DOCKETED	
Docket Number:	01-EP-14C
Project Title:	Border Project - Compliance
TN #:	245506-2
Document Title:	Part 2 to Border BESS PTA
Description:	N/A
Filer:	Jon Boyer
Organization:	Middle River Power
Submitter Role:	Applicant
Submission Date:	8/19/2022 3:33:22 PM
Docketed Date:	8/19/2022

APPENDIX E

CULTURAL RESOURCES TECHNICAL REPORT

CONFIDENTIAL AND NOT FOR PUBLIC DISTRIBUTION

This appendix presents the Cultural Resources Technical Report prepared for the Border BESS Project. A copy of the confidential report has been provided to the California Energy Commission.

Confidentiality Statement

The Cultural Resources Technical Report prepared by Rincon Consultants, Inc. for the Border BESS Project (August 2022) contains sensitive and confidential information concerning archaeological resources. This report should be held confidential and is not for public distribution. Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the National Historic Preservation Act (PL 102-574, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]). Sections of this report contain locational maps and other sensitive information. Distribution should be restricted appropriately.

APPENDIX F

NOISE AND VIBRATION STUDY

This appendix presents the Noise and Vibration Study prepared for the Border BESS Project.

Border 52 MW Battery Energy Storage System (BESS) Project

Noise and Vibration Study

prepared for

Hermes BESS LLC
2060 Sanyo Avenue
San Diego, California 92154

prepared by

Rincon Consultants, Inc.
8825 Aero Drive, Suite 120
San Diego, California 92123

August 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Table of Contents

Tables

Figures

Appendices

1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts associated with the construction, operation, and decommissioning of the Border Battery Energy Storage System (BESS) Project located at 2060 Sanyo Avenue in San Diego, California. The purpose of this study is to analyze the noise and vibration levels related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

Table 1 Summary of Impacts

Issue	Proposed Project's Level of Significance	Applicable Recommendations
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?	Less than significant impact (Construction) Less than significant impact (Operation)	None
Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than significant impact (Construction) Less than significant impact (Operation)	None
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, would the project expose people residing or working in the project area to excessive noise levels?	No impact	None

1.2 Project Summary

Project Location

The project site is located within the existing 10.12-acre CalPeak Power-Border LLC, Border Peaking Plant (BPP) property on Assessor's Parcel Number (APN) 646-130-58, located at 2060 Sanyo Avenue in the City of San Diego, California (Figures 1 and 2). The project would be built on a 3-acre area on the eastern half of the BPP property. The BPP property is bound by California State Route (SR) 11 to the north, SR 125 and SR 905 to the west, and Sanyo Road to the east. Other land uses in the area include undeveloped land to the south and commercial development to the east.

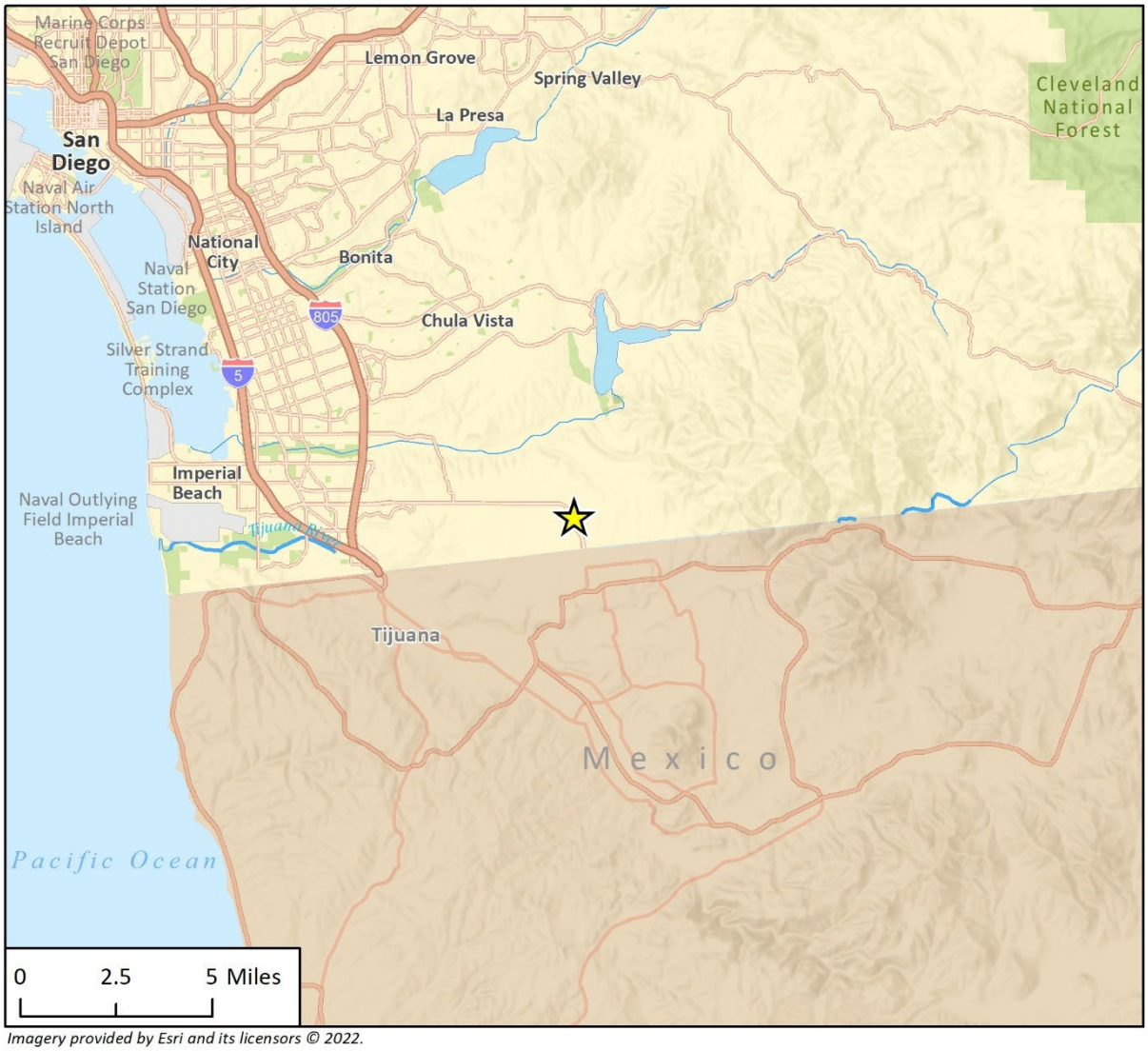
Project Description

The proposed project includes the development of a BESS facility and the utilization of a temporary construction laydown yard within the existing BPP. See Figures 2 and 3 for project site limits and detailed project plans. The key components of the project are listed below:

- Batteries with 52 MW hours ("MWh") of energy storage capacity per hour (e.g., 52 MWh for 1 hour or 26 MWh for 2 hours) to be located on an approximate 1.7-acre site, including BESS switchyard within an overall 10.12-acre site owned by CalPeak Power-Border LLC.

- The overall 10.12-acre site includes the existing approximately 4.5-acre nominal 52 MW CalPeak Power-Border LLC BPP that was previously permitted by the California Energy Commission (CEC) as an emergency energy project in 2001 (CEC Docket No. 01-EP-14). The battery storage technologies being considered are lithium iron phosphate and nickel manganese cobalt or other technologies that may become commercially available as the BESS Project undergoes final design.
- The batteries and their associated inverters account for the bulk of the associated BESS equipment and will be located within the parcel (APN 646-130-58, 2060 Sanyo Avenue) that contains the existing nominal 52 MW BPP that was licensed by the CEC in 2001. This parcel is controlled by CalPeak Power-Border LLC.
- The 52 MW BESS site is located within an existing open area adjacent to the eastern side of the BPP. Site development for the BESS facilities, including BESS switchyard, on approximately 1.7 acres of land will involve site grading, excavation of soil, and recompaction to accomplish site stormwater control and to support concrete pad foundations. Similar site grading activities for site stormwater control are planned for the 1.3-acre temporary construction laydown and personnel parking area on the eastern and northern portions of the overall BPP site (laydown area).
- The BESS site and laydown area will be graded at the same time as one overall operation. It is estimated that up to approximately 5,000 cubic yards of balanced cut-and-fill will be required during site preparation and levelling activities. Maximum cut depths are estimated at approximately 4 feet in the southeastern portion of the laydown area. The average depth of cut-and-fill for 5,000 cubic yards of material when averaged over 3.1 acres is approximately 1 foot.
- The 52 MW BESS will be connected to the San Diego Gas & Electric (SDG&E) Border Substation to the north by installing an approximately 90-foot-long, 13.8 kV overhead line or underground concrete cable trench from the BESS 13.8 kV switchyard to the low side (13.8 kV) of the existing GSU at the BPP. Connecting to the low side (13.8 kV) of the BPP GSU will allow the BESS to provide transmission voltage to the SDG&E Border Substation without requiring an additional step-up transformer at the Border BESS switchyard. The overhead 13.8 kV line option includes the installation of two, approximately 30-feet-tall H-frame structures on concrete pad foundations, one on each side of the BPP perimeter road, to support the 13.8 kV line span crossing of the road from the BESS switchyard to the BPP connection point. The underground cable option consists of multiple conductors to be installed in a concrete trench approximately 10-foot-wide by three-foot-deep across the BPP perimeter access road and covered with steel plates to allow future access to the cables and crossing by vehicles. The 13.8 kV connection will be installed in accordance with applicable codes and standards.
- The 52MW BESS Project includes repair of a section of the existing BPP access road between Sanyo Avenue on the east end and the BPP entrance gate on the western end. The road segment to be prepared covers a distance of approximately 600 feet. The repair work will include removal of the existing asphalt surface for asphalt recycling, reconstruction/reconditioning of the roadway subgrade, and repaving with asphalt.

