinity of AOC 7, which is currently vacant and may contain contamination, may result in a potentially significant public health and environmental hazard requiring mitigation.

Mitigation Measures

Implementation of Mitigation Measures HAZ-1 and HAZ-2 would identify hazards at AOC 7 and would reduce potential hazardous material construction and operational impacts in these areas to less than significant, as discussed below.

HAZ-1 DTSC Regulatory Agency Submittal and Cleanup/Remediation

Prior to commencement of construction/grading activities and/or demolition activities at the Project Site, the Project Applicant, as well as future applicants for development proposals on the Power Plant Property, shall submit the following documents to the DTSC project manager of the open Corrective Action and Cleanup Program Site cases:

- Current development plan and any modifications to the development plan
- All environmental documents completed for the project, including the April 2023 Hazardous Materials Technical Study
- All future environmental documents completed for the project

Upon submittal of the information above, the DTSC may require actions such as: development of subsurface investigation workplans; completion of soil, soil vapor, and/or groundwater subsurface investigations; installation of soil vapor or groundwater monitoring wells; soil excavation and offsite disposal; completion of human health risk assessments; development of a new LUC for AOC 7 or an expansion of the existing AOC 1 LUC to include AOC 7; and/or completion of remediation reports or case closure documents. Subsurface soil, soil vapor, and groundwater investigations, if required, shall be conducted in accordance with a sampling plan that shall be reviewed and approved by the

DTSC. Documentation of compliance with applicable DTSC requirements shall be submitted to the City and reviewed by the Project Applicant prior to issuance of grading permits.

It should also be noted that the DTSC may determine that EHS or the RWQCB may be best suited to perform the cleanup oversight agency duties for the assessment and/or remediation of this project. Should the cleanup oversight agency be transferred from the DTSC to EHS or RWQCB, this and other mitigation measures will still apply.

HAZ-2 Soil Management Plan and Land Use Covenant

Future project applicants under the Master Plan that propose soil or ground disturbing activities within AOC 7 shall retain a qualified environmental consultant to prepare an SMP to address potential contamination in AOC 7 that has not yet been assessed. The SMP shall address:

- On-site handling and management of impacted soils or other impacted wastes (e.g., stained soil, soil, or groundwater with solvent or chemical odors) if such soils or impacted wastes are encountered, and
- Specific actions to reduce hazards to construction workers and offsite receptors during the construction phase.

The SMP shall establish remedial measures and soil management practices to ensure construction worker safety, the health of future workers and visitors, and the off-site migration of contaminants from the project alignment. These measures and practices shall include, but are not limited to:

- Stockpile management including stormwater pollution prevention and the installation of BMPs
- Proper disposal procedures of contaminated materials
- Monitoring and reporting
- A health and safety plan for contractors working at the site that addresses the safety and health hazards of each phase of site construction activities with the requirements and procedures for employee protection
- The health and safety plan will also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.

The DTSC shall review and approve the SMP prior to construction (grading or other ground or soil disturbing) activities at AOC 7. The City shall review and approve the SMP prior to issuance of grading permits for future projects under the Master Plan. The SMP shall be implemented during construction at AOC 7.

Significance After Mitigation

Implementation of Mitigation Measures HAZ-1 and HAZ-2, which requires the Project Applicant and future applicants for development proposals on the Power Plant Property to submit previous and future environmental documents completed for the project and project plans to DTSC for review and approval (Mitigation Measure HAZ-1), and for future applicants to prepare an SMP prior to construction (grading or other ground or soil disturbing) activities at AOC 7, and implement all remedial measures and soil management practices described in any DTSC-approved SMPs (Mitigation Measure HAZ-2), would ensure construction worker safety and the health of future workers and visitors.

Threshold 6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact HAZ-3 CONSTRUCTION AND DEMOLITION ACTIVITIES AND STAGING AREAS WOULD BE LIMITED TO THE PROJECT SITE AND WOULD NOT REQUIRE ROADWAY CLOSURES OR DETOURS THAT COULD AFFECT EMERGENCY RESPONSE AND EVACUATION. IMPLEMENTATION OF THE PROPOSED BESS FACILITY SAFETY STANDARDS AND FEATURES, AS WELL AS RESPONSE FEATURES REQUIRED BY THE MBFD, AND COMPLIANCE WITH THE PROVISIONS OF THE EMERGENCY RESPONSE PLAN WOULD ENSURE PROJECT CONSTRUCTION, OPERATION, AND FUTURE DECOMMISSIONING ACTIVITIES WOULD NOT SUBSTANTIALLY IMPAIR AN ADOPTED EMERGENCY RESPONSE OR EMERGENCY EVACUATION PLAN. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

The City's Multi-Hazard Emergency Response Plan and LHMP outline policies and concepts for responding to earthquakes, hazardous material releases, storm and flooding, wildland fire, nuclear emergencies, and tsunamis. The Emergency Response Plan was adopted in 2003 and was most recently revised in 2008 (City of Morro Bay 2019 and 2008). The Emergency Response Plan identifies State Routes 1 and 41 as the major transportation arteries serving the City, which would serve as the primary transportation routes in the event of an evacuation. The MBFD manages the City's Emergency Operations Center and is responsible for updating disaster plans and responding to emergencies within the city, including evacuations (City of Morro Bay 2021b).

Demolition and BESS Facility Construction and Future Decommissioning

Construction activities and staging areas for the project, including during future BESS Facility decommissioning, would be limited to the Project Site and would not require roadway closures, detours, or other impacts to highways or arterial roadways, such as State Routes 1 and 41 and Embarcadero. Heavy truck deliveries and off-site hauling trips would be routed to avoid the Main Street to Beach Street to Embarcadero route and would instead access the site via Quintana Road.

Emergency access to the Project Site would be maintained throughout the construction and decommissioning phases from Embarcadero. Therefore, project construction and future decommissioning would not impair or physically interfere with an adopted emergency response plan or evacuation plan. The project would be located on a previously developed lot and would not substantially modify access to the Project Site or surrounding land uses.

BESS Facility Operation

In the event of an emergency that could affect the health, safety, and property of the public during operation of the project, the policies and general approach of the Emergency Response Plan would apply. The Plan implements the City's LHMP, which is part of the County of San Luis Obispo's Multi-Jurisdictional LHMP. The policies and general approach to emergency situations delineated in the Plan follow a number of widely adopted emergency response standards and operations protocols, including the National Incident Management System, the State Emergency Management System, and the Incident Command System.

The BESS Facility's effect on Project Site and regional emergency access and evacuation routes would be subject to the approval of the MBFD. The MBFD would be responsible for final review and approval of the Project Applicant's building plans, and any emergency preparedness and response features required by the MBFD would be required to be implemented by the BESS Facility developer/operator prior to issuance of a building permit. Implementation of the proposed safety standards and features incorporated in the BESS Facility, as well as implementation of any additional emergency preparedness and response features required by the MBFD, and compliance with the

provisions of the Emergency Response Plan would ensure construction and operation of the BESS Facility would not substantially impair an adopted emergency response or emergency evacuation plan.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change on emergency response and evacuation are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

As described in Section 4.7.3, Previous Environmental Review, the 2021 Final EIR for Plan Morro Bay concluded that population growth and increased development in the City could impact evacuation routes and increase the number of residents susceptible to hazards, but that implementation of the General Plan and LCP Update public safety goals and policies and coordination with the MBFD minimize the risks of natural hazards and ensure proper emergency access and evacuation and response procedures. Similarly, although implementation of the Master Plan would result in increased development and population on the Power Plant Property compared to the existing undeveloped condition, the Master Plan would carry forward and would not modify any General Plan and LCP goals and policies related to emergency response. As a result, future development that may occur under the Master Plan would continue to require site- and project-specific review in coordination with the MBFD to ensure that development would not impede access to State Route 1, State Route 41, and Embarcadero during construction and operation. MBFD review would also ensure adequate emergency site access, safe internal circulation, and public safety features. Implementation of Plan Morro Bay goals and policies and plan review by the MBFD would minimize the potential for the Master Plan to impede access to State Route 1, State Route 41, and Embarcadero and substantially impair an adopted emergency response or emergency evacuation plan. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 8: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to inundation?

Impact HAZ-4 THE PROJECT SITE IS LOCATED IN A TSUNAMI HAZARD AREA AND IS SUBJECT TO FLOODING RISK. HOWEVER, IMPLEMENTATION OF THE PROPOSED SAFETY STANDARDS AND FEATURES, CBC STRUCTURAL DESIGN STANDARDS, STATE AND FEDERAL REGULATIONS REGARDING THE USE, STORAGE, AND DISPOSAL OF HAZARDOUS MATERIALS, AND THE REQUIRED TSUNAMI RESPONSE PLAN, AS WELL AS COMPLIANCE WITH THE PROVISIONS OF THE EMERGENCY RESPONSE PLAN, WOULD COLLECTIVELY MINIMIZE THE POTENTIAL FOR THE PROJECT TO RELEASE POLLUTANTS DUE TO PROJECT INUNDATION. THESE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

BESS Facility

Flooding

Floods cause damage to buildings and infrastructure by inundating them with water and, potentially, debris. The Base Flood Elevation (BFE) is the computed elevation to which a flood is anticipated to rise during a 100-year flood event, or during a flood that statistically has a 1% chance of occurring in any given year. The BFE was derived from local topography and historical weather data, is shown on FIRMs developed by FEMA. Areas that are within the 100-year flood zone are within Special Flood Hazard Areas (SFHAs).

The Project Site includes areas mapped in a flood zone designated with “AE” and “X” (Figure 4.7-3). Specifically, the BESS Site is within Zone X, which has a 0.2 percent annual (minimal) chance of flood hazard. The remaining portions of the Project Site are in an SFHA with a high flood risk (FEMA 2022), or AE Zone, which indicates that the area has a 1 percent annual flood risk and a 26 percent risk of flooding over 30 years. BFEs are estimated to range between 15 and 20 feet above the North American Vertical Datum of 1988 (NAVD 88) for these areas. Based on the mapped flood zone, the BFE would primarily affect the Power Plant area; most of the BESS Site is outside of the SFHA. Based on this information, the Project Site is susceptible to a 100-year flood risk. However, the project does not propose new buildings on the portion of the Project Site within the Zone AE SFHA. The BESS Facility would be constructed in accordance with FEMA Zone X requirements and would include stormwater detention and infiltration components in accordance with Regional Water Quality Control Board requirements. Therefore, the potential impact from flooding would be less than significant.

Tsunamis

Tsunamis are a powerful series of water waves generated by a substantial displacement of water, typically caused by an earthquake. Wave heights can reach tens of feet high and can cause significant damage to buildings and infrastructure in coastal areas. Tsunami Hazard Areas are generated by the California Geologic Survey (CGS) and are based on models that account for local geographic features. Tsunami Hazard Areas show coastal areas that may be at risk based on inundation limits corresponding to a 975-year average return period tsunami event and are reevaluated at least every 5 to 10 years.

The Project Site is located in a Tsunami Hazard Area (CGS 2024; Figure 4.7-4) that extends east approximately 1,600 feet to the foot of an unnamed ridge located adjacent to Little Morro Creek Road. According to the Duke Energy application, tsunamis occurred in the Morro Bay area in 1878, 1953, 1960 and 1964, which resulted in localized damage to piers, wharves, and buoys in Morro Bay

Harbor. More recent tsunami advisories have been issued in 2011 and 2022. Based on historical records, there has been no resultant flooding or damage to the Power Plant Property as a result of tsunamis. The potential for damage to the site from tsunamis is reduced by the existing sand spit, Morro Rock, and the narrow harbor entrance (Duke Energy 2000). The BESS Facility has been sited to minimize tsunami risk; the side of the BESS Site facing the ocean is protected by existing berms that are approximately 33 feet in height. The only voids in the berms surrounding the BESS Site are to the east and south, facing away from the ocean (refer to Figure 4.7-3 and Figure 4.7-4). Nonetheless the Project Site is susceptible to tsunami risks.

The Project Applicant would be required to minimize the risk of release of pollutants by incorporating applicable CBC standards as adopted by the Morro Bay Municipal Code into the final Project design plans. CBC structural design standards require buildings and structures in the Tsunami Design Zone to be designed and constructed in accordance with ASCE 7-16 standards. During the plan check process, the City would be required to review and approve detailed structural engineering drawings and confirm that the BESS Facility would be compliant with applicable CBC structural design standards, ASCE 7-16 standards, and Morro Bay Municipal Code requirements. As such, the project would be reasonably expected to withstand a hypothetical Maximum Considered Tsunami (2,500-year return period event consistent with U.S. seismic provisions).

Potential hazardous materials and pollutants that could be at risk of release due to inundation include the lithium-ion batteries within the BESS Facility (if lithium-ion batteries are used at the BESS Facility). Lithium-ion batteries are regulated by the USDOT as Class 9 Miscellaneous Dangerous Goods. The use, storage, transportation, and disposal of batteries and any other regulated hazardous materials during operation and maintenance of the project would be subject to all applicable State and federal laws, such as the HMTA, RCRA, HMMA, and CCR Title 22. Specifically, the HMTA requires the BESS Facility developer/operator to prepare and maintain a HMBEP, which includes an inventory of hazardous materials stored onsite, an emergency response plan, and an employee training program.

The BESS Facility incorporates a multi-tiered safety system based on industrial best practices in consultation with the MBFD (refer to Impact HAZ-1, which lists the safety systems, passive design considerations, include monitoring, automatic and manual protection elements, and explosion prevention protection included in the proposed safety system). In addition, the BESS Facility systems would automatically shut down when inundation occurs, and batteries would be encased so inundation would not result in a release of any potentially hazardous battery components.

Additionally, the City currently plans to require, as a Condition of Approval for the project, that the Project Applicant prepare a Tsunami Response Plan for review and approval by the Fire Chief, Police Chief, Harbor Director, and the Community Development Director. The Project Applicant's Tsunami Response Plan would be approved prior to issuance of a building permit and would include components such as (but not limited to) clearly defined warning procedures, triggers for activation of the City's Emergency Operation Center (EOC), and a media and public information plan. The purpose of the Tsunami Response Plan would be to provide detailed project-specific procedures and coordination to implement the City's emergency response procedures. Any additional conditions required by the MBFD, including fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be incorporated into the final BESS Facility design.

Figure 4.7-5 Berms Surrounding the BESS Site (1/2)



Source: Westwood Professional Services, Inc., 2021.

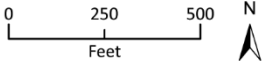
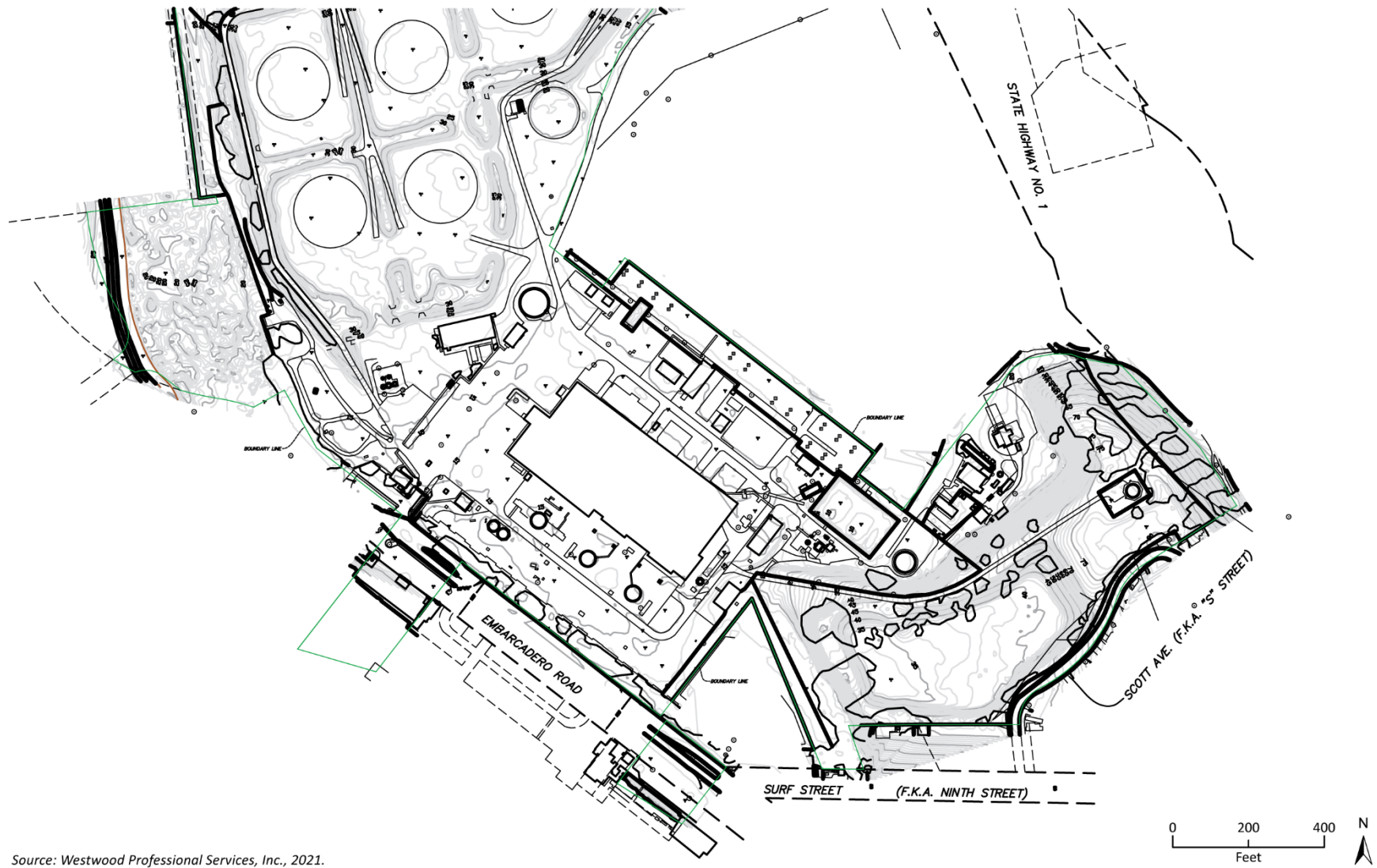


Figure 4.7-6 Berms Surrounding the BESS Site (2/2)



Source: Westwood Professional Services, Inc., 2021.

During normal operation, lithium-ion batteries would not represent a significant risk of chemical release that may affect on-site or off-site receptors or involve hazardous emissions. Safety standards and features incorporated in the project would minimize the potential for a release of pollutants associated with proposed onsite lithium-ion batteries. Incorporation of applicable CBC structural design standards into the structural plans for the BESS Facility and compliance with applicable State and federal regulations related to the use, storage, and disposal of hazardous materials, including lithium-ion batteries, would limit the risk that inundation of the Project Site due to a tsunami would result in the release of pollutants. Implementation of a Tsunami Response Plan approved by the City's Fire Chief, Police Chief, Harbor Director, and Community Development Director would ensure the project would provide clearly defined project-specific warning procedures, triggers for activation of the City's EOC, and a media and public information plan to implement the City's emergency response procedures.

In the event of an emergency that could affect the health, safety, and property of the public, the policies and general approach of the City's Multi-Hazard Emergency Response Plan would apply. The Plan implements the City's LHMP, which is part of the County of San Luis Obispo's Multi-Jurisdictional LHMP. The policies and general approach to emergency situations delineated in the Plan follow a number of widely adopted emergency response standards and operations protocols, including the National Incident Management System, the State Emergency Management System, and the Incident Command System.

Implementation of the proposed safety standards and features incorporated in the project; applicable CBC structural design standards; applicable State and federal regulations regarding the use, storage, and disposal of hazardous materials, including lithium-ion batteries; implementation of the required Tsunami Response Plan; and compliance with the provisions of the Emergency Response Plan would collectively minimize the potential for the project to risk release pollutants due to project inundation as well as the risk that any accidental release would result in adverse impacts to the health, safety, and property of the public or the environment. Therefore, this impact would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of BESS Facility construction, demolition of the power plant building and stacks, BESS Facility operation, and future decommissioning.

Future development of the remainder of the Power Plant Property under the Master Plan could potentially occur within Zone AE SFHA and within a Tsunami Hazard Area. Potential hazardous materials and pollutants that could be at risk of release due to inundation include common pollutants associated with residential and commercial development that may be developed in the future under the Master Plan, such as trash, pesticides, and cleaning solvents. Future development

under the Master Plan would be required to minimize the risk of damage and release of pollutants by complying with FEMA Zone AE SFHA, Morro Bay Municipal Code Chapter 14.72, Flood Damage Prevention, CBC, and ASCE 7-16 requirements for development within flood and tsunami risk areas. During the plan check process, the City would be required to review and approve detailed structural engineering drawings on a project-by-project basis for any future development under the Master Plan to ensure that projects would be compliant with applicable CBC structural design standards, ASCE 7-16 standards, and Morro Bay Municipal Code requirements such that the project would be reasonably expected to withstand a hypothetical Maximum Considered Tsunami and flood event. Individual development proposals are reviewed separately by the City and undergo environmental review when it is determined that the potential for significant impacts exists. Consistent with the conclusions of the 2021 Final EIR for Plan Morro Bay, compliance with existing regulations and the General Plan and LCP Update goals and policies related to flood risk and hazardous materials would ensure that the Master Plan would result in less than significant impacts related to the release of pollutants due to inundation.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

4.7.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative hazards and hazardous materials impacts is limited to development sites in close proximity to the Project Site. This geographic scope is appropriate for hazards and hazardous materials impacts such as existing site contamination, upset or accidental release of pollutants (including due to flooding), and wildfire risk, that can affect adjacent sites but do not typically impact regional areas in a cumulative manner. Adjacent development that is considered part of the cumulative analysis includes planned and pending projects in Morro Bay, listed in Table 3-1 in Section 3, *Environmental Setting*.

Cumulative development in the project vicinity would gradually increase the City's population and workforce and would increase the interface between residential land uses and industrial land uses that involve the use of hazardous materials. Cumulative impacts associated with hazards and hazardous materials, such as soil contamination or the operational use of hazardous materials, are typically site-specific and not regionally cumulative. However, an overall increase in the potential for human health hazards will occur as new development increases the City's population.

As discussed in Impacts HAZ-1 and HAZ-2, existing federal, State, and local regulations effectively reduce the inherent hazard associated with routine transport, use, storage, and disposal of hazardous materials and existing site contamination. Regulations and oversight, as outlined in the impacts analysis above, would also effectively reduce the potential for individual projects to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions within Morro Bay. Thus, cumulative impacts related to the transport, use, storage, or disposal of hazardous materials, upset conditions, hazardous emissions near schools, and project locations on known or unknown hazardous materials sites, would be less than significant.

Cumulative development could result in impacts to highways and arterial roadways, such as Embarcadero, SR 1, and SR 41, which serve as the primary emergency evacuation routes for Morro Bay and surrounding communities. However, similar to the project, cumulative projects would be

required to minimize potential impacts to SR 1 and SR 41 during construction and operation and would be required to coordinate with Caltrans and local emergency response providers to ensure that any temporary or permanent impacts to SR 1 and SR 41 would not result in inadequate emergency access or impair implementation of emergency response and evacuation plans. Likewise, cumulative development would be required to coordinate with the MBFD to ensure that site plans and project design include adequate emergency access and safety features. Thus, potential cumulative impacts related to conflict with emergency response plans would be less than significant.

Consistent with the conclusions of the 2021 Final EIR for Plan Morro Bay, future development under the Master Plan would not result in a cumulatively considerable contribution to a significant impact related to the routine transport, use, or disposal of hazardous materials, accidental release of hazardous materials, release of hazardous materials due to flooding, or the impairment of emergency response or evacuation plans.

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4.8 Noise

This section of the EIR addresses the potential physical environmental effects associated with noise from implementation of the proposed project. The project’s potential for exposure to aviation related noise levels is addressed in Section 4.10, *Effects Found Not to be Significant*.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24 acres (BESS Site) of the 43-acre Project Site, (2) demolition and removal of the existing Power Plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site), and (3) adoption of a Master Plan, which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site¹.

This analysis is based on the findings of the Acoustical Analysis prepared by WJV Acoustics, Inc. (WJVA) prepared in January 2021 and revised August 2023 (Appendix J).

4.8.1 Setting

Overview of Noise and Vibration Measurement

Noise

Noise is defined as unwanted sound that disturbs human activity. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with human hearing response, which is most sensitive to frequencies around 4,000 Hertz (similar to the highest note on a piano) and less sensitive to frequencies below 100 Hertz (similar to a transformer hum).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, *Project Description*, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, *Project Description*, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, *Project Description*, Figure 2-8.

60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to cause annoyance, direct physical damage, or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (L_{eq}). L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period. Another metric utilized is L_{max} , which is the maximum noise level recorded during a noise event.

The time period in which noise occurs is also important since nighttime noise tends to disturb people more than daytime noise. Two commonly used noise metrics – the Day-Night average noise level (L_{dn}) and the Community Noise Equivalent Level (CNEL) – recognize this fact by weighting hourly equivalent noise levels over a 24-hour period. L_{dn} is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 p.m. to 7:00 a.m.) noise levels to account for the greater sensitivity to noise during that time period. CNEL is identical to L_{dn} , except it also adds a 5 dB penalty for noise occurring during the evening (7:00 p.m. to 10:00 p.m.). Noise levels described by L_{dn} and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and L_{dn} are often used interchangeably.

A range of noise levels associated with common indoor and outdoor activities is shown in Table 4.8-1. The decibel scale is open-ended. 0 dB or 0 dBA should not be construed as the absence of sound. Instead, it is the generally accepted threshold of the best human hearing. Sound pressure levels in negative decibel ranges are inaudible to humans. On the other extreme, the decibel scale can go much higher than shown in Table 4.8-1. For example, gunshots, explosions, and rocket engines can reach 140 dBA or higher at close range. Noise levels approaching 140 dBA are nearing the threshold of pain. Higher levels can inflict physical damage on structural members of air and spacecraft and related parts.

Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Groundborne vibration related to human annoyance is generally related to root mean square velocity levels expressed in vibration decibels (VdB). However, construction-related groundborne vibration in relation to its potential for building damage can also be measured in inches per second (in/sec) peak particle velocity (PPV) (Federal Transit Administration 2006). Based on the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* and the California Department of Transportation's (Caltrans) *Transportation-Related Earthborne Vibration* technical advisory (Caltrans 2020), vibration levels decrease by 6 VdB with every doubling of distance.

Table 4.8-1 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at 3 feet	100	
Diesel truck at 50 feet at 50 mph	90	
	80	Food blender at 3 feet Garbage disposal at 3 feet
Noisy urban area, daytime Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet Normal speech at 3 feet
Commercial area Heavy traffic at 300 feet	60	
Quiet urban area daytime	50	Large business office Dishwasher in next room
Quiet urban area nighttime Quiet suburban nighttime	40	Theater, large conference room (background)
Quiet rural nighttime	30	Library Bedroom at night, concert hall (background)
	20	Broadcast recording studio
	10	
	0	

Source: Caltrans 2013

The background vibration velocity level in residential and educational areas is usually around 50 VdB. (FTA 2006). The vibration threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Sensitive Receptors, Background Noise Levels, and Sources

Existing noise levels in the Project Site vicinity are dominated by traffic noise along SR 1 and other local roadways, and is the focus of the environmental setting discussed herein. Other sources of ambient noise include noise associated with nearby commercial and retail land uses along Embarcadero and noise associated with the beaches and activities occurring within the harbor area. Residential, transient lodging, park and institutional uses are located in the project vicinity. To characterize existing noise levels near sensitive receptor locations, measurements of existing ambient noise levels in the project vicinity were conducted between November 5-6, 2019 (Appendix J). Long-term (24-hour) ambient noise level measurements were conducted at two locations (sites LT-1 and LT-2).

LT-1 is located near the closest residential land uses to the Power Plant Property, at the terminus of Surf Street, southeast of the Power Plant. LT-1 is exposed to vehicle noise associated with traffic along Surf Street, Embarcadero, and other local roadways, as well as noise associated with nearby retail, commercial, and harbor activities. LT-2 is located north of the Power Plant Property, near existing transient lodging land uses (Morro Dunes R.V. Park). LT-2 is exposed to noise associated with vehicle traffic on Embarcadero and within the R.V. Park and noise associated with the beach and human recreational activities (voices, barking dogs, fishing activities, etc.). Sensitive receptor locations identified and utilized for modeling purposes are shown in Figure 4.8-1.

Measured L_{eq} at site LT-1 ranged from 38.4 dB between 4:00 a.m. and 5:00 a.m. to 63.5 dBA between 3:00 p.m. and 4:00 p.m. L_{max} noise levels at site LT-1 ranged from 51.4 to 77.7 dBA. Residual noise levels at the monitoring site² ranged from 33.1 to 53.1 dBA. The measured L_{dn} value at LT-1 over the 24-hour monitoring period was 54.7 dB L_{dn} .

