



CEQA and COASTAL DETERMINATIONS and NOTICE OF APPROVAL

Project: National City Marine Terminal Electrification Project
Location: 2350 Terminal Avenue, National City, California, 91950
Parcel No.: 025-001, 027-003, 027-047, 028-001
Project No.: 2021-077
Applicant: Joel Valenzuela, Maritime Department, 3165 Pacific Highway, San Diego, CA 92101
Date Approved: July 6, 2021

PROJECT DESCRIPTION

The San Diego Unified Port District (District or Applicant), proposes modifications to the National City Marine Terminal (NCMT) to install shore power equipment, provide vehicle charging stations, and upgrade the existing lighting system (project). The NCMT is an approximately 133acre existing and operating marine terminal. The cargo handling areas of NCMT, which constitutes the majority of the NCMT, are operated by Pasha Automotive Services (Pasha) under a long term lease/operative agreement with the District. The six active terminal berths are managed by the District.

The project would install shore power outlets (SPO) and associated infrastructure to comply with the California Air Resources Board's (CARB) Ocean Going Vessels At-Berth Regulation (At-Berth Regulation) requirements for roll on/roll off (RORO) vessels.¹

The At-Berth Regulation, adopted in 2007, is intended to reduce nitrogen oxide (NO_x) and diesel particulate matter (DPM) emissions from the operation of auxiliary engines on container vessels, passenger vessels, and refrigerated cargo vessels while the vessels are docked at California ports, including the Port of San Diego. The At-Berth Regulation is specifically intended to limit the duration of time auxiliary diesel engines are operated when such regulated vessels are docked at-berth. In 2020, CARB amended the At-Berth Regulation to include RORO vessels, and those new compliance requirements go into effect in 2025.

To meet the needs of RORO vessels docking at the NCMT, and thus ensure compliance with the revised At-Berth Regulation for RORO vessels, the District is proposing to install up to four SPOs, four substations to receive electricity and deliver it to SPOs for at-berth vessels, and associated utility infrastructure. In addition, the District proposes to install new, energy-efficient high-mast lighting on existing poles in order to reduce electrical consumption at the terminal, as well as charging infrastructure for electric powered vehicles. The proposed improvements are detailed below.

Shore Power System Upgrades

The District proposes to install shore power at NCMT. The shore power system upgrades may consist of up to four shore power substations and SPOs. The system would also include electrical distribution equipment, conduit, a substation grounding system, and an SDG&E service station. Collectively, these shore power facilities, as further described below, comprise the shore power system proposed for NCMT.

Shore Power Substation

As shown on Figure 1 up to four shore power substations would be installed on the terminal. Three would be close to Berth 24-4 and one would be installed near Berth 24-10/11. Each of the four

¹ California Code of Regulations (CCR), Title 17, Chapter 1, Subchapter 7.5, Section 93118.3.

substations would require installing below grade concrete encased duct banks to convey power from the substation to each SPO. Each substation would include a concrete pad measuring approximately 1,200 square feet and enclosed behind an 8-foot chain-link fence.

Substation Grounding System

A substation ground loop consisting of copper clad ground rods and bare copper cables of sufficient size to carry the available ground fault current would be installed and tied into the existing ground system. The substation ground loop would be within the footprint of each shore power substation. All electrical equipment, structures, system neutral grounds receptacles, and switchgear grounds would connect to the ground loop. The 6.6kV transformer's secondary wyeconnected neutral would be connected to the grounding system through a neutral grounding resistor to limit grounding fault current to 50 amps or less.

Main Distribution Equipment for Shore Power

Each of the four shore power substations would include primary and secondary shore power system equipment. The equipment would range in height from 5 feet to 12 feet and be approximately 30 to 35 feet in cumulative length.

Safety perimeter guard posts and fencing would be constructed around the equipment. The equipment would include the 12.47-kV main circuit breaker, one step-down dry-type transformer, a secondary circuit breaker, relays, and ground switches for each substation. The main distribution equipment, including the transformer, would be placed inside a 6-inch curb spill containment basin if the design uses a liquid filled transformer.