Figure 1 Regional Location

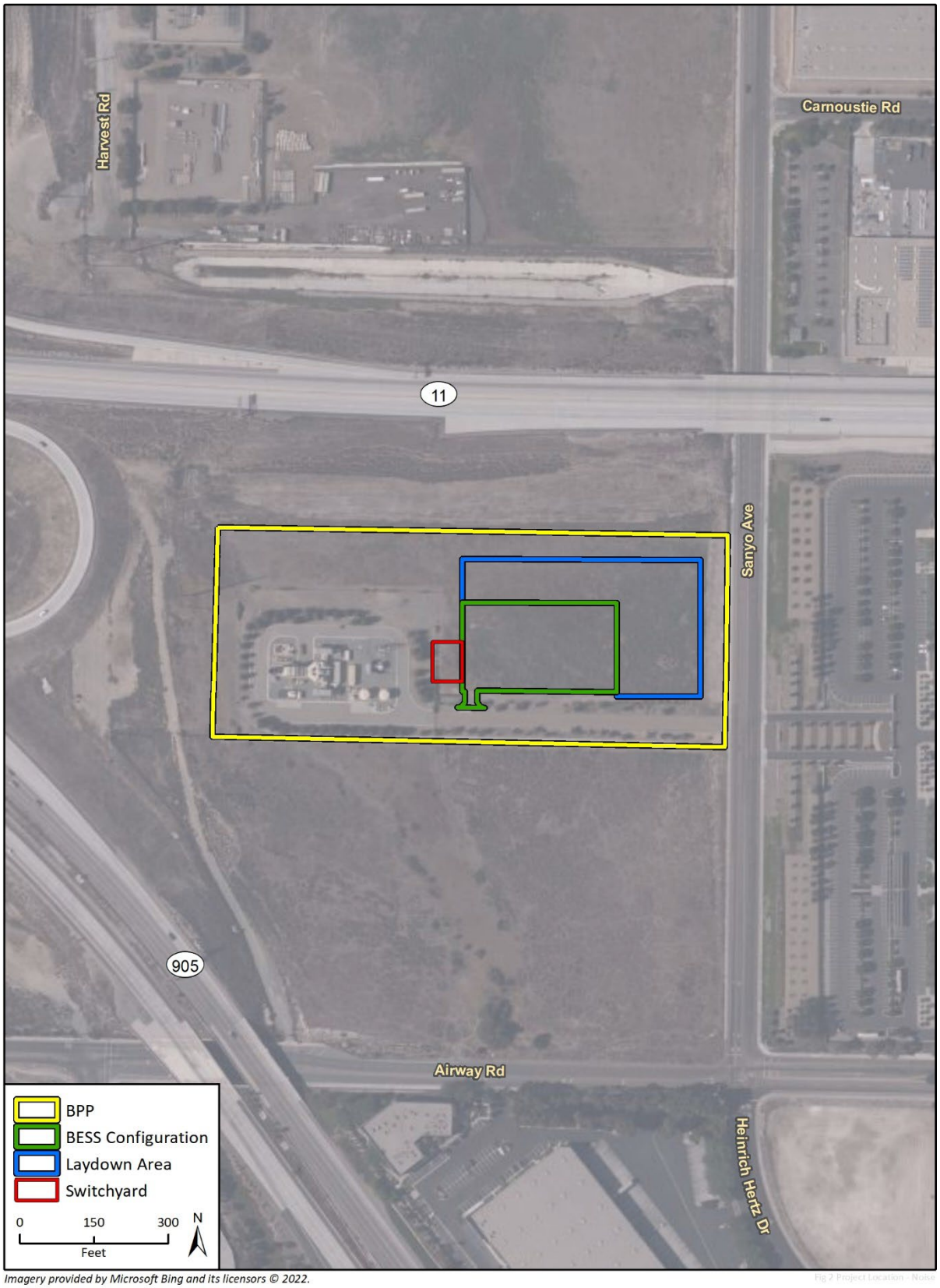


Imagery provided by Esri and its licensors © 2022.

Project Location

N

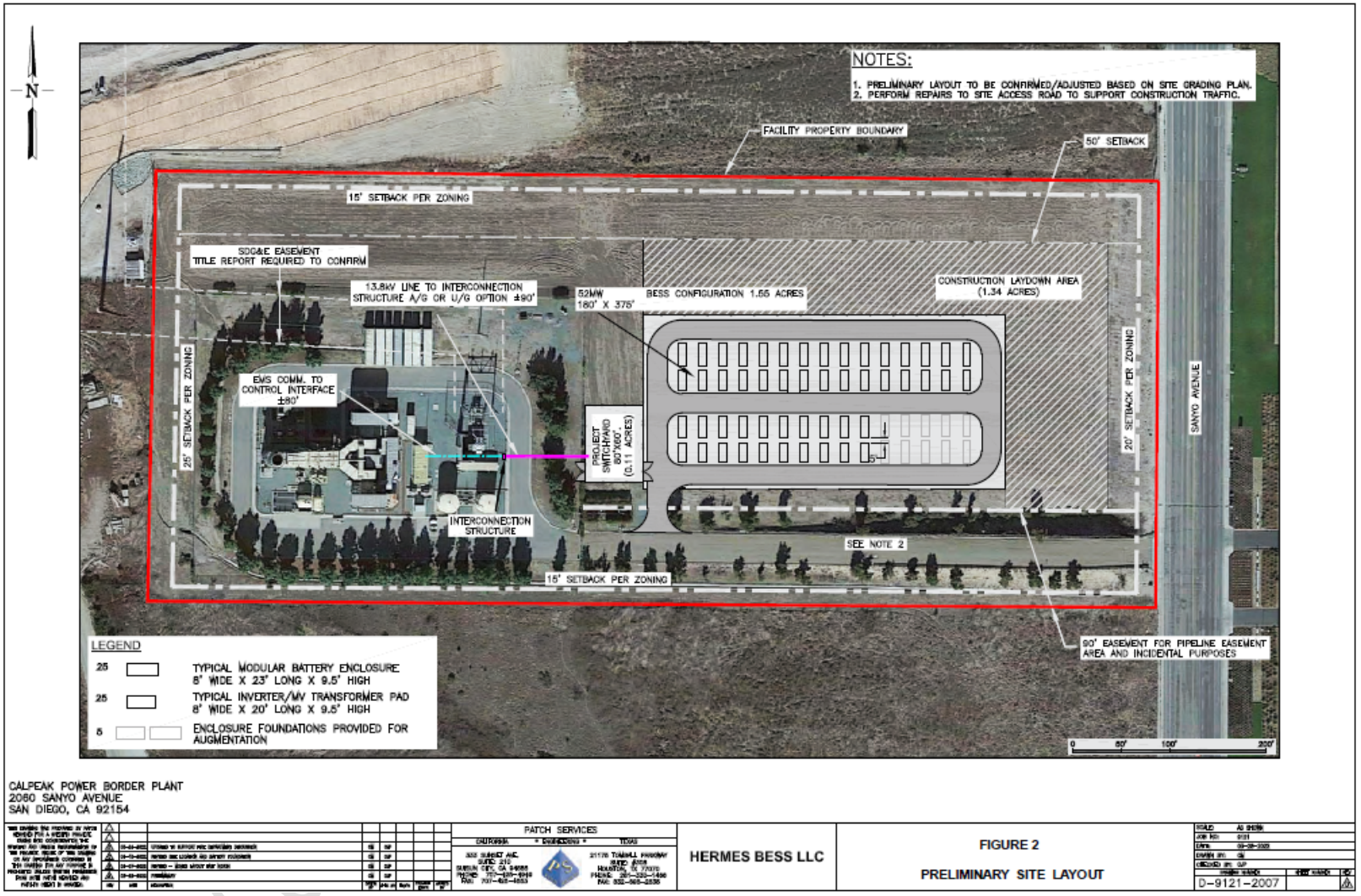
Figure 2 Project Location



Imagery provided by Microsoft Bing and its licensors © 2022.

Fig 2 Project Location - Noise

Figure 3 Proposed Site Plan



Source: Hermes BESS LLC

The Project will also include a fiber optic communication/controls cabling that will connect the BESS switchyard to the BPP transmission control system interface to integrate the BESS operation with the BPP and the CAISO. The communication line will be installed either overhead or underground for the portion of the route in common with the 13.8 kV line from the BESS Switchyard to the west side of the BPP perimeter road. The communication line will then be installed in aboveground or buried conduit over a distance of approximately 80 feet to the connection point with the existing BPP transmission control system interface to the west.

Construction

Construction site mobilization is currently anticipated to begin in the second quarter of 2023 with commercial operation beginning in the second quarter of 2024. Construction hours are expected to typically start at 7 a.m. and end at 7 p.m., Monday through Saturday. Typical worker hours and equipment usage will be 8 hours/day within the 7 a.m. to 7 p.m. window. Construction equipment to be utilized would be expected to include graders and excavators, backhoes, water trucks, sheep's foot compactors, front end loaders, concrete trucks, dump trucks, trash trucks, and flatbed trailers. Cranes, man-lifts, portable welding units, line trucks, and mechanic trucks will also be required. A percussion drill rig or pile driver may be needed if a pile foundation option is selected instead of concrete pad foundations. Cut and fill will be balanced onsite to the extent practical. It is expected that excess cut from access road repair, installation of the 13.8 kV underground cable (if this option is selected), and the Communication Line would be recycled and/or disposed of at an approved offsite location.

Operation

Operation of the Border BESS facility will be integrated with the existing 52 MW Border Peaker Plant (BPP). Commercial operation is currently anticipated for the second quarter of 2024. Once operational, the BESS facilities would operate seven days per week and 365 days per year. The facilities would be expected to require regular maintenance visits by two workers approximately one day per week on average. The planned project life is 40 years.

Border Peaker Plant Project Noise Conditions of Certification

The following CEC conditions that are in place for the existing BPP shall also apply for the proposed Border BESS project, as applicable.

NOISE-1: The project permitted under this emergency process shall be required to comply with applicable community noise standards.

> **Verification**: Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey as a minimum. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints. If the results from the survey indicate that the project noise levels at the closest sensitive receptor are in excess of 62.5 dBA from 7:00 a.m. to 7:00 p.m., 60 dB from 7:00 p.m. to 10:00 p.m., and 57.5 dB from 10:00 p.m. to 7:00 a.m., or above 75 dBA at the project site property lines additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.

NOISE-2: Prior to the start of rough grading, the project owner shall notify all residents within one mile of the site of the start of construction and will provide a complaint resolution process.

Verification: The project owner shall provide the Compliance Project Manager (CPM) with a statement, attesting that the above notification has been performed.

NOISE-3: Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints.

Verification: Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the County Environmental Health Department, and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-4: Night construction activities may be authorized by the CPM if they are consistent with local noise ordinances. Night construction, or specific night construction activities may be disallowed by the CPM if it results in significant impact to the surrounding community.

Verification: The applicant has indicated that it would not perform construction activities that would exceed the City's noise standards (e.g., pile driving and steam blows) during the hours of 10 p.m. to 7 a.m. Noise monitoring and surveys may be conducted if complaints are reported by residence in the surrounding area of the project site.

2 Background

2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impacts. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time.

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. It is also measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn}/CNEL depends on the distribution of traffic during the day, evening, and night.

2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

2.3 Sensitive Receivers

Noise-sensitive receivers are land uses that may be subject to stress and/or interference from excessive noise, such as residential dwellings, schools, transient lodging (hotels), hospitals, educational facilities, and libraries. Industrial and commercial land uses are generally not considered sensitive to noise.