Measured L_{eq} at site LT-2 ranged from a low of 35.1 dB between 2:00 a.m. and 3:00 a.m. to a high of 61.0 dBA between 10:00 a.m. and 11:00 a.m. L_{max} noise levels at site LT-2 ranged from 41.7 to 87.8 dBA. Residual noise levels at the monitoring site ranged from 46.8 to 62.7 dBA. The measured L_{dn} value at LT-2 over the 24-hour monitoring period was 53.3 dB L_{dn} .

4.8.2 Regulatory Setting

a. Federal Regulations

No federal regulations or standards pertain to the regulation of noise for the project.

b. State Regulations

No State regulations or standards pertain to the regulation of noise for the project.

While there are no State standards for vibration, Caltrans establishes vibration risk for structures. For continuous, frequent, and intermittent vibration, Caltrans considers the architectural damage risk level to be somewhere between 0.08 and 0.5 in/sec PPV, depending on the type of building that is affected (Caltrans 2020).

c. Regional and Local Regulations

Plan Morro Bay

In 2021, the City of Morro Bay (City) adopted Plan Morro Bay, which serves as the City's General Plan and Local Coastal Program (LCP) and Coastal Land Use Plan. The General Plan Noise Element contains goals, policies, and implementation measures describing the compatibility of sensitive land uses with noise. The purpose of these goals, policies, and implementation measures is to reduce the various potential effects of noise on people. Table 4.8-2 summarizes the ranges of noise exposure considered to be acceptable, conditionally acceptable, or unacceptable for various noise-sensitive land uses in the City. These ranges are derived from the California Governor's Office of Planning and Research General Plan Guidelines.

² As defined by the L_{90} , which is a statistical descriptor that defines the noise level exceeded 90 percent of the time during each hour of the sample period. The L_{90} is generally considered to represent the residual (or background) noise level in the absence of identifiable single noise events from traffic, aircraft and other local noise sources.

Figure 4.8-1 Noise Measurement Locations and Sensitive Receptor Locations



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by WJVA, 2023.

Fig 4.8-1_Monitoring_Locations_Sensitive_Receptor

Table 4.8-2 Community Exterior Noise Exposure Levels

Land Use Category	Community Noise Exposure (CNEL or Ldn dBA)		
	Acceptable ¹	Conditionally Acceptable ²	Unacceptable ³
Residential, Theaters Auditoriums, Music Halls	<60	60-70	>70
Transient Lodging – Motels, Hotels	<60	60-75	>75
Schools, Libraries, Museums, Hospitals, Nursing Homes, Meeting Halls, Churches	<60	60-75	>75
Playgrounds and Parks	<70	70-75	>75
Offices	<60	60-75	>75

¹ Specified land use is satisfactory. No noise mitigation measures are required.

² Use should be permitted only after careful study and inclusion of protective measures, as needed, to satisfy the policies of the Noise Element.

³ Development is usually not permitted.

Source: City of Morro Bay 2021

Table 4.8-3 provides acceptable transportation noise exposure levels established in Plan Morro Bay for various land use types. For transportation noise sources, the Noise Element establishes an exterior noise exposure level of up to 60 dB L_{dn} as “acceptable” for residential land uses (including transient lodging). An exterior noise exposure level of up to 70 dB L_{dn} for residential land uses and up to 75 dB L_{dn} for transient lodging is considered “conditionally acceptable.” The noise level standards are to be applied to outdoor activity areas. Outdoor activity areas generally include backyards of single-family residences, individual patios or decks of multi-family developments and common outdoor recreation areas of multi-family developments.

Table 4.8-3 Maximum Allowable Noise Exposure – Transportation Noise Sources

Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	CNEL or Ldn dBA	CNEL or Ldn dBA	Leq dBA ²
Residential	60 ^c	45	–
Transient Lodging	60 ^c	45	–
Hospitals, Nursing Homes	60 ^c	45	–
Theaters, Auditoriums, Music Halls	–	–	35
Churches, Meeting Halls, Office Buildings	60 ³	–	45
Schools, Libraries, Museums	–	–	45
Playgrounds, Neighborhood Parks	70	–	–

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dBA L_{dn} or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dBA L_{dn} may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the values in this table.

Source: City of Morro Bay 2021

The Noise Element also provides acceptable noise level standards for non-transportation (stationary) noise sources. The Noise Element provides the non-transportation noise standards in terms of the L_{eq} and L_{max} metrics. The noise level standards become 5 dB more restrictive during the nighttime hours of 10:00 p.m. to 7:00 a.m. Table 4.8-4 provides the acceptable noise exposure levels for non-transportation (stationary) noise sources.

Table 4.8-4 Maximum Allowable Exterior Noise Exposure – Stationary Noise Sources

	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly L_{eq} , dBA ^b	50	45
Maximum Level (L_{max}), dBA ²	70	65
Maximum Level, Impulse Noise (L_{max}), dBA ³	65	60

¹ As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barrier or other property line noise mitigation measures.

² Sound level measurements shall be made with slow meter response.

³ Sound level measurements shall be made with fast meter response.

Source: City of Morro Bay 2021

City of Morro Bay Municipal Code

Section 17.28.120 of the Morro Bay Municipal Code establishes noise requirements for the City. In general, the Municipal Code prohibits any business operation with sustained or intermittent noise levels exceeding 70 dBA CNEL within 150 feet of residential uses, hospitals, and other noise-sensitive uses unless noise levels are mitigated in compliance with the Municipal Code. In addition, commercial and industrial deliveries and loud commercial activities within 100 feet of a residential use are limited to the hours between 7:00 a.m. and 10:00 p.m. The City reviews new public and private development proposals to determine conformance with the policies of the Noise Element, and requires an acoustical analysis early in the review process so that noise mitigation may be included in project design. For development not subject to the environmental review process, the requirements for an acoustical analysis are implemented prior to issuance of a building permit.

Morro Bay Municipal Code Section 9.28.030 regulates noise from construction and building repair activities. This section prohibits “erection (including excavating), demolition, alteration or repair of any building or general land grading and contour activity using equipment in such a manner as to be plainly audible at a distance of fifty feet from the building” between 7:00 p.m. and 7:00 a.m. on weekdays, and between 7:00 p.m. and 8:00 a.m. on weekends, except in the case of urgent necessity in the interest of public health and safety, and then only with permission from the City Community Development Department.

4.8.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under Plan Morro Bay to result in noise impacts. The 2021 Final EIR concluded that construction of individual projects facilitated by the Plan Morro Bay would temporarily produce high noise levels, potentially affecting nearby noise-sensitive land uses, but compliance with existing standards and Plan Morro Bay goals and policies would ensure construction activity associated with redevelopment or new development would limit noise disturbance at noise-sensitive receptors in the City sufficiently to result in a less than significant impact (Impact N-1). The 2021 Final EIR determined that construction of individual projects facilitated by Plan Morro Bay could temporarily

generate groundborne vibration, potentially affecting adjacent sensitive land uses. Although the Morro Bay Municipal Code's timing restrictions on construction activity would limit vibration disturbance, the 2021 Final EIR concluded that high vibration levels during working construction hours could potentially disturb people or damage fragile buildings, requiring mitigation to ensure the potential impact would remain less than significant (Impact N-2). Mitigation Measure N-2 from the 2021 Final EIR required the City to include two new policies under Goal NOI-3 related to vibration reduction. Policy NOI-3.5 requires the City to control construction vibration by avoiding the use of vibratory rollers near vibration-sensitive receptors and scheduling construction activities with the highest potential to produce vibration to hours with the least potential to affect sensitive land uses. Policy NOI-3.6 requires the City to ensure developers notify neighbors of scheduled construction activities that would generate vibration.

The 2021 Final EIR determined that development facilitated by Plan Morro Bay could incrementally increase traffic and associated noise levels along roadways in the City, exposing noise-sensitive land uses located near roadways to incrementally greater noise levels. Implementation of Plan Morro Bay policies would promote the use of design features and techniques intended to minimize roadway noise affecting sensitive receptors, maintaining compliance with the City's interior and exterior noise standards, resulting in a less than significant impact (Impact N-3). The 2021 Final EIR also determined that new development facilitated by Plan Morro Bay would introduce new operational noise sources associated with residential, commercial, industrial, and mixed-use land uses. Continued regulation of on-site noise, consistent with the Morro Bay Municipal Code, would minimize disturbance to adjoining uses, and this impact was determined to be less than significant (Impact N-4). The 2021 Final EIR concluded there would be no impact related to airport noise (Impact N-5) (City of Morro Bay 2021).

4.8.4 Impact Analysis

a. Methodology

The Acoustical Analysis, prepared by WJVA in January 2021 and revised August 2023 (Appendix J), evaluates whether the project has the potential to result in significant noise impacts. The Acoustical Analysis is based on the BESS Facility and Power Plant Property site plan prepared by the Project Applicant (Figure 2-5 in Section 2, *Project Description*), construction equipment noise level data available from the Federal Highway Administration (FHWA), construction equipment vibration level data available from Caltrans, operational equipment noise level data provided by the Project Applicant, traffic volume data provided in the Traffic and Parking Study prepared by Associated Transportation Engineers (ATE) in January 2023 (Appendix K), and noise level measurements conducted in the Project Site vicinity.

Temporary Sources of Noise (Construction/Decommissioning/Demolition)

Heavy Equipment Noise

Based on the Project Applicant's planned construction schedule for the BESS Facility, construction activities are expected to occur over an approximate 36-month time period. Month 1 would consist of fencing and site preparation, months 2-10 would consist of foundation work and pile installation, and months 11-26 would consist of BESS, substation, and gen-tie installation. Specific construction equipment operating at any one time would vary over the course of the construction period and would include a wide range of equipment types over various phases of construction activities. Appendix D of the Acoustical Analysis provides the preliminary list of construction equipment by

phase, as provided by the Project Applicant (Appendix J). As described in Section 2, *Project Description*, this analysis assumes that BESS Facility decommissioning activities may require the removal of all above-grade facilities, buried electrical conduit, and all concrete foundations if such improvements are not identified for potential future redevelopment by the City, as well as restoration of site soils through tilling in a manner adequate to restore the sub-grade material to match the density and depth of the remainder of the Power Plant Property. As a result, this analysis assumes decommissioning of the BESS Facility would involve the use of heavy equipment and personnel similar to that used for the BESS Facility’s construction phase.

Demolition of the Power Plant building and stacks would commence approximately six months following completion of the BESS Facility, and is expected to occur over an approximately 24-month time period. Demolition activities 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. Specific equipment required to support demolition activities would vary over the course of the demolition period and would include a wide range of equipment types. The types of equipment necessary for demolition include skid steer loaders, excavators with shears, an excavator with concrete processor, an excavator with magnet, a wheel loader, and a rough terrain crane (refer to Appendix J for the preliminary list of anticipated demolition equipment by phase). WJVA used the FHWA Roadway Construction Noise Model (RCNM) to estimate demolition heavy equipment noise levels at sensitive receptor locations near the Project Site.

Construction noise would occur at various locations on the Project Site. The analysis in this section conservatively estimates that over the course of a typical construction day, equipment could be located as close as 300 feet to the closest noise sensitive receptor location (LT-2), but would typically be located at a further distance due to movement of construction equipment across the Project Site throughout a given day, as well as the overall size of the Project Site. Table 4.8-5 provides typical construction-related noise levels at reference distances of 500 feet, 1,000 feet, 2,000 feet, and 3,000 feet.

Table 4.8-5 Typical Construction Equipment Maximum Noise Levels

Type of Equipment	500 feet	1,000 feet	2,000 feet	3,000 feet
Backhoe	58	52	46	42
Concrete Saw	70	64	58	54
Crane/Excavator	61	55	49	45
Front End Loader	59	53	47	43
Jackhammer	69	63	57	53
Paver	57	51	45	41
Pneumatic Tools	65	59	53	49
Dozer	62	56	50	46
Pumps/Roller/Portable Generator	60	54	48	44
Truck/Grader	66	60	54	50
Scraper	67	61	55	51
Pile Driver	90	84	78	74

Source: Appendix J

WJVA used the FHWA RCNM to estimate project-related construction noise levels at sensitive receptor locations near the Project Site. Construction noise levels were modeled at six receptor locations, including residential, transient lodging, park and school locations (refer to Figure 4.8-1).

Heavy Equipment Vibration

The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel locomotives, and rail-car coupling. Other less intense sources of vibration include heavy equipment such as bulldozers/trucks and vibratory rollers. Typical vibration levels associated with activities that may be ongoing during construction and demolition on the Project Site are summarized by Table 4.8-6, at distance of 300 feet from the source. A distance of 300 feet is applied in this analysis as all pile driving would occur at distances greater than 300 feet from vibration sensitive receptors or fragile buildings. 300 feet also presents the standard reference distance for which the generated vibration “signature” is normally recognized (Caltrans 2020).

Table 4.8-6 Typical Vibration Levels During Construction

Equipment	PPV (in/sec) at 300 feet
Bulldozer (Large)	0.006
Bulldozer (small)	0.00019
Loaded Truck	0.005
Jackhammer	0.002
Vibratory Roller	0.013
Caisson Drilling	0.006
Vibratory Pile Driver	0.042
Source: Appendix J	

Construction of the BESS Facility would require temporary pile driving activities and temporary use of a vibratory roller, which are the most dominant and vibration intensive activities proposed. Demolition of the Power Plant building and stacks would require temporary use of bulldozers, loaded trucks, and jackhammers, which are less vibration intensive than pile driving activities or use of a vibratory roller. As a result, this analysis compares reference vibration levels associated with pile driving activities and use of the vibratory roller at a distance of 300 feet to the nearest vibration sensitive receptor locations.

Traffic Noise

The FHWA Traffic Noise Model (TNM) was used to quantify expected project-related increases in traffic noise exposure along roadways in the project vicinity. The FHWA TNM is a standard analytical method used by state and local agencies for forecasting roadway traffic noise. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles), and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA TNM was developed to forecast hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within ± 1.5 dB. To predict L_{dn} (24-hour) values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Traffic noise exposure for existing traffic conditions (Existing) and traffic conditions during construction and demolition activities (Existing Plus Project) was calculated based on the FHWA Model and traffic volumes provided in the Traffic and Parking Study (Appendix K). The project traffic conditions (project-related traffic volumes) analyzed represent those expected to occur during construction of the BESS Facility. Noise modeling assumptions used to calculate project traffic noise are provided as Appendix C of the Acoustical Analysis (Appendix J).

Long Term Sources of Noise (BESS Facility Operation)

Long term sources of noise would primarily be associated with operation of the BESS Facility. BESS Facility operational noise would include the substations (specifically the transformers and power conversion systems). The BESS buildings would incorporate one substation located outside of each building, with two generator step-up (GSU) units incorporated with each substation. According to the Project Applicant, each GSU unit would be designed to the industry standard noise level of 85 dBA (or lower) at a distance of three feet from the unit.

The project would incorporate approximately 60 individual power conversion system units at each of the three BESS buildings. According to the Project Applicant, each power conversion system unit (consisting of one transformer and two inverters) would produce a noise level of approximately 80 dBA at a distance of three feet from the unit.

The project would modify existing earthen berms located around the area where the battery storage buildings and substations would be located. The existing berms are up to 33 feet in height, and after initial site grading would be a minimum of approximately 10-12 feet above the BESS Site grade. The berms would therefore provide acoustic shielding of project-related noise. WJVA utilized the FHWA Traffic Noise Model to determine the noise level reduction that would be provided by berms. The model calculates insertion loss (noise reduction) based on the distance from the noise source to the berm, the distance from the berm to the receptor, and the relative heights of the sources, berms, and receptors. The calculations assumed a berm height of ten feet, a receiver height of five feet, and a source height of five feet for the power conversion units. Based on the relative heights of these features and distances between noise sources, berms, and receivers, the berms would provide approximately 8-9 dBA of noise level reduction.

The project-related noise level from each substation was estimated from each proposed substation location to the approximate distance of each of the two closest modeled receptors (vicinity of LT-1 and LT-2). These receptors represent the two closest sensitive receptor areas to the project site. Although other sensitive receptors are located in proximity, they are located at greater distances to the project site than those represented by LT-1 and LT-2. For LT-1, the approximate distances from each substation to the residential property line are 1,000 feet, 1,100 feet and 1,400 feet. For LT-2, the approximate distances are 1,800 feet, 1,900 feet and 2,000 feet.

For each grouping of 60 power conversion system units, the individual noise levels from all 60 sources were summed and the resulting total estimated noise from each grouping was estimated from the approximate distance of the center of each BESS building to each of the modeled receivers. This provides a conservative noise level estimate at the closest sensitive receptor locations. For receptors in the vicinity of LT-1, these calculated setback distances were 2,060 feet, 2,330 feet and 2,440 feet. For receptors in the vicinity of LT-2, these calculated setback distances were 660 feet, 980 feet and 1,050 feet.

Taking into account the characteristics of the substations and the power conversion system, the noise reduction provided by berms, and the standard rate of attenuation of noise with increased

distance from a point source (-6 dBA per doubling of distance), WJVA estimated the long-term noise levels from operation of the BESS Facility at the closest existing noise-sensitive receiver locations, which includes residential land uses southeast of the Project Site (in the vicinity of LT-1) and the property line of the Morro Dunes R.V. Park northwest of the Project Site (in the vicinity of LT-2). Estimated project-related noise levels do not take into consideration acoustic shielding provided by existing buildings and intervening terrain (excluding the berms) and should therefore be considered a conservative assessment of project-related noise levels.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant adverse impact if it would do any of the following:

1. Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Result in generation of excessive groundborne vibration or groundborne noise levels.
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

The nearest airport to the Project Site is the San Luis Obispo County Regional Airport, located approximately 15 miles to the southeast. Because the Project Site is not within the vicinity of a private airstrip or an airport land use plan, and is not within two miles of a public airport or public use airport, the project would not expose people working in the project area to excessive aviation related noise levels (Threshold 3). This topic is briefly discussed in Section 4.10, *Effects Found Not to be Significant*.

Section 4.3, *Biological Resources*, includes a discussion of project-generated noise on biological resources.

Construction and Demolition Noise Threshold

The City has not adopted specific construction/demolition noise level standards that would apply to the project. The FTA identifies a daytime noise level of 90 dB L_{eq} as a reasonable criterion for construction noise impact assessment (FTA 2006). The FTA guidance states that adverse community reactions may result if this noise level is exceeded during construction/demolition activities. Additionally, the World Health Organization (WHO) recommends that noise exposure levels should not exceed 70 dB over a 24-hour period, and 85 dB L_{eq} over a 1-hour period to avoid hearing impairment (WHO 2022). The 1-hour, 85 dB noise level is the more appropriate threshold for construction noise, as it captures the intermittent aspect of construction noise, without taking into consideration nighttime noise levels and operating restrictions (operation of heavy equipment would only occur during allowable daytime hours). Therefore, the City has elected to use an 85 dB L_{eq} threshold in this analysis to assess the potential for construction and demolition related noise levels to result in significant noise impacts to off-site sensitive receptors in the Project Site vicinity.

Vibration Threshold

The City of Morro Bay has not adopted specific vibration standards. Caltrans' *Transportation and Construction Vibration Guidance Manual* provides guidance for determining annoyance potential criteria and damage potential threshold criteria for vulnerable structures. These criteria are shown in Table 4.8-7 and Table 4.8-8, and are presented in terms of PPV (in/sec). The City has elected to utilize a threshold of significance for which a construction vibration impact is considered to occur at 0.1 PPV (in/sec), as this level of vibration is considered "Strongly Perceptible" and has the potential to result in damage to fragile buildings.

Table 4.8-7 Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Source	Continuous/Frequent Intermittent Source
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.1
Severe	2.0	0.4

Source: Caltrans 2020.

Table 4.8-8 Guideline Vibration Damage Potential Threshold Criteria

	Maximum PPV (in/sec)	
	Transient Source	Continuous/Frequent Intermittent Source
Extremely fragile, historic buildings, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2020.

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact NOI-1 PROJECT CONSTRUCTION, FUTURE DECOMMISSIONING, AND DEMOLITION ACTIVITIES WOULD NOT RESULT IN A SUBSTANTIAL TEMPORARY INCREASE IN AMBIENT NOISE LEVELS IN EXCESS OF APPLICABLE NOISE STANDARDS. OPERATION OF THE BESS FACILITY WOULD NOT RESULT IN A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN EXCESS OF APPLICABLE NOISE STANDARDS. THESE IMPACTS WOULD BE LESS THAN SIGNIFICANT.

BESS Facility Construction and Future Decommissioning

Construction Heavy Equipment Use

Construction equipment noise levels were modeled at six sensitive receptor locations in the vicinity of the Project Site, including residential, transient lodging, park, and school locations. Table 4.8-9 shows the estimated construction-related noise levels at each receiver location, for each phase of project construction. Noise levels shown in Table 4.8-9 are anticipated to be similar during potential future decommissioning of the BESS Facility.

Table 4.8-9 Construction Noise Levels

Receiver	Distance (feet)	Month 1 Site Preparation (dba L _{eq})	Months 2-10 Foundation and Pile Installation (dba L _{eq})	Months 11-36 BESS Facility, Substation, and Gen-tie (dba L _{eq})
R-1	2,000	55	62	51
R-2	900	62	69	58
R-3	1,400	58	65	54
R-4	1,800	56	63	52
R-5	2,600	52	60	49
R-6	2,200	54	61	50

Source: Appendix J

As shown in Table 4.8-9, heavy equipment noise would result in an increase over existing ambient noise levels in the vicinity of nearby sensitive receptors, but would not exceed 85 dB L_{eq} at any nearby sensitive receptor location for any one-hour period or 70 dB L_{eq} for any 24-hour period. Noise levels at R-2 (Morro Dunes R.V. Park) may reach 69 dB L_{eq} during temporary pile driving activities.

Therefore, noise levels during construction and decommissioning would not exceed the applicable significance threshold and these impacts would be less than significant. In addition, the City anticipates that it would require, as a condition of approval, that the Project Applicant operate heavy equipment in accordance with the following best management practices:

- As required by the Morro Bay Municipal Code, construction activities should not occur outside the hours of 7:00 a.m. to 7:00 p.m.
- All construction equipment shall be properly maintained and muffled to minimize noise generation at the source.
- Noise-producing equipment shall not be operating, running, or idling while not in immediate use by a construction contractor.
- All noise-producing construction equipment shall be located and operated, to the extent possible, at the greatest possible distance from any noise-sensitive land uses.
- Locate construction staging areas, to the extent possible, at the greatest possible distances from any noise-sensitive land uses.
- Signs shall be posted at the construction site and near adjacent sensitive receptors displaying hours of construction activities and providing the contact phone number of a designated noise disturbance coordinator.

Implementation of these BMPs would further reduce noise impacts associated with construction and decommissioning.

Construction Traffic Noise

Construction phase traffic noise levels are shown in Table 4.8-10. The noise exposure levels are at a reference distance of 100 feet from the center of each analyzed roadway segment, for Existing and Existing Plus Project (Construction Phase). Construction noise levels shown in Table 4.8-10 would be similar during potential future decommissioning of the BESS Facility.

Table 4.8-10 Construction Phase Traffic Noise Levels

Roadway Name (Description)	Existing (dBA L _{dn})	Existing Plus Project (Construction) (dBA L _{dn})	Change (dBA L _{dn})	Significant Impact?
Main Street (n/o SR 1 NB Ramps)	58.3	58.3	0.0	No
Main Street (s/o SR 1 NB Ramps)	59.6	59.7	+0.1	No
Main Street (n/o SR 1 SB Ramps)	59.5	59.7	+0.2	No
Main Street (n/o SR 1 SB Ramps)	60.6	60.8	+0.2	No
Main Street (n/o Beach Street)	59.0	59.0	0.0	No
Main Street (s/o Beach Street)	57.0	57.0	0.0	No
Beach Street (w/o Main Street)	55.9	56.0	+0.1	No
Beach Street (e/o Main Street)	47.5	47.5	0.0	No

Source: Appendix J

As shown in Table 4.8-10, traffic noise during the construction phase of the project would not increase by more than 0.2 dBA along all analyzed roadway segments. Traffic noise impacts during potential future decommissioning of the BESS Facility would be similar as construction. This minor increase does not represent a significant traffic noise increase, as changes in noise levels less than 1-2 dBA are generally not perceived.

Demolition Activities

Demolition Heavy Equipment Use

Demolition equipment noise levels were modeled at six sensitive receptor locations in the vicinity of the Project Site, including residential, transient lodging, park, and school locations. Table 4.8-11 shows the estimated demolition-related noise levels at each receiver location, for the duration of demolition activities.

Table 4.8-11 Demolition Noise Levels

Receiver	Distance (Feet)	Noise Level by Month During Demolition (dBA L _{eq})											
		1-3	4	5-6	7-9	10	11	12	13-17	18-21	22	23	24
R-1	1,000	44	47	50	51	52	53	54	54	54	54	52	47
R-2	2,000	38	41	44	45	46	47	48	48	48	48	46	41
R-3	2,200	37	40	43	44	45	46	47	47	48	47	45	40
R-4	2,700	36	39	41	42	43	44	45	45	46	45	43	39
R-5	3,400	34	37	39	40	41	42	44	43	44	43	41	37
R-6	1,400	41	44	47	48	49	50	51	51	52	51	49	44

Source: Appendix J

As shown in Table 4.8-11, demolition-related heavy equipment noise would not exceed 54 dB L_{eq} at any of the nearby sensitive receptor locations during the demolition period, and thus would not exceed the applicable threshold for demolition noise of 85 dBA L_{eq}.

Demolition Traffic Noise

Demolition phase traffic noise levels are shown in Table 4.8-12. The noise exposure levels shown are at a reference distance of 100 feet from the center of each analyzed roadway segment, for Existing and Existing Plus Project (Demolition Phase) traffic conditions.

Table 4.8-12 Demolition Phase Traffic Noise Levels

Roadway Name (Description)	Existing (dBA L _{eq})	Existing Plus Project (Demolition) (dBA L _{eq})	Change (dBA L _{eq})	Significant Impact?
Main Street (n/o SR 1 NB Ramps)	58.3	58.3	0.0	No
Main Street (s/o SR 1 NB Ramps)	59.6	59.7	+0.1	No
Main Street (n/o SR 1 SB Ramps)	59.5	59.6	+0.1	No
Main Street (n/o SR 1 SB Ramps)	60.6	60.8	+0.2	No
Main Street (n/o Beach Street)	59.0	59.0	0.0	No
Main Street (s/o Beach Street)	57.0	57.0	0.0	No
Beach Street (w/o Main Street)	55.9	55.9	0.0	No
Beach Street (e/o Main Street)	47.5	47.5	0.0	No

Source: Appendix J

As shown in Table 4.8-12, traffic noise during the demolition phase of the project would not increase by more than 0.2 dBA along all analyzed roadway segments. This minor increase does not represent a significant traffic noise increase, as changes in noise level less than 1-2 dBA are generally not perceived.

BESS Facility Operation

Onsite Operational Noise Sources

Taking into account the anticipated operational noise levels of the substations and the power conversion system, the noise reduction provided by berms on the Project Site, and the standard rate of attenuation of noise with increased distance from a point source, the expected project-related operational noise levels would be 39 dBA at residential land uses southeast of the Project Site (in the vicinity of LT-1) and 43 dBA at the property line of the Morro Dunes R.V. Park northwest of the Project Site (in the vicinity of LT-2), which is within the typical noise level of quiet suburban areas at nighttime (refer to Table 4.8-1). Therefore, noise levels associated with operation of the BESS Facility would not exceed the City's applicable daytime or nighttime noise level standard of 60 dBA L_{dn} at nearby noise-sensitive receptors (residential land uses, R.V. Park, transient lodging, high school).

The General Plan Noise Element also states that new development would result in a significant noise impact if the project would result in noise levels that would increase existing ambient noise levels by 3 dBA L_{dn} or more. As described in Section 4.8.1, existing noise ambient levels at the closest sensitive receptors to the Project Site were measured at 54.7 dB L_{dn} (LT-1) and 53.3 dB L_{dn} (LT-2). Estimated as a 24-hour average (L_{dn}), which weights nighttime noise more heavily than noise during daytime hours, the BESS Facility's operational noise would be approximately 45 dB L_{dn} at site LT-1 and approximately 49 dB L_{dn} at site LT-2, with the resulting combined noise levels of 55.1 dB L_{dn} in the vicinity of LT-1 and 54.7 dB L_{dn} in the vicinity of LT-2, an increase of 0.4 dB L_{dn} and 1.4 dB L_{dn} , respectively. Therefore, the project would not generate operational noise levels during the daytime or nighttime that would increase existing ambient noise levels by 3 dBA L_{dn} or more, and the potential operational noise impacts of the BESS Facility would be less than significant.