The main distribution equipment for each shore power substation would consist of:

- A touch screen interface for control and monitoring of the shore power system;
- A primary 12-kV breaker (measuring approximately 3 by 8 by 8 feet);
- A main 6.6-kV breaker (measuring approximately 3 by 8 by 8 feet);
- Four ground switches (measuring approximately 4 by 8 by 8 feet);
- A 7.5-MVA, 12.47-kV dry--type transformer (measuring approximately 12 by 21 by 10 feet);
- A battery charge transition cabinet;
- A control power transformer (CPT) panel (measuring approximately 3 by 8 by 8 feet); and,
- An outdoor walk-in weatherproof NEMA3R enclosure for each substation (measuring approximately 9 by 30 by 15 feet).

Figure 1



Shore Power Outlets

SPOs would be installed at Berths 24-2/3, 24-4, 24-5, and 24-10/11. Each SPO would consist of two push-pull receptacles and be placed in an underground vault (12 feet long x 2 feet deep x 4 feet wide) to minimize impacts on terminal operations. Each receptacle would be mechanically and electrically interlocked by interlock system ground check relays. The vault covers and supporting walls enclosing the vaults would be designed for wheel loads of 125 kips, and heaters would be provided at the shore to ship power outlet vaults to control the climate. Each SPO would have a connected load of 1900 kilovolt amperes (kVA), which is sufficient to power one vessel per outlet.

SDG&E Service Station

The proposed SDG&E service substation is anticipated to be located alongside the existing SDG&E service substation. Currently, the District is coordinating with SDG&E to determine what equipment is necessary to install and if additional 12kV service is necessary. If additional 12-kV service is necessary, the SDG&E service substation would consist of a 10-foot x 10-foot precast concrete pad enclosed by 8 foot high chain link fence. The primary SDG&E electrical infrastructure would include a capacitor bank, fourway trayer switch, and 12kV meter. A new duct bank system may also be installed to facilitate transferring power from the SDG&E incoming service area to each shore power substation to support the proposed shore power system. Based on the anticipated scope of work proposed by the District, SDG&E believes it has sufficient existing distribution infrastructure and capacity in the area to serve the needs of the proposed project. SDG&E would not likely require significant trenching to connect the proposed facilities to the existing distribution network. This initial input by SDG&E is preliminary in nature, and subject to change based on additional analysis, engineering and design performed by SDG&E, as well as any potential project changes proposed by the District.

Conduit/Cable Infrastructure

The conduit/cable infrastructure would consist of approximately 10,500 feet of concrete encased conduit duct bank. The conduit/cable would be approximately 18 inches wide and installed approximately 4 to 5 feet below grade from the existing SDG&E service substation to each shore power substation and to each SPO. Additionally, approximately 10,500 feet of copper electron paramagnetic resonance (EPR) insulated cable would be installed in the new duct bank. Twelve concrete manholes, measuring approximately 6 by 8 by 7 feet, would be installed.

Vehicle Charging Equipment

In preparation of the import of new electric vehicles through the NCMT, the project includes the installation of up to 10 electric vehicle chargers in the central area of the terminal, near Buildings 24-1, 24-A, and 24-B. Each charging station would require approximately 5-kilowatt power. An additional five light-duty truck chargers would be installed near Buildings 24-A and 24-B for use by employees and laborers with electric vehicles. Each light-duty charging station would require approximately 25-kilowatt power.

Lighting Upgrades

The existing lighting system contains over 400 high intensity discharge (HID) light fixtures used for illuminating the high volume and general use areas during nighttime operation. These fixtures are controlled manually via circuit breakers and typically lose approximately 30 to 40 percent of lighting output in the first third of their useful life, resulting in excessive energy consumption and constant

maintenance cost. The District would replace the existing HID fixtures with light-emitting diode (LED) lighting fixture technology to reduce energy usage and maintenance cost. With LED technology, the light source is more controlled through advanced optics that will help focus light into the desired space and minimize light spill at the water. The proposed lighting upgrade will be consistent with OSHA regulations, specifically Standard 1917.123 Illumination for Marine Terminal Facilities, to provide a safe working environment on a working marine terminal.