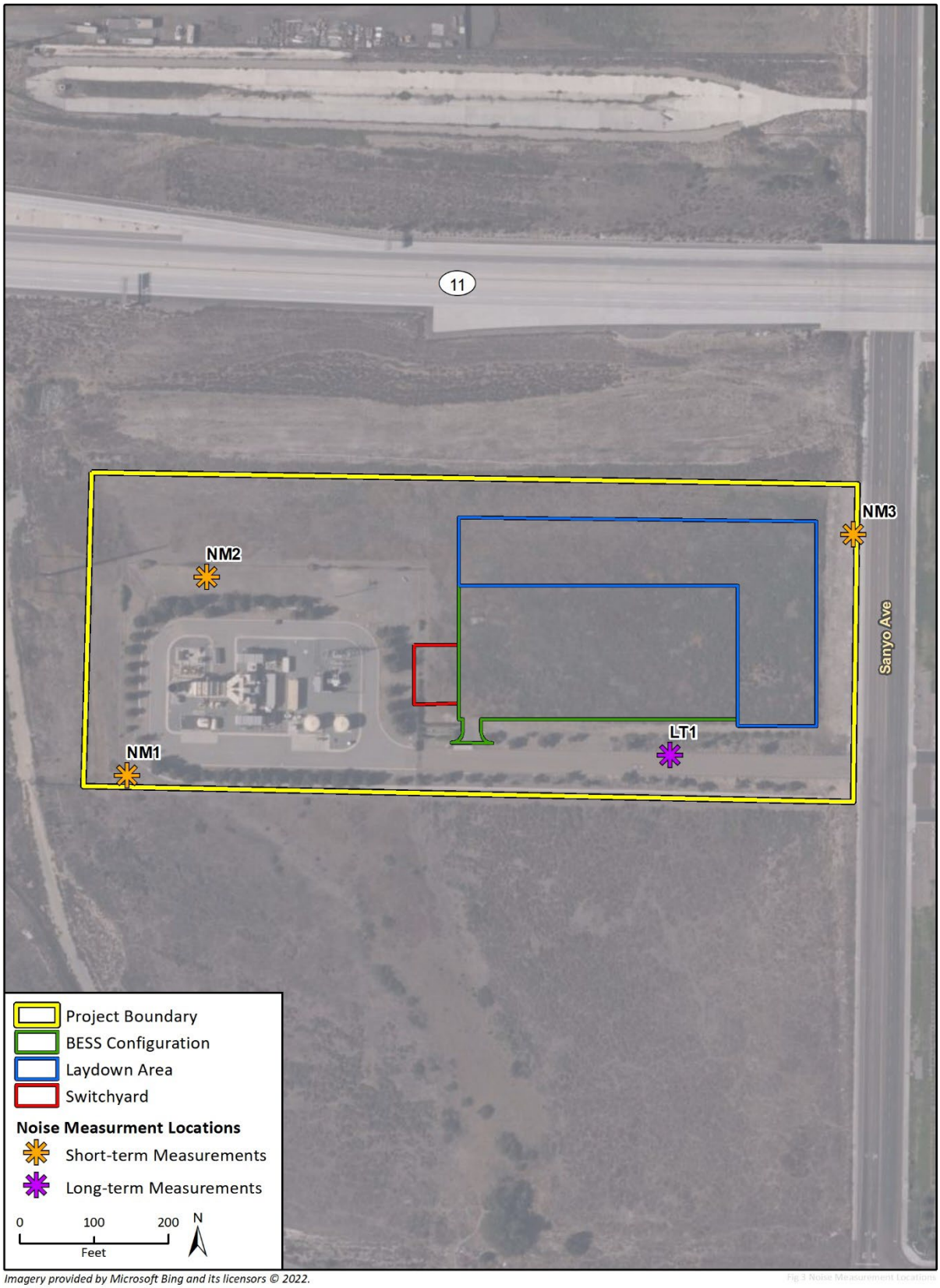
Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, and hospitals. However, vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studies or medical facilities with sensitive equipment).

The nearest sensitive receivers include three existing residences located approximately 2,500 feet northeast of the site.

2.4 Project Noise Setting

The project site is located in an industrial area of the City of San Diego, close to the border with Mexico. The major noise sources in the area are freeways and roadways located near the project, including SR 11 to the north, SR 905 to the west, and Sanyo Avenue to the east. Traffic includes a high amount of medium and heavy trucks due to the shipping activities associated with being located near the border and large warehouses present in the area, including an Amazon distribution center located at 6948 Otay Mesa Road. Aircraft and helicopter noise is also present in the project area from Brown Field Municipal Airport, located 1.5 miles to the west. To characterize ambient noise levels at and near the BPP and the Border BESS portions of the overall 10.12-acre parcel, three short term 10-minute sound level measurements were conducted on March 31, 2022, and one 25-hour measurement was conducted on March 31, 2022 and April 1, 2022. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. The sound meter was calibrated prior to measurements. For the short-term measurements, Noise Measurement (NM) 1 was conducted adjacent to the southwestern edge of the project site; NM2 was conducted in the northwestern portion of the project site; and NM3 was conducted adjacent to Sanyo Avenue. The long-term measurement (LT1) was conducted in a southeastern portion of the project site. Figure 4 shows the measurement locations, Table 2 summarizes the results of the short-term noise measurements, and Table 3 summarizes the results of the long-term noise measurements.

Figure 4 Noise Measurement Locations



Imagery provided by Microsoft Bing and its licensors © 2022.

Table 2 Project Sites Noise Monitoring Results – Short Term

Measurement Location	Measurement Location	Sample Times	Primary Noise Sources	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	L_{10} (dBA)	L_{50} (dBA)	L_{90} (dBA)
NM1	Southwestern portion of project site	10:20 – 10:30 a.m.	SR 905	59	54	69	61	58	56
NM2	Northwestern portion of project site	10:40 – 11:50 a.m.	SR 905, SR 11	54	49	64	56	54	51
NM3	Eastern edge of project site	10:59 – 11:09 a.m.	Sanyo Avenue, SR 11	69	51	86	73	62	55

Detailed sound level measurement data are included in Appendix A and shown on Figure 4.

Table 3 Project Site Noise Monitoring Results – Long Term

Sample Time	dBA L_{eq}	Sample Time	dBA L_{eq}
LT1 – Southeastern Portion of Project Site, March 31 – April 1, 2022			
11:25 a.m.	59	12:25 a.m.	41
12:25 p.m.	63	1:25 a.m.	46
1:25 p.m.	65	2:25 a.m.	51
2:25 p.m.	60	3:25 a.m.	49
3:25 p.m.	57	4:25 a.m.	56
4:25 p.m.	57	5:25 a.m.	58
5:25 p.m.	60	6:25 a.m.	59
6:25 p.m.	56	7:25 a.m.	57
7:25 p.m.	56	8:25 a.m.	57
8:25 p.m.	52	9:25 a.m.	55
9:25 p.m.	51	10:25 a.m.	56
10:25 p.m.	48	11:25 a.m.	61
11:25 p.m.	44		
			25-hour Noise Level
		CNEL	61
		L_{eq}	58
		L_{min}	37
		L_{max}	81
		L_{10}	61
		L_{50}	55
		L_{90}	45

Source: Rincon Consultants, field measurements conducted on March 31 – April 1, 2022, using ANSI Type II Integrating sound level meter. See Appendix A.

2.5 Regulatory Setting

Federal

There are no federal noise regulations directly applicable to the proposed project.

State

The California Code of Regulations, Title 20, Division 2, Chapter 5, Article 6, Section B, Appendix B includes the following noise regulations applicable to the project:

(4) Noise

(A) A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area potentially impacted by the proposed project is that area where, during either construction or operation, there is a potential increase of 5 dBA or more, over existing background levels.

(B) A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for a lesser duration at the applicant's discretion, preferably during the same 25-hour period. The results of the noise level measurements shall be reported as hourly averages in L_{eq} (equivalent sound or noise level), L_{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L_{10}, L_{50}, and L_{90} values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported in units of dBA.

(C) A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.

(D) An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.

(E) An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.

(F) The audible noise from existing switchyards and overhead transmission lines that would be affected by the project, and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.

Local

The project site is located within the City of San Diego jurisdiction. Applicable noise standards are codified in the following City regulations:

City of San Diego Municipal Code, Chapter 5, Article 9.5, Division 4, §59.5.0404 Construction Noise

(a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

(b) Except as provided in subsection (c) hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 dBA during the 12-hour period from 7:00 a.m. to 7:00 p.m.

(c) The provisions of subsection (b) of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

City of San Diego Municipal Code, Chapter 5, Article 9.5, Division 4, §59.5.0401, Sound Level Limits

(a) It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table [Table 4], at any location in the City on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.

Table 4 City of San Diego Noise Limits

Land Use Zone	Time of Day	dBA Leq (1 hour)
Single Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a maximum density of 1/2000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

Notes: The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Permissible construction noise level limits shall be governed by Section 59.5.0404 of this article.

3 Methodology

3.1 Construction Noise

Construction and decommissioning activity would result in temporary noise in the project sites vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise associated with the project would be generated by heavy-duty diesel construction equipment used for site preparation, grading, foundation installation, on-site access routes, loading, unloading, placing materials, and installing battery enclosures, switchyards, on-site electrical interconnection, and ultimately, decommissioning. Typical heavy construction equipment during grading could include dozers, loaders, graders, and dump trucks. It is assumed that diesel engines would power all construction equipment. Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., material placement, components installation, and decommissioning).

During construction, equipment goes through varying load cycles and is operated intermittently to allow for non-equipment tasks such as measurement. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FHWA 2018). Reference noise levels for heavy-duty construction equipment were estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). Due to the size of the project site, a likely construction scenario includes simultaneous operation of a backhoe, dozer, front-end loader, and off-highway truck during grading activities. As discussed above, a percussion drill rig or pile driver may be needed if a pile foundation option is selected instead of concrete pad foundations. A reasonable worst-case scenario of an excavator, a dozer, a grader, and an impact pile driver was analyzed. At a distance of 50 feet, an excavator, a dozer, a grader, and an impact pile driver would generate a noise level of 95 dBA L_{eq} (RCNM calculations are included in Appendix B).

Construction equipment would operate as close as 2,500 feet to the nearest residential property line to the northeast.

3.2 Groundborne Vibration

The project does not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project sites. The greatest vibratory source during construction in the vicinity of the BESS site would be pile driving if a pile foundation option is selected instead of concrete pad foundations. Blasting would not be required for construction of the project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020, FTA 2018). Table 5 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 5 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 ft. (in/sec)
Impact Pile Driver	1.518
Roller	0.032
Large Bulldozer	0.089
Loaded Trucks	0.076

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such pile-driving, vibratory compaction, demolition, drilling, or excavation, are based on information contained in Caltrans' *Transportation and Construction Vibration Guidance Manual* and the Federal Transit Administration and the FTA *Transit Noise and Vibration Impact Assessment Manual* (Caltrans 2020; FTA 2018). Maximum recommended vibration limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 6.

Table 6 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Based on AASHTO recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source.

3.3 Operational Noise

Under normal operation, the BESS site would be remotely monitored with no personnel on-site except for periodic maintenance and battery augmentation activities. Maintenance and battery augmentation activities would not generate substantial noise. The noise sources on the project site after completion of construction would include stationary outdoor equipment such as transformers, inverters, and individual BESS units.

Noise level modeling for the BESS project's combined worst case operational sources were developed using SoundPLAN noise modeling software, Version 8.2. SoundPLAN incorporates noise propagation algorithms and reference sound levels published by various government agencies and the scientific community. Noise sources, receivers, structures, and barriers are input using three-dimensional coordinates. In all cases receivers were modeled at the average height of the human ear, which is five feet above ground elevation.

Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a worst-

case assumption for total noise impacts since only some receivers would be downwind at any one time.

On site noise sources were modeled based on collected reference data. Inverters would be Power Electronics Inverters or similar design. Manufacturer's specifications indicate that these units generate a noise level of 79 dBA at 1 meter (see Appendix C for specification sheets). Transformers for the project would also be Power Electronics or similar design. Manufacturer's specifications indicate that these units generate a noise level of 67 dBA at 1 meter with cooling fans (see Appendix C for specification sheets). BESS units would be CATL units or similar design. Manufacturer's specifications indicate that these units generate a noise level of 75 dBA at 1 meter. For a conservative scenario, the units were assumed to operate at 100 percent of an hour for 24 hours.

3.4 Traffic Noise

It is expected that construction traffic would access the project site via Otay Mesa Road and Sanyo Avenue. Existing traffic volumes are compared with proposed construction traffic along Sanyo Avenue and Otay Mesa Road logarithmically to estimate the potential project-related traffic noise increase. Existing volumes are based on published City of San Diego average daily traffic (ADT) volumes (City of San Diego 2021). Vehicle trips generated by project construction activities are based on estimates provided by the project applicant. It is estimated that up to 50 workers and 15 delivery trucks per day would occur during peak construction periods. A vehicle trip is defined as a one-direction vehicle movement. The total number of trips generated by the project includes both inbound and outbound trips. Therefore, project construction would generate a maximum of 130 one-way trips per day. Table 7 shows the estimated number of existing and construction-generated vehicle trips on the roadway segments. All construction trips were conservatively assumed to occur on both Sanyo Avenue and Otay Mesa Road.