Operational Traffic Noise

Up to fifteen permanent staff in three shifts would be employed for facility maintenance and repairs. Operation of the BESS facility would not result in a perceptible traffic noise increase (3 dBA, as described on pages 4.8-1 and 4.8-2, above) unless project-related traffic would double existing area traffic levels. Average daily trips on the roadways that would experience an increase in traffic as a result of BESS Facility operation (primarily Beach Street and Main Street) currently experience average daily trips ranging from 680 (Beach Street east of Main Street) to 13,780 (Main Street south of SR 1 Southbound ramps) under existing conditions (Appendix K). An increase of 15 permanent staff entering the local roadway network on a daily basis, compared to existing conditions, would not result in a perceptible noise increase from vehicles during operation of the project.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG), but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the

remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.8.3, *Previous Environmental Review*, the 2021 Final EIR concluded that future development in Morro Bay facilitated by Plan Morro Bay would introduce new construction and operation related noise sources associated with residential, commercial, industrial, and mixed-use land uses. Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would include a mix of residential and commercial uses and associated new construction and operation related noise sources. However, the anticipated increase in construction and operation related noise sources associated with future development of the Master Plan area would be lower than what was anticipated for the Power Plant Property in the 2021 Final EIR, due to the change of the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). General (Light) Industrial land use typically results in lower vehicle trip generation in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses. As a result of reduced vehicle miles traveled (VMT), the BESS Facility would result in reduced long-term traffic noise in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses envisioned for that portion of the Power Plant Property in the 2021 Final EIR.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review pursuant to CEQA, including mitigation to reduce temporary and long-term noise levels where potential project-level environmental impacts are identified. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce long-term noise associated with future development of the Master Plan area. Continued regulation of on-site noise consistent with the Morro Bay Municipal Code regulations and Plan Morro Bay policies would minimize disturbance to adjoining uses. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact NOI-2 CONSTRUCTION AND DEMOLITION ACTIVITIES WOULD NOT RESULT IN THE GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

BESS Facility Construction, Future Decommissioning, and Demolition Activities

As shown in Table 4.8-6, vibration levels resulting from the most intense vibrational activity, the temporary use of a vibratory pile driver, could reach approximately 0.042 PPV (in/sec) at a distance of 300 feet from the activities. All project pile driving would occur at distances greater than 300 feet from vibration sensitive receptors or fragile buildings. According to reference vibration levels shown in Table 4.8-7 and Table 4.8-8, at a distance of 300 feet vibration from temporary pile driving activities would be “barely perceptible,” and would be below the threshold for any potential structural damage. Table 4.8-6 indicates that the equipment with the next highest potential vibration levels (excluding pile driving) would be a vibratory roller. While in use, a roller could produce temporary vibration levels of approximately 0.013 PPV (in/sec) at a distance of 300 feet, which would also be “barely perceptible,” and would not exceed the threshold for potential structural damage. As such, the project would not produce any vibrations that are perceptible to nearby sensitive receptors or that exceed any thresholds for potential structural damages. Temporary vibration impacts during demolition, BESS Facility construction, and future decommissioning activities would be less than significant.

BESS Facility Operation

Operation of the BESS Facility would not involve any vibration producing equipment or require the regular use of heavy transportation vehicles that would generate groundborne vibration. As a result, vibration impacts during operation of the BESS Facility would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential environmental effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.8.3, *Previous Environmental Review*, the 2021 Final EIR concluded that construction of individual projects facilitated by Plan Morro Bay could temporarily generate groundborne vibration, potentially affecting adjacent sensitive land uses. Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would include a mix of residential and commercial uses and associated new construction and operation with potential new sources of new vibration.

Compliance with Morro Bay Municipal Code Section 9.28.030 would restrict the timing of construction activities, including vibration-generating activities during project construction, authorized by a City permit to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 8:00 a.m. to 7:00 p.m. on weekends and holidays. This requirement for new development would protect nearby vibration-sensitive receptors, including residences, from exposure to vibration during normal sleeping hours. Policies from the Noise Element of Plan Morro Bay would apply to future development projects facilitated by the Master Plan. Policy NOI-3.5 requires the City to control construction vibration by avoiding the use of vibratory rollers near vibration-sensitive receptors and scheduling construction activities with the highest potential to produce vibration to hours with the least potential to affect sensitive land uses. Policy NOI-3.6 requires the City to ensure developers notify neighbors of scheduled construction activities that would generate vibration. The avoidance of vibratory rollers in close proximity to vibration-sensitive receptors would prevent potential structural damage from vibration.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including any necessary mitigation to reduce vibration related effects where potential project-level environmental impacts are identified. Continued regulation of on-site vibration consistent with Morro Bay Municipal Code regulations and Plan Morro Bay policies would minimize disturbance to adjoining uses. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation is required because this impact would be less than significant.

4.8.5 Cumulative Impacts

The contribution of a project's individual noise impacts to regional noise impacts is, by its nature, a cumulative effect. Noise from past, present, and future projects in the region also have or will contribute to adverse regional noise impacts on a cumulative basis. A project's individual generation of noise is considered to contribute to the existing, cumulative noise conditions. As described above, the project-level thresholds for construction and operation of the project are based on significance criteria for which a project is not anticipated to contribute to an exceedance, violation, or result in a considerable net increase in noise. As discussed under Impact NOI-1 and Impact NOI-2, the generation of noise from all components of the project would not conflict with Plan Morro Bay, Morro Bay Municipal Code regulations, or other applicable guidance for noise or vibration significance criteria.

Construction and operation of cumulative development projects could result in noise or vibration that adversely affect sensitive receptors if cumulative projects include the use of heavy equipment during construction, generate vehicle trips, and include operational sources of noise. Cumulative development projects listed in Section 3, *Environmental Setting*, would include the aforementioned noise generating sources. Similar to the proposed project, all cumulative development projects and construction contractors would be required to adhere to the hours of construction listed in the Morro Bay Municipal Code, ensure noise-producing equipment is not operating, running, or idling while not in immediate use, and ensure all noise-producing construction equipment and staging areas are located and operated at the greatest possible distance from any noise-sensitive land uses.

Future development in Morro Bay facilitated by Plan Morro Bay would introduce new sensitive receptors and new operation related noise sources associated with residential, commercial, Industrial, and mixed-use land uses. Future development of Visitor Serving Commercial and Mixed-

Use Residential on the Power Plant Property consistent with the vision of the Master Plan would include a mix of residential and commercial uses. Continued regulation of on-site noise and vibration consistent with Morro Bay Municipal Code regulations and Plan Morro Bay policies would ensure land uses under the Master Plan do not generate incompatible operational noise or vibration impacts. Consistent with the conclusions of the 2021 Final EIR, future development under the Master Plan would not result in a cumulatively considerable contribution to a significant impact related to noise or vibration.

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4.9 Transportation

This section of the EIR addresses the potential physical environmental effects associated with transportation, circulation, vehicle miles traveled, and multimodal (including transit, roadway, bicycle and pedestrian facilities) transportation, from implementation of the proposed project. The project's potential to result in traffic hazards and inadequate emergency access are addressed in Section 4.10, *Effects Found Not to be Significant*.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System (BESS Facility) on a 24-acre portion of the 43-acre Project Site (referred to as the BESS Site), (2) demolition and removal of the existing power plant building and stacks, and (3) adoption of a Master Plan, which would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

This analysis is based in part on the findings of the Traffic and Parking Study prepared by Associated Transportation Engineers (ATE) in January 2023 (Appendix K).

4.9.1 Setting

The transportation network in the City of Morro Bay (City) encompasses infrastructure, facilities and amenities, and transit services. The transportation system is a connected grid network, with pedestrian and bicycle infrastructure on many of the main streets.

a. Existing Street Network

Regional access for the Project Site is provided by State Route 1 (SR 1) and local access is provided by a network of arterial and collector streets within the City. The following text provides a brief description of the study-area street network.

- SR 1 is a regional State Highway that extends north through the City toward the Cambria area and southeast towards San Luis Obispo. SR 1 is a divided four-lane highway within the City and immediate surrounding areas. SR 1 would provide regional access to the Project Site via the SR 1/Main Street interchange.
- Main Street, designated as a Minor Arterial by the City, is a two-lane roadway that extends north and south of SR 1. North of the SR 1/Main Street interchange, Main Street parallels the east side of SR 1 and serves commercial uses and residential neighborhoods. South of the SR 1/Main Street interchange, Main Street extends through the downtown area to the Morro Bay

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

State Park area. Project traffic would use the segment of Main Street south of SR 1, which is a designated truck route.

- Quintana Road is a two-lane roadway that extends east and west of Main Street. The segment west of Main Street provides access to the Project Site and the segment east of Main Street serves commercial uses.
- Beach Street is a two-lane roadway that extends east and west of Main Street. The segment between Main Street and Embarcadero, which is designated as a Minor Arterial, serves the adjacent commercial uses. This segment, which would be used by project traffic, is a designated truck route.
- Embarcadero, designated as a Minor Arterial, is a two-lane roadway that extends north and south of Beach Street. Embarcadero provides access to visitor-serving and marine uses along its reach. There is a driveway providing access to the Project Site on Embarcadero.

Figure 4.9-1 shows the existing regional street network and access for the Project Site.

b. Pedestrian and Bicycle Facilities

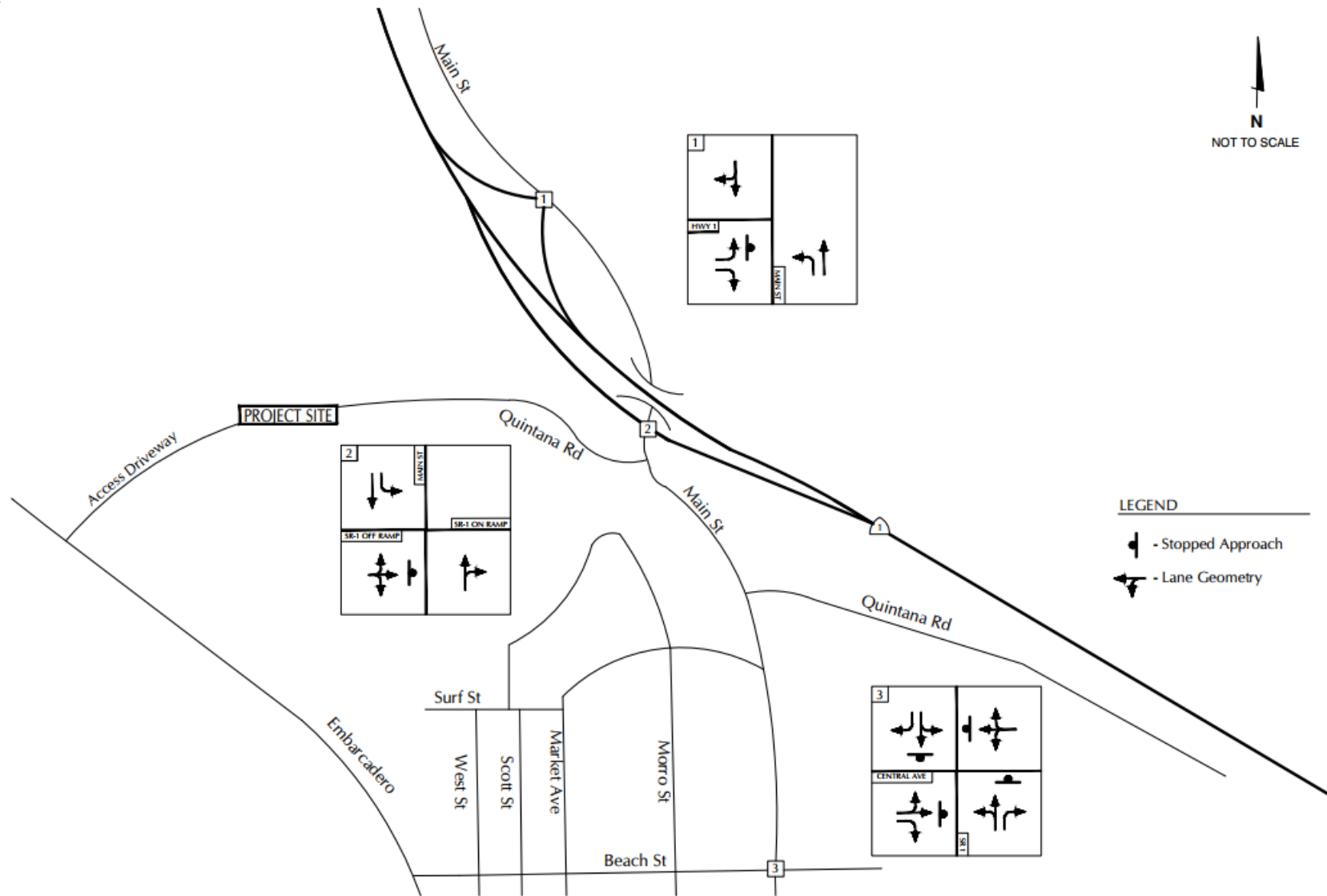
Pedestrian and bicycle facilities in the City are described below.

Pedestrian Facilities

Pedestrian facilities in the City consist of sidewalks, trails and paths, and crosswalks. Sidewalks are provided along Embarcadero and along most streets in the downtown area of the City. Most single-family residential areas in Morro Bay lack sidewalks. Section 12.04.010 of the Morro Bay Municipal Code requires that new developments conform to the City's Standard Drawings and Specifications. The City's Standard Drawings and Specifications require sidewalks for commercial, industrial, and high-density residential uses as well as on arterial, local, and collector roads not bordered by one or more of these land uses. Hillside streets in single-family residential or duplex residential zoning districts are required to provide a flat, walkable surface on one side of the road.

There are several trails and paths in the City. The Morro Bay Harborwalk is a multi-use bicycle and walking path connecting the Embarcadero to the Morro Rock coastal park area and Morro Strand State Beach. This path is heavily used by locals and visitors. The California Coastal Trail is a hiking and bicycling trail that spans from Oregon to Mexico. The California legislature formally established the Trail in 2001 and designated a general trail alignment. There is some existing signage for the Trail along the Bayfront of Embarcadero . Additional recreational hiking trails are provided in Morro Bay State Park. These include the Black Hill hiking areas and walking paths along the estuary near the State Park marina.

Figure 4.9-1 Existing Street Network



Bicycle Facilities

Bikeways are facilities that provide primarily for, and promote, bicycle travel. Bicycle facilities in the City are described in four classes of facilities:

- Class I. Paths or trails, separated from roadways, for the exclusive use of bicycle and pedestrian modes of travel with a minimum of vehicular cross-flow. The Morro Bay Harborwalk path is an example of a Class I bikeway facility. Approximately 3.6 miles of Class I bikeways exist in the City.

Class II. Striped lane for one-way bicycle travel on a street or highway. Approximately 7.1 miles of Class II bikeways exist in the City

- Class III. Roads where bicycles and vehicles share the travel lanes of the roadway. These routes are supplemented with signs and pavement legends including sharrows, which are shared-lane markings. The section of Beachcomber Street south of Yerba Buena Street is an example of a Class III bike route with sharrows.
- Class IV. Designated lanes for bicycles on roadways, but which are also separated from the roadway traffic by barricades, such as bollards, grade separation, or on-street parking. No Class IV bikeway facilities currently exist in the City.

c. Public Transit

The San Luis Obispo Regional Transit Authority (RTA) is a joint powers authority providing fixed-route regional service throughout San Luis Obispo County and serving the Morro Bay Transit Center on Harbor Street in the City. RTA provides American with Disabilities Act paratransit service through the Runabout, a demand response system operating within three-quarters of a mile of all fixed-route services in San Luis Obispo County.

The City operates Morro Bay Transit, which provides fixed-route bus service with hourly headways from 6:25 a.m. to 6:45 p.m. on weekdays and 8:25 a.m. to 4:25 p.m. on Saturdays. Curb-to-curb service is provided within three-quarters of a mile of the fixed route on a reservation basis. This route serves the major campgrounds, high school, senior center, grocery store, and neighborhoods throughout the City.

The Morro Bay Trolley operates three loops from Memorial Day weekend through the first weekend in October. The routes serve northern portions of the City, the downtown area, and the waterfront with headways of less than one hour. Stops are provided at the State Park campground, downtown, Embarcadero, Morro Rock, and Morro Strand campground.

Morro Bay Senior Citizens, Inc. operates a senior transportation shuttle on Monday through Thursday from 9:00 AM to 4:00 PM. It serves destinations throughout San Luis Obispo County.

4.9.2 Regulatory Setting

a. State Regulations

Caltrans Authority over the State Highway System

The California Department of Transportation (Caltrans) has jurisdiction over the State Highway system in California. Caltrans builds, maintains, and operates all state highways with a goal to allow for the safe and efficient use of the State transportation system for all users, and sets design standards that are often copied by local governments. Caltrans requirements are described in their

Highway Design Manual, Seventh Edition (Caltrans 2020), which covers the information needed for Caltrans to review impacts to State highway facilities, including freeway and arterial segments, on- and off-ramps, and signalized intersections.

Senate Bill 743

Senate Bill (SB) 743, which was signed into law in 2013, tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.” SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion/driver delay, while an inconvenience to drivers, is not itself an environmental impact (see Public Resources Code Section 21099[b][2]). In addition to new exemptions for projects that are consistent with specific plans, the draft SB 743 guidelines replace congestion-based metrics, such as auto delay and level of service (LOS), with vehicle miles traveled (VMT) as the basis for determining significant impacts, unless the guidelines provide specific exceptions. In November 2018, the California Natural Resources Agency finalized updates to the *CEQA Guidelines* Section 15064.3 establishing VMT as the most appropriate measure of transportation impacts, and the updated Guidelines became effective in December 2018.

California’s Complete Streets Act

The California Complete Streets Act, adopted in 2008, requires that cities and other public agencies incorporate “complete street” policies promoting safety and accessibility, among other goals, when updating their General Plan Circulation Element, to ensure that Complete Streets principles are incorporated. Complete Streets Law was signed into law as Assembly Bill (AB) 1358. It requires that cities plan for the needs of all users, including bicyclists and pedestrians, when updating local general plans.

b. Local Regulations

San Luis Obispo Council of Governments, Regional Transportation Plan/Sustainable Communities Strategy

The San Luis Obispo Council of Governments (SLOCOG) is required by State and federal law to prepare, update, and adopt a Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) every four years. The most recent update to the RTP and SCS was completed by SLOCOG in 2023 (SLOCOG 2023). The 2023 RTP addresses all modes of travel and identifies and prioritizes expenditures from anticipated funding for all modes of transportation including highways, streets and roads, transit, rail, bicycle and pedestrian, as well as transportation demand management strategies. All transportation projects that use State and federal funds, or that could significantly affect transportation within the San Luis Obispo County, must be included in the RTP. The 2023 RTP identifies active transportation projects, non-highway system projects, highway system projects, and a park and ride project in the City. The SCS is intended to guide future planning efforts and policy decisions that affect transportation, including its relationship with housing and land use that will reduce greenhouse gas emissions in the region. The 2023 RTP identified and

tested growth scenarios to accommodate an anticipated 42,000 new people, 18,000 new homes, and 18,000 new jobs in the San Luis Obispo County region (SLOCOG 2023).

2011 Morro Bay Bicycle and Pedestrian Master Plan

The Morro Bay Bicycle and Pedestrian Master Plan, adopted in 2012, describes existing conditions and identifies goals, objectives, and planned improvements to serve bicycle and pedestrian modes of travel in the City (City of Morro Bay 2012). The goals contained in the plan provide broad vision statements and serve as the foundation for the plan, while objectives provide more detailed and measurable statements. Goals of the Morro Bay Bicycle and Pedestrian Master Plan are as follows:

- Adopt a “Complete Streets” policy requiring bicycle and pedestrian improvements in all transportation and development (private or public) projects subject to discretionary review.
- Complete the bicycling and walking systems suggested in [the Master Plan], recognizing these projects are Economic Generators for the city.
- Develop a city-wide educational program for non-motorized use, including paper maps, pathways for play and road safety education.
- Collaborate with businesses and business organizations to promote bicycle use and walking as part of a Visitor Serving Strategy emphasizing bike/walking based tourism.
- Provide short and long term bike parking at targeted locations while further developing the “Racks with Plaques” Program.
- Improve safety, educational, and artistic amenities along existing and future paths.

The majority of the planned bikeways under the Morro Bay Bicycle and Pedestrian Master Plan would be Class I and Class II bikeways. As described above, Class I bikeways are paths or trails, separated from roadways, for the exclusive use of bicycles and pedestrians. Class II bikeways are striped lanes for one-way bicycle travel on streets and highways.

Plan Morro Bay

Plan Morro Bay was adopted in May 2021, and includes goals, policies, and implementation actions related to the City’s circulation system, primarily within the Circulation Element, but also within the Land Use, Noise, Public Safety, and Conservation Elements. The Circulation Element is required by California Government Code Section 65302(b) and includes major thoroughfares, transportation routes, and other means of travel. The Circulation Element plans for a multimodal transportation network, which facilitates safe and convenient travel for all community members and reduces VMT. The Coastal Act requires cities and counties to maximize public access to the coast, which includes access to parking and other forms of transportation that provide coastal access to visitors. Plan Morro Bay includes a description of the existing transportation network, parking facilities in the Coastal Zone, the transportation network diagram, and multimodal transportation infrastructure. Plan Morro Bay also covers key transportation issues in the City and the goals and policies which will guide efforts by the City, developers, and officials to improve travel mobility and efficiency in Morro Bay, as well as to reduce traffic noise and air pollutant and greenhouse gas (GHG) emissions and improve emergency response and roadway safety.

4.9.3 Previous Environmental Review

The 2021 Final EIR for Plan Morro Bay programmatically assessed the potential for future development under Plan Morro Bay (also referred to herein as the General Plan and Local Coastal

Program [LCP] Update) to result in local and regional transportation impacts. The 2021 Final EIR concluded that the General Plan and LCP include multiple goals and policies that would improve safety, access, and performance of public transit, bicycle, and pedestrian transportation modes. For example, Policy CIR-2.7 implemented strategies to calm traffic on streets with high amounts of pedestrian and bicycle use, which would reduce delays associated with vehicle traffic, such as delays at intersection crosswalks. The 2021 Final EIR also required additional pedestrian facility improvements to be added to the list of “Planned Circulation Improvements” in the General Plan and LCP Update Circulation Element through implementation of Mitigation Measure T-1. Required pedestrian facility improvements included sidewalks and a vehicular connection on Embarcadero north of Beach Street to shift traffic away from Beach Street for the anticipated redevelopment of the Power Plant Property.

The 2021 Final EIR concluded that land use growth and associated future development in the City would result in a permanent long-term increase in VMT. While the Circulation Element includes goals and policies intended to reduce VMT (and to reduce reliance on passenger vehicles), including establishing a VMT standard to achieve State-mandated reductions in VMT, the long-term increase in VMT was found to be a significant and unavoidable impact of future development in the City under the General Plan and LCP Update.

4.9.4 Impact Analysis

a. Methodology

This impact analysis is based on the existing conditions of the Project Site and vicinity, including the existing street network, pedestrian and bicycle facilities, and existing traffic operations in the City, as described under Section 4.9.1, *Setting*. This analysis identifies potential transportation impacts based in part on the findings of the Traffic and Parking Study prepared by ATE in January 2023 (Appendix K).

ATE prepared a traffic and parking study for the construction, demolition, and operational phases of the project. The study focuses on the potential traffic and parking effects of the project during the construction phase (when the battery storage system would be built), the demolition phase of the project when the existing power plant building and stacks would be removed, and the operational phase of the BESS Facility.

b. Significance Thresholds

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines*. For the purposes of this EIR, implementation of the project may have a significant effect on the environment if it would do any of the following:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
2. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b).
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment).
4. Result in inadequate emergency access.

Because the project (including construction and operation of the BESS Facility) would not substantially increase hazards due to a geometric design feature (Threshold 3) or result in

inadequate emergency access (Threshold 4), a discussion of these effects is not included in this section. These topics are briefly discussed in Section 4.10, *Effects Found Not to be Significant*.

Prior to July 2020, most agencies in California, including the City, utilized LOS as the primary metric for evaluating potential transportation impacts under CEQA. In 2013, the State passed SB 743, which mandates that jurisdictions can no longer use LOS or other measures of automobile delay/congestion to evaluate transportation impacts under CEQA. The State then issued guidelines identifying VMT as the primary metric to be used for CEQA analysis of transportation impacts, with these changes becoming mandatory on July 1, 2020. The City still requires evaluation of LOS and site access management to guide local circulation system planning and recommended conditions of approval for development projects; however, these analyses are outside the scope of the CEQA process, and therefore, an evaluation of LOS is not contained herein.

Vehicle Miles Traveled/CEQA Guidelines Section 15064.3, Subdivision (b)

Per the State’s Natural Resource Agency Updated Guidelines for the Implementation of CEQA, VMT has been designated as the most appropriate measure of transportation impacts. “Vehicle miles traveled” or VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. For land use projects, VMT exceeding an applicable threshold of significance may indicate a potentially significant impact.

The City has not yet adopted locally-specific thresholds for evaluating potential VMT impacts. As a result, this evaluation relies on the VMT thresholds and calculation methodologies presented in the San Luis Obispo County Transportation Impact Analysis Guidelines (San Luis Obispo County 2021)². The County’s VMT thresholds for employment-based projects are summarized below:

Employment VMT Threshold. Project VMT exceeds a level of 15 percent below existing county VMT for home-based work VMT per employee.

The County’s guidelines indicate that the Countywide Home-Based Work VMT per employee is 30.2, and the significance threshold is 25.7 Home-Based Work VMT per employee (15 percent less than 30.2).

Section 3.2 of the San Luis Obispo County Transportation Impact Analysis Guidelines establishes screening criteria for certain projects that would not be required to determine or evaluate the project VMT. If any of the screening criteria are met, a project’s level of impact related to VMT would be considered less than significant. Section 3.2 states that:

“Small projects that are consistent with the SLOCOG SCS or San Luis Obispo County General Plan and generate fewer than 110 daily trips, consistent with trip generation associated with projects eligible for a Categorical Exemption under CEQA, are considered to have a less than significant VMT impact.”

It should also be noted that SB 743 and *CEQA Guidelines* Section 15064.3[b] focus on land use and transportation projects and these laws do not typically consider temporary construction trips as having the potential to result in a significant environmental impact. As a result, the discussion of the temporary components of the project – demolition, construction, and future decommissioning – is included primarily for informational purposes.

² The City of Morro Bay has approved the use of the San Luis Obispo County VMT thresholds for the purpose of complying with *CEQA Guidelines* Section 15064.3.b.

c. Project Impacts

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

Impact TRA-1 OPERATION OF THE BESS FACILITY AND FUTURE LAND USES DEVELOPED UNDER THE MASTER PLAN WOULD IMPLEMENT PLANNED CIRCULATION IMPROVEMENTS ENVISIONED IN THE PLAN MORRO BAY CIRCULATION ELEMENT. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, and Future Decommissioning

Demolition, BESS Facility construction, and future decommissioning could result in temporary impacts to the circulation system due to construction-related traffic and activities. Access to the Project Site during construction would be provided from SR 1 via Main Street to the existing driveway that connects to Quintana Road and then along the northern boundary of the existing PG&E substation. The driveway on Embarcadero would not be used for inbound or outbound vehicular traffic to the Project Site during BESS Facility construction or demolition. As a result, project construction and demolition activities would not generate new vehicular traffic on Embarcadero. Flatbed trailers and trucks would be used to transport construction equipment and construction materials to the Project Site, but would be directed away from the Embarcadero driveway, minimizing the effect of construction traffic on pedestrian and bicycle circulation.

The driveway on Embarcadero would be open for construction workers and employees walking to local retail/restaurants and other facilities and businesses during the lunch break period or after work. There is an existing crosswalk for employees to cross Embarcadero to access local facilities. Sidewalks are provided on the east side of the Project Site driveway and on the south of Embarcadero to accommodate pedestrians. There is 40 feet of red curb along the north side of Embarcadero adjacent to the project driveway, providing visibility to the east. In addition, there are Class II bike lanes on Embarcadero adjacent to the Project Site; and Class I bike paths extending north of the site to the Morro Bay High School and west of the Project Site to Morro Rock. It is not anticipated that there would be any new bicycle traffic generated by the demolition, construction, or future decommissioning activities, as the majority of construction workers would drive to the Project Site. There may be some additional mid-day pedestrian activity generated by the project at the Embarcadero site entrance; however, it is not anticipated that this additional pedestrian activity would impact the existing pedestrian or bicycle facilities in the study area. Given the existing pedestrian and bicycle facilities provided and the routing of construction-related vehicle traffic away from Embarcadero, no significant safety issues to bicyclists and pedestrians are anticipated.

A staging/laydown area and construction worker parking area would be established at existing hard surface locations on the Power Plant Property, such as the concrete pads located between the existing power plant building and PG&E substation and the paved area between the stacks and Embarcadero. No construction staging or worker parking would occur within the public right-of-way. No more than 300 workers would be present on the Project Site at any given time; the average number of workers on site during project construction or decommissioning would be expected to be between 100 and 300. Construction and decommissioning 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 17.28.120.