Additionally, LED technology offers flexible optical packages for optimal light coverage and uniformity. Wireless integrated controls would also be able to control energy usage by only using fixtures where needed. With LED technology, there is not only the ability to reduce energy usage through lower wattage but also reduce the count of fixtures by approximately eight percent while providing improved foot candle averages where needed due to improved technology and optics. Further, and as required by District engineering specifications, prior to installation of the LED lighting system if nesting material is present on the light poles a qualified biologist would determine if the nest is active. If active nests are present, installation of the lighting system would be delayed until the nest is no longer active.

Construction

Project construction is expected to begin in mid-2023 and would span over three years, with completion in the last quarter of 2026. Typical daily construction hours are expected to occur from 7:00 a.m. to 4:00 p.m. Monday through Friday. Construction activities associated with the shore power system upgrades would require the temporary use of heavy machinery and other construction-related equipment, including but not limited to, saw cutters, backhoes, compactors, concrete truck, crane, skid steer loader, air compressor, and dump trucks.

The proposed project's landside improvements would involve excavation of approximately 4,800 cubic yards of material (1,200 cubic yards of concrete/asphalt and 3,600 cubic yards of soil), requiring a total of up to 510 export truck trips, which would be spread over the three-year construction term. Approximately 500 cubic yards of backfill soil would be imported from a regional source located within 50 miles of the project site, requiring a total of 50 import truck trips. Therefore, approximately 10 daily truck trips are anticipated during peak project construction during portions Phases 2 and 3 of construction.

Additionally, as part of the SPO installation, there will be minor over-water work to construct a 12-inch by 12-inch opening at the edge of the pier to allow the electrical cable from vessel's connection to connect to the SPO receptacles. The SPO would be contained in underground vault landside. The construction equipment required for the demolition include a saw-cutter and jack hammer. To create the proposed SPO opening, over-water work is estimated to take 15 working days. The contractor may need up to two barges for use during installation of the SPO outlet. Barges shall comply with all marine-related U.S. Coast Guard and other safety requirements. Also, as may be necessary, a Rivers and Harbors Act permit from the U.S. Army Corps of Engineers would be obtained for over-water work.

Project construction would be conducted in three phases to minimize interference with the ongoing terminal operations. Phase 1 would include the upgrade of the terminal lighting system and the installation of vehicle charging stations. Phase 2 would include the installation of shore power system for Berth 24-4, 24-5 and 24-10/11. Phase 3 would include the installation of the shore power system for Berth 24-2/3. Table 1 provides details of the construction schedule by phase.

Table 1. Project Construction Phasing Summary

Component	Location	Construction Phase	Construction Date (Duration)	Approximate Workers per Day
High-mast lighting	Various	Phase 1	2023 (120 days)	10
Vehicle charging stations				
Shore power substation, SPO, and associated infrastructure	Berth Number 24-10/11	Phase 2	2023-2024 (300 days)	35
Shore power substation and SPO	Berth Number 24-5			
Shore power substation, SPO, and associated infrastructure	Berth Number 24-4			
Shore power substation, SPO, and associated infrastructure	Berth Number 24-2/3	Phase 3	2026 (210 days)	15

Notes:

SPO=shore power outlet

All work would be performed within the NCMT project site, which is an operating marine terminal. Sufficient construction staging areas and parking for the construction workers would be provided on the NCMT site for each phase of construction.

The District's standard best management practices (BMP) that would be employed during construction include:

- Employing the project site's existing fully contained stormwater diversion system during project construction and operation to limit stormwater runoff into San Diego Bay;
- Conducting proper waste unloading, transport, and disposal procedures; and
- Conducting community health and safety procedures and monitoring.