To assess the increase in ambient noise levels at the nearby residences, per California Code of Regulations requirements, a version of the FHWA traffic noise prediction model (FHWA-RD-77-108) is used. Appendix D contains the traffic noise modeling inputs and outputs.

Table 7 Estimated Existing and Construction Vehicle Trips

Roadway Segment	Existing Daily Vehicle Trips[1]	Construction Daily Vehicle Trips	Existing + Construction Daily Vehicle Trips
Sanyo Avenue – Carnoustie Road to Airway Road	1,910	130	2,040
Otay Mesa Road – East of Sanyo Avenue	10,230	130	10,360

[1] Existing average daily vehicle trips obtained from the City of San Diego Traffic Volumes website.

3.5 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the CEQA Guidelines requires consideration of whether a project would result in:

1. 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. Generation of excessive groundborne vibration or groundborne noise levels; 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

Construction Noise

Per Section 59.5.0404 of the City of San Diego Municipal Code, construction noise is limited to an average noise level of 75 dBA during the 12-hour period of 7:00 a.m. to 7:00 p.m. at residential properties. Noise levels from construction of the BESS project that exceeds 75 dBA L_{eq} at residential properties would be significant.

On-site Operational Noise

The project site is in a mainly industrial area of the City with single-family residential uses approximately 2,500 feet to the northeast. As discussed in Section 2.5, the City of San Diego Municipal Code Section 59.5.0401 establishes exterior noise standards that are assessed at property lines (see Table 4). On-site operational noise could be significant if it exceeded these noise standards.

Off-site Traffic Noise

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment. Based on this, the following thresholds of significance similar to those recommended by the Federal Aviation Administration (FAA) are used to assess traffic noise impacts at sensitive receptor locations (FAA 2020). A significant impact would occur if project traffic noise increases the existing noise environment by the following:

- Greater than 1.5 dBA for ambient noise environments of 65 dBA CNEL and higher;
- Greater than 3 dBA for ambient noise environments of 60 to 64 dBA CNEL; or
- Greater than 5 dBA for ambient noise environments of less than 60 dBA CNEL.

Construction Vibration

The Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) is used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans criteria described above, construction vibration impacts would be significant if vibration levels exceed 0.2 in./sec. PPV for residential structures, which are the limits where minor cosmetic, i.e., non-structural, damage may occur to these buildings.

4 Impact Analysis

4.1 Issue 1

Issue:	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? **LESS THAN SIGNIFICANT**

Construction

Construction Equipment

Per the Project Description, the project will comply with the City of San Diego Municipal Code hour limitations for construction noise of 7:00 a.m. to 7:00 p.m. Prior to and during the construction period, the existing CEC Noise Conditions of Certification NOISE-2 and NOISE-3 will apply. Since nighttime construction is not proposed, Noise Condition of Certification NOISE-4 would not apply. Over the course of a typical construction day, construction equipment would be located as close as 2,500 feet to the nearest noise sensitive uses to the northeast (single-family residences on Otay Mesa Road). At a distance of 2,500, when accounting for impact pile driving if concrete foundations are not used for battery energy storage systems, construction noise would generate noise levels of up to 61 dBA L_{eq}. This conservatively does not take into account shielding from any intervening buildings, terrain, or other features. Therefore, construction noise levels would not exceed the City of San Diego construction noise threshold of 75 dBA L_{eq} at residential properties. In addition, traffic noise modeling indicates that the existing ambient noise level at residences on Otay Mesa Road is 70 dBA CNEL. Construction noise would not increase ambient noise levels by 5 dBA or more (California Code of Regulations criterion). Impacts would be less than significant.

The California Code of Regulations, Title 20, Division 2, Chapter 5, Article 6, Section B, Appendix B requires that an estimate of worker noise exposure during project construction. As discussed in Section 3.1, construction noise could reach as high as 95 dBA L_{eq}. The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the US EPA. Noise limitations would apply to the operation of construction equipment. Noise exposure of this type is addressed through a facility's Health and Safety Plan, as required under OSHA.

Construction Vehicles

The project would generate new vehicle trips that would increase noise levels on nearby roadways during construction. The project is anticipated to generate a maximum of 130 daily vehicle trips between workers and deliveries of equipment. The project would not make alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes. A temporary increase of 130 daily trips would result in a daily traffic noise level increase of approximately 0.3 dBA CNEL on Sanyo Avenue and less than 0.1 dBA CNEL on Otay Mesa Road. Project construction traffic noise increases would not exceed the 1.5 dBA CNEL impact criterion for off-site traffic noise impacts. Therefore, impacts would be less than significant.

Operation

Following the methodology discussed in Section 3.3, project operational noise levels were modeled and noise contours were estimated. Modeled noise levels at the nearest receptors are summarized in Table 8, and noise contours are shown in Figure 5.

Table 8 Operational Noise Levels, dBA

Receiver	Description	Modeled Noise Level (L_{eq})	City of San Diego Nighttime Standard (L_{eq})[1]	Exceed Nighttime Standard?[1]
R1	Northeastern residential receptors Otay Mesa Road[2]	33	40	No
R2	Industrial use across Sanyo Avenue	52	75	No
R3	Holiday Inn Niels Bohr Court	37	60	No

[1] The nighttime standard is the more stringent standard. Therefore, if the nighttime standard is not exceeded, the daytime and evening standards are also not exceeded.

[2] The nearest residences on Otay Mesa Road are located in an unincorporated area of San Diego County. However, the City of San Diego residential noise standards are more stringent and are, therefore, used for the purposes of this analysis.

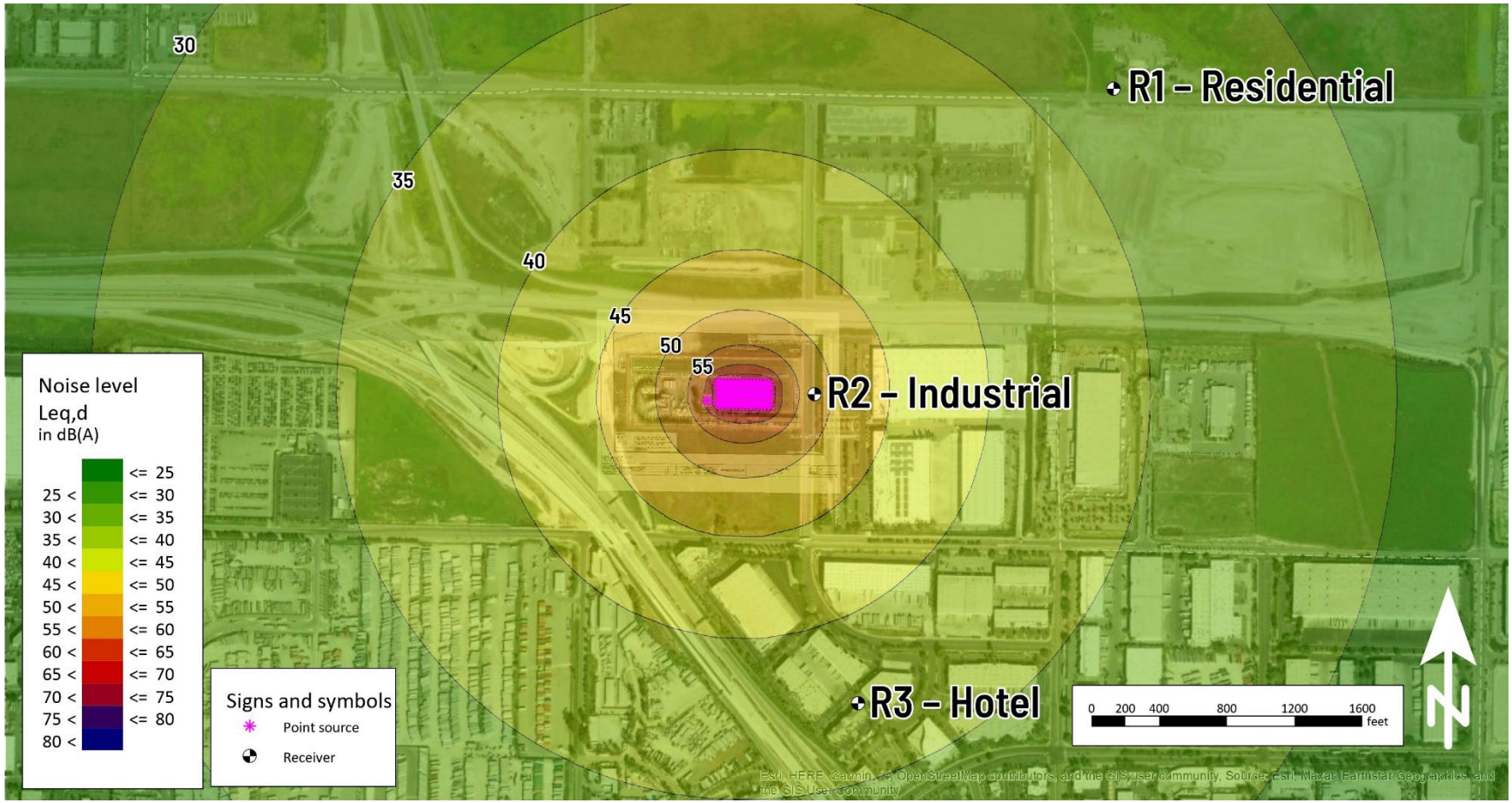
As shown in Table 8, noise levels attributable to project operation would not exceed City exterior noise standards at the nearest receptor locations. In addition, traffic noise modeling indicates that the existing ambient noise level at residences on Otay Mesa Road is 70 dBA CNEL. Project operation would not increase ambient noise levels by 5 dBA or more (California Code of Regulations criterion). Impacts would be less than significant. Once operational, the project applicant will be required to comply with Noise Condition of Certification NOISE-1.

The California Code of Regulations, Title 20, Division 2, Chapter 5, Article 6, Section B, Appendix B requires an estimate of worker noise exposure during project operation. Operational noise levels at the site could reach as high as 83 dBA L_{eq}. The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Noise limitations would apply to the operation of industrial equipment as part of the project. Noise exposure of this type is addressed through a facility's Health and Safety Plan, as required under OSHA.

Off-site Traffic Noise

The project would be expected to require regular maintenance visits by two workers, one day per week on average. However, when compared with the existing daily traffic volumes of 1,910 or more on surrounding roadways, these maintenance worker trips would cause a negligible traffic noise increase. Therefore, impacts would be less than significant. Similarly, infrequent battery augmentation activities involving addition of new batteries on existing foundations would result in negligible, less than significant traffic noise increases.

Figure 5 Project Operational Noise Contours



4.2 Issue 2

Issue:	Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? **LESS THAN SIGNIFICANT**

Construction activities known to generate excessive ground-borne vibration, such as pile driving, may be conducted by the project. Pile driving construction equipment may be used within 425 feet of the nearest off-site structures, industrial buildings to the east across Sanyo Avenue. Impact pile driving generates a vibration level of approximately 1.518 in/sec PPV at a distance of 25 feet (FTA 2018). This vibration level would attenuate to 0.02 in/sec PPV for a pile driver at a distance of 425 feet. This vibration level would not exceed the threshold of 0.2 in/sec PPV. Therefore, temporary impacts associated with construction would be less than significant.