The construction contractor would be required to prepare a site-specific Traffic Management Plan that details safety precautions for on-site vehicular and pedestrian traffic as well as off-site haul

routes. All subcontractors would be required to comply with this Traffic Management Plan. Signs and flaggers would be employed as necessary to ensure on-site worker safety, off-site public safety and to improve traffic circulation. Demolition, construction, and future decommissioning would not conflict with Circulation Element goals or policies, or conflict with Morro Bay Municipal Code Section 10.52.030, which describes the City engineer role and authority to designate streets as “truck routes,” and this impact would be less than significant.

BESS Facility Operation

The project would implement planned circulation improvements and other improvements envisioned in the Plan Morro Bay Circulation Element. Frontage improvements along Embarcadero include a 12-foot multi-use path and storm drainage along the Project Site’s Embarcadero frontage pursuant to the City’s Public Works Department requirements. A visual simulation of the planned multi-use path along the Project Site’s Embarcadero frontage is shown in Figure 4.9-2. Up to six Monterey cypress trees may be removed for access west of proposed southernmost building and associated substation, but the project would be designed to avoid removal of trees if possible, and any trees that are removed would be replaced consistent with the City’s Major Vegetation Guidelines. The planned frontage improvements are consistent with planned transportation improvements on Embarcadero described in the Circulation Element, which include providing sidewalks and a vehicular connection that would shift traffic away from Beach Street and the redeveloped Power Plant Property. These frontage improvements would also be consistent with other applicable goals and policies of Plan Morro Bay.

As described in Section 4.9.3, *Previous Environmental Review*, the 2021 Final EIR concluded that the Circulation Element included goals and policies that would improve safety, access, and performance for all modes of travel. For example, Policies CIR-1.1 through 1.11 are intended to enhance the City’s alternative transportation modes while continuing to accommodate automobile travel, and Policies CIR-2.1 through 2.7 are intended to promote active transportation by addressing safety concerns. Because the project would implement planned circulation improvements envisioned in the Plan Morro Bay Circulation Element (i.e., the 12-foot multi-use path along the Project Site’s Embarcadero Road frontage), the project would not conflict with any applicable transportation program, plan, ordinance or policy, and this impact would be less than significant.

Figure 4.9-2 Embarcadero Frontage Multi-Use Path (Photo Simulations)



Photo Simulation 1: Looking East from Embarcadero



Photo Simulation 2: Looking Northwest from Embarcadero

Source: Vistra, 11/1/2023.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential transportation-related effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

The change in land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial would be inconsistent with the land use designations anticipated in the 2023 RTP. However, implementation of the Master Plan would result in fewer vehicle trips and lower VMT than anticipated in the 2023 RTP, due to the lower vehicle trip generation rate typical for General (Light) Industrial uses in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses (refer to Impact TRA-2 for a detailed discussion of the anticipated vehicle miles traveled associated with these land uses). Implementation of the goals and policies in the Circulation Element would further contribute to reducing VMT in the City. Consistent with Policy CIR-3.2 and CIR-3.3, future development projects that occur in accordance with the Master Plan would require focused, project-level environmental review, and would require mitigation to reduce VMT where potential environmental impacts are identified.

The Master Plan would implement Circulation Element goals and policies, including the objectives described in Plan Morro Bay Policy LU-5.4 to create better connections between the two sides of Embarcadero and create a pedestrian-friendly atmosphere and safer pedestrian infrastructure along the Embarcadero frontage. Future development of Visitor-Serving Commercial and Mixed-Use Residential uses envisioned along Embarcadero in the Master Plan would facilitate implementation of Circulation Element Policies CIR-1.1 through 1.11, which are intended to enhance the City's alternative transportation modes while continuing to accommodate automobile travel, and Policies CIR-2.1 through 2.7, which are intended to promote active transportation by addressing safety concerns. As a result, the Master Plan would not conflict with a program, plan, ordinance or policy addressing the circulation system, and this impact would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

Threshold 2: Would the project conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?

Impact TRA-2 OPERATION OF THE BESS FACILITY WOULD NOT RESULT IN NEW VEHICLE TRAVEL THAT WOULD EXCEED THE APPLICABLE VEHICLE MILES TRAVELLED (VMT) SCREENING CRITERIA. FUTURE DEVELOPMENT UNDER THE MASTER PLAN WOULD CONTINUE TO RESULT IN LONG-TERM VMT, CONSISTENT WITH THE CONCLUSIONS OF THE 2021 FINAL EIR FOR PLAN MORRO BAY. HOWEVER, THE CHANGE TO THE LAND USE DESIGNATION OF THE BESS SITE FROM VISITOR SERVING COMMERCIAL TO GENERAL (LIGHT) INDUSTRIAL WOULD SUBSTANTIALLY REDUCE LONG-TERM INCREASE IN VMT ASSOCIATED WITH FUTURE DEVELOPMENT OF THE MASTER PLAN AREA. AS A RESULT, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Demolition, BESS Facility Construction, and Future Decommissioning

As discussed in Section 4.9.4.b, *CEQA Guidelines* Section 15064.3(b) focuses on land use and transportation projects and does not typically consider temporary construction trips as having the potential to result in a significant environmental impact. As a result, the discussion of the temporary components of the project – demolition, construction, and future decommissioning – is qualitative in nature, and is included primarily for informational purposes.

As discussed in the Air Quality Technical Report (Appendix B), material/vendor trips are assumed to occur during the grading, building construction, paving, and demolition phases. No on-road soil hauling truck traffic is expected during construction, as there is no planned import or export of material during the site preparation and grading phases. The demolition phase would require approximately 32 one-way material hauling trips per day. Vehicle trips would also be generated by construction workers accessing the Project Site during the 20-month demolition period and 48-month BESS Facility construction period (future decommissioning is assumed to occur over a similar 48-month period). No more than 300 workers would be present on the Project Site at any given time; the average number of workers on site during project construction or decommissioning would be expected to be between 100 and 300. The majority of workers during the BESS Facility construction and demolition phases would be expected to reside in San Luis Obispo County. Some workers would typically travel from outside the County to work at the site for certain portions of the construction phase and would be anticipated to reside at local lodging facilities. The project calls for implementation of an employee carpool program for the construction and demolition phases of the project, with anticipated average vehicle occupancy of 2 employees per vehicle.

As discussed in Section 2, *Project Description*, this analysis assumes that decommissioning activities would involve the use of heavy equipment and personnel similar to that used for the BESS Facility's construction phase. As a result, BESS Facility decommissioning would result in similar material/vendor trips and worker trips to the BESS Facility construction phase. Based on these considerations, the potential temporary VMT impacts during the construction, demolition, and decommissioning phases of the project would be less than significant.

BESS Facility Operation

The BESS Facility would be operated and maintained by approximately 15 new employees for on-going operations working three shifts per day. The BESS Facility would require only nominal long-term maintenance and capital improvements. Periodically, it may be necessary to test and/or replace individual battery modules. The BESS Facility would be continuously monitored to determine if and when testing and possible replacement of individual battery modules is necessary

or advisable. Table 4.9-1 shows the trip generation forecasts for on-going operations of the BESS Facility.

Table 4.9-1 BESS Facility Trip Generation – On-Going Operations

On-Going Operations	Number per Day	Shift Schedule	Average Daily Trips (ADT)	AM Peak	PM Peak
Employees ¹					
1 st Shift	5	8:00 AM – 4:00 PM	15	5	5
2 nd Shift	5	4:00 PM – 12:00 AM	15	0	5
3 rd Shift	5	12:00 AM – 8:00 AM	15	5	0
Subtotals:			45	10	10
Deliveries	1		2	0	0
Totals:			47	10	10

1. ADT assumes 1 inbound + 1 outbound trip per employee and 50% of employees leave for lunch break. Peak hour trips assume employee arrived during the AM peak hour and depart during the PM peak hour.
 Source: Associated Transportation Engineers, Traffic and Parking Study, January 2023 (Appendix K)

As shown in Table 4.9-1, operation of the BESS Facility is forecasted to generate 47 Average Daily Trips (ADT), 10 AM peak hour trips, and 10 PM peak hour trips. As discussed in Section 4.9.4.e, the San Luis Obispo County Transportation Impact Analysis Guidelines establish a VMT screening criteria for projects that would generate fewer than 110 daily trips and are consistent with the SLOCOG Regional Transportation Plan. Impact TRA-1 establishes that the project would result in fewer vehicle trips and lower VMT than anticipated in the 2023 RTP, due to the lower vehicle trip generation rate typical for General (Light) Industrial uses in comparison to Visitor Serving Commercial and Mixed-Use Residential land uses. The volume of daily and peak hour traffic shown in Table 4.9-1 would not exceed the applicable VMT screening criteria. As a result, the potential VMT impact during operation of the BESS Facility would be less than significant.

Master Plan

The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial land use and zoning designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not facilitate or contemplate reciprocal access to adjacent properties, new utility connections for future Visitor Serving Commercial uses, infrastructure improvements, or other changes in the physical environment that were not identified in Plan Morro Bay and evaluated in the 2021 Final EIR. The BESS Facility would be consistent with the proposed General (Light) Industrial land use on the BESS Site. Therefore, the potential VMT effects of this land use designation change are evaluated in the preceding discussion of demolition and BESS Facility construction, operation, and future decommissioning.

As described in Section 4.9.3, *Previous Environmental Review*, the 2021 Final EIR concluded that land use growth and associated future development in the City would result in a long-term increase in per-service¹ population VMT. The increase in VMT is attributable to the increase in employment

associated with substantial commercial growth envisioned in Plan Morro Bay. Plan Morro Bay identified the land use designations in the Master Plan area as Visitor Serving Commercial and Mixed-Use Residential Overlay. The Circulation Element includes goals and policies that reduce reliance on passenger vehicles, facilitate pedestrian and bicycle transportation, and establish local targets for VMT reduction. However, the long-term increase in VMT associated with future development in the City was found to be a significant and unavoidable impact.

Future development of Visitor Serving Commercial and Mixed-Use Residential on the Power Plant Property consistent with the vision of the Master Plan would have the potential to result in a long-term increase in per-service population VMT. However, the anticipated growth in VMT associated with future development of the Master Plan area would be lower than anticipated for the Power Plant Property in the 2021 Final EIR, due to the change in the land use designation of the 24-acre BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). This reduction is because General (Light) Industrial land uses generate fewer daily vehicle trips and associated VMT than Visitor Serving Commercial land uses, which would include a mix of residential, retail, and restaurant uses. General (Light) Industrial land use have a typical daily trip rate of 4.87 trips per 1,000 sf, and the BESS Facility, as described in the BESS Facility Operation discussion above, would generate only 47 ADT (Institute of Transportation Engineers [ITE] 2021). Development of the Project Site with Visitor Serving Commercial and Mixed-Use Residential land uses could involve a mix of residential apartments or condominiums with retail and restaurants on lower levels. This type of development has an average trip rate of 54.45 trips per 1,000 sf for retail uses and 6.74 trips per residence for multifamily residential units³ (ITE 2021). Therefore, development of the BESS Facility would result in substantially lower vehicle trip generation than would be anticipated from development of the 24-acre BESS Site with Visitor Serving Commercial and Mixed-Use Residential land uses.

Individual development projects in the Master Plan area would continue to be required to prepare focused, project-level environmental review, including mitigation to reduce VMT where potential project-level environmental impacts are identified. The change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would substantially reduce long-term increase in VMT associated with future development of the Master Plan area. As a result, this impact would be less than significant.

Mitigation Measures

No mitigation would be required because this impact would be less than significant.

4.9.5 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project would be significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (*CEQA Guidelines* Section 15065[a][3]). The geographic scope for cumulative transportation impacts is the City's multimodal transportation network. Adjacent development that is considered part of the cumulative analysis includes planned and pending projects in the City, listed in Table 3-1 in Section 3, Environmental Setting.

³ Based on ITE land use code 220, which is for residential uses of two to three stories in height, and land use code 822 for retail plazas up to 40,000 sf in size.

Morro Bay Battery Energy Storage System Project

Cumulative development in the City would gradually increase the City's population and workforce, and would therefore gradually increase the number of people using area roadways and other local transportation facilities, including pedestrian and bicycle facilities, as well as transit. As discussed in Impact TRA-1, the project would be consistent with the goals and policies of the Plan Morro Bay Circulation Element, and the project's frontage improvements (pedestrian and bicycle path) along the Project Site frontage of Embarcadero would implement planned circulation improvements envisioned in the Circulation Element. Cumulative development projects would typically be required to conform with the goals and policies of Plan Morro Bay, ensuring that cumulative impacts associated with Circulation Element and other Plan Morro Bay policy conflicts would be less than significant.

As discussed in Impact TRA-2, the change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce the long-term increase in VMT associated with the Master Plan area. Implementation of the goals and policies in the Circulation Element would further contribute to reducing VMT in the City. Consistent with Policy CIR-3.2 and CIR-3.3, individual development projects in the City would require focused, project-level environmental review, and would require mitigation to reduce VMT where potential environmental impacts are identified. As a result, the project would not contribute considerably to a cumulative increase in regional VMT.

4.10 Effects Found Not to be Significant

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System (BESS Facility) on a 24-acre portion of the 43-acre Project Site (referred to as the BESS Site), (2) demolition and removal of the existing power plant building and stacks, and (3) adoption of a Master Plan, which would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site.¹

Section 15128 of the *CEQA Guidelines* requires that an EIR briefly describe any possible effects that were determined not to be significant. This section discusses the environmental topics that were determined to not result in potentially significant environmental effects. The discussion of each topic relies on the checklist questions listed in Appendix G of the *CEQA Guidelines*.

4.10.1 Agricultural and Forestry Resources

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in any of the following:

1. Convert Prime Farmland, Unique Farmland, 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;
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract;
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);
4. Result in the loss of forest land or conversion of forest land to non-forest use; and/or
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant property. Refer to Section 2, Project Description, Figure 2-2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, Project Description, Figure 2-2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, Project Description, Figure 2-4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idled Morro Bay Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, Project Description, Figure 2-8.

Assessment of Impacts

The Project Site has a General Plan and Local Coastal Program (LCP) land use designation of Visitor Serving Commercial with a Mixed-Use Residential Overlay. The Project Site is not zoned for agricultural or forest land use, is not under a Williamson Act contract, and is not designated by the California Department of Conservation (DOC) as Prime Farmland or Farmland of Statewide Importance (DOC 2021). The project does not involve any development that would convert agricultural land to a non-agricultural use, conflict with existing zoning of forest land or timberland, result in the loss or conversion of forest land to non-forest uses, interrupt ongoing agricultural activity, or conflict with a Williamson Act contract. The Master Plan would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) but would otherwise retain the existing Visitor Serving Commercial designation and Mixed-Use Residential Overlay established by Plan Morro Bay for the remainder of the Master Plan area. The Master Plan does not include any land use changes that would affect agricultural land use designations. Therefore, the project would not adversely affect agricultural, forest land, or timberland resources.

4.10.2 Biological Resources

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in any of the following:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
3. Have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Checklist Items 1, 2, 3, 4, and 5 are addressed in Section 4.3, *Biological Resources*. Checklist Item 6 is addressed herein.

Assessment of Impacts

The Project Site is not located within an adopted Habitat Conservation Plan as identified by CDFW (CDFW 2023b), or within an adopted Natural Community Conservation Plan as identified by CDFW (CDFW 2019). Therefore, the project would have no impact regarding conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.10.3 Energy

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in any of the following:

1. A potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; and/or
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Assessment of Impacts

Energy use during the construction, demolition, and future decommissioning phases would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment.

Energy use during construction, demolition, and decommissioning would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. Construction contractors would be required to comply with the provisions of California Code of Regulations (CCR) Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, as well as the City's Climate Action Plan Implementation Action O-1.2, which limits idling time to no more than three minutes. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. In addition to these requirements, construction contractors would be expected to minimize unnecessary fuel consumption as a standard cost-reducing practice.

Electrical power would be consumed to construct the project, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area. Overall, construction, demolition, and future decommissioning activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. Furthermore, per applicable regulatory requirements such as California's Green Building Standards Code (CALGreen; CCR Title 24, Part 11), the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction, demolition, and future decommissioning would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and no impact would occur.

Morro Bay Battery Energy Storage System Project

Operation of the BESS Facility would primarily involve remote monitoring, with up to 15 full-time operations and maintenance (O&M) staff available to conduct periodic inspections and maintenance as needed. Energy use during project operation would be limited to electricity to power communications panels, the battery monitoring system, HVAC, and lighting. The buildings would be required to be designed in compliance with the current Title 24 requirements at the time of permit issuance, which would reduce energy requirements of the project. Vehicle trips generated during typical operation of the BESS Facility would be limited to the 15 O&M staff members and occasional trips required for battery module replacement. Therefore, operation of the project would demand relatively little energy and transportation fuel use.

The project would involve demolition of the existing power plant building and stacks. However, the Power Plant has been inactive since its retirement in 2014. Therefore, removal of these existing structures would not result in a long term reduction in energy production.

Furthermore, by expanding access to energy storage systems, the BESS Facility would increase the stability and reliability of the existing electrical grid, thereby reducing the need for additional electricity to be generated by fossil fuel power plants during peak hours. Therefore, the BESS Facility and associated infrastructure improvements would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction, demolition, operation, or future decommissioning.

The City of Morro Bay Climate Action Plan (CAP) was adopted by the City Council in 2014. The CAP regulates city government operations, energy, solid waste, land use, transportation, and tree removal. Collectively the measures identified in the CAP have the potential to reduce greenhouse gas (GHG) emissions and energy use within Morro Bay. The measures in the CAP focus primarily on actions completed by the City (City of Morro Bay 2014). In addition, the City's 2021 General Plan/LCP, Plan Morro Bay, contains two goals and several policies related to energy efficiency and innovation (City of Morro Bay 2021a). Applicable goals and policies contained within Plan Morro Bay include the following:

Goal C-5: Morro Bay is a leader in energy innovation and sustainable usage.

Goal C-6: Energy available to Morro Bay residences, business, and public buildings is renewable and sustainable.

Policy C-6.1: Create incentives that promote renewable and sustainable energy systems as a component of new development or reuse projects. Require water- and energy-efficient features in all new and significantly renovated development, such as lowflow and energy-efficient appliances, drought-tolerant vegetation, rooftop solar, and passive heating and cooling features.

Policy C-6.4: Support public/private partnerships to implement energy efficiency, energy storage, and microgrid development to achieve cost savings, reduce energy use, and improve energy reliability.

The project would be consistent with the overall intent of the energy-related goals and policies contained within the CAP and Plan Morro Bay by expanding opportunities for the efficient storage and use of renewable energy and by reducing reliance on fossil fuels to power the electrical grid. The BESS Facility would complement local and State goals to support reliable, low-carbon grid operation. The BESS Facility would have the ability to store excess generated energy, including energy from renewable sources, that would otherwise be wasted and regenerate it for later use during peak times when demand is highest. Additionally, the BESS Facility would reduce peak loads

on the power delivery and transmission system and serve as a demand response asset for grid operators, thereby conserving utility resources and reducing fossil fuel combustion for the provisioning of electricity. Additionally, as described above, the project would also comply with applicable CALGreen energy efficiency policies to reduce operational energy use. Therefore, the project would not conflict with any plans for renewable energy or efficiency.

Refer to Appendix L for additional information relating to the project's potential energy impacts.

4.10.4 Geology and Soils

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in any of the following:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - ii. Strong seismic ground shaking;
 - iii. Seismic-related ground failure, including liquefaction;
 - iv. Landslides;
2. Result in substantial soil erosion or the loss of topsoil;
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; and/or
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Checklist Items 1.iii, 3, 4, and 6 are addressed in Section 4.5, *Geology/Soils*. Checklist Items listed 1.i, 1.ii, 1.iv, 2, and 5 are addressed herein.

Assessment of Impacts

The Project Site is located in a seismically active area of California; however, the Project Site does not overlie the trace of any known fault and the Project Site and vicinity are not located within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS] 2022a). The nearest mapped fault zone is located approximately 9.3 miles southeast of the Project Site (CGS 2022a); therefore, the Project Site is not at substantial risk of ground surface fault ruptures.

As with virtually all of California, the Project Site is located in an area with the potential for ground shaking that may cause structural or property damage in the event of an earthquake (CGS 2016). The Project Site overlies Quaternary-aged alluvium composed of gravel, sand, and some clay, and

the material in the immediate vicinity of the Project Site is beach and dune sands; these materials have an increased risk of damage due to ground shaking (SLO County 1999). According to the Duke Energy Application (Duke Energy 2000), the Project Site is subject to a peak horizontal ground acceleration (PGA) of 33% of the acceleration of gravity (g-units; 0.33 g) from a maximum credible earthquake of magnitude 6.8 on the Los Osos fault, and is located within Seismic Zone 4 as designated by the California Building Code. Based on this information, the Project Site is susceptible to seismic activity, and would be subject to moderate ground shaking during a reasonably likely earthquake. However, the project would be required to minimize this risk through incorporation of applicable CBC standards as adopted by the City of Morro Bay (Morro Bay Municipal Code Section 14.01.020). Project structures (including battery racks) would be required to be designed in accordance with the minimum requirements of the versions of the CBC and ASCE 7 in place at the time of construction permitting. During the plan check process, the City would review detailed structural engineering drawings of the seismic anchoring, which would be reviewed and approved by a licensed structural engineer to ensure that in the event of an earthquake, the racks/cabinets would remain upright and have a low probability of resulting in property loss or injury. The project design and compliance with the CBC would minimize the risk of loss, injury, or death involving seismic ground shaking. With adherence to existing regulatory requirements, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, associated with seismic-related ground shaking, ground failure, or landslides.

The Project Site is near the foothills of the Santa Lucia Mountains of the Coast Ranges. Landslides are a form of mass wasting, in which rocks or soil material travel downhill under the force of gravity in a slope failure. The Project Site is previously developed, generally flat, and is located in a developed area of the City approximately at sea level. The closest known historical landslide is located approximately 1.9 miles to the north and is classified as active/historic or dormant young (CGS 2022b); no known landslides have been mapped in the immediate vicinity of the Project Site, and the Project Site has a “low potential” for landslide risks (SLO County 2024). Therefore, there is minimal risk of seismically induced landslides and slope instability on the Project Site.

The Project Site is innately susceptible to some erosion risks because it lies in a coastal zone that is subject to ocean wave action. This action is currently being managed by emplaced rip-rap along the eastern edge of Morro Bay and attenuated by the sand spit and dunes that form Morro Bay’s western boundary (SLO County 1999). The primary source of potential erosion as a result of the project would be during initial site ground disturbance and construction and from storm water runoff. As further discussed in Section 4.10.6, Hydrology/Water Quality, the project would be required to obtain coverage under a Construction General Permit to comply with all established regulations under the National Pollution Discharge Elimination System (NPDES) permitting program to control construction stormwater discharges. Compliance with the conditions of the Construction General Permit would require the developer to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to reduce potential erosion and loss of topsoil during project construction, demolition, and future decommissioning activities. Typical Best Management Practices (BMPs) required by a SWPPP would include covering of inactive stockpiles, silt fences and gravel bag berms to trap sediments, and inlet protection, and slope stabilization to limit discharge of eroded soils from the construction site and sedimentation of surface waters offsite. The Project Applicant would also be required to develop a Storm Water Control Plan which would describe design requirements to address the collection of storm water and the direction of run off flow to on and off-site drainages. Preparation of the required Storm Water Control Plan and SWPPP would ensure the project would not result in substantial temporary or long-term erosion or loss of topsoil.

The project would connect to the City sanitary sewer system and would not require the use of septic tanks or other alternative wastewater disposal systems. Therefore, there would be no impact.

4.10.5 Hazards and Hazardous Materials

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in any of the following:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
4. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
5. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Checklist Items 1, 2, 4, and 6 are addressed in Section 4.7, *Hazards and Hazardous Materials*.

Checklist Items 3, 5, and 7 are addressed herein.

Assessment of Impacts

The closest schools to the Project Site are Morro Bay High School, located approximately 0.31 mile to the north of the northern boundary of the Project Site, and the Family Partnership Charter School, located approximately 0.30 mile to the southeast of the southeastern boundary of the Project Site. In addition, the Rockies Teen Center, which is currently leased by the Boys & Girls Club, is located approximately 0.25-mile north of the northern boundary of the Project Site. The project would involve the storage of lithium-ion batteries. The transport, use, storage, and disposal of lithium-ion batteries during operation and maintenance of the project are regulated by the United States Department of Transportation as Class 9 Miscellaneous Dangerous Goods. The transport, use, storage, and disposal of batteries during operation and maintenance of the project would be subject to all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and CCR Title 22. As described in detail in Section 2, *Project Description*, and Section 4.7, *Hazards and Hazardous Materials*, the BESS Facility would be equipped with multi-tiered safety and accident prevention systems developed in consultation with the Morro Bay Fire Department (MBFD). Compliance with these regulations and implementation of the safety system would ensure that

schools in the vicinity of the Project Site would not be adversely affected by the BESS Facility during normal operations.

Potential haul routes identified for project construction, demolition, operation, and future decommissioning would involve driving short distances via either Embarcadero or Quintana Road to SR 1 and would not reasonably be expected to include travel on any of the local roadways adjacent to nearby schools. Project construction, demolition, and decommissioning activities would also comply with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and CCR Title 22. Therefore, project construction, demolition, and future decommissioning would not result in hazardous materials-related impacts to nearby schools.

The risk of upset and accidental release of hazardous chemicals contained within the batteries (e.g., in the event of a fire) is addressed in Section 4.7, Hazards and Hazardous Materials.

The airport nearest to the Project Site, San Luis Obispo County Regional Airport, is located approximately 15 miles to the southeast. The Project Site is located outside of the 60, 65, 70 and-75 CNEL contours generated by the San Luis Obispo County Regional Airport (Reynolds, Smith & Hills [RS&H] 2021). The project also is not located within the vicinity of a private airstrip. Therefore, the project would not expose people in the project area to excessive noise levels related to airport activity.

The Project Site is not within the vicinity of a very high fire hazard severity zone (VHFHSZ) (CAL FIRE 2021). Therefore, the Project Site is not at significant risk of wildland fires and would not expose people or structures to significant risk of loss, injury, or death involving wildland fires.

4.10.6 Hydrology/Water Quality

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. Result in substantial erosion or siltation on- or off-site;
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
 - iv. Impede or redirect flood flows;
4. Be located in a flood hazard, tsunami, or seiche zone and risk release of pollutants due to project inundation; and/or
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Checklist Item 4 is addressed in Section 4.7, Hazards and Hazardous Materials. Checklist Items 1, 2, 3.i through 3.iv, and 5 are addressed herein.

Assessment of Impacts

Prior to initiation of construction and/or demolition activities, including construction associated with future decommissioning of the BESS Facility, the project would be required to obtain coverage under a Construction General Permit to comply with Clean Water Act NPDES requirements. Under the conditions of the Construction General Permit, the developer would be required to develop and implement a SWPPP for the project construction, demolition, and future decommissioning activities and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The Construction General Permit prohibits the discharge of materials other than storm water discharges and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at Title 40 of the Code of Federal Regulations (40 CFR 117.3 or 40 CFR 302.4). The Construction General Permit also specifies that construction activities must meet all applicable provisions of Sections 30 and 402 of the Clean Water Act. Compliance with the permit would require the development and implementation of a SWPPP and associated BMPs during project construction, demolition, and decommissioning. The BMPs would include measures such as silt fences, gravel bag berms, and inlet protection that would be implemented to prevent discharge of eroded soils from the construction site and sedimentation of surface waters offsite. The BMPs would also include measures to quickly contain and clean up any minor spills or leaks of fluids from construction equipment. Conformance with Section 402 of the Clean Water Act would ensure that demolition and construction and future decommissioning of the BESS Facility would not violate any water quality standards or waste discharge requirements or impact nearby water features including the Pacific Ocean, Morro Creek, and Willow Camp Creek.

The BESS Site currently contains approximately 157,000 sf (or 16 percent of the total site area) of impervious area, and the project would increase impervious area on the BESS Site by approximately 170,000 sf to 327,000 sf (or 33 percent of the total site area). On the Demolition Site, no long-term change to the amount of impervious surface would occur as a result of the project. Although the project would increase the amount of impervious surface on the BESS Site compared to existing conditions, approximately 77 percent of the BESS Site would consist of pervious surfaces. In addition, the project would be required to implement the strategies contained in the City's Stormwater Management Guidance Manual, which requires compliance with the Regional Water Quality Control Board (RWQCB) Post-Construction Storm Water Management Requirements for Development Projects in the Central Coast Region (Resolution R3-2013-0032), preparation of a Stormwater Control Plan (SWCP) and that Low Impact Development (LID) practices are incorporated into the final project design (City of Morro Bay 2017a). During project operation, runoff would be directed to a combination of the gravel bed and vegetated infiltration areas near the BESS Site perimeter, with overflow directed to onsite storm drains. Storm water collected through the onsite storm drains would be conveyed to the City's existing storm water management system. The Project Site would be capable of retaining stormwater runoff generated by an 95th percentile 24-hour storm, as required by RWQCB Resolution R3-2013-0032.

