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|-------------------------|--------------------------------|
| Docket Number: | 24-OPT-02 |
| Project Title: | Compass Energy Storage Project |
| TN #: | 262697 |
| Document Title: | Project Description Update |
| Description: | N/A |
| Filer: | Erin Phillips |
| Organization: | Dudek |
| Submitter Role: | Applicant Consultant |
| Submission Date: | 4/16/2025 2:02:01 PM |
| Docketed Date: | 4/16/2025 |

MEMORANDUM

To: California Energy Commission
From: Compass Energy Storage LLC
Subject: Updated Project Description Cover Letter - Compass Battery Energy Storage Project (Docket Number 24-OPT-02)
Date: April 14, 2025
Attachment(s): Section 2.0, Project Description

On March 10, 2025, Compass Energy Storage LLC and Affiliates provided an updated conceptual site plan that incorporated specific additional recommendations from the Orange County Fire Authority (OCFA). The recommendations incorporated included extension of the offsite access road to two additional site entrances along the facility's northern border, additional fire hydrants, and a reconfigured internal road layout. Updated visual simulations and conceptual landscape plan were also provided to reflect the recommendations. Please refer to Document TN# 262127 for the referenced updated documents.

The attached Project Description is provided to reflect the changes as a result of the updated conceptual site plan. Edits and updates are shown in ~~strikeout~~/underline text. A summary of the edits and updates is provided below:

- Section 2.1, Overview and Location has been updated to reflect the revised acreage of the access road. Table 2-1, Preliminary Project Square Footage, has also been updated.
- Section 2.2.8, Site Access and Security has been updated to include a description of the additional entrances.
- A clarification has been added to Section 2.3.1, Schedule and Workforce.
- Grading quantities have been updated in Section 2.3.2, Site Grading and Earthwork.
- Please note, due to the nominal amount of additional acreage and grading for the additional access road and entrances (approximately 500 cubic yards), the estimated grading trips and amount of construction equipment necessary for grading will not change with the site plan updates. No updates to Table 2-3, Construction Scenario Assumptions are necessary.
- Figure 2-1, Site Plan has been updated.

2 Project Description

2.1 Overview and Location

The battery energy storage (BESS) project (Project) proposed by Compass Energy Storage LLC is a 250 MW, up to 1000 MWh facility composed of lithium-iron phosphate, or similar technology batteries (LFP), inverters, medium-voltage (MV) transformers, a switchyard, a collector substation, and other associated equipment to interconnect into the San Diego Gas and Electric (SDG&E) Trabuco to Capistrano 138 kilovolt (kV) transmission line (Point of Interconnection). The Project includes a switchyard to be owned and operated by SDG&E. The batteries will be installed in non-habitable steel cabinet-enclosures. The enclosures will have battery storage racks, with relay and communications systems for remote, automated monitoring and managing of the batteries. The BESS will also include a battery management system to control the charging/discharging of the batteries, along with temperature monitoring and control of individual battery cell temperature with an integrated cooling system. Batteries operate with direct current (DC) electricity, which must be converted to alternating current (AC) for compatibility with the existing electric grid. Power inverters to convert between AC and DC, along with transformers to step up the voltage, will be included as part of the Project. Electric energy will be transferred from the existing power grid to the Project batteries for storage and from the Project batteries to the power grid when additional electricity is needed.

Following construction, the Project will not create air emissions, will not require sanitary facilities, will generate minimal vehicle trips, and will only require water for landscape irrigation and to supply on-site fire hydrants.

The proposed Project consists of approximately 12.4 acres of an approximately 40.8-acre parcel in the City of San Juan Capistrano, California (City). The Project also includes approximately 1.836 acres of offsite components (access road). The Project site is located within the northern portion of the City, adjacent to Camino Capistrano with Interstate-5 located to the east. The Project site is utilized by the current owner, Saddleback Church, for ancillary activities and is adjacent to the Saddleback Church Rancho Capistrano to the north, mostly open space to the south, Oso Creek to the south and east, Metrolink Railroad and Interstate-5 to the east, and open space and residences outside of the City limits to the west. The SDG&E Trabuco to Capistrano 138 kV transmission line is located approximately 500 feet to the east and runs alongside the Metrolink Railroad tracks.