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

4.3 Issue 3

Issue:	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, would the project expose people residing or working in the project area to excessive noise levels? **NO IMPACT**

The closest airport to the project site is the Brown Field Municipal Airport, located approximately 1.5 miles to the northwest. The project would not be located within the noise contours of the airport, as shown in Figure 3.10-4 of the City of San Diego General Plan Program EIR (City of San Diego 2007). Therefore, no substantial noise exposure from airport noise would occur to construction workers, or users of the project, and no impacts would occur.

Cumulative Noise

Construction noise and vibration are localized and rapidly attenuate within an urban environment. Although some cumulative projects in the surrounding area may be under construction at the same time as the proposed project, these projects are not located in close enough proximity to the project sites such that noise and vibration from construction activities would impact the same sensitive receivers and structures. Therefore, no cumulative construction noise and vibration impacts would occur.

Similar to construction noise and vibration, operational noise and vibration from these sources is localized and rapidly attenuates within an industrialized setting due to the effects of intervening structures that block the line of sight and other noise sources closer to receivers that obscure project-related noise. Given the distance of the cumulative projects from the project site, these projects are not located in close enough proximity to the project sites such that operational noise and vibration would impact the same sensitive receivers. Therefore, no cumulative operational noise and vibration impacts would occur.

5 Conclusion

The proposed project would generate both temporary construction-related noise and long-term noise associated with operation. Construction noise would not exceed San Diego noise standards at the nearby land uses and impacts from construction noise would be less than significant.

The project's stationary noise sources (BESS units, transformers, and inverters) would not exceed applicable daytime or nighttime exterior noise standards from the City Noise Ordinance at the nearest land uses. Therefore, stationary noise impacts would be less than significant.

Project-generated traffic from the project would generate an increase of up to 0.3 dBA CNEL on adjacent roadways during project construction and less during project operation. This is below the threshold of 1.5 dBA CNEL; therefore, the off-site traffic noise increase would be less than significant.

The project would generate groundborne vibration during construction, but vibration would not exceed the applicable thresholds at adjacent structures to the project sites. Therefore, construction-related vibration impacts would be less than significant.

The project site is outside the noise contours for the nearest airport. Therefore, no substantial noise exposure from airport noise would occur to construction workers, maintenance workers, or infrequent visitors to the facility, and no impacts would occur.

6 References

California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf

_____. 2020. *Transportation and Construction Vibration Guidance Manual*. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

City of San Diego. 2007. Draft General Plan Final PEIR.

_____. 2021. Traffic Volumes. Available online: https://data.sandiego.gov/datasets/traffic-volumes/.

Federal Aviation Administration. 2020. 1050.1F Desk Reference. February.

Federal Highway Administration (FHWA). 2006*. FHWA Highway Construction Noise Handbook*. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available at: http://www.fhwa.dot.gov/environment/construction_noise/handbook. Accessed November 2018.

_____. 2011. Highway Traffic Noise Analysis and Abatement Policy and Guidance. (FHWA-HEP-10-025). December.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Lawrence E. Kinsler and R. Frey, Austin and B. Coppens, Alan and V. Sanders, James. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.

Malcolm J. Crocker (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

This page intentionally left blank.

APPENDIX G

VEHICLE MILES TRAVELED (VMT) TECHNICAL MEMORANDUM

This appendix presents the Vehicle Miles Traveled (VMT) Technical Memorandum prepared for the Border BESS Project.

Rincon Consultants, Inc.

8825 Aero Drive
Suite 120
San Diego, California 92123

760 918 9444

info@rinconconsultants.com
www.rinconconsultants.com

August 5, 2022
Rincon Project No. 22-12591

Hermes BESS LLC
2060 Sanyo Avenue
San Diego, California 92154

Subject: VMT Technical Memorandum for the Hermes BESS LLC Border Battery Energy Storage System Project in City of San Diego

Rincon Consultants, Inc. (Rincon) is pleased to provide you with this vehicle miles traveled (VMT) technical memorandum for the Border Battery Energy Storage Project (project) in the City of San Diego (City), California. The purpose of this memorandum is to analyze the potential for the project to screen out of the requirement to prepare a detailed transportation VMT analysis, as identified by the applicability of VMT screening criteria adopted by the City of San Diego in their Transportation Study Manual (TSM 2020). This memorandum is not intended to support a full California Environmental Quality Act (CEQA) analysis; rather, this memorandum and its findings will serve to support an assumed California Energy Commission (CEC) post-certification amendment for the project.

Project Description

The project proposes to implement a 52-megawatt (MW) Battery Energy Storage System (BESS) project at the existing nominal 52 MW Border Peaker Plant (BPP), located in the southeastern portion of the City of San Diego. The project will be constructed to support California's current need for additional renewable electrical energy supply, especially during peak load demand time periods in the summer, and would advance the State's and the California Public Utility Commission's policy requirement of 60% renewable power by 2030 and 100% by 2045 (refer to Senate Bill 100). The proposed BESS facilities are located in an approximately 1.7-acre area within the eastern portion of the overall 10.12-acre BPP parcel. The project has been previously disturbed by historical agricultural uses, the development of the BPP, and annual mowing to control vegetation. Development would include approximately 1.6 acres for the enclosed battery storage system structures, which would be installed on concrete pad or pile foundations, and 0.1 acre for the BESS switchyard. The project would also include improvements to an approximately 600-foot-long section of the existing BPP access road, electrical connections from the BESS switchyard to the interconnection point at the BPP, and grading of an approximately 1.3-acre area to be utilized for construction laydown.

Regulatory Setting

Senate Bill 743 (SB 743) was signed into law by Governor Jerry Brown in 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria and metrics for identifying and mitigating transportation impacts under CEQA. SB 743 changed the way that public agencies evaluate

transportation, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact. Under SB 743, the OPR established VMT as the preferred metric for measuring transportation impacts of most projects in place of vehicle level of service (LOS) or related measures of congestion as the primary metric. The use of VMT for determining significance of transportation impacts has become commonplace since the certification of this provision and the release of OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018.

CEQA Guidelines Section 15064.3 implements SB 743 and establishes VMT as the most appropriate measure of transportation impacts for environmental analysis. CEQA lead agencies were required to comply with CEQA Guidelines Section 15064.3 no later than July 1, 2020. In response, the City of San Diego adopted specific thresholds for the purposes of evaluating VMT impacts of projects subject to CEQA within their jurisdiction in the City of San Diego Transportation Study Manual (TSM), published in 2020. The TSM also contains certain screening criteria, methodologies of analysis, and suggested mitigations for projects that are found to have a significant VMT impact. The City's guidelines and screening criteria contained in the TSM were used for the current VMT analysis of the Border BESS project.

The licensing for the Border Peaker Plant in 2001 (CEC Docket No. 01-EP-14) did not include a VMT analysis. The CEC has requested that a VMT analysis be provided as part of the post-certification amendment for the Border BESS project. The VMT screening analysis presented herein is consistent with City of San Diego methods for projects requiring CEQA review, although the City of San Diego does not have lead agency jurisdiction for the project given the CEC's jurisdiction.

VMT Screening Thresholds

For land use projects, SB 743 provides opportunities to streamline transportation analysis under CEQA based on specific screening thresholds adopted by each individual jurisdiction. As described above, the City of San Diego's 2020 TSM contains screening criteria specific to their jurisdiction. The requirement to prepare a detailed transportation VMT analysis applies to all land development projects in San Diego, except for those that meet at least one screening criteria provided in the City's TSM. A project that meets one of the screening criteria would be presumed to have a less than significant VMT impact due to project characteristics and/or location (City of San Diego 2020). The following screening criteria have are identified in the TSM:

1. **Residential or Commercial Project Located in a VMT Efficient Area:** The project is a residential or commercial employment project located in a VMT efficient area based on the applicable location-based screening map produced by SANDAG.
2. **Industrial or Agricultural Project Located in a VMT Efficient Area:** The project is an industrial employment or agricultural employment project located in VMT efficient area (in an area with average or below average base year VMT per Employee) based on the applicable location-based screening map produced by SANDAG.
3. **Small Project:** The project is a small project defined as generating less than 300 daily unadjusted driveway trips.
4. **Locally Serving Retail/Recreational Project:** The project is a locally serving retail/recreational project, defined as having 100,000 square feet gross floor area or less and demonstrates through a market area study that the market capture area for the project is approximately three miles (or less) and serves a population of roughly 25,000 people or less.

5. **Locally Serving Public Facility:** The project is a locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is a passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.
6. **Affordable Housing:** The project has access to transit and is wholly or has a portion that meets one of the following criteria: is affordable to persons with a household income equal to or less than 50% of the area median income; housing for senior citizens; housing for transitional foster youth, disabled veterans, or homeless persons.
7. **Mixed Use Project Screening Considerations:** The project's individual land uses should be compared to the screening criteria above. It is possible for some of the mixed-use project's land uses to be screened out and some to require further analysis.
8. **Redevelopment Project Screening Considerations:** The project is a redevelopment that demonstrates that the proposed project's total project VMT is less than the existing land use's total VMT.

VMT Analysis

Construction of the project is expected to have a peak daily workforce of up to 50 daily construction workers. In addition, construction of the project is expected to generate an average of 15 truck trips per day for the first 10-12 weeks and five truck trips per day for an additional 3-6 months to facilitate incoming deliveries and offsite disposal of construction waste. Overall, the project is expected to generate a maximum of 65 round trips per day during the construction phase. The estimated number of construction-phase trips is based on the planned work activities, construction schedule, and applicant experience on similar projects. After construction is complete, the project would function as an unmanned facility that is controlled remotely from an off-site location. No daily operational trips would typically be generated by the project. However, required maintenance of the BESS project would be expected to require two maintenance workers to visit the site on one day of each week, resulting in approximately two round trips per week during the operational lifespan of the project.

As a result of the vehicle trips described above, the Border BESS project would qualify for a streamlined transportation analysis under CEQA without being subject to the detailed transportation VMT analysis requirements under the City of San Diego's "Small Project" screening criteria. Furthermore, the project can be categorized as a public utility with passive use, which would qualify for a streamlined transportation analysis under the City's "Locally Serving Public Facility" screening criteria.

Conclusion

As described above, the Border BESS project would screen out of the requirement to prepare a detailed transportation VMT analysis based under both the "Small Project" and "Locally Serving Public Facility" screening criteria, as identified in the City of San Diego's 2020 Transportation Study Manual." Therefore, it can be presumed that the project would have a less than significant VMT impact.

Sincerely,
Rincon Consultants, Inc.

Lorraine Ahlquist
Environmental Senior Manager

Taylor Freeman
Environmental Planner

References

San Diego, City of. 2020. Transportation Study Manual. https://www.sandiego.gov/sites/default/files/10-transportation-study-manual.pdf (accessed June 2022).

State Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf (accessed June 2022).

APPENDIX H
BORDER BESS-ONLY CONDITIONS OF CERTIFICATION

Based on a review of existing CEC Conditions of Certification for the Border Peaker Plant, this appendix presents a list of assumed Border BESS-Only Conditions. It is assumed that the CEC will specify Conditions of Certification specific to the Border BESS Project and that BESS compliance will be tracked by the CEC against these specific Conditions.

Table H-1 presents a summary of the assumed Border BESS-Only Conditions, including an itemization of BPP Conditions that are assessed to be "not applicable" to the Border BESS Project subject to CEC review and concurrence. In addition, some Conditions will need to be reworded to facilitate compliance and/or to make them specific to the BESS Project versus the BPP project.