The lithium-ion batteries that would be a part of the BESS Facility would be fully contained within project buildings, and battery fluids and other substances would not be susceptible to spills or release as runoff. With compliance with the Stormwater Management Guidance Manual, operation of the project would not be expected to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Morro Bay Battery Energy Storage System Project

The Morro Valley and Chorro Valley Groundwater Basins underlie the City (City of Morro Bay 2021c). According to the Sustainable Groundwater Management Act Basin Prioritization Dashboard, the Morro Valley and Chorro Valley Groundwater Basins are identified as Very Low Priority basins and are not identified as critically over-drafted (California Department of Water Resources 2021). In 2020, approximately 94 percent of the City's drinking water was sourced from imported water from the State Water Project, with the remaining sourced from local groundwater sources (City of Morro Bay 2021c). The use of groundwater resources from these groundwater basins is controlled through Groundwater Permits issued by the State Water Resources Control Board (SWRCB) (City of Morro Bay 2021c). The Morro Bay Urban Water Management Plan (UWMP) outlines management strategies for the Morro Valley and Chorro Valley Groundwater Basins and recommends future tasks associated with implementation of Sustainable Groundwater Management Act (City of Morro Bay 2021c). In addition, the project would be under the jurisdiction of the Central Coast California RWQCB. The RWQCB provides permits for projects potentially affecting surface waters and groundwater locally, such as the Construction General Permit required for the project.

Construction and demolition activities, including during the future decommissioning of the BESS Facility, would have the potential to degrade surface water quality in receiving waterbodies due to ground disturbance and mobilization of sediment and sediment-bound pollutants. Implementation of erosion and sediment control BMPs, as required pursuant to the NPDES Construction General Permit, would reduce the potential for construction and future decommissioning activities to exacerbate existing surface water or groundwater quality impairments. Therefore, construction, demolition, and future decommissioning of the project would not conflict with or obstruct implementation of applicable water quality control plans and sustainable groundwater management of the basin.

Upon completion of construction activities, the BESS Site would be stabilized with gravel, and approximately 77 percent of the BESS Site would consist of pervious surfaces, with 654,000 sf of pervious surfaces provided on the BESS Site and existing vegetation near the perimeter of the BESS Site to be maintained. The gravel bed and vegetated areas would provide for the effective filtration and percolation of stormwater on the BESS Site, allowing for groundwater recharge. Demolition of the existing power plant building and stacks would not change the amount of impervious surface on the Demolition Site, and the BESS Site drainage characteristics would be required to be restored to pre-demolition conditions. Furthermore, operation of the project would not involve discharge of contaminants with the potential to exacerbate existing surface water or groundwater water quality impairments, nor would it involve groundwater extraction that would deplete groundwater supplies. Therefore, operation of the project would not impede groundwater recharge and sustainable management of groundwater, nor would it conflict with or obstruct implementation of applicable water quality control plans.

As described above, project construction, demolition, and future decommissioning activities would be required to obtain coverage under a Construction General Permit to comply with Clean Water Act NPDES requirements. Compliance with the permit would require the development and implementation of a SWPPP and associated BMPs. The BMPs would include measures to prevent discharge of eroded soils from construction and demolition activities and sedimentation of surface waters off site. The BMPs would also include measures to quickly contain and clean up any spills or leaks of fluids from construction equipment. With compliance with the applicable regulations and implementation of the required SWPPP, construction of the BESS Facility, demolition of the existing power plant building and stacks, and the future decommissioning of the BESS Facility would not result in substantial erosion or siltation on or off site.

The Project Site is relatively flat and there are no streams or rivers located on the Project Site. The project is in the vicinity of Morro Creek and Willow Camp Creek, but the project would not involve any alterations to the courses of these creeks. Runoff from impervious surfaces on the Project Site would flow to permeable soils, gravel, and vegetated areas within the Project Site for infiltration. Overflow would be directed to storm drains throughout the Project Site and conveyed and discharged through the existing storm drainage system operated by the City, as shown in Figure 4.10-1.

The project would be subject to the post construction requirements of the RWQCB and would implement a Safe Clean Water Program (SCWP) for the control of storm water during project operation. Site-specific BMPs would be designed by the contractor in compliance with all applicable regulations and conditions of the RWQCB. Therefore, project construction, demolition, operational, and future decommissioning activities would not substantially alter the existing drainage pattern of the Project Site or vicinity, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on or off site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.

4.10.7 Land Use/Planning

Thresholds of Significance

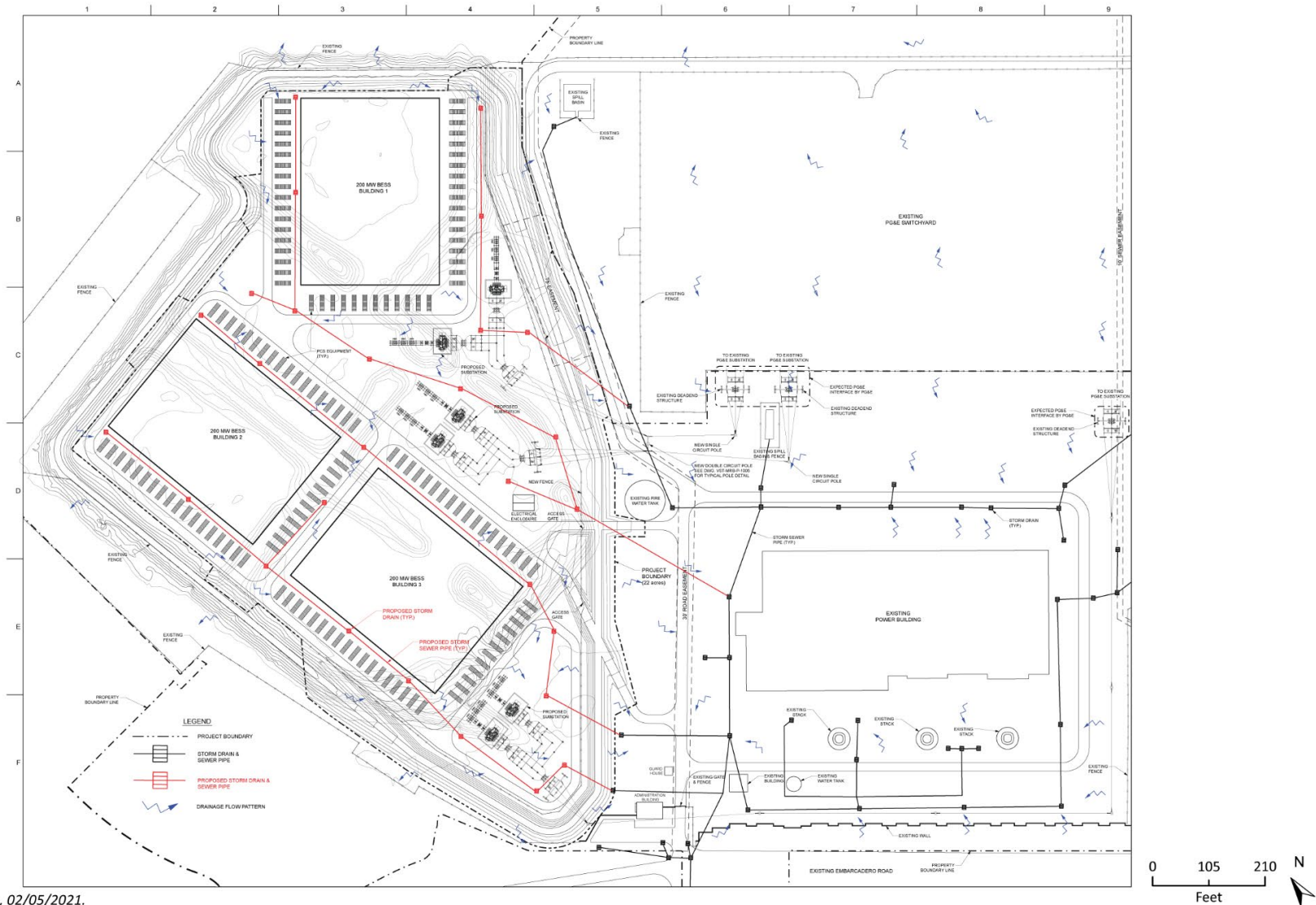
Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Physically divide an established neighborhood; and/or
2. Cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Assessment of Impacts

All project improvements would be constructed on the Power Plant Property. Therefore, no residents would be displaced, and the project would not impact access to adjacent properties or other areas of the City. The project does not include any new roads or other development features that would divide an established community. In addition, temporary, short-term construction, demolition, and future decommissioning activities would maintain local access for businesses and residences in the area surrounding the Project Site. Therefore, the project would not temporarily divide an established community.

Figure 4.10-1 Conceptual Drainage Plan



Source: Vistra, 02/05/2021.

The Project Site has a General Plan/LCP land use designation of Visitor Serving Commercial with a Mixed-Use Residential Overlay. In 2021, the City adopted Plan Morro Bay, an update to the City's General Plan and Local Coastal Program (LCP) Land Use Plan, which changed the land use designation from Industrial – Coastal Development to Visitor Serving Commercial with a Mixed-Use Residential Overlay. Plan Morro Bay was certified by the California Coastal Commission (CCC) on August 12, 2021. A comprehensive update to the Zoning Code/Implementation Plan was adopted in November 2022, which changed the Project Site's zoning from M-2/PD/I with a Planned Development overlay and Interim Use overlay designation to Visitor Serving Commercial (VSC).² The Project Site is subject to a PG&E Deed Restriction that prohibits permanent or temporary lodging, hospitals and health care facilities, schools and daycare centers, and parks, playground or other recreational uses. In 2022, the California Department of Toxic Substances Control (DTSC) imposed a land use covenant on the BESS Site that limits future use in the covered areas to commercial and industrial uses.

Plan Morro Bay Policy LU-5.4 requires a Master Plan for the redevelopment in the Power Plant Property and surrounding area (e.g., surrounding road systems). The project includes a General Plan and LCP Land Use Plan Map Amendment to incorporate the Master Plan into Plan Morro Bay and amend the General Plan and LCP Land Use Plan designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). Approval of these entitlements would satisfy the requirements of Plan Morro Bay Policy LU-5.4 and Chapter 3 of the Coastal Act, which requires a CDP for any associated development on the Power Plant Property. With the General Plan and LCP Land Use Plan Map Amendments, the project's proposed industrial use of the BESS Site would not conflict with the General Plan/LCP or the City's Zoning Code/Implementation Plan. Industrial use of the BESS Site would also be consistent with the existing PG&E Deed Restriction and DTSC land use restriction on the BESS Site.

In addition, the project would be consistent with Morro Bay Municipal Code Chapter 14, which includes minimum regulations for construction, fire prevention, and use and occupancy of buildings and structures. As identified through the NOP process, the project could potentially result in impacts to aesthetic/visual resources, air quality and GHG emissions, biological resources, cultural and tribal cultural resources, hazardous materials, noise, and transportation. Plan Morro Bay contains goals and policies related to these topics, and project consistency with applicable goals and policies adopted for the purposes of avoiding environmental effects to these resources is discussed further below.

Goal C-9 of Plan Morro Bay establishes the City's goal and policies for preservation of the aesthetic and visual resources in Morro Bay, including public views of Morro Rock and the coastline. The City's policies require that development be sited, screened, and designed to minimize impacts to public views of Morro Rock and Morro Bay through careful selection of scale and massing, lighting, color, building materials, and landscaping. The project site is located east of Embarcadero Road which minimizes the potential change to public views of Morro Rock or Morro Bay from the Embarcadero. In addition, project design would be required to comply with Morro Bay Municipal Code Section 17.14.090, Visual Resource Protection, which provides standards for the protection of visual resources and compatible design for new development within the coastal zone, as well as Chapter 17.38, Design Review, which establishes the design review process to ensure that the Planning

² The references in this section are to the comprehensive update to the Zoning Code/Implementation Plan adopted by the City Council in November 2022 (Ordinance 654) and amended in December 2023 (Ordinance 661 and 662), which is currently anticipated to be certified by the California Coastal Commission in March 2024.

Commission carefully reviews the project for aesthetic and visual compatibility. Therefore, the project would not conflict with applicable local policies related to aesthetic resources.

Goal C-3 and Goal C-4 of Plan Morro Bay institute the City's goals and policies for improving air quality and reducing GHG emissions within the City. Relevant policies under Goal C-3 include Policy C-3.2, which directs the City to coordinate with San Luis Obispo County Air Pollution District (SLOAPCD) to enforce air quality standards and implement the County Clean Air Plan and Policy C-3.4, which establishes dust minimization requirements for project construction. The project would be required to comply with SLOAPCD rules and guidance during project construction, demolition, operation, and future decommissioning activities, including dust control strategies and SLOAPCD guidance on quantifying construction and operational air pollutant emissions and comparing to the applicable thresholds, as described in Section 4.2, *Air Quality*. Goal C-4 of Plan Morro Bay directs the City to implement and update its CAP and pursue strategies to reduce GHG emissions. Energy storage systems assist utilities in achieving criteria air pollutant emission and GHG emission reductions by providing the means of storing excess electricity generated during off-peak hours for use during peak hours as an alternative to operating peaker power plants.³ By expanding access to energy storage systems, the project would reduce the amount of fossil fuels consumed during peak hours and maximize usage of energy from renewable sources, thereby reducing the need for additional electricity to be generated by fossil fuel power plants during peak hours. As a result, the BESS Facility would reduce fossil fuel consumption, reducing criteria air pollutant and GHG emissions from the electricity sector. Therefore, the project would not conflict with applicable local goals for improving air quality and reducing GHG emissions.

Goals C-1 and C-7 of Plan Morro Bay contain the City's goals for protecting environmentally sensitive habitat areas (ESHA), marine habitats, and endangered species habitats. Policy C-1.3 requires a biological site assessment for properties within 100 feet of ESHA, including identification of ESHA boundaries and buffers and any special status species, to inform project development activities and reduce potential impacts to biological resources. The Project Applicant has completed biological site assessments in accordance with this policy and they will inform the project design and environmental review process to ensure the project does not conflict with applicable goals for protecting ESHA, marine habitats, or endangered species habitats.

Goal C-2 and Policy EJ-2.7 of Plan Morro Bay establish the City's policies for identification and preservation of cultural and historic resources and coordination with Native American tribes on matters of tribal cultural resources. The Project Applicant has completed cultural resources assessments that will inform project construction and design and the environmental review process to ensure the project does not conflict with the applicable goals for identification and preservation of cultural and historic resources and coordination with Native American tribes on matters of tribal cultural resources. In addition, as required by AB 52 and SB 18, the City has initiated tribal consultation to solicit input from local Native American tribes on the project.

Goal PS-4 of Plan Morro Bay contains policies related to emergency response, hazardous materials, and resiliency. Policy PS-4.2 requires the establishment of hazardous materials hauling routes that avoid residential areas, Policy PS-4.3 requires safety measures for businesses that store, use or transport hazardous materials. Policy PS-4.4 encourages collaboration with public agencies with responsibility for hazards. These policies would inform the equipment and supply hauling routes used during project construction, demolition, operation, and future decommissioning, which will be determined in coordination with the City and will be selected to avoid residential and sensitive uses

³ Peaker power plants are fossil-fuel power plants that are operated only when demand for electricity is high (i.e., during times of peak demand).

to the maximum extent practicable. In addition, the Project Applicant would be required to coordinate with the MBFD, as described under Section 2, *Project Description*, to ensure appropriate safety systems are in place to protect the public.

The Noise Element of Plan Morro Bay, including Goals NOI-1, NOI-2, and NOI-3, establishes the City's noise standards and policies for the reduction of noise from transportation, construction, and special events. Project construction, demolition, operation, and future decommissioning activities would be required to comply with applicable noise standards, construction hour limits, and noise shielding requirements established in the Noise Element and Morro Bay Municipal Code Chapter 17.28, Performance Standards, and Section 9.28.030(I), Construction or Repairing of Buildings. As discussed in Section 4.8, *Noise*, the project would not result in significant noise impacts and would not conflict with the applicable noise policies.

The Circulation Element of Plan Morro Bay contains goals and policies for the safe, convenient, and efficient circulation of vehicles, goods, pedestrians, bicyclists, and public transit users. Applicable policies include Policy CIR-1.10, which seeks to maintain the efficient movement of trucks and goods throughout the City, and Policy CIR-2.3, which encourages the provisioning of facilities and amenities for active transportation uses in commercial and residential development. Project construction, demolition, operation, and future decommissioning haul routes would be determined in coordination with the City to ensure trucks associated with the project would not create substantial disruptions or safety hazards on the City's circulation system. In addition, the project would be required to comply with the parking requirements of Zoning Code Chapter 17.27, Parking and Loading (IP), and any additional requirements imposed by the City for roadway and active transportation improvements.

As set forth in the above discussion, the project would not conflict with the applicable requirements of the Morro Bay Municipal Code and Plan Morro Bay related to aesthetic/visual resources, air quality and GHG emissions, biological resources, cultural and tribal cultural resources, hazardous materials, noise, or transportation adopted for the purpose of avoiding or mitigating environmental impacts. Therefore, impacts would be less than significant.

4.10.8 Mineral Resources

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would result in:

1. The loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and/or
2. The loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Assessment of Impacts

Consistent with the requirements of the California's Surface Mining and Reclamation Act of 1975 (SMARA), the State Geologist has classified land based on the known or inferred mineral resource potential. The Mineral Land Classification process identifies lands that contain economically significant mineral deposits and primarily classifies land as Mineral Resource Zones (MRZ) 1-4. The Division of Mines and Geology's Guidelines for Classification and Designation of Mineral Lands, defines MRZs as:

Morro Bay Battery Energy Storage System Project

- MRZ-1: Areas of No Mineral Resource Significance
- MRZ-2: Areas of Identified Mineral Resource Significance
- MRZ-3: Areas of Undetermined Mineral Resource Significance
- MRZ-4: Areas of Unknown Mineral Resource Significance/No Known Mineral Occurrence

According to the Updated Mineral Land Classification Map for the San Luis Obispo-Santa Barbara Region, the Project Site and surrounding areas are classified as MRZ-3 (DOC 2011). There are no known mineral resources of value to the region or residents of the state within the Project Site according to the DOC, and the City's General Plan/LCP indicates that there are no existing mineral extraction operations in Morro Bay (DOC 2011; City of Morro Bay 2021a). Therefore, the project would have no impact to mineral resources.

4.10.9 Noise

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Result in generation of excessive groundborne vibration or groundborne noise levels; and/or
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Checklist Items 1 and 2 are addressed in Section 4.8, *Noise*. Checklist Item 3 is addressed below.

Assessment of Impacts

The airport nearest to the Project Site, San Luis Obispo County Regional Airport, is located approximately 15 miles to the southeast. The Project Site is located outside of the 60, 65, 70 and 75 CNEL contours generated by the San Luis Obispo County Regional Airport (RS&H 2021). The Project Site is not located within the vicinity of a private airstrip. The project would not expose workers in the project area to excessive noise levels related to airport activity.

4.10.10 Population/Housing

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); and/or
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Assessment of Impacts

The project includes adoption of a Master Plan, which would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) and guide development of the remainder of the Project Site with a mix of residential and commercial uses consistent with the Visitor Serving Commercial designation and Mixed-Use Residential Overlay established by Plan Morro Bay; construction of a BESS Facility on the BESS Site; and demolition of the existing power plant building and stacks. The project would not be utilized to increase the amount of energy currently being provided to existing customers or to provide energy to areas not already serviced by local providers. Furthermore, the project would not allow development of land which previously could not be developed due to electricity service constraints. The project does not propose new homes and the up to 15 new permanent O&M positions on the Project Site would not generate substantial new employment that would indirectly result in substantial growth inducement. Although the project would revise the land use designation on the BESS Site, the project would not result in any other land use changes or new development that could substantially increase population or result in a substantial increased need for housing. Rather, the land use designation change on the BESS Site would result in reduced residential development potential, and associated population growth, because it would change an area currently designated for Visitor Serving Commercial and potential Mixed-Use residential development to General (Light) Industrial. In addition, the project would not displace existing housing or people. Therefore, the project would not directly or indirectly induce population growth or displace existing people or housing.

4.10.11 Public Services

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - i. Fire protection;
 - ii. Police protection;
 - iii. Schools;
 - iv. Parks; and/or
 - v. Other public facilities.

Assessment of Impacts

The project would be served by the MBSFD, which maintains a staff of 29 firefighters and support staff and a main fire station at 715 Harbor Street (City of Morro Bay 2021d). The Project Site is located within one mile (driving distance) from the MBSFD 715 Harbor Street station. The department operates and manages two fire engines, one quint, one rescue truck, one command vehicle, two utility vehicles, and a mass casualty vehicle. The department also operates an engine

provided by the California State Office of Emergency Services. The MBFD Strategic Plan identifies a response time goal of five minutes for 90 percent of calls (MBFD 2004).

The Project Site land use designation was changed to Visitor Serving Commercial with a Mixed-Use Residential Overlay in Plan Morro Bay. Under this designation, the Project Site could be developed with uses such as residential apartments or condominiums with retail and restaurants on lower levels. Commercial and residential uses would result in substantially more residents, visitors, and employees on the Project Site than the proposed project. The project includes adoption of a Master Plan that would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) to enable the construction and operation of the BESS Facility. The project would not result in additional residents in Morro Bay that would affect service ratios and other performance objectives. Rather, the Master Plan land use designation change and operation of the BESS Facility would reduce demand for fire services from what was anticipated in Plan Morro Bay.

The BESS Facility would be equipped with multi-tiered safety and accident prevention systems based on industrial best practices developed in consultation with the MBFD. Safety systems would incorporate operational measures, maintenance standards, and passive design considerations, including monitoring, automatic and manual protection elements, engineering designs, site layout designs (e.g., battery spacing and orientation), and explosion prevention protection, among other features as described in detail in Section 2, *Project Description*. In addition to the Project Applicant's proposed safety systems, development of the project would include close coordination with the MBFD, including plan review and approval for consistency with the Fire Code requirements and emergency response planning. Any additional conditions required by the MBFD, which may include but would not be limited to fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be incorporated into the final project plans and designs to further improve fire safety, enable efficient and safe emergency response, and minimize impacts to the MBFD.

The MBFD has retained DNV Energy USA, Inc. (DNV), an independent engineering and safety consultant, to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization. The independent public safety analysis is anticipated to be complete in 2024, and any additional safety conditions recommended in the analysis, which may include but would not be limited to fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be required by the MBFD to be incorporated into the final BESS Facility design and plans. The MBFD would be responsible for final review and approval of the Project Applicant's building plans, and any safety features required by the MBFD would be required to be implemented by the BESS Facility developer/operator prior to issuance of a building permit.

In addition to these requirements, the project would pay required development impact fees to offset project demands on MBFD fire protection services. Therefore, the project would not substantially increase demand for fire services or result in any change to fire response or performance objectives for fire protection services. No new fire stations or expansion or physical alterations to existing fire stations would be required due to implementation of the project.

Police protection would be provided by the Morro Bay Police Department (MBPD), which maintains a staff of 21 officers and support staff, as well as a volunteer department (City of Morro Bay 2021e). The police station is located at 850 Morro Bay Boulevard, approximately 1.1 mile (driving distance) from the Project Site.

As described above, the project would not result in additional residents in Morro Bay that would affect service ratios and other performance objectives. Rather, the Master Plan land use designation change and operation of the BESS Facility would reduce demand for police services from what was anticipated in Plan Morro Bay. Operation of the BESS Facility would involve minimal on-site personnel presence. The BESS Facility would be enclosed by security fencing to minimize potential trespassing. In addition, the project would pay required development impact fees to offset project demands on MBPD police protection services. Therefore, the project would not result in the need for new or physically altered police facilities to maintain acceptable service ratios, response times, or other performance objectives for police protection services.

As stated above, the proposed project would result in reduced residential growth compared to development of the BESS Site with mixed uses. The project would not result in additional students in Morro Bay that would affect relevant and nearby school districts. Rather, the Master Plan land use designation change and operation of the BESS Facility would reduce demand for school services from what was anticipated in Plan Morro Bay. Therefore, the project would not result in the need for new or physically altered schools in order to meet service ratios or other performance objectives.

As described below in Section 4.10.12, Recreation, the project would not lead to additional population in Morro Bay or increased demand for parks. Therefore, the project would not affect park service ratios, increase the use of existing parks, or create a need for new or physically altered parks.

As discussed above, the project would not result in additional residents in Morro Bay that would affect service ratios and other performance objectives. Rather, the Master Plan land use designation change and operation of the BESS Facility would reduce demand on public facilities and services from what was anticipated in Plan Morro Bay. As such, the project would not result in a substantial increase in the use of other public facilities, such as libraries and hospitals, or the need for new or physically altered facilities.

4.10.12 Recreation

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Result in the increase of the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Assessment of Impacts

The Project Site land use designation was changed to Visitor Serving Commercial with a Mixed-Use Residential Overlay in Plan Morro Bay. Under this designation, the Project Site could be developed with uses such as residential apartments or condominiums with retail and restaurants on lower levels. Commercial and residential uses would result in substantially more residents, visitors, and employees on the Project Site than the project. The project includes adoption of a Master Plan that would change the land use designation of the BESS Site from Visitor Serving Commercial to General

(Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) to enable the implementation and operation of the BESS Facility. The project would not result in additional residents, housing, or substantial employees within Morro Bay. Therefore, the Master Plan land use designation change and operation of the BESS Facility would reduce demand on local parks and recreational facilities from what was anticipated in Plan Morro Bay. Therefore, the project would not increase the use of existing parks or other recreational facilities, nor would the project require the construction or expansion of such facilities.

4.10.13 Transportation

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment); and/or
4. Result in inadequate emergency access.

Checklist Items 1 and 2 are addressed in Section 4.9, *Transportation*. Checklist Items 3 and 4 are addressed herein.

Assessment of Impacts

The Project Site has been previously developed and is served by existing internal roadways and entrances associated with the Power Plant Property. The Project Site would continue to be accessed by the main gate along Embarcadero, Quintana Road, and the internal driveways serving the Power Plant Property. Additional internal driveways would be constructed to provide adequate on-site circulation for the new uses associated with the BESS Facility. In addition, the Master Plan would identify public access improvements through and/or along the Project Site's Embarcadero street frontage, but no hazardous design features such as sharp curves or dangerous intersections would be constructed. Furthermore, operation of the BESS Facility would not involve the regular use of oversized or otherwise non-standard vehicles. Therefore, the project would not substantially increase hazards due to geometric design features or incompatible use and impacts would be less than significant.

Project construction, demolition, and staging areas, including during future project decommissioning, would be limited to the Project Site and would not require roadway closures, detours, or other impacts to State Routes 1 and 41 that could impair emergency access and response in the community. During construction, demolition, and decommissioning activities, emergency access to the Project Site would be maintained via Embarcadero. Therefore, project construction, demolition, and future decommissioning would not result in inadequate emergency access to the site or surrounding areas. During operation of the project, emergency access would continue to be available by Embarcadero, with internal circulation routes built to meet the access requirements of the MBFD. The project would be required to submit plans, including site access and circulation plans, to the MBFD for review and approval. Any emergency access features required by the MBFD, including site and building access, fire apparatus access roads, and site warning signage,

would be incorporated into the project plans or implemented as conditions of approval for the project. Therefore, the project would not result in inadequate emergency access.

4.10.14 Utilities/Service Systems

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and/or
5. Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Assessment of Impacts

Water Supply and Infrastructure

The Morro Bay Public Works Utilities Division provides water service and maintains the potable water infrastructure serving the City. The Project Site is served by existing potable water infrastructure within the streets surrounding the site. There are two existing wells located on the Power Plant Property, both of which are owned and operated by Morro Bay Mutual Water Company. Neither well is located on the Project Site, and the Project Applicant has not proposed to use either well in connection with the project. The City receives approximately 96 percent of its water supply from the State Water Project, which is purchased by San Luis Obispo County. The remaining water supply is provided by treated brackish water from the Morro Basin (City of Morro Bay 2021c). The 2020 UWMP provides water supply and demand estimates for 25 years into the future. In 2020, total water production used by the City was 1,090-acre feet (City of Morro Bay 2021c). The City's water demand is projected only to slightly increase through 2045, and according to the 2020 UWMP the City is expected to have an available water supply that meets or exceeds projected demands under normal, single dry year, and multiple dry year conditions through 2035 (City of Morro Bay 2021c).

Project construction, demolition, and operational activities would consume water for dust control, typical building use and operations, and, if required, fire suppression. During project construction, demolition, and future decommissioning, water would primarily be utilized for dust control, as well as in the construction office. Water consumption during these phases would be temporary and would not contribute to the City's annual long-term water consumption in a manner that would worsen water supply conditions or require the construction or relocation of water infrastructure. Long-term operation of the BESS Facility would require minimal potable water use associated with use of employee break rooms and restrooms by the 15 O&M staff members. There is also the

potential for water use associated with the fire suppression system that would be installed in the BESS Facility. However, such water use would be temporary and infrequent, limited to emergency events.