Operation

By 2026, the NCMT would have four berths (2-2/3, 24-4, 24-5, and 24-10/11) equipped to provide shore power to vessels capable of using SPOs in compliance with the CARB At-Berth Regulation for RORO vessels. On August 27, 2020, CARB approved a new regulation that builds on the 2007 At-Berth Regulation. By January 1, 2025, all RORO vessels are required to utilize shore power or reduce emissions of ocean-going vessels while at berth. To date, no alternative compliance method has been approved by CARB for RORO vessels, although it is possible that the Emissions Control and Capture Systems currently approved for container ships may be approved for RORO vessels by January 1, 2025. It is anticipated that RORO carriers would begin retrofitting some of their vessels in time to meet the 2025 deadline; however, it is currently unclear how many vessels would meet the deadline prior to the regulatory mandate.

The project does not propose an increase in operational activities. With completion of the project, the annual cargo volume moving through the NCMT would continue to range approximately from 360,000 to 500,000 automobiles annually, consistent with the existing operational conditions at NCMT. Changes to operational activities include utilizing the additional electrical capacity by connecting vessels to the new SPOs and turning off the vessel's auxiliary engines. This use of electricity rather than the auxiliary engines eliminates air emissions generated while the vessels are at berth.² The additional capacity would also power the new automobile plugs around the terminal to charge imported electric vehicles.

Under existing and future conditions, each RORO cargo operation at Berths 24-2/3, 24-4, and 24-5 lasts approximately 10 hours, while the vessels are normally at the berth for approximately 20-24 hours. Currently, Berths 24-10/11 are used by Pasha to perform stevedoring services for Pasha's Hawaiian vessels. Depending on the year, 10 to 20 percent of vessel calls are dual or triple calls that overlap operationally.

Due to its nature and limited scope, construction of the project would generate a minor amount of vehicle trips and would require limited use of equipment. Therefore, significant impacts related to air quality, greenhouse gas emissions, and transportation and traffic are not anticipated to occur. The District and Pasha would be responsible for compliance with all laws and regulations associated with the activities on or in connection with the above-described premises, and in all uses thereof, including those regulating stormwater, biological resources, and hazardous materials, as well as acquiring necessary permits from relevant resource agencies, such as the California Coastal Commission and Army Corps of Engineers.

The following categorical determinations are based on the project submittal and all project information known to the District as of the date of this determination.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CATEGORICAL DETERMINATION

Based on the above description, the project is determined to be Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines SG §15301, Class 1/Section 3.a: Existing Facilities, SG §15303, Class 3/Section 3.c: New Construction of Conversion of Small Structures, and SG §15304, Class 4/Section 3.d Minor Alterations to Land.

3.a. Existing Facilities (SG § 15301) (Class 1): Includes operation, repair, maintenance, or minor

² CARB projects that the At-Berth Regulations will, through the implementation of technologies as required, including shore power, significantly reduce emissions from vessel fleets. (See [Control Measure for ocean-going vessels at berth \(ca.gov\)](https://www.carb.ca.gov/Control-Measures/Control-Measures-for-ocean-going-vessels-at-berth/).)

alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing including but not limited to:

- (7) Existing facilities used to provide electric power, natural gas, sewerage, or other public utility service.

AND/OR

3.c. New Construction or Conversion of Small Structures (SG § 15303) (Class 3): Includes construction of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and conversion of existing small structures from one use to another with minor modifications to the exterior of the structure. Examples of this exemption include:

- (2) Accessory (appurtenant) structures and mechanical equipment including, but not limited to, garages, sheds, railway spur tracks, pilings, temporary trailers, industrial equipment enclosures, fences, parking, on-site roadways, walkways and health and safety devices.
- (3) Water, sewer, electrical, gas, telephone, and other utility structures or facilities.

AND/OR

3.d Minor Alterations to Land (SG § 15304) (Class 4): Includes minor alterations in the condition of land, water and/or vegetation not involving removal of mature, scenic trees, including, but not limited to:

- (7) Minor trenching and backfilling where the surface is restored.