Table H-1. Summary List of Assumed Border BESS-Only Conditions of Certification

Topic	Summary of Existing CEC Conditions for Border Peaker Plant[1]	Applicable to BESS Project (Y/NA)[2,3]	Comments
Air Quality	AQ-1: Construction Fugitive Dust Mitigation Plan	Y	
	AQ-2: Compliance with ATC/PTO issued by SDCAPCD	Not Applicable (NA)	No air permits
	AQ-3: Compliance with BACT	NA	No air permits
Biological Resources	BIO-1:Avoid Impacts to Legally Protected Species	Y	
	BIO-2: Avoid Impacts to Designated Critical Habitat	NA	No Critical Habitat on site
	BIO-3: Avoid Impacts to Locally Designated Sensitive Species and Protected Areas	NA	No such species on site
	BIO-4: Reduce Risk of Bird Electrocution/APLIC 1996	Y	
	BIO-5: Construction Access by Biologists and CPM	Y	
	BIO-6: Reestablishment of Biological Resource Values at Decommissioning	NA	
	BIO-7: Mitigation Compensation Plans for Non-Native Grassland (NNG) and Wetland Impacts During Construction	NA	No NNG or wetlands present or impacted on site.
	BIO-8: Pre-project Activity Bird Surveys	Y	
	BIO-9: Flagging and Monitoring of Potentially Affected Wetlands	NA	No wetlands present or impacted on site.
	BIO-10: Landscaping Avoidance of Invasive/Pest Species and CDFW and CalEPPC 1999 Consultation	NA	No landscaping required within the site boundaries.
Cultural Resources	CUL-1: Avoid Significant Impacts to Cultural Resources	Y	
	CUL-2: No Special Cultural Resource Conditions Required for this Project (BPP)	--[1]	

Topic	Summary of Existing CEC Conditions for Border Peaker Plant[1]	Applicable to BESS Project (Y/NA)[2,3]	Comments
Facility Design	GEN-1: Design Project in Accordance with CA Building Code and Applicable LORS	Y	
	GEN-2: Schedule of Facility Design Submittals	Y	
Hazardous Materials Management	HAZ-1: CPM Approval for Use of Hazardous Materials in Reportable Quantities	Y	
	HAZ-2: Hazardous Material Business Plan and Risk Management Plan	Y	
Land Use	LAND-1: Project Conformance with all Applicable Local, State, and Federal Requirements	Y	
Noise	NOISE-1: Project Compliance with Applicable Community Noise Standards	Y	
	NOISE-2: Pre-grading Notification of Residents within 1 Mile	Y	
	NOISE-3: Noise Complaint Resolution	Y	
	NOISE-4: Night Construction Consistency with Local Noise Ordinances	Y	
Paleontological Resources	PALEO-1: This standard condition does not Apply to this Project (BPP)	--	CEC approval states, "This standard condition does not apply to this project."
	PALEO-2: Paleontology Specialist Duties and Resource Find Requirements	Y	
Soil and Water Resources	SOIL&WATER-1: Construction SWPPP	Y	
	SOIL&WATER-2: Erosion Prevention and Sedimentation Control Plan	Y	
	SOIL&WATER-3: Valid Water Service Agreement	NA	No water use for batteries operations. Any

Topic	Summary of Existing CEC Conditions for Border Peaker Plant[1]	Applicable to BESS Project (Y/NA)[2,3]	Comments
			water use would be within the existing service agreement.
	SOIL&WATER-5: Completed Geotechnical Report	Y	
Traffic and Transportation	TRANS-1: Transportation Permits	Y	
	TRANS-2: Encroachment Permits	Y	
	TRANS-3: Hazardous Material Transport Permits and Licenses from CA Highway Patrol and Caltrans	Y	
	TRANS-4: Post-Construction Roadway Repair	Y	
Transmission System Engineering	TSE-1: Transmission Facility Design	Y	
	TSE-2: Facility/Grid Synchronization with CAISO	Y	
Visual Resources	VIS-1: Neutral Paint Color for Structures Visible to the Public	Y	
	VIS-2: Lighting Restrictions	Y	
	VIS-3: Landscaping Plan	NA	No landscaping needed or proposed.
Waste Management	WASTE-1: Hazardous Waste Generator ID (DTSC)	Y	
	WASTE-2: Environmental Professional Availability and Authority for Soil Excavation and Grading Activities Related to Contaminated Soil	Y	
Worker Safety	WORKER SAFETY-1: Compliance with Title 8, CCR beginning with Part 450 (8 CCR Part 450 et seq)	Y	Y[6]

[1] *CUL-2: No Special Cultural Resource Conditions Required for this Project (BPP)* will likely need to be replaced with CEC standard Cultural Resource Conditions to meet current CEC requirements. The applicant has proposed Applicant Proposed Mitigation measures (APM) 1 through 4 for cultural resources with the expectation that the CEC will stipulate similar measures as Conditions for the Border BESS Project.

Border BESS Petition for Post-Certification Amendment
Appendix H.1

[Note: these CEC Conditions of Certification are the current Conditions for the Border Peaker Project, not the Proposed Border BESS Project]

BORDER PEAKER PROJECT (01-EP- 14)

CONDITIONS OF CERTIFICATION
As Amended

(Updated August 12, 2020)

TABLE OF CONTENTS

BORDER PROJECT (01-EP-14C)
AIR QUALITY CONDITIONS OF CERTIFICATION

AQ-1 Prior to the commencement of project construction, the project owner shall prepare a Construction Fugitive Dust Mitigation Plan that will specifically identify fugitive dust mitigation measures that will be employed for the construction of the project and related facilities.

Measures that should be addressed include the following:

- the identification of the employee parking area(s) and surface of the parking area(s);
- the frequency of watering of unpaved roads and disturbed areas;
- the application of chemical dust suppressants;
- the stabilization of storage piles and disturbed areas;
- the use of gravel in high traffic areas;
- the use of paved access aprons;
- the use of posted speed limit signs;
- the use of wheel washing areas prior to large trucks leaving the project site;
- the methods that will be used to clean tracked-out mud and dirt from the project site onto public roads; and
- for any transportation of borrowed fill material, the use of covers on vehicles, wetting of the material, and insuring appropriate freeboard of material in the vehicles.

Verification: The project owner shall submit to the CPM a letter attesting to compliance with the above and shall report any violations to the CPM.

AQ-2 The project owner shall comply with the terms and conditions of the Authority to Construct and the Permit to Operate issued by San Diego County Air Pollution Control District.

Verification: In the event that the air district finds the project to be out of compliance with the terms and conditions of the Authority to Construct, the project owner shall notify the CPM of the violation, and the measures taken to return to compliance, within five (5) days.

AQ-3 The project owner shall operate the project in compliance with all Best Available Control Technology (BACT) standards imposed by the Air District in its Authority to Construct. Failure to meet these standards will result in a finding that the project owner is out of compliance with the certification.

BORDER PROJECT (01-EP-14C)
BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

BIO-1 The project permitted under this emergency process will avoid all impacts to legally protected species and their habitat on site, adjacent to the site and along the right of way for linear facilities.

BIO-2 The project permitted under this emergency process will avoid all impacts to designated critical habitat (wetlands, vernal pools, riparian habitat, preserves) on site or adjacent to the site.

BIO-3 The project permitted under this emergency process will avoid all impacts to locally designated sensitive species and protected areas.

BIO-4 The project permitted under this emergency process will reduce risk of large bird electrocution by electric transmission lines and any interconnection between structures, substations and transmission lines by using construction methods identified in "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996" (APLIC 1996).

BIO-5 The project biologist, a person knowledgeable of the local/regional biological resources, and CPM will have access to the site and linear rights-of-way at any time prior to and during construction and have the authority to halt construction in an area necessary to protect a sensitive biological resource at any time.

BIO-6 Upon decommissioning the site, the biological resource values will be reestablished at preconstruction levels or better.

Verification: If the Designated Biologist halts construction, the action will be reported immediately to the CPM along with the recommended implementation actions to resolve the situation or decide that additional consultation is needed.

Throughout construction, the project owner shall report on items one through six above if identified resources are found or impacted.

BIO-7 Prior to operations, the applicant will submit a report of any impacted sensitive habitat, including NNG and wetlands, to the CPM for review and approval.

The applicant will then develop mitigation compensation plans using the following table:

		Inside MHPA	Outside MHPA
Wetlands	2:1		
NNG		0.5:1	1:1

BIO-8 Prior to any project-related activities a qualified biologist will conduct sensitive bird species surveys of the project site and surrounding habitats within 300 feet of the project boundary. Survey methodologies will allow for a thorough search of these areas to identify potential arboreal and/or ground nesting raptor species.

Verification: The qualified biologist shall submit a report of the findings to the CPM prior to construction. If special status nesting birds or other TES species are found the CPM may recommend additional agency consultation.

BIO-9 The project biologist, prior to site mobilization, will flag buffers on all potentially affected wetlands. The project biologist will then be present onsite during construction of the transmission poles and lines or until determined by the CPM.

Verification: The project biologist, prior to site mobilization, shall submit documentation to the CPM confirming compliance with Condition of Certification BIO-9.

BIO-10 Landscaping of the Border Project Site will contain no species of tree or plant considered invasive or having pest status. The project landscape specialist shall confer with the California Department of Fish and Game and the CalEPPC, 1999.

Verification: The landscape specialist shall provide documentation of the results of the consultation, and a vegetation plan to the CPM for review and approval prior to beginning any landscape activities.

The applicant will submit verification of the results of this consultation to CPM for approval prior landscape activities.

BORDER PROJECT (01-EP-14C)
CULTURAL RESOURCES CONDITIONS OF CERTIFICATION

CUL-1 The project certified under this emergency process shall not cause any significant impact to cultural resources on the power plant site or linear rights of way. No significant cultural resources have been identified in the Area of Potential Effect (APE). No on-site cultural resource monitoring is required for this proposed site.

In the event of an inadvertent cultural find the following conditions apply:

- The presence of subsurface archaeological resources is always a possibility in areas where only surface inspection has taken place. In the unlikely event that sub-surface archaeological remains are discovered during ground disturbing activities (i.e., grading and/or excavation), work in the area must halt and a qualified Cultural Resource Specialist (CRS) will be contacted immediately to evaluate the significance of the find. The project manager, construction manager, and the Compliance Project Manager (CPM) will be notified if the resource is judged to be potentially significant, and the archaeologist may recommend further study.
- In the event that suspected human remains are encountered, work must stop immediately within a radius of 100 feet (30 meters) of the discovery, and the San Diego County Coroner's Office will be notified within 24 hours of the find. If the skeletal remains are determined to be prehistoric, the Coroner's Office will contact the Native American Heritage Commission (NAHC) to identify the Most Likely Descendants (MLD). The MLD will be notified and will determine the most appropriate disposition of the remains and any associated artifacts.

CUL-2 will not apply to this project as no cultural resource monitoring has been required.

No special cultural resource conditions are required for this project.

BORDER PROJECT (01-EP-14C)
FACILITY DESIGN CONDITIONS OF CERTIFICATION

GEN-1 The project owner shall design, construct and inspect the project in accordance with the 1998 California Building Code (CBC) and all other applicable LORS in effect at the time initial design plans are submitted to the CBO for review and approval.

Verification: Within 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) after receipt of the Certificate of Occupancy, the project owner shall submit to the CPM a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met.

The project owner shall provide the CPM a copy of the Certificate of Occupancy within 30 days of receipt from the CBO [1998 CBC, Section 109 – Certificate of Occupancy.] The project owner shall keep copies of plan checks and CBO inspection approvals at the project site.

GEN-2 Prior to submittal of the initial engineering designs for CBO review, the project owner shall furnish to the CPM and to the CBO a schedule of facility design submittals, a Master Drawing List, and a Master Specifications List. The schedule shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures and equipment.