The Project Site land use designation was changed to Visitor Serving Commercial with a Mixed-Use Residential Overlay in Plan Morro Bay. Under this designation, the Project Site could be developed with uses such as residential apartments or condominiums with retail and restaurants on lower levels. Commercial and residential uses would consume substantially more water than the project. The project includes adoption of a Master Plan that would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG).

As a net change relative to the City's current anticipated water demand, the Master Plan land use designation change and operation of the BESS Facility would reduce water demand in comparison to what was anticipated in Plan Morro Bay. According to the 2021 Final EIR for Plan Morro Bay (2021 Final EIR), the City's water supply is adequate to support projected demand under normal, dry year, and multiple dry year conditions (City of Morro Bay 2021f). Because the project would result in a reduction in projected water demand, the project would not require or result in the relocation or construction of new or expanded water facilities. Therefore, the project would result in a less than significant impact to water services.

Wastewater Treatment

The project would connect to the City's existing sewer network and would be served by the City's existing and planned wastewater conveyance and treatment infrastructure. The City's Sewer System Management Plan was last updated in 2019 and complies with State requirements for sanitary sewer system operation (City of Morro Bay 2019). In 2019, the CCC approved a new wastewater treatment and water reclamation facility (WRF) to be built at the intersection of State Route 1 and South Bay Boulevard (CCC 2019). The new Water Resources Center (WRC) broke ground in March 2020 and started receiving sewer flows from the City in October of 2022. (City of Morro Bay 2022). The new WRC is designed to treat an average of 0.97 MGD of wastewater flows from the City in accordance with the effluent requirements of the NPDES permit program and provide purified water for injection into the groundwater aquifer (City of Morro Bay 2022). The second phase of the project, injection of purified water into the groundwater aquifer, is expected to be completed in 2025.

The Project Site land use designation was changed to Visitor Serving Commercial with a Mixed-Use Residential Overlay in Plan Morro Bay. Under this designation, the Project Site could be developed with uses such as residential apartments or condominiums with retail and restaurants on lower levels. Commercial and residential uses would be expected to produce substantially more wastewater than the proposed project. The project includes adoption of a Master Plan that would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project would involve construction of a BESS Facility, the long-term operation of which would result in wastewater production associated with use of employee break rooms and restrooms by the 15 O&M staff members. Therefore, the Master Plan land use designation change and operation of the BESS Facility would reduce wastewater production from what was anticipated in Plan Morro Bay. According to the 2021 Final EIR, the City's wastewater treatment infrastructure and new WRF currently under construction provides adequate capacity to serve the anticipated development and population associated with buildout of Plan Morro Bay (City of Morro Bay 2021f). Because the

project would result in a reduction in projected wastewater production, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. Therefore, the project would result in a less than significant impact to wastewater treatment.

Stormwater

The City maintains and operates a stormwater drainage system in compliance with the NPDES General Permit for the discharge of stormwater from small-sized Municipal Separate Storm Sewer Systems (MS4). The current Phase II Small MS4 General Permit became effective on July 1, 2013. The City complies with a list of requirements specified by the NPDES, which includes the City's Stormwater Management Program (City of Morro Bay 2021g). All projects that create or replace more than 2,500 sf of impervious surface are required to incorporate stormwater management controls as described in the Stormwater Management Guide Manual for Low Impact Development and Post-Construction Requirements (City of Morro Bay 2017b).

The developed area of the Project Site would include the BESS Facility structures, concrete equipment pads, internal circulation paths, and a gravel field. As discussed in Section 10, *Hydrology and Water Quality*, the project would increase impervious areas on the BESS Site by approximately 170,000 sf to 327,000 sf (or 33 percent of the total BESS Site area). On the Demolition Site, no long-term change to the amount of impervious surface would occur as a result of the project. The project would be required to implement the strategies contained in the City's Stormwater Management Guidance Manual, which requires compliance with the RWQCB's Post-Construction Storm Water Management Requirements for Development Projects in the Central Coast Region (Resolution R3-2013-0032), preparation of a SWCP and that LID practices are incorporated into the final project design (City of Morro Bay 2017a). Therefore, to address the requirements of the City of Morro Bay and the RWQCB, the project would be required to implement a SWCP that would outline drainage design, performance requirements, and estimate post-development runoff from the site.

Existing vegetated areas around the northern, southern, and western perimeters of the Project Site would remain in place and would serve for stormwater infiltration. In addition, the gravel field would allow for stormwater percolation. Stormwater treatment for the site would primarily be provided through the use of infiltration. Stormwater drains would also be provided on the site for overflow and would direct stormwater to the existing stormwater drainage system. The site would be designed to contain a 95th percentile storm event, as required by the City. Therefore, the Project Site would adequately contain stormwater flows.

Electricity, Natural Gas, and Telecommunications

The Project Site is located in a developed area that is well-served by existing electricity, natural gas, and telecommunications facilities. Electricity would be provided by PG&E, and telecommunication and internet service would be provided by a local service provider such as Spectrum Communications. The BESS Facility would not include natural gas appliances, and no natural gas would be required for operation of the project. The BESS Facility structures would be unmanned, and electricity use would be limited to safety lighting and heating/cooling. The O&M Building would require electricity for interior and exterior lighting and heating/cooling. As discussed further in Section 4.10.3, Energy, energy use for the project would be minimal and would not be wasteful or inefficient. Therefore, the project would not require the construction of new electricity, natural gas, or telecommunications facilities.

Solid Waste

The City contracts with Morro Bay Garbage (MBG) to provide waste collection services in the planning area. MBG is a subsidiary of Waste Connections Incorporated, which serves the San Luis Obispo Integrated Waste Management Authority (IWMA) jurisdictional area. MBG provides collection service for municipal solid waste, recyclable materials, and clean green waste. The estimated volume of waste collected for Morro Bay between 2010 and 2014 ranged between 106.7 and 121.7 tons per year, with no clear trend toward increasing or decreasing during that time. MBG deposits waste collected in Morro Bay at the Cold Canyon Landfill, one of three landfills in the IWMA jurisdictional area. Cold Canyon Landfill is located approximately 25 miles southeast of Morro Bay on State Route 227. Solid waste transported to the landfill is either sorted and recycled or deposited into the landfill. The estimated permitted landfill capacity of the Cold Canyon Landfill is just over 23 million cubic yards and is estimated to have 62 years of remaining life (City of Morro Bay 2021f).

Construction of the project would generate solid waste, including construction and demolition debris. Demolition of the existing power plant building and stacks would generate an estimated 134,000 tons of building material (approximately 80,400 cubic yards). As described in detail in Section 4.7, *Hazards and Hazardous Materials*, prior to demolition of the power plant building asbestos containing materials (ACM) and lead based paint (LBP) would be removed and disposed of in compliance with the National Emission Standards for Hazardous Air Pollutants, California Occupational Health and Safety Administration, and other federal and State requirements for the handling of ACM and LBP. Construction and demolition debris would be removed and disposed of in a timely manner and in accordance with all applicable laws and regulations. Pursuant to CALGreen, project construction would be required to divert a minimum of 65 percent of nonhazardous construction waste. Approximately 84 percent of building materials from the demolished structures would be recycled/reused/salvaged, and the remaining 22,000 tons (approximately 13,200 cubic yards) of demolished building material would be hauled to a nearby landfill, such as the Cold Canyon Landfill. Hazardous building materials would be disposed of in accordance with the applicable local, State, and federal regulations. As described above, the Cold Canyon Landfill has a remaining capacity of 23 million cubic yards, and the addition of 13,200 cubic yards of demolition debris would account for 0.06 percent of the remaining capacity. The removal of construction debris would be temporary, only occurring during the construction, demolition, and future decommissioning periods, and would not contribute to an exceedance of the permitted capacity of any local landfill.

The project would have a total permanent staff of only 15 individuals and would therefore generate minimal solid waste during project operation that would not exceed the capacity of Cold Canyon Landfill. Proper recycling and solid waste containers would be provided on the Project Site to ensure that project operation complies with the commercial recycling requirements for municipal solid waste. Occasionally, individual batteries may need to be replaced. Removed batteries would be recycled and disposed of off-site in accordance with local, State, and federal regulations regarding the disposal of hazardous materials. Therefore, the project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, nor would it otherwise impair the attainment of solid waste reduction goals.

4.10.15 Wildfire

Thresholds of Significance

Pursuant to the *CEQA Guidelines*, Appendix G checklist, potentially significant impacts would occur if the project would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and/or
4. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Assessment of Impacts

As discussed in Section 4.10.5, Hazards and Hazardous Materials, the project is not located within a VHFHSZ. The nearest VHRHSZ is approximately two miles southeast of the Project Site (CAL FIRE 2021). Due to the urban nature of the Project Site, the distance of the Project Site from the nearest VHFHSZ, and the proposed uses, the project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. In addition, the project would substantially rely on existing utility and road infrastructure, and thus, would not introduce utilities or roadways infrastructure that would exacerbate wildfire risk.

The MBFD would provide fire prevention, fire protection, and emergency response for the project. The BESS would comply with all federal, State and local laws and implement various operating and maintenance standards, extensive monitoring systems, and best industry practices to avoid and minimize safety risks. In addition to complying with all federal, State, and local laws and regulations, the BESS Facility would incorporate multi-tiered safety and accident prevention systems based on best practices in the energy industry and in consultation with the MBFD. Safety systems would incorporate operational measures, maintenance standards, and passive design considerations, including monitoring, automatic and manual protection elements, engineering designs, site layout designs (e.g., battery spacing and orientation), and explosion prevention protection, among other features, as described in detail in Section 2, *Project Description*.

As described in Section 4.10.11, *Public Services*, the MBFD has identified an independent consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD in making decisions regarding BESS safety element design, emergency planning, and hazard minimization. The independent public safety analysis is anticipated to be complete in 2024, and any additional safety conditions recommended in the analysis, which may include but would not be limited to fire department site access, fire apparatus access roads, site warning signage, and building safety systems, would be required by the MBFD to be incorporated into the final BESS Facility design and plans. The MBFD would be responsible for final review and approval of the Project Applicant's building plans, and any safety features required by the MBFD would be required to be implemented by the BESS Facility developer/operator prior to issuance of a building permit.

Morro Bay Battery Energy Storage System Project

Development of the Project Site would also include the removal of onsite vegetation so it would not pose a fire risk.

Construction, demolition, and future decommissioning activities and staging would be limited to the Power Plant Property and would not block roadway access or site access and would not otherwise impair the implementation of emergency response plans. During construction, demolition, and future decommissioning, emergency access would be maintained via Embarcadero. During operation of the project, emergency access would continue to be available by Embarcadero, with internal circulation routes built to meet the access requirements of the MBFD. Project operation and maintenance would not introduce new activities that could impede or interfere with emergency plans, as operation and maintenance would not involve work within the public right-of-way. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

The Project Site is relatively flat and is not located adjacent to hillsides; therefore, the Project Site has negligible potential for landslides and slope instability. Appropriate stormwater drainage improvements to contain stormwater and reduce off-site flows would be included in the project design. As such, the project would not be anticipated to expose people or structures to post-fire instability or flooding. Therefore, based on the above considerations, impacts related to wildfire would be less than significant.

5 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed Morro Bay Battery Energy Storage System Project that would attain most of the basic project objectives but would avoid or substantially lessen the project’s significant adverse impacts. The objectives of the project are described in Section 2.7, *Project Objectives*.

The proposed project includes three components: (1) construction and operation of a 600 megawatt (MW) Battery Energy Storage System facility (BESS Facility) on approximately 24 acres (BESS Site) of the 43-acre Project Site; (2) demolition and removal of the existing Power Plant building and stacks, which would occur on approximately 19 acres of the Project Site (Demolition Site); and (3) adoption of a Master Plan which would apply to the entire Power Plant Property and would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). The project components are described in detail in Section 2, *Project Description*, including the relative locations and boundaries of the Project Site, BESS Site, Power Plant Property, and Demolition Site¹.

5.1 Alternatives Development and Screening Process

Included in this analysis are five alternatives that involve changes to the project that may reduce or avoid potential project-related environmental impacts as identified in this EIR. These five alternatives, including the CEQA-required “no project” alternative, have been developed to provide a reasonable range of options to help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project. As discussed in Section 4, *Environmental Impact Analysis*, the proposed project would have a significant and unavoidable impact related to historical resources (Impact CUL-1).

The following alternatives are evaluated in this EIR:

- Alternative 1: No Project
- Alternative 2: Plan Morro Bay Consistency
- Alternative 3: BESS Facility Without Demolition
- Alternative 4: Reduced BESS Facility
- Alternative 5: Enclosure-Based BESS Facility

Table 5-1 provides a summary comparison of the development characteristics of the proposed project and each of the alternatives considered in this section. Detailed descriptions of the alternatives are included in the impact analysis for each alternative. The potential environmental impacts of each alternative are analyzed in Section 5.2. As required by CEQA, Section 5.3 provides a discussion of the “environmentally superior alternative” among those studied.

¹ Following are definitions for several key terms used in this EIR:

Power Plant Property refers to the approximately 107-acre Morro Bay Power Plant Property. Refer to Section 2, *Project Description*, Figure 2 2.

Project Site refers to the portions of the Power Plant Property that would be used for the proposed project. The Project Site covers approximately 43 acres of the 107-acre Power Plant Property. Refer to Section 2, *Project Description*, Figure 2 2.

BESS Site refers to the portions of the Project Site used for construction and operation of the 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 Section 2, *Project Description*, Figure 2 4.

Demolition Site refers to the portions of the Project Site used for remediation and demolition of the idle Power Plant building and stacks. The Demolition Site includes the remaining 19 acres of the 43-acre Project Site. Refer to Section 2, *Project Description*, Figure 2 8.

Table 5-1 Comparison of Project Alternatives Buildout Characteristics

Feature	Proposed Project	Alternative 1: No Project	Alternative 2: Plan Morro Bay Consistency	Alternative 3: BESS Facility Without Demolition	Alternative 4: Reduced BESS Facility	Alternative 5: Enclosure-Based BESS Facility
Project Site	43 acres	43 acres	43 acres	43 acres	43 acres	43 acres
BESS Site	24 acres	--	0 acres	24 acres	21 acres	24 acres
Demolition Site	19 acres	--	19 acres	0 acres	19 acres	19 acres
Portions of Project Site Retaining Visitor Serving Commercial Land Use Designation	19 acres	43 acres	43 acres	19 acres	22 acres	19 acres
Battery Storage Buildings	Three buildings, 91,000 sf per building, up to 35.2 ft tall	--	--	Three buildings, 91,000 sf per building, up to 35.2 ft tall	Three buildings, 75,700 sf per building, up to 35.2 ft tall	174 enclosures, 770 sf per battery storage enclosure, up to 15 ft tall
Power Conversion Systems (PCS)	Approximately 180 PCS, 300 sf per unit	--	--	Approximately 180 PCS, 300 sf per unit	Approximately 150 PCS, 300 sf per unit	Approximately 174 PCS, 140 sf per unit
Substations	3 substations, 49,704 sf, 30 ft tall	--	--	3 substations, 49,704 sf, 30 ft tall	3 substations, 49,704 sf, 30 ft tall	1 substation, 46,000 sf, 30 ft tall
Drilled Pilings	5,500 to 6,500	--	--	5,500 to 6,500	4,500 to 5,500	5,500 to 6,500
The potential square footage and height for Battery Storage Buildings, Power Conversion Systems, Substations, and Control House anticipated for Alternatives 4 and 5 are based on estimates provided by the Project Applicant.						

Other project alternatives considered, but not evaluated in detail in this EIR, include an alternative Project Site design that would relocate the BESS Facility elsewhere on the Project Site and an off-site alternative that would locate the BESS Facility elsewhere in Morro Bay. Relocating the BESS Facility elsewhere on the Project Site was determined to be infeasible because the former tank farm site has been specifically identified as the most appropriate location on the Power Plant Property for non-Visitor Serving Commercial uses due to the Limited Use Covenant (LUC) imposed by DTSC, which currently restricts land uses in this specific location to commercial/industrial uses and prohibits future development of the property for permanent or temporary lodging, school, day care centers, recreation, or hospital uses. An off-site alternative was determined to be infeasible because there is no other similarly-sized property in Morro Bay with an appropriate land use designation and appropriate adjacent land uses to support a 24-acre General (Light) Industrial land use, and the applicant does not own or control other properties that would present a feasible alternative location for the BESS Facility. These alternatives have been rejected from further consideration on the basis that they are (1) infeasible and (2) inappropriately speculative and are therefore not discussed further in this EIR.

5.2 Project Alternatives Impact Analysis

5.2.1 Alternative 1: No Project Alternative

5.2.1.1 *Description*

The No Project Alternative assumes the BESS Facility is not constructed and the Master Plan is not implemented. The Power Plant Property currently encompasses the idle Power Plant building and smokestacks, Lila Keiser Park, and facilities operated by Pacific Wildlife Care and Marine Mammal Center. Under the No Project Alternative, the Power Plant building and stacks would not be demolished, the Power Plant Property would remain in its existing condition, and the Project Site's land use designation would not be modified. The No Project Alternative assumes no future development would occur on the Power Plant Property in the immediate future. The only activity on the Project Site that is assumed to take place under the No Project Alternative is routine maintenance activities that would be required to maintain the structural integrity of the existing Power Plant building and stacks.

5.2.1.2 *Impact Analysis*

The No Project Alternative would not result in changes to the existing conditions at the Power Plant Property. Therefore, the No Project Alternative would not result in any of the adverse environmental impacts identified for the proposed project in this EIR.

The No Project Alternative would avoid the significant and unavoidable impact to historical resources caused by the removal of the Power Plant building and smokestacks, because those existing structures would not be demolished. The No Project Alternative has the potential to result in the need for occasional routine maintenance activities for upkeep of the existing Power Plant building and stacks. These maintenance activities may result in occasional maintenance vehicle trips to and from the Power Plant Property. However, such maintenance vehicle trips would be infrequent and are not anticipated to result in a substantial increase in vehicle miles traveled (VMT) over existing conditions, or other transportation or circulation impacts.

Although the No Project Alternative would reduce or eliminate the adverse environmental impacts of the proposed project, this alternative would not achieve any of the project objectives described in Section 2.7, *Project Objectives*.

5.2.2 Alternative 2: Plan Morro Bay Consistency Alternative

5.2.2.1 Description

The Plan Morro Bay Consistency Alternative assumes the BESS Facility is not constructed, and the Power Plant Property is instead redeveloped consistent with the current Visitor Serving Commercial land use designation. Consistent with Plan Morro Bay Policy LU-5.4, this alternative would continue to require implementation of a Master Plan² prior to the approval of any future development of the Power Plant Property. The Plan Morro Bay Consistency Alternative assumes the Master Plan created for development at the Power Plant Property would not change the existing Visitor Serving Commercial land use designation on the BESS Site, instead retaining the Visitor Serving Commercial land use designation on the entirety of the Power Plant Property. However, the Master Plan could permit specific optional land use overlays at the Power Plant Property, such as a mixed-use residential overlay.

This alternative would result in demolition of the existing Power Plant building and smokestacks to prepare the Project Site for future development under the Visitor Serving Commercial land use designation. Redevelopment of the Power Plant Property with Visitor Serving Commercial uses under this alternative is assumed to occur prior to Plan Morro Bay's horizon year of 2040.

This alternative anticipates the Master Plan required under Plan Morro Bay Policy LU-5.4 would carry forward and would not modify any General Plan and/or LCP goals and policies. Accordingly, the potential environmental impacts anticipated with implementation of this alternative are largely those which are identified in the 2021 Final EIR for Plan Morro Bay, certified by the Morro Bay City Council on May 25, 2021. These impacts are discussed within the Previous Environmental Review discussions in Sections 4.1 through 4.9 of this EIR, and further detailed in the 2021 Final EIR for Plan Morro Bay.

5.2.2.2 Impact Analysis

a. Aesthetics and Visual Resources

The Plan Morro Bay Consistency Alternative would result in similar impacts to scenic vistas as the proposed project due to the demolition and removal of the Power Plant building and stacks. Potential future Visitor Serving Commercial development facilitated by the Master Plan would not require changes to the existing land use designation of the BESS Site, and would be required to comply with Plan Morro Bay goals and policies related to the preservation of scenic vistas, scenic resources, visual character, and light and glare, as well as design requirements in Visitor Serving Commercial areas, which would be implemented by the Master Plan. Therefore, the Plan Morro Bay Consistency Alternative would not result in significant impacts to aesthetics and visual resources due to conflicts with the land uses at the Power Plant Property, similar to the proposed project.

² The Master Plan developed for the proposed project would be required to be revised in accordance with the anticipated buildout of the Plan Morro Bay Consistency Alternative.

In addition, potential future Visitor Serving Commercial development on the Power Plant Property would be subject to site-specific environmental review and project-specific mitigation measures to reduce potential impacts to aesthetics and visual resources, if required.

Overall, the Plan Morro Bay Consistency Alternative is anticipated to result in similar aesthetics and visual resource impacts compared to the proposed project, and these impacts would remain less than significant.

b. Air Quality

The Plan Morro Bay Consistency Alternative assumes the BESS Site is developed for Visitor Serving Commercial uses, resulting in approximately twice as much Visitor Serving Commercial development in comparison to the proposed project. Because Visitor Serving Commercial land uses typically produce more vehicle trips than General (Light) Industrial land uses, this increase would result in greater VMT in comparison to the proposed project (refer to Impact TRA-2 in Section 4.9, *Transportation*, for a detailed discussion of the anticipated VMT associated with these land uses), which would result in increased air pollutant emissions from vehicle travel. Although development facilitated by the Plan Morro Bay Consistency Alternative would implement goals and policies in Plan Morro Bay and mitigation measures from the 2021 Final EIR for Plan Morro Bay to reduce air pollutant emissions, the increased vehicle emissions that would be generated by increased Visitor Serving Commercial uses would be inconsistent with the 2001 Clean Air Plan and therefore, would result in a significant and unavoidable impact.

Therefore, the Plan Morro Bay Consistency Alternative would result in increased air quality impacts compared to the proposed project, which would be a significant and unavoidable impact.

c. Biological Resources

The Plan Morro Bay Consistency Alternative would not change the size or location of the Project Site, and would include similar demolition and construction activities, and a similar development footprint as the proposed project. As a result, this alternative would result in similar potential impacts to sensitive species and habitats as the proposed project. The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to riparian habitats, sensitive natural communities, and wetlands, and protect designated environmentally sensitive habitat areas (ESHA). Individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce impacts to biological resources where potential project-level environmental impacts are identified.

Incorporation of Plan Morro Bay goals and policies, in combination with project-specific mitigation measures, would reduce potential impacts to biological resources to a less than significant level, similar to the proposed project.

d. Cultural Resources and Tribal Cultural Resources

The Plan Morro Bay Consistency Alternative would demolish the existing Power Plant building and stacks, and therefore would result in a significant and unavoidable impact to historical resources, similar to the proposed project.

The Plan Morro Bay Consistency Alternative would not change the size or location of the Project Site, and would include similar demolition activities, construction activities and development footprint as the proposed project. Similar to the proposed project, structural development on the

BESS Site would require pile driving in order to remediate potential liquefaction hazards. As a result, this alternative would result in similar ground-disturbing activities in similar locations as the proposed project, and therefore would have similar potential to disturb archaeological or tribal cultural resources.

The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to the protection of cultural resources or mitigation for development projects that could impact cultural resources. Individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce impacts to archaeological and tribal cultural resources where potential project-level environmental impacts are identified. Similar to the proposed project, in the event of unanticipated discovery of human remains, the Plan Morro Bay Consistency Alternative would comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 to reduce potential impacts to a less than significant level.

Incorporation of Plan Morro Bay goals and policies, in combination with project-specific mitigation measures, would reduce potential impacts to archaeological and tribal cultural resources to a less than significant level, similar to the proposed project.

e. Geology and Soils

The Plan Morro Bay Consistency Alternative would not change the size or location of the Project Site, and would include similar demolition activities, construction activities, and development footprint as the proposed project. As a result, this alternative would be subject to the same potential liquefaction hazards, subsidence hazards, and expansive soil hazards as the proposed project. In addition, the Plan Morro Bay Consistency Alternative would have a similar potential to disturb paleontological resources as the proposed project due to similar ground-disturbing activities, including pile driving, for future development on the Power Plant Property.

The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to reducing geological hazards and potential impacts to paleontological resources. Individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce potential impacts related to geological hazards and paleontological resources.

Incorporation of Plan Morro Bay goals and policies, in combination with project-specific mitigation measures, would reduce potential impacts related to geological hazards and paleontological resources to a less than significant level, similar to the proposed project.

f. Greenhouse Gas Emissions

The Plan Morro Bay Consistency Alternative would result in approximately twice as much Visitor Serving Commercial land uses in comparison to the proposed project. Because Visitor Serving Commercial land uses typically produce more vehicle trips than General (Light) Industrial land uses, this increase would result in greater VMT in comparison to the proposed project (refer to Impact TRA-2 in Section 4.9, *Transportation*, for a detailed discussion of the anticipated vehicle miles traveled associated with these land uses), which would result in increased GHG emissions from vehicle travel.

The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to reducing GHG emissions, including goals and policies related to the continued assessment and updating of the Morro Bay Climate Action Plan. Individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce potential impacts related to greenhouse gas emissions. However, reasonably foreseeable development under the Plan Morro Bay Consistency Alternative could occur prior to the adoption of an updated Morro Bay Climate Action Plan. Such development may be inconsistent with the updated Morro Bay Climate Action Plan and therefore impede local and state GHG emission reduction targets. As a result, the Plan Morro Bay Consistency Alternative would result in potentially significant impacts related to GHG emissions.

Furthermore, the Plan Morro Bay Consistency Alternative would not result in construction of the BESS Facility, and therefore would not provide infrastructure to reduce reliance on fossil fuels or maximize usage of renewable energy during times of peak demand. The Plan Morro Bay Consistency Alternative would therefore not contribute to the state's decarbonization efforts.

Overall, the Plan Morro Bay Consistency Alternative would result in increased GHG impacts compared to the proposed project, and those impacts would be significant and unavoidable in the event that future visitor-serving commercial development is inconsistent with the updated Morro Bay Climate Action Plan.

g. Hazards and Hazardous Materials

The Plan Morro Bay Consistency Alternative would require similar construction and demolition practices as the proposed project, which would involve similar handling of fuels and other hazardous materials as the proposed project. During operation, this alternative would be expected to result in less hazardous material use than the proposed project, as Visitor Serving Commercial uses typically do not require the widespread use of hazardous materials specific to utility-scale BESS facilities (i.e., lithium-ion batteries, power conversion systems, etc.). Similar to the proposed project, these potential impacts would be reduced to a less than significant level with adherence to federal, state, and local regulations related to the handling of hazardous materials.

The Plan Morro Bay Consistency Alternative would not change the size or location of the Project Site, and would have a similar development footprint as the proposed project. As a result, this alternative could result in hazards due to existing hazardous materials contamination on the Power Plant Property in AOC 1 and potential contamination in AOC 7, which has not yet been assessed due to the presence of the Power Plant building. Similar to the proposed project, the Plan Morro Bay Consistency Alternative would require cleanup of contamination on a project-by-project basis for structures that would be located in areas that may contain hazardous materials or other contaminants, and would be enforced through project-specific mitigation measures. Therefore, the Plan Morro Bay Consistency Alternative would result in a similar impact from existing on-site contamination as the proposed project, which could be reduced to a less than significant level with implementation of mitigation.

The Plan Morro Bay Consistency Alternative would result in approximately twice as much Visitor Serving Commercial land uses in comparison to the proposed project. Because Visitor Serving Commercial land uses typically produce more vehicle trips than General (Light) Industrial land uses, this increase would result in greater vehicle travel at the Power Plant property in comparison to the proposed project (refer to Impact TRA-2 in Section 4.9, *Transportation*, for a detailed discussion of the anticipated VMT associated with these land uses). As a result, the Plan Morro Bay Consistency

Alternative has a higher potential to interfere with emergency response and evacuation than the proposed project. The Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to minimizing the disruption of emergency response and evacuation. Therefore, similar to the proposed project, the Plan Morro Bay Consistency Alternative would result in less than significant impacts related to the impairment of emergency response and evacuation.

Similar to the proposed project, development facilitated by this alternative would be subject to potential flood and tsunami hazards, which could result in a release of pollutants due to inundation. Potential future Visitor Serving Commercial development would be required to adhere to Plan Morro Bay policies and Morro Bay Municipal Code provisions that require new development to be designed in accordance with California Building Code requirements and constructed to ensure that exposure to and risk of pollutant release due to seiche, tsunami, or flooding is not exacerbated.