The project is determined to be Categorically Exempt pursuant to the CEQA Guidelines and the Sections of the District's Guidelines for Compliance with CEQA as identified above. These are appropriate for the project because it includes minor construction at an existing marine terminal and would not expand the existing use of the NCMT. The Project would install shore power equipment, provide vehicle charging stations, and upgrade the existing lighting system to serve existing marine terminal operations. Construction would occur over the course of approximately three years, in multiple phases, and would consist of trenching, placing concrete pads to accommodate new power stations, and other minor work that would not obstruct or otherwise change existing operations of the NCMT in a manner that would necessitate the use of off-site facilities. The project would not result in a significant cumulative impact due to the continuation of the existing use. The project would consist of construction and location of new, small facilities/structures, and would not involve the removal of mature, scenic trees. The District has determined none of the six exceptions to the use of a categorical exemption apply to this project (CEQA Guidelines Section 15300.2) because the project is not located in an area that would impact an environmental resource of hazardous or critical concern, would not have cumulative impact of successive projects of the same type in the same place, would not have a significant effect on the environment due to unusual circumstances, is not within a highway officially designated as a state scenic highway, is not located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code, and would not cause a substantial adverse change in the significance of a historical resource.

Pursuant to CEQA Guidelines Section 15062, a 35-day statute of limitations for this CEQA exemption shall apply from the date a Notice of Exemption is posted with the San Diego County Clerk, or a 180-day statute of limitations for this CEQA exemption shall apply if no Notice of Exemption is filed.

CALIFORNIA COASTAL ACT

PORT MASTER PLAN CONSISTENCY

Planning District: 5 – National City Bayfront (Precise Plan Figure 15)

Use Designation: Marine Related, Marine Terminal, Terminal Berthing, Specialized Berthing

The project conforms to the certified Port Master Plan because it would install shore power equipment, provide vehicle charging stations, and upgrade the existing lighting system to serve existing marine terminal operations consistent with the existing certified Land and Water use designations. The project would not change the use of the site nor would it interrupt or expand the existing conforming uses of the site.

CATEGORICAL DETERMINATION

Categorical Exclusions: Section 8.a: Existing Facilities, Section 8.b: Replacement or Reconstruction, and 8.d Minor Alterations to Land

8.a. Existing Facilities: The operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, including but not limited to:

- (2) Public and private utilities used to provide electric power, natural gas, sewer, or other utility services;

AND/OR

8.c. New Construction or Conversion of Small Structures: Construction and location of limited numbers of new, small facilities or structures and installation of small, new equipment and facilities, involving negligible or no change of existing use of the property, including but not limited to:

- (2) Water main, sewer, electrical, gas, or other utility extensions of reasonable length to serve such construction;
- (3) Accessory structures, including, but not limited to, on-premise signs, small parking lots, fences, walkways, swimming pools, miscellaneous work buildings, temporary trailers, small accessory piers, minor mooring facilities, buoys, floats, pilings, or similar structures; and seasonal or temporary use items such as lifeguard towers, mobile food units, portable restrooms, or similar structures;

8.d Minor Alterations to Land: Minor public or private alterations in the condition of land, water, and/or vegetation which do not involve the removal of mature, scenic trees, including but not limited to:

- (6) Minor trenching or backfilling where the surface is restored;

The project is determined to be Categorically Excluded pursuant to the Sections of the District's *Coastal Development Permit Regulations* as identified above. These are appropriate for the proposed project because it would involve negligible or no expansion of use beyond that previously existing, would involve negligible or no change of existing use of the property, and would not involve the removal of mature, scenic trees.

Pursuant to California Coastal Act Section 30717, there is a 10-working-day period to appeal this "Coastal Act Categorical Determination of Exclusion" to the California Coastal Commission.

CALIFORNIA PUBLIC TRUST DOCTRINE

The proposed project complies with Section 87.(a)(1) of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operation of wharves, docks, piers, slips, quays, and all other works, buildings,

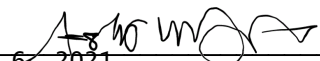
facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation.

The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

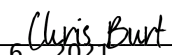
Joe Stuyvesant
President/CEO

Determination by:

Ashley Wright
Senior Planner
Planning Department

Signature: 
Date: Jul 6, 2021

Deputy General Counsel

Signature: 
Date: Jul 6, 2021