Verification: At least 15 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the Master Drawing List, and the Master Specifications List of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in Table 1 below. Major structures and equipment shall be added to or deleted from the Table only with CPM approval.

Table 1: Major Structures and Equipment List

Equipment/System
Combustion Turbine Generator Foundations and Connections
CT Inlet Air Plenum Structures, Foundations and Connections
CT Inlet Air Evaporative Cooler Structures, Foundations and Connections
SCR Unit Transition Ducts from CTGs – Structure
SCR Unit Structure, Foundation and Connections
SCR Unit Exhaust Stack, Foundation and Connections
Electrical/Control Room Structure, Foundation and Connections
CT Mechanical Accessory Compartment Foundation and Connections
Switchgear Equipment Building Structure, Foundation and Connections
Step-Up Transformer Foundation and Connections

Equipment/System
Auxiliary Transformer Foundation and Connections
Grading and Drainage Plan
Building Energy Conservation Systems
Temperature Control and Ventilation Systems
HVAC and Refrigeration Systems
Electrical and Plumbing Systems
Prefabricated Tank Foundations and Connections
Field-Erected Storage Tanks, Foundations and Connections
Natural Gas Pipeline
Occupied Buildings — Structure, Foundation and Connections

BORDER PROJECT (01-EP-14C)
HAZARDOUS MATERIALS MANAGEMENT CONDITIONS OF CERTIFICATION

HAZ-1 The project owner shall not use any hazardous material in reportable quantities except those identified by type and quantity in the Application for Certification unless approved by the CPM.

Verification: The project owner shall provide in the Annual Compliance Report a list of hazardous materials used at the facility in reportable quantities.

HAZ-2 The project owner shall submit both the Business Plan and Risk Management Plan to the CPM for review and comment, and shall also submit these plans and/or procedures to the County Fire Department for approval.

Verification: 30 days (or a CPM-approved alternative timeframe) prior to the initial delivery of any hazardous materials in reportable quantities to the facility, the project owner shall submit the Business and Risk Management Plan to the CPM for review and comment. At the same time, the project owner shall submit these plans to the County Fire Department for approval. The project owner shall also submit evidence to the CPM that the County Fire Department approved of these plans, when available.

BORDER PROJECT (01-EP-14C)
LAND USE CONDITIONS OF CERTIFICATION

LAND–1 The project permitted under this emergency process will conform to all applicable local, state and federal land use requirements, including general plan policies, zoning regulations, local development standards, easement requirements, encroachment permits, truck and vehicle circulation plan requirements, Federal Aviation Administration approval, and the Federal Emergency Management Agency National Flood Insurance Program.

Verification: Prior to start of construction, the project owner will submit to the CPM documentation verifying compliance with the above referenced land use requirements.

BORDER PROJECT (01-EP-14C)
NOISE CONDITIONS OF CERTIFICATION

NOISE-1 The project permitted under this emergency process shall be required to comply with applicable community noise standards.

Verification: Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey as a minimum. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints. If the results from the survey indicate that the project noise levels at the closest sensitive receptor are in excess of 62.5 dBA from 7:00 a.m. to 7:00 p.m., 60 dB from 7:00 p.m. to 10:00 p.m., and 57.5 dB from 10:00 p.m. to 7:00 a.m., or above 75 dBA at the project site property lines additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.

NOISE-2 Prior to the start of rough grading, the project owner shall notify all residents within one mile of the site of the start of construction and will provide a complaint resolution process.

Verification: The project owner shall provide the CPM with a statement, attesting that the above notification has been performed.

NOISE-3 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints.

Verification: Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the County Environmental Health Department, and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-4 Night construction activities may be authorized by the CPM if they are consistent with local noise ordinances. Night construction, or specific night construction activities may be disallowed by the CPM if it results in significant impact to the surrounding community.

Verification: The applicant has indicated that it would not perform construction activities that would exceed the City's noise standards (e.g., pile driving and steam blows) during the hours of 10 PM to 7 AM. Noise monitoring and surveys may be conducted if complaints are reported by residence in the surrounding area of the project site

BORDER PROJECT (01-EP-14C)
PALEONTOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

PALEO-1 This standard condition does not apply to this project.

PALEO-2 The project owner shall ensure the completion of the following actions/activities:

- Provide a paleontology specialist who will have access to the site and linear rights-of-way at any time prior to and during ground disturbance.
- The paleontology specialist will provide training to appropriate construction personnel at the site, will install avoidance measures (as necessary), and will be present during appropriate ground disturbing activities. The paleontology specialist has the authority to halt construction at a location if a significant paleontologic resource is found. If resources are discovered and the specialist is not present, the project owner will halt construction at that location and will contact the specialist immediately. The specialist will consult with the CPM and a decision will be made by the CPM within 24-hours as to how to proceed.
- The project owner shall allow time for the paleontology specialist to protect significant resource finds, and pay all fees necessary to protect any significant resources.

Verification: Throughout construction, the project owner shall inform the CPM concerning any substantive activity related to items 1 through 3 above.

BORDER PROJECT (01-EP-14C)
SOIL AND WATER RESOURCES CONDITIONS OF CERTIFICATION

SOIL&WATER-1 Prior to ground disturbance, the project owner shall obtain CPM approval of a Storm Water Pollution Prevention Plan (SWPPP) as required under the General Storm Water Construction Activity Permit for the project.

Verification: Prior to ground disturbance, the project owner will submit a copy of the Storm Water Pollution Prevention Plan for the project to the CPM.

SOIL&WATER-2 Prior to ground disturbance, the project owner shall obtain CPM approval of an Erosion Prevention and Sedimentation Control Plan. The plan will maintain natural drainage patterns to the extent possible, minimizing any potential impacts to the adjacent drainage.

Verification: The Erosion Control and Storm Water Management Plan for the project shall be submitted to the CPM prior to ground disturbance.

SOIL&WATER-3 Prior to site mobilization, the project owner shall submit to the CPM, a copy of a valid water service agreement for water supplies for the project from an authorized water purveyor, or a copy of a valid well permit for the project from the appropriate licensing agency.

Verification: The water service agreement or well permit shall be submitted to the CPM prior to site mobilization.

SOIL& WATER-5 Prior to construction, the project owner shall submit to the CPM, a copy of the completed geo technical report.

Verification: The geo-technical report for the project shall be submitted to the CPM prior to ground disturbance.

BORDER PROJECT (01-EP-14C)
TRAFFIC AND TRANSPORTATION CONDITIONS OF CERTIFICATION

TRANS-1 The project permitted under this emergency process shall comply with Caltrans and City/County limitations on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for roadway use.

Verification: The project owner shall keep copies of any oversize and over-weight transportation permits received at the project site.

TRANS-2 The project permitted under this emergency process shall comply with Caltrans and City/County limitation for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

Verification: The project owner shall keep copies of any encroachment permits received at the project site.

TRANS-3 The project permitted under this emergency process shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

Verification: The project owner shall keep copies of all permits/licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances at the project site.

TRANS-4 Following completion of construction of the power plant and all related linear facilities, the project owner shall return all roadways to original or as near original condition as possible.

BORDER PROJECT (01-EP-14C)
TRANSMISSION SYSTEM ENGINEERING CONDITIONS OF CERTIFICATION

TSE-1 The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to requirements listed below:

The power plant switchyard, outlet line and termination shall meet or exceed the electrical, mechanical, civil and structural requirements of CPUC General Order 95, CPUC Rule 21, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", Title 8 CCR, Sections 2700-2974, CPUC Decision 93-11-013, Federal Communications Commission Part 15, Public Resources Code 4292-4296, and National Electric Code (NEC).

Verification: Within 15 days after cessation of construction the project owner shall provide a statement to the CPM from the registered engineer in responsible charge (signed and sealed) that the switchyard and transmission facilities conform to the above listed requirements.

TSE-2 The Applicant shall provide the following Notice to the California Independent System Operator (ISO) prior to synchronizing the facility with the California Transmission System:

1. At least one (1) week prior to first synchronizing the facility with the grid for testing, provide the California ISO a letter stating the proposed date of synchronization. This letter should also affirm that all the electrical facilities necessary to connect the new facility to the grid have been installed and successfully tested; and
2. At least one (1) business day prior to synchronize the facility with the grid for testing, provide telephone notification to the ISO Outage Coordination Department, Monday through Friday, between the hours of 0700-1530 at (916) 351-2300.

Verification: The applicant shall provide copies of the California ISO letter to the CPM when it is sent to the California ISO one (1) week prior to initial synchronization with the grid. A report of conversation with the California ISO shall be provided electronically to the CPM one (1) day before synchronizing the facility with the California transmission system for the first time.

BORDER PROJECT (01-EP-14C)
VISUAL RESOURCES CONDITIONS OF CERTIFICATION

VIS-1 Project structures treated during manufacture and all structures treated in the field, which are visible to the public, shall be painted in a neutral color consistent with the surrounding environment.

Verification: Prior to painting exposed services, the project owner shall identify the selected color for CPM approval.

VIS-2 The project owner shall design and install all lighting such that light bulbs and reflectors are not visible from public viewing areas and illumination of the vicinity and the nighttime sky is minimized. Lighting shall be directed on-site to the extent practicable. Lighting must also be installed consistent with any local requirements.

Verification: Within 30 days of certification, the project owner shall submit plans for lighting to the local planning department and the CPM. The lighting plan must be consistent with all applicable LORS.

VIS-3 The project owner shall prepare and submit to the local planning department for review and comment, and to the CPM for review and approval a landscaping plan which provides for any or all of the following, as appropriate, to screen the project from view: berms, vegetation and trees, and slats in fencing.

Verification: Within 30 days of certification, the project owner shall submit the landscaping plan to the local planning department and the CPM, who will review the plans for consistency with LORS. Landscaping plans must include a species list. Invasive non-native species will not be permitted.

BORDER PROJECT (01-EP-14C)
WASTE MANAGEMENT CONDITIONS OF CERTIFICATION

WASTE-1 The project owner shall obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to producing any hazardous waste.

Verification: The project owner shall keep its copy of the identification number on file at the project site.

WASTE-2 The project owner shall have an environmental professional available for consultation during soil excavation and grading activities. The environmental professional shall be given full authority to oversee any earth moving activities that have the potential to disturb contaminated soil. The environmental professional shall meet the qualifications of such as defined by the American Society for Testing and Materials designation E 1527-97 Standard Practice for Phase I Environmental Site Assessments.

Verification: If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities, the environmental professional shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and make a recommended course of action. The environmental professional shall have the authority to suspend construction activity at that location. If, in the opinion of the environmental professional, remediation is to be required, the project owner shall consult with the CPM and a decision will be made by the CPM within 24 hours as to how to proceed.

BORDER PROJECT (01-EP-14C)
WORKER AND FIRE SAFETY CONDITIONS OF CERTIFICATION

WORKER SAFETY-1 The project owner must comply with all requirements in Title 8 of the California Code of Regulations, beginning with Part 450 (8 CCR Part 450 et seq).

Verification: The project owner shall submit to the CPM a letter attesting to compliance with the above and shall report any violations to the CPM.

BORDER PROJECT (01-EP-14C)
GENERAL COMPLIANCE CONDITIONS OF CERTIFICATION

INTRODUCTION

General conditions (and the Compliance Plan) have been established as required by Public Resources Code section 25532. The plan provides a means for assuring that the facility is constructed, operated and closed in accordance with applicable environmental and public health and safety laws, ordinances, regulations, and standards, and with conditions of certification as approved by the California Energy Commission (Energy Commission).