Accordingly, the Plan Morro Bay Consistency Alternative would result in less than significant impacts, similar to the proposed project.

h. Noise

The Plan Morro Bay Consistency Alternative would result in similar levels of demolition noise as the proposed project, which would not exceed the applicable significance threshold of 85 dBA L_{eq} for demolition noise. However, this alternative is anticipated to result in more extensive and prolonged construction noise than the proposed project due to sporadic construction schedules associated with individual commercial development projects. This alternative is also anticipated to result in more extensive operational noise than the proposed project due to the increase in public use of the Power Plant Property that would be anticipated from typical Visitor Serving Commercial uses. However, the Master Plan would carry forward and would not modify any General Plan and/or LCP goals and policies related to minimizing community noise disturbance. The Morro Bay Municipal Code noise standards would apply to potential future Visitor Serving Commercial development projects. Compliance with those existing standards and Plan Morro Bay goals and policies and Morro Bay Municipal Code standards would ensure construction activity and operational noise associated with potential future Visitor Serving Commercial development projects would minimize noise disturbance at noise-sensitive receptors. Furthermore, individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce potential impacts related to noise.

Accordingly, although the Plan Morro Bay Consistency Alternative is anticipated to result in greater construction and operational noise than the proposed project, potential noise impacts would be less than significant, similar to the proposed project.

i. Transportation

The Plan Morro Bay Consistency Alternative would result in approximately twice as much Visitor Serving Commercial land uses in comparison to the proposed project. Because Visitor Serving Commercial land uses typically produce more vehicle trips than General (Light) Industrial land uses, this increase would result in greater VMT in comparison to the proposed project (refer to Impact TRA-2 in Section 4.9, *Transportation*, for a detailed discussion of the anticipated VMT associated with these land uses).

Individual development projects facilitated by the Plan Morro Bay Consistency Alternative would continue to be required to undergo focused, project-level environmental review, including implementation of mitigation to reduce VMT where potential project-level environmental impacts are identified. However, potential future Visitor Serving Commercial development has the potential to result in a long-term increase in VMT, which, as identified in the 2021 Final EIR for Plan Morro Bay, would be a significant and unavoidable impact.

Therefore, the Plan Morro Bay Consistency Alternative would result in increased transportation impacts compared to the proposed project, and those impacts would be significant and unavoidable.

5.2.3 Alternative 3: BESS Facility Without Demolition

5.2.3.1 *Description*

The BESS Facility Without Demolition Alternative would include the construction and operation of a 600 MW BESS facility and adoption of a Master Plan consistent with Plan Morro Bay Policy LU-5.4; however, this alternative would exclude demolition and removal of the existing Power Plant building and stacks. Under the BESS Facility without Demolition Alternative, the existing Power Plant building and stacks would remain as they are under existing conditions. Therefore, the BESS Facility Without Demolition Alternative has the potential to result in the need for occasional routine maintenance activities for upkeep of the existing Power Plant building and stacks. In addition, retaining the existing Power Plant building and stacks would limit the future development potential for Visitor Serving Commercial uses on the remainder of the Power Plant Property envisioned in Plan Morro Bay.

5.2.3.2 *Impact Analysis*

a. Aesthetics and Visual Resources

The BESS Facility Without Demolition Alternative would retain the existing Power Plant building and stacks, which are the visually dominant features of the Project Site. Accordingly, this alternative would result in less visual change compared to the proposed project. Retaining the Power Plant building and stacks in accordance with this alternative would maintain existing visual intrusions from views along the Embarcadero. Construction, operation, and potential future decommissioning of the BESS Facility would be required to occur in accordance with the policies of Plan Morro Bay and the Morro Bay Municipal Code related to the preservation of scenic vistas, scenic resources, visual character, and light and glare. Adherence to existing City policies and Municipal Code requirements would ensure potential aesthetic impacts would remain at a less than significant level.

Therefore, the BESS Facility Without Demolition Alternative would result in less visual change to existing conditions in comparison to the proposed project, and potential aesthetic impacts would remain less than significant, similar to the proposed project.

b. Air Quality

The BESS Facility Without Demolition Alternative would not include demolition of the existing Power Plant building and stacks. Therefore, this alternative would reduce criteria pollutant emissions and toxic air contaminants compared to the proposed project.

Similar to the proposed project, this alternative would be required to implement San Luis Obispo Air Pollution Control District (SLOAPCD) emissions and fugitive dust control measures during construction and operation of the BESS Facility in compliance with the 2001 Clean Air Plan. This alternative would be required to implement similar mitigation measures as the proposed project to reduce pollutant exposure impacts associated with construction emissions to a less than significant level, including implementation of SLOAPCD mitigation measures for construction equipment. The Master Plan for this alternative would not conflict with or obstruct implementation of the 2001 Clean Air Plan and individual projects in the Master Plan area would continue to be required to demonstrate consistency with the 2001 Clean Air Plan.

Implementation of required mitigation would reduce this alternative's potential air quality impacts to a less than significant level, similar to the proposed project.

c. Biological Resources

The BESS Facility Without Demolition Alternative would not include demolition of the existing Power Plant building and stacks. Therefore, this alternative would reduce the potential for direct impacts to special-status species with the potential to use the existing Power Plant building and stacks, such as nesting birds or bats. Similar to the proposed project, this alternative would be required to implement mitigation to reduce potential impacts to biological resources, such as biological monitoring, pre-construction surveys for wildlife, use of wildlife buffers, and implementation of a habitat mitigation and monitoring plan.

Implementation of required mitigation would reduce this alternative's impacts to biological resources to a less than significant level, similar to the proposed project.

d. Cultural Resources and Tribal Cultural Resources

The BESS Facility Without Demolition Alternative would not demolish the existing Power Plant building and stacks, which are eligible for the National Register of Historic Places and California Register of Historic Resources. Accordingly, this alternative would not result in a significant impact to historical resources.

The BESS Facility Without Demolition Alternative would include similar construction activities and a similar development footprint for the BESS Facility as the proposed project. Similar to the proposed project, structural development on the BESS Site would require pile driving in order to remediate potential liquefaction hazards. As a result, this alternative would result in similar ground-disturbing activities in similar locations as the proposed project.

Similar to the proposed project, the BESS Facility Without Demolition Alternative would be required to implement mitigation to reduce potential impacts to archaeological resources and tribal cultural resources to a less than significant level, including archaeological monitoring, recovery excavations, and implementation of a construction monitoring treatment plan. In the event of unanticipated discovery of human remains, the BESS Facility Without Demolition Alternative would comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 to reduce potential impacts to a less than significant level.

Overall, the BESS Facility Without Demolition Alternative would result in less than significant impacts to archaeological resources and tribal cultural resources with implementation of mitigation, similar to the proposed project.

e. Geology and Soils

The BESS Facility Without Demolition Alternative would include similar construction activities and a similar development footprint for the BESS Facility as the proposed project. As a result, this alternative would be subject to the same potential liquefaction hazards, subsidence hazards, and expansive soil hazards as the proposed project.

In addition, the BESS Facility Without Demolition Alternative would have a similar potential to disturb paleontological resources as the proposed project due to similar ground-disturbing activities, including pile driving, at the Project Site. Similar to the proposed project, the BESS Facility Without Demolition Alternative would be required to implement mitigation to reduce potential impacts to a less than significant level, including requiring geotechnical assessments for individual developments, paleontological monitoring, and implementing procedures for the unanticipated discovery of paleontological resources.

Implementation of required mitigation would reduce this alternative's potential geology and soils impacts to a less than significant level, similar to the proposed project.

f. Greenhouse Gas Emissions

The BESS Facility Without Demolition Alternative would not include demolition activities, and therefore would reduce the amount of GHG emissions generated compared to the proposed project. Similar to the proposed project, the BESS Facility Without Demolition Alternative would be used to store renewable energy during off-peak hours when energy usage/demand is lower and to dispatch stored energy on an as-needed basis during peak demand hours. As a result, the BESS Facility Without Demolition Alternative would accelerate California's decarbonization efforts by increasing the battery storage capacity in the State, supporting the State's long-term goal of reducing GHG emissions associated with the energy sector.

Similar to the proposed project, the BESS Facility Without Demolition Alternative would change the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG), which would reduce long-term increases in GHG emissions associated with future development of Visitor Serving Commercial uses across the Master Plan area.

Overall, the BESS Facility Without Demolition Alternative would have a less than significant impact on GHG emissions, similar to the proposed project.

g. Hazards and Hazardous Materials

The BESS Facility Without Demolition Alternative would not include demolition activities, and therefore, would not result in the potential unsafe release of asbestos containing material or lead-based paint associated with the existing Power Plant building and stacks. Therefore, the BESS Facility Without Demolition Alternative would result in fewer potential impacts related to hazardous materials compared to the proposed project. Similar to the proposed project, the BESS Facility Without Demolition Alternative would adhere to existing federal, State, and local regulations, and implement mitigation to minimize the potential for impacts related to hazardous materials to occur, including coordination with the California Department of Toxic Substances Control and implementation of a soil management plan.

Implementation of required mitigation would reduce this alternative's potential hazards and hazardous materials impacts to a less than significant level, similar to the proposed project.

h. Noise

The BESS Facility Without Demolition Alternative would not include demolition activities, and therefore, would result in less temporary noise in comparison to the proposed project. However, construction activity associated with the BESS Facility, and associated construction equipment noise, would be similar to the proposed project. Construction activity would be subject to the City's best management practices to minimize construction noise. The BESS Facility Without Demolition Alternative's pile driving activities would be similar to the proposed project and would occur at similar distances to sensitive receptors. As a result, noise and vibration from pile driving would be barely perceptible at nearby receptors and the BESS Facility Without Demolition Alternative would not result in substantial operational noise or vibration, similar to the proposed project.

Overall, the BESS Facility Without Demolition Alternative would have a less than significant impact related to noise and vibration, similar to the proposed project.

i. Transportation

The BESS Facility Without Demolition Alternative would not include demolition activities, and therefore, would reduce the volume of temporary vehicle trips to and from the Power Plant Property. This reduction in the amount of vehicle travel required during construction would reduce the effect of construction traffic on pedestrian and bicycle circulation in comparison to the proposed project. However, operation of the BESS Facility under this alternative would result in a similar amount of operational vehicle trips as the proposed project, and a similar change in VMT compared to the proposed project. The operation of the BESS Facility Without Demolition Alternative would be required to adhere to Plan Morro Bay policies concerning circulation, and would not exceed the VMT screening criteria identified in the San Luis Obispo County Transportation Impact Analysis Guidelines, which are used in this EIR as the applicable threshold of significance for evaluating potential impacts related to VMT.

Therefore, the BESS Facility Without Demolition Alternative would have a less than significant impact related to transportation, similar to the proposed project.

5.2.4 Alternative 4: Reduced BESS Facility

5.2.4.1 Description

The Reduced BESS Facility Alternative would include the construction and operation of a BESS Facility, demolition and removal of the existing Power Plant building and smokestacks, and adoption of a Master Plan, similar to the proposed project. However, under this reduced project alternative, the BESS Facility would include three smaller enclosed buildings, resulting in a reduced BESS Site area and 100 MW reduction in total storage capacity. Under the Reduced BESS Facility Alternative, each building would have a building area of 75,700 sf, resulting in a total building area of approximately 227,000 sf on a 21-acre BESS Site. Similar to the proposed project, the buildings would be up to 35.2 feet in height from average natural grade. Each building would house approximately 2,000 racks containing lithium-ion batteries with storage capacity of approximately 166 MW for a total storage capacity of approximately 500 MW. Construction of the Reduced BESS Facility would take 36 to 42 months, compared to the proposed project's construction schedule of 36 to 48 months. The Reduced BESS Facility Alternative would require approximately 1,000 fewer drilled pilings compared to the proposed project. In addition, the Reduced BESS Facility is expected

to require a slight reduction in permanent operation and maintenance staff activities compared to the proposed project.³

5.2.4.2 Impact Analysis

a. Aesthetics and Visual Resources

The Reduced BESS Facility Alternative would demolish the Power Plant building and stacks which, similar to the proposed project, would remove existing visual intrusions from views along the Embarcadero and provide more visual emphasis on existing trees, other vegetation, and smaller-scale community development. The Reduced BESS Facility Alternative would utilize three battery storage buildings with a reduced footprint in comparison to the proposed project. Although this alternative would result in a three-acre reduction in footprint, the three battery storage buildings under this alternative would be the same height as the proposed project buildings, exceeding the height of the existing earthen berms. As shown in the visual simulations of the proposed project (Figures 4.1-2 through 4.1-8 of Section 4.1, *Aesthetics*) the extent of the project footprint is not prominently captured at key viewpoints. Rather, the prominent visual change identified from key viewpoints is the absence of the Power Plant building and stacks, and the heights of the battery storage buildings. Because this alternative would include three battery storage buildings with the same height as the proposed project buildings, the Reduced BESS Facility Alternative would result in similar visual changes as the proposed project. Accordingly, the Reduced BESS Facility Alternative would result in less than significant impacts related to scenic vistas, scenic resources, and visual character, similar to the proposed project.

Similar to the proposed project, the Reduced BESS Facility Alternative would be required to adhere to Plan Morro Bay policies and Morro Bay Municipal Code regulations that would minimize potential impacts related to light and glare. The Master Plan would not modify any General Plan and/or LCP goals and policies related to aesthetics and visual resources. Adherence to existing City policies and Municipal Code requirements would minimize impacts on aesthetics and visual resources, ensuring such impacts would remain less than significant.

Therefore, the Reduced BESS Facility Alternative would result in similar aesthetics and visual resource impacts in comparison to the proposed project and would be less than significant.

b. Air Quality

The Reduced BESS Facility Alternative would result in similar demolition activities as the proposed project. Due to similar demolition activities, the Reduced BESS Facility Alternative is anticipated to generate a similar level of criteria pollutant emissions as the proposed project during demolition. However, the Reduced BESS Facility Alternative is anticipated to require 26 to 42 months to construct the BESS Facility, approximately 6 months fewer than the proposed project's construction schedule of 36 to 48 months. This reduced construction schedule would correspondingly reduce construction equipment operation times, and the total volume of criteria pollutants emitted during the construction phase of the Reduced BESS Facility Alternative in comparison to the proposed project.

³ Note that this Reduced BESS Facility Alternative could also be accomplished through the use of an enclosure-based approach for the BESS Facility, similar to the proposal for Alternative 5, which could result in additional reductions to the potential impacts that may result from this Alternative 4, so long as the enclosure system proposed is consistent with the development footprint and building area for the Reduced BESS Facility Alternative.

The Reduced BESS Facility Alternative would be required to implement SLOAPCD control measures in compliance with the 2001 Clean Air Plan. This alternative would also be required to implement similar mitigation as the proposed project to reduce pollutant exposure impacts associated with construction emissions to a less than significant level, including implementation of SLOAPCD mitigation measures for construction equipment. Because the Reduced BESS Facility Alternative would be expected to require fewer operation and maintenance staff in comparison to the proposed project, criteria air pollutants emitted by vehicle trips during operation of this alternative would be incrementally reduced compared to the proposed project.

The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in less than significant air quality impacts, similar to the proposed project.

Overall, the Reduced BESS Facility Alternative would result in incrementally reduced air quality impacts compared to the proposed project due to the reduced level of construction activity. Implementation of required mitigation would reduce this alternative's potential air quality impacts to a less than significant level, similar to the proposed project.

c. Biological Resources

The Reduced BESS Facility Alternative would result in an incrementally reduced area of disturbance compared to the proposed project. Accordingly, the Reduced BESS Facility Alternative would have incrementally reduced impacts on special-status species and habitats in comparison to the proposed project. Similar to the proposed project, this alternative would be required to implement mitigation to reduce potential impacts to biological resources, such as biological monitoring, pre-construction surveys for wildlife, use of wildlife buffers, and implementation of a habitat mitigation and monitoring plan. Similar to the proposed project, implementation of these required mitigation measures would reduce the Reduced BESS Facility Alternative's potential impacts to biological resources to a less than significant level.

The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with implementation of required mitigation.

Overall, the Reduced BESS Facility Alternative would have an incrementally reduced impact in comparison to the proposed project. Similar to the proposed project, implementation of required mitigation would reduce this alternative's potential biological resources impacts to a less than significant level.

d. Cultural Resources and Tribal Cultural Resources

The Reduced BESS Facility Alternative would remove the existing Power Plant building and stacks and therefore would result in significant and unavoidable impacts to historical resources, similar to the proposed project.

The Reduced BESS Facility Alternative would require approximately 1,000 fewer piles in comparison to the proposed project, which would result in a corresponding reduction in the amount of ground disturbing activities. Therefore, the Reduced BESS Facility Alternative would have an incrementally reduced potential to disturb archaeological resources and tribal cultural resources in comparison to the proposed project.

Similar to the proposed project, the Reduced BESS Facility Alternative has the potential to adversely impact archaeological resources and tribal cultural resources through the installation of stormwater drainage. Similar to the proposed project, the Reduced BESS Facility Alternative would be required to implement mitigation to reduce potential impacts to archaeological resources and tribal cultural resources to a less than significant level, including archaeological monitoring, recovery excavations, and implementation of a construction monitoring treatment plan.

The Master Plan for the Reduced BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with implementation of required mitigation. In the event of unanticipated discovery of human remains, the Reduced BESS Facility Alternative would be required to comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 to reduce potential impacts to a less than significant level.

Overall, the Reduced BESS Facility Alternative would result in incrementally reduced impacts to archaeological and tribal cultural resources due to reduced piles. Implementation of required mitigation would reduce this alternative's potential impacts to archaeological and tribal cultural resources to a less than significant level, similar to the proposed project.

e. Geology and Soils

The Reduced BESS Facility Alternative would be subject to similar potential liquefaction hazards, subsidence hazards, and expansive soil hazards as the proposed project. The Reduced BESS Facility Alternative would include a reduced number of piles compared to the proposed project. However, similar to the proposed project, no known paleontological resources would be impacted. Pileings would be driven into the ground, with no sediment excavated and no exposures of bedrock; as a result, paleontological monitoring of pile installation would not identify paleontological resources. Therefore, similar to the proposed project, any undiscovered resources that may be present in older sediments under the Project Site would not be encountered. Similar to the proposed project, the Reduced BESS Facility Alternative would be required to implement mitigation to reduce potential impacts related to geology and soils to a less than significant level, including requiring geotechnical assessments, paleontological monitoring, and implementing procedures for the unanticipated discovery of paleontological resources. Therefore, the Reduced BESS Facility Alternative would result in similar impacts to paleontological resources as the proposed project, and these impacts would be less than significant with mitigation incorporated.

The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with adherence to State and City policies, and implementation of mitigation.

Overall, the Reduced BESS Facility Alternative's impacts to geology and soils would be less than significant with implementation of required mitigation, similar to the proposed project.

f. Greenhouse Gas Emissions

The Reduced BESS Facility Alternative would include similar demolition activities as the proposed project. Due to similar demolition activities, the Reduced BESS Facility Alternative is anticipated to generate a similar level of GHG emissions as the proposed project during demolition. However, the Reduced BESS Facility Alternative is anticipated to require 36 to 42 months to construct the BESS Facility, approximately 6 months fewer than the proposed project's construction schedule of 36 to

48 months. This reduced construction schedule would correspondingly reduce construction equipment operation times and the total volume of GHG emissions during the construction phase in comparison to the proposed project. In addition, the Reduced BESS Facility Alternative would be expected to require a slight reduction in operation and maintenance staff in comparison to the proposed project. Therefore, GHG emissions emitted by vehicle trips during operation of this alternative would be incrementally reduced compared to the proposed project.

Similar to the proposed project, the Reduced BESS Facility Alternative would be used to store renewable energy during off-peak hours when energy usage/demand is lower and dispatch stored energy on an as-needed basis during peak demand hours. However, this alternative would have a reduced battery storage capacity in comparison to the proposed project. As a result, the Reduced BESS Facility Alternative would accelerate California's decarbonization efforts by increasing the battery storage capacity in the State, supporting the States long-term goal to reduce GHG emissions associated with the energy sector, albeit to an incrementally lesser degree than the proposed project.

The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project. Similar to the proposed project, a change of the land use designation for the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce long-term increases in GHG emissions associated with future development of the Master Plan area.

Overall, the Reduced BESS Facility Alternative would result in incrementally reduced GHG impacts compared to the proposed project due to the reduced level of construction activity associated with the BESS Facility component of the project. However, this alternative would also result in a lesser amount of long-term reductions in GHG emissions associated with the energy sector in comparison to the proposed project due to the reduced battery energy storage capacity. Overall, potential GHG impacts from the Reduced BESS Facility Alternative would remain less than significant, similar to the proposed project.

g. Hazards and Hazardous Materials

The Reduced BESS Facility Alternative would include demolition and construction activities, requiring the use of similar hazardous materials as the proposed project. The Reduced BESS Facility Alternative would be located in identified flood and tsunami hazard areas. Similar to the proposed project, the Reduced BESS Facility Alternative would include fire suppression design features including monitoring and detection systems, automatic protection and suppression systems, and explosion prevention protection systems, which would reduce potential impacts related to fire hazards to a less than significant level. Accordingly, the Reduced BESS Facility Alternative would result in similar impacts in comparison to the proposed project.

Similar to the proposed project, the Reduced BESS Facility Alternative would be required to adhere to existing federal, State, and local regulations, and implement mitigation to minimize the potential for impacts related to hazardous materials to occur, including coordination with the California Department of Toxic Substances Control and implementation of a soil management plan.

The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project. As a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with adherence to City policies and implementation of required mitigation.

Overall, the Reduced BESS Facility Alternative's potential impacts associated with hazards and hazardous materials would be less than significant with implementation of required mitigation, similar to the proposed project.

h. Noise

The Reduced BESS Facility Alternative would include similar demolition activities as the proposed project and would therefore generate similar maximum noise levels as the proposed project during demolition. However, the Reduced BESS Facility Alternative is anticipated to require 36 to 42 months to construct, approximately 6 months fewer than the proposed project's construction schedule of 36 to 48 months. While construction noise levels would be similar to the proposed project, this reduced construction schedule would correspondingly reduce the duration to which sensitive receptors would be exposed to construction noise in comparison to the proposed project. Similar to the proposed project, the Reduced BESS Facility Alternative's construction activities would be subject to the City's best management practices to minimize construction noise.

The Reduced BESS Facility Alternative would require approximately 1,000 fewer piles and therefore result in less noise during pile driving activities compared to the proposed project. The Reduced BESS Facility Alternative's pile driving activities would occur at similar distances to sensitive receptors in comparison to the proposed project; as a result, noise and vibration from pile driving would be barely perceptible at nearby receptors, similar to the proposed project.

In addition, the Reduced BESS Facility Alternative would be expected to require a slight reduction in operation and maintenance staff in comparison to the proposed project. Therefore, noise emitted by vehicle trips during operation of this alternative would be incrementally reduced compared to the proposed project. The Master Plan associated with the Reduced BESS Facility Alternative would not differ from the proposed project. As a result, the Master Plan for this alternative would result in similar noise impacts as the proposed project, which would be minimized with adherence to City policies.

The Reduced BESS Facility Alternative would result in incrementally reduced noise impacts compared to the proposed project due to the reduced level of construction and operational activity. Overall, noise and vibration impacts from this alternative would be less than significant, similar to the proposed project.

i. Transportation

The Reduced BESS Facility Alternative would include similar demolition and construction activities as the proposed project. However, the Reduced BESS Facility Alternative is anticipated to require 36 to 42 months to construct, approximately 6 months fewer than the proposed project's construction schedule of 36 to 48 months. This reduced construction schedule would correspondingly reduce total vehicle trips required for construction, which would reduce the effect of construction traffic on pedestrian and bicycle circulation in comparison to the proposed project.

In addition, the Reduced BESS Facility Alternative would be expected to require a slight reduction in operation and maintenance staff in comparison to the proposed project. Therefore, vehicle trips and corresponding VMT during operation of this alternative would be incrementally reduced compared to the proposed project. Similar to the proposed project, the Reduced BESS Facility Alternative would be required to be consistent with Plan Morro Bay policies that address transportation and circulation and would not exceed VMT screening criteria identified in the San Luis Obispo County Transportation Impact Analysis Guidelines.

Overall, the Reduced BESS Facility Alternative would result in incrementally reduced transportation impacts compared to the proposed project due to the reduced duration of construction activity and incremental reduction in operation and maintenance employees. Therefore, the Reduced BESS Facility Alternative's potential impacts related to transportation and circulations would be less than significant, similar to the proposed project.

5.2.5 Alternative 5: Enclosure-Based BESS Facility

5.2.5.1 *Description*

The Enclosure-Based BESS Facility Alternative would include the construction and operation of a 600 MW BESS facility, demolition and removal of the existing Power Plant building and stacks, and adoption of a Master Plan, similar to the proposed project. However, instead of the three large permanent structures envisioned by the proposed project, the enclosure-based alternative would utilize 174 battery storage enclosures, each separated approximately 10 feet apart, and each with its own independent fire protection system and thermal management system, . The battery storage enclosures would be approximately 15 ft tall. The Enclosure-Based BESS Facility Alternative would also only include the construction of one approximately 46,000 square foot (sf), 30-foot tall substation, instead of the three approximately 49,700 sf, 30-foot tall substations envisioned in the proposed project. Construction of the enclosure-Based BESS Facility Alternative would take 24 to 36 months, compared to the proposed project's construction schedule of 36 to 48 months. The Enclosure-Based BESS Facility Alternative would require approximately 5,500 to 6,500 drilled pilings, similar to the proposed project.

5.2.5.2 *Impact Analysis*

a. Aesthetics and Visual Resources

The Enclosure-Based BESS Facility Alternative would demolish the Power Plant building and stacks, which, similar to the proposed project, would remove existing visual intrusions from views along the Embarcadero and provide more visual emphasis on existing trees, other vegetation, and smaller-scale community development. The Enclosure-Based BESS Facility Alternative would utilize 15-foot-tall battery storage enclosures approximately 20 feet shorter than the battery storage buildings envisioned in the proposed project. The enclosures would not exceed the heights of existing earthen berms and would be more obscured by vegetation, fencing, and topography in comparison to the proposed project's battery storage buildings. In addition, the Enclosure-Based BESS Facility Alternative would include only one 30-foot-tall substation compared to the proposed project's three 30-foot tall substations. Accordingly, the Enclosure-Based BESS Facility Alternative would result in reduced impacts to scenic vistas, scenic resources, and visual character compared to the proposed project.

Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be required to adhere to Plan Morro Bay policies and Morro Bay Municipal Code regulations which would minimize potential impacts related to light and glare. The Master Plan would not modify any General Plan and/or LCP goals and policies related to aesthetics and visual resources. Adherence to existing City policies and Municipal Code requirements would minimize impacts regarding aesthetics and visual resources, ensuring such impacts would remain less than significant.

Therefore, the Enclosure-Based BESS Facility Alternative would result in reduced aesthetics and visual resource impacts in comparison to the proposed project. Overall, aesthetic and visual resource impacts would be less than significant, similar to the proposed project.

b. Air Quality

The Enclosure-Based BESS Facility Alternative would result in similar demolition and operational activities as the proposed project. Due to similar demolition and operational activities, the Enclosure-Based BESS Facility Alternative is anticipated to generate a similar level of criteria pollutant emissions as the proposed project during demolition and operation. However, the Enclosure-Based BESS Facility Alternative is anticipated to require 24 to 36 months to construct the BESS Facility, approximately 12 months fewer than the proposed project's construction schedule for the BESS Facility of 36 to 48 months. This reduced construction schedule would correspondingly reduce construction equipment operation times, and the total volume of criteria pollutants emitted during the construction phase of the Enclosure-Based BESS Facility Alternative in comparison to the proposed project.

The Enclosure-Based BESS Facility Alternative would be required to implement SLOAPCD control measures in compliance with the 2001 Clean Air Plan. This alternative would be required to implement similar mitigation to the proposed project to reduce pollutant exposure impacts associated with construction emissions to a less than significant level, including implementation of SLOAPCD mitigation measures for construction equipment. The Master Plan associated with the Enclosure-Based BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in less than significant air quality impacts, similar to the proposed project.

Overall, the Enclosure-Based BESS Facility Alternative would result in incrementally reduced air quality impacts compared to the proposed project due to the reduced level of construction activity. Implementation of required mitigation would ensure this alternative's overall air quality impacts would remain less than significant, similar to the proposed project.

c. Biological Resources

The Enclosure-Based BESS Facility Alternative would locate the enclosure-based BESS Facility on the same site (the BESS Site) as the proposed project and would result in a similar area of disturbance as the proposed project. Accordingly, the Enclosure-Based BESS Facility Alternative would have similar potential impacts on special-status species and habitats in comparison to the proposed project. Similar to the proposed project, this alternative would be required to implement mitigation to reduce potential impacts to biological resources, such as biological monitoring, pre-construction surveys for wildlife, use of wildlife buffers, and implementation of a habitat mitigation and monitoring plan. Similar to the proposed project, implementation of these required mitigation measures would reduce the Enclosure-Based BESS Facility Alternative's potential impacts to biological resources to a less than significant level.