The Compliance Plan is comprised of general conditions and technical (environmental and engineering) conditions as follows:

- General conditions that set forth the duties and responsibilities of the Compliance Project Manager (CPM), the project owner, and delegate agencies; the requirements for handling confidential information and maintaining the compliance record; procedures for settling disputes and making post-certification changes; administrative procedures to verify the compliance status; and requirements for facility closure plans.
- Specific conditions for each technical area contain the measures required to mitigate potential adverse impacts associated with construction, operation and closure to an insignificant level. Specific conditions may also include a verification provision that describes the method of verifying that the condition has been satisfied.

DEFINITIONS

To ensure consistency, continuity and efficiency, the following terms, as defined, apply to all technical areas, including Conditions of Certification:

Site Mobilization

Moving trailers and related equipment onto the site, usually accompanied by minor ground disturbance, grading for the trailers and limited vehicle parking, trenching for utilities, installing utilities, grading for an access corridor, and other related activities. Ground disturbance, grading, etc. for site mobilization are limited to the portion of the site necessary for placing the trailers and providing access and parking for the occupants. Site mobilization is for temporary facilities and is therefore not considered construction.

Ground Disturbance

Onsite activity that results in the removal of soil or vegetation, boring, trenching or alteration of the site surface. This does not include driving or parking a passenger vehicle, pickup truck, or other light vehicle, or walking on the site.

Grading

Onsite activity conducted with earth-moving equipment that results in alteration of the topographical features of the site such as leveling, removal of hills or high spots, or moving of soil from one area to another.

Construction

[From Public Resources Code section 25105.] Onsite work to install permanent equipment or structures for any facility.

Construction does not include the following:

a. The installation of environmental monitoring equipment.

b. A soil or geological investigation.

c. A topographical survey.

d. Any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility.

e. Any work to provide access to the site for any of the purposes specified in a, b, c, or d.

TERM OF CERTIFICATION

Certification is for the life of the project if at the end of the power purchase agreement with either the California Independent System Operator or the California Department of Water Resources the project owner can verify that the project meets the following continuation criteria:

- the project is permanent, rather than temporary or mobile in nature;
- the project owner demonstrates site control;
- the project owner has secured permanent emission reduction credits (ERCs) to fully offset project emissions for its projected run hours prior to expiration of any temporary ERCs;
- the project is in current compliance with all Energy Commission permit conditions specified in the final decision;
- the project is in current compliance with all conditions contained in the Permit to Construct and Permit to Operate issued by The San Diego County Air Pollution Control District (SDAPCD) for the project; and
- the project continues to meet BACT requirements under SDAPCD and California Air Resources Board (CARB) requirements.

The project shall expire if these continuation criteria are not met. At least six months prior to the expiration of the power purchase agreement with the Department of Water Resources (DWR), or prior to the expiration of the Summer Reliability Agreement with the California Independent System Operator if no DWR contract is signed, the project owner shall provide verification that these conditions have been meet.

In addition, the project owner shall submit a report after completion of the first three years in operation, as described below.

COMPLIANCE PROJECT MANAGER (CPM) RESPONSIBILITIES

A CPM will oversee the compliance monitoring and shall be responsible for:

1. ensuring that the design, construction, operation, and closure of the project facilities is in compliance with the terms and conditions of the Commission Decision;
2. resolving complaints;
3. processing post-certification changes to the conditions of certification, project description, and ownership or operational control;
4. documenting and tracking compliance filings; and
5. ensuring that the compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies and the Energy Commission when handling disputes, complaints and amendments.

The Commission has established a toll-free compliance telephone number of 1-800-858-0784 for the public to contact the Commission about power plant construction or operation-related questions, complaints or concerns.

Pre-Construction and Pre-Operation Compliance Meeting

The CPM may schedule pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings will be to assemble both the Energy Commission's and the project owner's technical staff to review the status of all pre-construction or pre-operation requirements contained in the Energy Commission's conditions of certification to confirm that they have been met, or if they have not been met, to ensure that the proper action is taken.

Energy Commission Record

The Energy Commission shall maintain as a public record, in either the Compliance file or Docket file, for the life of the project (or other period as required):

1. All documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
2. All complaints of noncompliance filed with the Energy Commission; and
3. All petitions for project modifications and the resulting staff or Energy Commission action taken.

PROJECT OWNER RESPONSIBILITIES

It is the responsibility of the project owner to ensure that the general compliance conditions and the conditions of certification are satisfied. The general compliance

conditions regarding post-certification changes specify measures that the project owner must take when requesting changes in the project design, compliance conditions, or ownership. Failure to comply with any of the conditions of certification or the general compliance conditions may result in reopening of the case and revocation of Energy Commission certification, an administrative fine, or other action as appropriate.

Access

The CPM, responsible Energy Commission staff, and delegate agencies or consultants, shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

Compliance Record

The project owner shall maintain project files on-site or at an alternative site approved by the CPM, for the life of the project. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents for the life of the project, unless a lesser period is specified by the conditions of certification.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files.

Compliance Reporting

The project owner shall submit status reports to the CPM every two weeks indicating its progress in meeting milestones for procuring necessary project components and all required approvals for construction and operation of the facility by September 30, 2001. The first of these reports will be due two weeks after certification of the project by the Energy Commission.

Start of Operations

The CalPeak Power-Border project shall be on-line by not later than September 30, 2001. If The project is not operational by September 30, 2001, the Energy Commission will conduct a hearing to determine the cause of the delay and consider what sanctions, if any, are appropriate. If the Energy Commission finds that the project owner failed to proceed with due diligence to have CalPeak Power-Border in operation by September 30, 2001, the Energy Commission will set a specific date by which CalPeak Power-Border must be brought on-line as a condition precedent to continue the certification.

Three-Year Review

No later than 15 days after completion of the first three years in operation, the project owner shall submit to the Energy Commission a report of operations that includes a review of the project's compliance with the terms and conditions of certification, the number of hours in operation, and the demand for power from the facility during the three-year period.

Compliance Verifications

Conditions of certification may have appropriate means of "verification". The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions. The verification procedures, unlike the conditions, may be modified, as necessary by the CPM, without full Energy Commission approval.

Verification of compliance with the conditions of certification can be accomplished by:

- reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
- appropriate letters from delegate agencies verifying compliance;
- Energy Commission staff audits of project records; and/or
- Energy Commission staff inspections of mitigation and/or other evidence of mitigation.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal.

All submittals shall be addressed as follows:

Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-3000)
Sacramento, CA 95814

Confidential Information

Any information, which the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information, which is determined to be confidential, shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

Reporting of Complaints, Notices, and Citations

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering, with date and time stamp recording. The telephone number shall be posted at the project site and easily visible to passersby during construction and operation.

The project owner shall report and provide copies of all complaint forms, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt, to the CPM.

GENERAL CONDITIONS FOR FACILITY CLOSURE

In order to ensure that a planned facility closure does not create adverse impacts, plant closure must be consistent with all applicable laws, ordinances, regulations, standards (LORS), and local/regional plans in existence at the time of closure. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least three months prior to commencement of closure activities (or other period of time agreed to by the CPM).

DELEGATE AGENCIES

To the extent permitted by law, the Energy Commission may delegate authority for compliance verification and enforcement to various state and local agencies that have expertise in subject areas where specific requirements have been established as a condition of certification. If a delegate agency does not participate in this program, the Energy Commission staff will establish an alternative method of verification and enforcement. Energy Commission staff reserves the right to independently verify compliance.

In performing construction and operation monitoring of the project, the Energy Commission staff acts as, and has the authority of, the Chief Building Official (CBO). The Commission staff retains this authority when delegating to a local CBO. Delegation of authority for compliance verification includes the authority for enforcing codes, the responsibility for code interpretation where required, and the authority to use discretion, as necessary, in implementing the various codes and standards.

ENFORCEMENT

The Energy Commission's legal authority to enforce the terms and conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy Commission may amend or revoke the certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or conditions of the Commission Decision. The specific action and amount of any fines the Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, inadvertence, unforeseeable events, and other factors the Commission may consider.

Moreover, to ensure compliance with the terms and conditions of certification and applicable laws, ordinances, regulations, and standards, delegate agencies are authorized to take any action allowed by law in accordance with their statutory authority, regulations, and administrative procedures.

NONCOMPLIANCE COMPLAINT PROCEDURES

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1230 et. seq., but in many instances the noncompliance can be resolved by using the informal dispute resolution

process. Both the informal and formal complaint procedures, as described in current State law and regulations, are described below. They shall be followed unless superseded by current law or regulations.

INFORMAL DISPUTE RESOLUTION PROCEDURE

The following procedure is designed to informally resolve disputes concerning interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate this procedure for resolving a dispute. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. This procedure may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1230 et. seq., but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and conditions of certification as approved by the Energy Commission, although the agreed upon resolution may result in a project owner proposing an amendment.

The procedure encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be referred to the full Energy Commission for consideration via the complaint and investigation process. The procedure for informal dispute resolution is as follows:

Request for Informal Investigation

Any individual, group, or agency may request the Energy Commission to conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and conditions of certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter and within seven (7) working days of the CPM's request, provide a written report of the results of the investigation, including corrective measures proposed or undertaken, to the CPM. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to provide an initial report, within forty-eight (48) hours, followed by a written report filed within seven (7) days.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within fourteen (14) days of the project owner's filing of its written report.

Upon receipt of such a request, the CPM shall:

1. Immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place and secure the attendance of appropriate Energy Commission staff and staff of any other agency with expertise in the subject area of concern as necessary;
2. Conduct such meeting in an informal and objective manner; and,
3. After the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum which fairly and accurately identifies the positions of all parties and any conclusions reached.

FORMAL DISPUTE RESOLUTION PROCEDURE-COMPLAINTS AND INVESTIGATIONS

If either the project owner, Energy Commission staff, or the party requesting an investigation is not satisfied with the results of the informal dispute resolution process, such party may file a complaint or a request for an investigation with the Energy Commission's General Counsel. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1230 et. seq.

The Chairman, upon receipt of a written request stating the basis of the dispute, may grant a hearing on the matter, consistent with the requirements of noticing provisions. The Commission shall have the authority to consider all relevant facts involved and make any appropriate orders consistent with its jurisdiction (Title 20, California Code of Regulations, sections 1232 - 1236).

POST CERTIFICATION CHANGES TO THE COMMISSION DECISION: AMENDMENTS, INSIGNIFICANT PROJECT CHANGES

The project owner must petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to 1) delete or change a condition of certification; 2) modify the project design or operational requirements; and 3) transfer ownership or operational control of the facility.

A petition is required for amendments and for insignificant project changes. In all cases, the petition or letter requesting a change should be submitted to the Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209. The criteria that determine which type of change process applies are explained below.

EXECUTIVE ORDER

Executive Order D-25-01 issued by the Governor of the State of California, which accelerates processing of certain project modifications, will be applied to all qualifying project modifications requested until December 31, 2001.

AMENDMENT

A proposed project modification will be processed as an amendment if it involves a change to a condition of certification, an ownership or operator change, or a potential significant environmental impact.

INSIGNIFICANT PROJECT CHANGE

The proposed modification will be processed as an insignificant project change if it does not require changing the language in a condition of certification, have a potential for significant environmental impact, and cause the project to violate laws, ordinances, regulations or standards.

VERIFICATION CHANGE

Changes to condition verifications require CPM approval and may require either a written or oral request by the project owner. The CPM will provide written authorization of verification changes.