The Master Plan associated with the Enclosure-Based BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with implementation of required mitigation.

Overall, implementation of required mitigation would reduce this alternative's potential biological resources impacts to a less than significant level, similar to the proposed project.

d. Cultural Resources and Tribal Cultural Resources

The Enclosure-Based BESS Facility Alternative would remove the existing Power Plant building and stacks and, therefore, would result in a significant and unavoidable impact to historical resources, similar to the proposed project.

As with the proposed project, the Enclosure-Based BESS Facility Alternative would require up to 6,500 pilings and therefore would have similar potential impacts to archaeological resources and tribal cultural resources in comparison to the proposed project. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative has the potential to adversely impact these resources through the installation of stormwater drainage. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be required to implement mitigation to reduce potential impacts to archaeological resources and tribal cultural resources to a less than significant level, including archaeological monitoring, recovery excavations, and implementation of a construction monitoring treatment plan.

The Master Plan for the Enclosure-Based BESS Facility Alternative would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with implementation of required mitigation. In the event of unanticipated discovery of human remains, the Enclosure-Based BESS Facility Alternative would be required to comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 to reduce potential impacts to a less than significant level.

Overall, implementation of required mitigation would reduce this alternative's potential archaeological and tribal cultural resources impacts to a less than significant level, similar to the proposed project.

e. Geology and Soils

The Enclosure-Based BESS Facility Alternative would be located on the same site (the BESS Site) as the proposed project, which is subject to potential liquefaction hazards, subsidence hazards, and expansive soil. The Enclosure-Based BESS Facility Alternative would require a similar number of drilled pilings as the proposed project. Similar to the proposed project, no known paleontological resources would be impacted. Pilings would be driven into the ground, with no sediment excavated and no exposures of bedrock; as a result, paleontological monitoring of pile installation would not identify paleontological resources. Therefore, similar to the proposed project, any undiscovered resources that may be present in older sediments under the Project Site would not otherwise be encountered. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be required to implement mitigation to reduce potential impacts to a less than significant level, including requiring geotechnical assessments, paleontological monitoring, and implementing procedures for the unanticipated discovery of paleontological resources. Therefore, the Enclosure-Based BESS Facility Alternative would result in similar impacts related to geological hazards and paleontological resources as the proposed project, and these impacts would be less than significant with mitigation incorporated.

The Master Plan associated with the Enclosure-Based BESS Facility Alternatives would not differ from the proposed project; as a result, the Master Plan for this alternative would result in similar impacts as the proposed project, which would be minimized with adherence to State and City policies, and implementation of required mitigation.

Overall, the Enclosure-Based BESS Facility Alternative's potential impacts to geology and soils would be less than significant with implementation of required mitigation, similar to the proposed project.

f. Greenhouse Gas Emissions

The Enclosure-Based BESS Facility Alternative would include similar demolition and operational activities as the proposed project. Due to similar demolition and operational activities, the Enclosure-Based BESS Facility Alternative is anticipated to generate a similar level of GHG emissions as the proposed project during demolition. However, the Enclosure-Based BESS Facility Alternative is anticipated to require 24 to 36 months to construct, approximately 12 months fewer than the proposed project's construction schedule of 36 to 48 months. This reduced construction schedule would correspondingly reduce construction equipment operation times, and the total volume of GHG emissions emitted during the construction phase of the Enclosure-Based BESS Facility Alternative in comparison to the proposed project.

Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be used to store renewable energy during off-peak hours when energy usage/demand is lower and dispatch stored energy on an as-needed basis during peak demand hours. As a result, the Enclosure-Based BESS Facility Alternative would accelerate California's decarbonization efforts by increasing the battery storage capacity in the State, supporting the State's long-term goals to reduce GHG emissions associated with the energy sector.

The Master Plan associated with the Enclosure-Based BESS Facility Alternative would not differ from the proposed project. Similar to the proposed project, the change to the land use designation of the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would reduce long-term increases in GHG emissions associated with future development of the Master Plan area.

Overall, the Enclosure-based BESS Facility Alternative would result in incrementally reduced GHG impacts compared to the proposed project due to the reduced level of construction activity. Potential GHG impacts would remain less than significant, similar to the proposed project.

g. Hazards and Hazardous Materials

The Enclosure-Based BESS Facility Alternative would include demolition and construction activities, requiring the use of similar hazardous materials as the proposed project. The Enclosure-Based BESS Facility Alternative would be located on the same site (the BESS Site) as the proposed project, which is in identified flood and tsunami hazard areas. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would include fire suppression design features including monitoring and detection systems, automatic protection and suppression systems, and explosion prevention protection systems, which would reduce potential impacts related to fire hazards to a less than significant level. In addition, each battery enclosure included in the Enclosure-Based BESS Facility Alternative would be spaced 10 feet apart which, in comparison to the proposed project, would further reduce the potential for an isolated fire to spread throughout the BESS Facility. Accordingly, the Enclosure-Based BESS Facility Alternative would result in incrementally reduced impacts in comparison to the proposed project.

Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be required to adhere to existing federal, State, and local regulations, and implement mitigation to minimize the potential for impacts related to hazardous materials to occur, including coordination with the California Department of Toxic Substances Control and implementation of a soil management plan.

The Master Plan associated with the Enclosure-Based BESS Facility Alternative would not differ from the proposed project. As a result, the Master Plan for this alternative would result in similar impacts

as the proposed project, which would be minimized with adherence to City policies and implementation of required mitigation.

Overall, the Enclosure-Based BESS Facility Alternative's potential impacts associated with hazards and hazardous materials would be less than significant with implementation of required mitigation, similar to the proposed project.

h. Noise

The Enclosure-Based BESS Facility Alternative would include similar demolition and operational activities as the proposed project and would therefore generate similar maximum noise levels as the proposed project during demolition and operation. However, the Enclosure-Based BESS Facility Alternative is anticipated to require 24 to 36 months to construct, approximately 12 months fewer than the proposed project's construction schedule of 36 to 48 months. While construction noise levels would be similar to the proposed project, this reduced construction schedule would correspondingly reduce the duration which sensitive receptors would be exposed to construction noise in comparison to the proposed project. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative's construction activities would be subject to the City's best management practices to minimize construction noise. The Enclosure-Based BESS Facility Alternative's pile driving activities would be similar to the proposed project and would occur at similar distances to sensitive receptors. As a result, noise and vibration from pile driving would be barely perceptible at nearby receptors, similar to the proposed project.

The Master Plan associated with the Enclosure-Based BESS Facility Alternative would not differ from the proposed project. As a result, the Master Plan for this alternative would result in similar noise impacts as the proposed project, which would be minimized with adherence to City policies.

Overall, the Enclosure-Based BESS Facility Alternative would result in incrementally reduced noise impacts compared to the proposed project due to the reduced level of construction activity. Potential noise and vibration impacts for this alternative would remain less than significant.

i. Transportation

The Enclosure-Based BESS Facility Alternative would include similar demolition and construction activities as the proposed project. However, the Enclosure-Based BESS Facility Alternative is anticipated to require 24 to 36 months to construct, approximately 12 months fewer than the proposed project's schedule of 36 to 48 months. This reduced construction schedule would correspondingly reduce the amount of vehicle travel required during construction, which would reduce the effect of construction traffic on pedestrian and bicycle circulation in comparison to the proposed project.

The Enclosure-Based BESS Facility Alternative would result in similar operational activities as the proposed project and would result in similar VMT as the proposed project. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would be required to be consistent with Plan Morro Bay policies that address transportation and circulation and would not exceed VMT screening criteria identified in the San Luis Obispo County Transportation Impact Analysis Guidelines.

Overall, the Enclosure-Based BESS Facility Alternative would result in incrementally reduced transportation impacts compared to the proposed project due to the reduced duration of construction activity. Potential impacts related to transportation and circulation would remain less than significant.

5.3 Identification of the Environmentally Superior Alternative

5.3.1 Comparison of Alternatives

CEQA requires the identification of the environmentally superior alternative among the alternatives evaluated in an EIR. The *CEQA Guidelines* do not define a specific methodology for determining the environmentally superior alternative. For the purposes of this analysis, each of the project alternatives is compared to the proposed project with respect to each environmental topic addressed in this EIR, and a determination has been made as to whether the potential environmental effects of each alternative would be reduced, increased, or similar in comparison to the proposed project.

A comparison of the environmental impacts from development of the proposed project and each of the five project alternatives are provided in Table 5-2. For each of the environmental topics evaluated in detail in this EIR, Table 5-2 provides a summary of the impact level of the proposed project and each alternative (no impact [NI], less than significant [LTS], less than significant with mitigation [LTSM], or significant and unavoidable [SU]), as well as a comparison of the severity of the alternative's impact compared to the proposed project's impact (increased level of impact compared to the proposed project [+], similar level of impact compared to the proposed project [=], or reduced level of impact compared to the proposed project [-]).

5.3.2 Environmentally Superior Alternative

This discussion identifies the environmentally superior alternative by assessing the degree to which each alternative avoids significant and unavoidable environmental impacts. For the purpose of this EIR, potential environmental impacts are equally weighted. In some cases, an alternative may avoid one or more significant and/or unavoidable impacts identified for the proposed project but introduce one or more new potentially significant impacts. Therefore, selection of the environmentally superior alternative requires an overall assessment of the changes in the number and type of significant impacts. Decision makers and the community in general may choose to emphasize one issue or another, which could lead to differing conclusions regarding environmental superiority.

Based on the alternatives analysis provided above, the No Project Alternative would be the environmentally superior alternative because no change to existing conditions would occur. *CEQA Guidelines* Section 15126.6(e)(2) provides that, if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other project alternatives.

The environmentally superior alternative among the other alternatives analyzed is the BESS Facility Without Demolition Alternative. The BESS Facility Without Demolition Alternative would eliminate the proposed project's significant and unavoidable impact on historical resources because the BESS Facility Without Demolition Alternative would not demolish structures that contribute to the Morro Bay Power Plant's eligibility for the National Register of Historic Places and California Register of Historical Resources. Excluding demolition of the Power Plant Building and stacks would also incrementally reduce the proposed project's less-than-significant potential impacts to aesthetics and visual resources, air quality, biological resources, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation impacts. However, the overall significance

conclusions and mitigation requirements for these impact areas would remain similar to the proposed project.

Although the BESS Facility Without Demolition Alternative would eliminate the significant and unavoidable impact on historical resources, this alternative would not prevent the eventual removal of the Power Plant building and stacks. Plan Morro Bay anticipates the Power Plant building and stacks would be demolished and removed from the site to make way for future Visitor Serving Commercial development and open space by 2040. Therefore, it is reasonable to assume the significant impact to historical resources would still occur by 2040, even if the impact would be avoided as a direct result of the implementation of this project alternative. Furthermore, because the BESS Facility Without Demolition Alternative would conflict with the goals of Plan Morro Bay, this alternative may be considered infeasible.

The Plan Morro Bay Consistency Alternative would retain the Visitor Serving Commercial land use designation, which would result in fewer potential impacts related to hazards and hazardous materials as commercial development facilitated by this alternative would not require the use of lithium-ion batteries. However, the Plan Morro Bay Consistency Alternative would not change the overall hazards and hazardous materials significance conclusion compared to the proposed project. The Plan Morro Bay Consistency Alternative would result in significant and unavoidable air quality and transportation impacts due to facilitating a substantial increase in commercial development in Morro Bay, which could conflict with the 2001 Clean Air Plan and result in long-term VMT increases. The Plan Morro Bay Consistency Alternative would also result in increased operational noise due to increased commercial development on site, although this increase in noise would not change the overall noise significance conclusion compared to the proposed project. In addition, the Plan Morro Bay Consistency Alternative would not fulfill project objectives intended to reduce fossil fuels and assist California in meeting its obligations under the California Public Utilities Commission's Energy Storage Framework and Design Program.

The Reduced BESS Facility Alternative would result in incrementally reduced air quality, biological resources, cultural resources and tribal cultural resources, greenhouse gas emissions, noise, and transportation impacts in comparison to the proposed project, although the overall significance conclusions and mitigation requirements for these issue areas would remain similar to the proposed project. Also similar to the proposed project, the Reduced BESS Facility Alternative would demolish the Power Plant building and stacks and therefore would result in a significant and unavoidable impact to historical resources. The Reduced BESS Facility Alternative would result in similar aesthetics, geology and soils and hazards and hazardous materials impacts as the proposed project. However, the Reduced BESS Facility Alternative would have a reduced battery storage capacity in comparison to the proposed project, supporting less of a long-term reduction in GHG emissions associated with the energy sector in comparison to the proposed project.

The Enclosure-Based BESS Facility Alternative would result in incrementally reduced impacts related to aesthetics and visual resources, air quality, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation, in comparison to the proposed project, although the overall significance conclusions and mitigation requirements for these issue areas would remain similar to the proposed project. Similar to the proposed project, the Enclosure-Based BESS Facility Alternative would demolish the Power Plant building and stacks and therefore would result in a significant and unavoidable impact to historical resources. The Enclosure-Based BESS Facility Alternative would result in similar impacts to biological resources, cultural resources and tribal cultural resources, and geology and soils as the proposed project.

Table 5-2 Impact Comparison of Alternatives

Environmental Issue	Proposed Project	Impact Classification				
		Alternative 1: No Project	Alternative 2: Plan Morro Bay Consistency	Alternative 3: BESS Facility Without Demolition	Alternative 4: Reduced BESS Facility	Alternative 5: Enclosure-based BESS Facility
Aesthetics						
Impacts to Scenic Vistas	LTS	NI -	LTS =	LTS -	LTS =	LTS -
Impacts to State Scenic Highway	LTS	NI -	LTS =	LTS -	LTS =	LTS -
Degradation of visual character and quality	LTS	NI -	LTS =	LTS -	LTS =	LTS -
Impacts from Light and Glare	LTS	NI -	LTS =	LTS -	LTS =	LTS =
Air Quality						
Conflict or obstruction of implementation of an air quality plan	LTS	NI -	SU +	LTS =	LTS =	LTS =
Cumulatively considerable net increase of a criteria pollutant	LTSM	NI -	SU +	LTSM -	LTSM -	LTSM -
Expose sensitive receptors to substantial pollutant concentrations	LTSM	NI -	LTSM -	LTSM -	LTSM -	LTSM -
Result in other emissions, such as odors	LTS	NI -	LTS =	LTS -	LTS =	LTS =
Biological Resources						
Impacts to candidate, sensitive, or special-status species	LTSM	NI -	LTSM =	LTSM -	LTSM -	LTSM =
Impacts to riparian habitat or sensitive natural communities	LTSM	NI -	LTSM =	LTSM =	LTSM -	LTSM =
Impacts to state or federally protected wetlands	LTS	NI -	LTS =	LTS =	LTS -	LTS =
Substantial interference with wildlife migration	LTSM	NI -	LTSM =	LTSM =	LTSM -	LTSM =
Conflicts with local policies or ordinances	LTSM	NI -	LTSM =	LTSM =	LTSM =	LTSM =
Cultural Resources and Tribal Cultural Resources						
Substantial adverse change to the significance of a historical resource	SU	NI -	SU =	LTS -	SU =	SU =
Substantial adverse change to the significance of an archaeological resource	LTSM	NI -	LTSM =	LTSM =	LTSM -	LTSM =
Disturb human remains	LTS	NI -	LTS =	LTS =	LTS =	LTS =
Substantial adverse change to the significance of a tribal cultural resource	LTSM	NI -	LTS =	LTS =	LTS -	LTSM =

Environmental Issue	Proposed Project	Impact Classification				
		Alternative 1: No Project	Alternative 2: Plan Morro Bay Consistency	Alternative 3: BESS Facility Without Demolition	Alternative 4: Reduced BESS Facility	Alternative 5: Enclosure-based BESS Facility
Geology and Soils						
Risk related to liquefaction, landslide, lateral spreading, subsidence, or collapse	LTSM	NI -	LTSM =	LTSM =	LTSM =	LTSM =
Risk related to expansive soil	LTSM	NI -	LTSM =	LTSM =	LTSM =	LTSM =
Destroy a unique paleontological resource or unique geologic feature	LTSM	NI -	LTSM =	LTSM =	LTSM =	LTSM =
Greenhouse Gas Emissions						
Generation of GHG emissions that would have a significant impact on the environment	LTS	NI -	LTSM +	LTS -	LTS -	LTS -
Conflict with a plan, policy, or regulation adopted for the purpose of reducing GHG emissions	LTS	NI -	SU +	LTS =	LTS +	LTS =
Hazards and Hazardous Materials						
Create significant hazards through routine transportation, use, disposal, or upset and accident conditions involving hazardous materials	LTS	NI -	LTS -	LTS -	LTS =	LTS -
Located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	LTSM	NI -	LTSM =	LTSM =	LTSM =	LTSM =
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTS	NI -	LTS +	LTS =	LTS =	LTS =
Risk pollutants release due to inundation in a flood hazard, tsunami, or seiche zone	LTS	NI -	LTS =	LTS =	LTS =	LTS =
Noise						
Generate substantial temporary or permanent increase in ambient noise levels in excess of applicable standards	LTS	NI -	LTS +	LTS -	LTS -	LTS -
Result in generation of excessive groundborne vibration or groundborne noise levels	LTS	NI -	LTS +	LTS =	LTS -	LTS =
Transportation						
Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	LTS	NI -	SU +	LTS -	LTS -	LTS -
Conflict or be inconsistent with <i>CEQA Guidelines</i> Section 15064.3(b)	LTS	NI -	SU +	LTS -	LTS -	LTS =
+ Increased level of impact compared to the proposed project - Reduced level of impact compared to the proposed project = Similar level of impact to the proposed project NI = No Impact LTS = Less than Significant LTSM = Less than Significant with Mitigation SU = Significant and Unavoidable						

6 Other CEQA Required Topics

This section discusses other topics for which the California Environmental Quality Act (CEQA) requires analysis, in addition to the topic areas discussed in Section 4, *Environmental Impact Analysis*, of this EIR. These additional topics include the potential to induce population growth and/or economic growth; the establishment of a precedent setting action; the development or encroachment in an isolated or adjacent area of open space; removal of obstacles to growth; and significant and irreversible impacts on the environment.

6.1 Growth Inducement

Sections 15126(d) and 15126.2(E) of the *CEQA Guidelines* requires that EIRs discuss the potential for projects to induce economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This includes a discussion of how a project may remove obstacles to population growth.

Generally speaking, a project may be considered growth inducing if it results in one or more of the five conditions identified below:

1. Induces population growth.
2. Induces economic expansion.
3. Establishes a precedent setting action.
4. Results in development or encroachment in an isolated or adjacent area of open space.
5. Removes an impediment to population growth.

Growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment (*CEQA Guidelines*, Section 15126.2[e]). This topic is presented to consider how the project could contribute to significant changes in the environment beyond the direct consequences of developing the proposed project.

6.1.1 Population Growth

As discussed in in Section 4.10, *Effects Found Not to be Significant*, Subsection 4.10.10, *Population/Housing*, the project would not directly generate population growth because it does not include residential uses.

The project would also not generate population growth indirectly. Although the project would revise the land use designation on the BESS Site, the project would not result in any other land use changes or new development that could increase population or result in an increased need for housing. The BESS Site is currently subject to a land use restriction from DTSC, as explained in Section 2.4.1, that prohibits the use of the 24-acre BESS Site for permanent or temporary lodging and restricts land uses to commercial or industrial uses. In addition, the land use designation change on the 24 acre BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG) would result in reduced residential development potential and associated population growth in Morro Bay, because it would change an area currently designated for Visitor Serving Commercial, which can include potential mixed-use residential development, to a non-residential use. In addition, the project would not displace

existing housing or people. Therefore, the project would not directly or indirectly induce population growth or displace existing people or housing.

6.1.2 Economic Growth

The project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, construction would not require substantial numbers of people to relocate to Morro Bay. Therefore, temporary employment opportunities from the construction of the project would not be substantially growth-inducing.

The long-term operation of the BESS Facility would accommodate up to 15 permanent staff for operations and maintenance, 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 drawn from the local project area and therefore would not cause relocation to Morro Bay.

SLOCOG regional forecasts indicate that approximately 672 jobs would be added in Morro Bay between 2015 and 2050 (SLOCOG 2017). The 15 jobs generated by the project would comprise approximately two percent of the anticipated job growth between 2015 and 2050 and, therefore, would be within regional employment forecasts and would not significantly contribute to new population growth.

The project would not be expected to induce substantial economic expansion to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with future development in or around Morro Bay would be addressed as part of the environmental review of individual development projects.

6.1.3 Precedent Setting Action

The Project Site is identified for future development in Plan Morro Bay. Future development of the Power Plant Property is required to meet performance standards prescribed in Plan Morro Bay and the Morro Bay Municipal Code, including minimum and maximum density requirements.

As described in Section 2, Project Description, the project would amend the General Plan and LCP and Coastal Land Use Plan designation on the BESS Site from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG). For the BESS Site, this change represents a return to the land use designation that applied to the site prior to the adoption of Plan Morro Bay in 2021, which changed the designation of the Power Plant Property from General (Light) Industrial to Visitor Serving Commercial. A General Plan and Coastal Land Use Plan Map Amendment and Zoning Map Amendment would incorporate the Master Plan and associated land use designations into Plan Morro Bay. The Power Plant Property was already designated for Visitor Serving Commercial with a Mixed-Use Residential Overlay in Plan Morro Bay, and would continue to provide housing options in areas other than the BESS Site. The land use designation change on the 24 acre BESS Site from Visitor Serving Commercial to General (Light) Industrial would result in reduced residential development potential in Morro Bay, because it would change a portion of the Power Plant Property currently designated for Visitor Serving Commercial, which can include potential mixed-use residential development, to a non-residential use. As discussed in Section 6.1.1, Population Growth, the project would not displace existing housing or people. Because the Project Site was already designated for urban development, the project would result in urban development as anticipated in the General Plan and LCP.

The proposed project would require discretionary approvals from the City Council including a Coastal Development Permit (CDP), Modification Permit, Design Review 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 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 Master Plan, as a long-term land use plan for the Power Plant Property, is intended to reduce the potential for uncontrolled growth from specific development proposals and associated environmental impacts of such growth. While the project would change the BESS Site's land use designation from Visitor Serving Commercial to General (Light) Industrial and the zoning from Visitor Serving Commercial (VSC) to Industrial-General (IG), the project involves a light industrial development on a site designated for urban development within the Master Plan area and Plan Morro Bay. As such, the project would focus development within already urban-designated areas. Furthermore, the project would not exceed the residential density allowed in the Visitor Serving Commercial land use pursuant to Plan Morro Bay, and would require review and recommendation by the Planning Commission and approval by the City Council.

6.1.4 Development of Open Space/Vacant Lands

Development of open space is considered growth-inducing when it occurs outside urban boundaries or in isolated locations instead of infill areas.

The Project Site is located within the Morro Bay City limits and is designated for urban development. Development of the BESS Facility would occur on a 24-acre portion of the former Morro Bay Power Plant Property, which 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 RV park and temporary lodging facilities to the north; and Coleman Park, the Morro Bay harbor walk, and dune habitat associated with Morro Rock beach to the west (refer to Section 2, Project Description, Figure 2-2).

The project would demolish the existing power plant building and stacks, which is anticipated in Plan Morro Bay to result in redevelopment of the remainder of the Power Plant Property with Visitor Serving Commercial uses, which may include mixed-use residential uses. The Power Plant Property is identified in Plan Morro Bay as a prime area for higher intensity and commercial infill development, focusing development within already urban-designated areas, and reducing growth pressure that could otherwise lead to development of open space or vacant lands in and around the City. Because the proposed project involves development on urbanized land and the use or demolition of existing buildings, it would not result in development of open space or vacant land.

6.1.5 Removal of Obstacles to Population Growth

The project would not result in the removal of an impediment for population growth within Morro Bay, because adequate access and services to facilitate such growth are already available for the adjacent and surrounding areas in the City.

An objective of the BESS Facility is to assist California utilities in meeting their obligations under the CPUC's Energy Storage Framework and Design Program, which includes the procurement of locally

sited energy storage systems. However, the BESS Facility is not intended to address a local energy deficiency, or a lack of local power grid infrastructure. The BESS Facility would operate independently from any other proposed, planned, or reasonably anticipated renewable or non-renewable energy production or transmission facility in the region or State. The BESS Facility would provide power to utility customers statewide by interconnecting to the existing PG&E switchyard located east of the Power Plant Property.

The project is located in an urbanized area that is served by existing infrastructure. As discussed in Section 4.10, *Effects Found Not to be Significant*, Subsection 4.10.14, *Utilities/Service Systems*, and Section 4.9, *Transportation*, existing infrastructure in Morro Bay would be adequate to serve the project. No additional utility infrastructure or facilities beyond those necessary to accommodate the project would be implemented. Therefore, the project would not expand infrastructure in a manner which would lead to unanticipated growth.

In addition, the project would result in implementation of planned circulation improvements and other improvements envisioned in the Plan Morro Bay Circulation Element, such as a 12-foot multi use path and site frontage improvements. These proposed frontage improvements are consistent with planned transportation improvements, which include providing sidewalks and a vehicular connection that would shift traffic away from Beach Street and the redeveloped Power Plant Property. These frontage improvements would also be consistent with other applicable goals and policies of Plan Morro Bay.

Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove any existing obstacle to growth.

6.2 Significant Irreversible Environmental Effects

Sections 15126(c) and 15126.2(d) of the *CEQA Guidelines* require a discussion of significant irreversible environmental changes which would be caused by the project should it be implemented. Therein, the Guidelines state:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

This section provides a summary of the potential irreversible impacts associated with implementation of the proposed project.

6.2.1 Irreversible Commitment of Resources

Construction and operation of the project would involve an irreversible commitment of construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the BESS Facility. Consumption of most of these resources would occur with any development in the region and are not unique to the project, although some resource consumption would be unique to the

components of the BESS facility such as the battery modules. Although the project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products, vehicle trips would be nominal and would not demand significant or irreversible energy and transportation fuel use. The BESS Facility would not use unusual amounts of non-renewable energy or construction materials. Furthermore, use of increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in Plan Morro Bay, are expected to offset the demand to some degree. Therefore, it is not anticipated that growth caused by the project would significantly affect local or regional energy supplies. Section 4.10.2, *Energy*, in Section 4.10, *Effects Found Not to be Significant*, includes a discussion of the project's potential impacts related to energy resources.

The project would generate regional air pollutant and GHG emissions from heavy equipment use during construction, demolition, and decommissioning activities and from stationary sources during operation. Vehicle trips associated with the proposed project would incrementally contribute to local traffic and noise levels and regional air pollutant emissions. These topics are discussed in Section 4.2, *Air Quality*, Section 4.6, *Greenhouse Gas Emissions*, Section 4.8, *Noise*, and Section 4.9, *Transportation*.

The project would also require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 4.10, *Effects Found Not to be Significant*, Subsection 4.10.14, *Utilities/Service Systems*, impacts to these service systems would not be significant.

6.2.2 Potential Environmental Damage from Accidents

The potential for fires, explosions, impacts related to the release of pollutants, and emergency response procedures is addressed in Section 4.7, *Hazards and Hazardous Materials*. As discussed in Section 4.7, *Hazards and Hazardous Materials*, implementation of the proposed project would not involve uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would affect other areas. Safety systems would incorporate operational measures, maintenance standards, and passive design considerations, including monitoring, automatic and manual protection elements, engineering designs, site layout designs (e.g., battery spacing and orientation), and explosion prevention protection, among other features.

The MBFD has retained independent engineering and safety consultant to assist with a public safety analysis of the BESS Facility which would be used by the City and MBFD specifically in making decisions regarding BESS safety element design, emergency planning, and hazard minimization. While fire risks can be minimized through use of proposed safety systems, fuel reduction, and siting, it cannot be assured that fire hazards could be completely avoided upon implementation and operation of the BESS Facility.

6.2.3 Significant and Unavoidable Environmental Impacts

CEQA requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. Section 15126(b) of the *CEQA Guidelines* requires that an EIR identify those significant impacts that cannot be reduced to a less than significant level with the application of mitigation measures. The implications and reasons why the project is being proposed, notwithstanding, must be described.

The analysis contained in this EIR concludes that the project would result in a significant and unavoidable impact to cultural resources. The Project Site contains the Morro Bay Power Plant,

Morro Bay Battery Energy Storage System Project

which qualifies as a historical resource under CEQA. As discussed in Section 4.4, *Cultural Resources*, although the project would implement Mitigation Measures CUL-1(a) and CUL-1(b), which would reduce the project's impact to the Morro Bay Power Plant historical resource to the extent feasible, the project's alterations to this historical resource would remain significant and unavoidable due to the irreversible change of demolishing buildings and structures that contribute to the resource's eligibility for the NRHP and CRHR.

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