Upon commencement of construction, Compass Energy Storage LLC will be the owner of the battery project site and upon completion of construction, the SDG&E switchyard site will be deeded to SDG&E.

The Project site was selected given it is in an area of high energy demand near SDG&E facilities. The Project site is one of the few remaining suitable and available sites in Orange County with minimal topography and associated grading/civil improvements in immediate proximity to transmission with full capacity and deliverability –and where extensive off-site transmission upgrades are not required. The Project location requires minimal new facilities to interconnect into the SDG&E grid with only 500 feet of transmission improvements. The Project site is also located immediately adjacent to existing roadways that provides readily available access for construction and operations. The site is also located outside of sensitive biological habitat as the site has been mostly previously disturbed.

2.2 Project Components

The Project will include the development of an approximately 250 MW BESS and associated infrastructure. A BESS is comprised of stationary equipment that receives electrical energy and then utilizes batteries to store that energy to then supply electrical energy at a future time. Power released or captured by the proposed Project will be transferred to and from the SDG&E Trabuco to Capistrano 138kV transmission line via a loop-in generation transmission line that will interconnect to an SDG&E switchyard that will be constructed within the Project site. The Project will consist of LFP or similar technology batteries installed in racks and contained inside non-habitable enclosures; inverters; MV transformers; an SDG&E switchyard; a Project substation; and other associated equipment. The Project will include the following components:

- Battery Energy Storage System
- Power Inverters and Transformers
- Project Substation
- SDG&E Switchyard
- Telecommunication Facilities
- Perimeter Visual Screening and Security Walls
- Stormwater Detention Facilities
- Landscaping
- Access Road Improvements
- Site Access and Security
- Loop-In Transmission Line
- Fire Protection System
- Operations and Maintenance Area

These facilities will be remotely operated year-round and be available to receive or deliver electrical energy to the grid 24 hours a day and 365 days a year. After commissioning and during the operational life of the Project, qualified technicians would routinely inspect the battery energy storage system and conduct necessary maintenance to ensure safe operational readiness. If an issue arises, the system can remotely shut down and de-energize.

Project components are also described in the following subsections. Figure 2-1, Site Plan, shows the Project layout. Appendix 2A contains scale plan and elevation drawings depicting the relative size and location of all facilities. Table 2-1 summarizes the preliminary square footage of the major Project components.

Table 2-1. Preliminary Project Square Footage

| Component | Area (square feet) |
|---|-----------------------------------|
| Battery enclosures, inverters, and transformer yard | 321,900 |
| Project substation | 30,030 |
| SDG&E switchyard | 81,840 |
| Access Road and Miscellaneous | 138,000 148,000 |
| Total | 571,770 581,770 |

2.2.1 Battery Energy Storage System

The lithium-ion batteries (LFP) will be housed in racks similar to common computer server racks. The racks are typically made of aluminum, but sometimes may be composed of steel. The LFP technology is considered one of the safest, best understood, and most efficient methods of energy storage on the market. The proposed facility will use an LFP technology that has a long lifespan and boasts superior safety and stability characteristics. The battery racks will be designed and installed in accordance with the local seismic design requirements.

The battery racks will be housed in non-habitable enclosures. The BESS will be designed and installed in conformance with the nationally recognized National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems, along with all applicable state and City fire protection requirements. The BESS development area will be connected with an improved access road that will meet OCFA requirements. Future augmentation area will be located within the BESS yard.

A Battery Management System (BMS) is used in conjunction with the energy storage system, which can monitor the battery voltage, current, temperature, managing energy absorption and release, thermal management, low voltage power supply, high voltage security monitoring, fault diagnosis and management, external communication with PCS and Emergency Management System (EMS), and ensure the stable operation of the energy storage system.

The Project will use battery storage systems that are compliant with National Fire Protection Association (NFPA) 855, that are Underwriters Laboratories (UL) certified, and that include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system is installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules.

In addition, the site will include infra-red sensors and visual monitoring by the operations team as part of its Hazard Mitigation and Emergency Response program.

2.2.2 Power Inverters and Transformers

Compass Energy Storage LLC uses only industry-standard, nationally (and internationally) recognized equipment. The inverters are unattended, stand-alone units that operate in all conditions. They operate in both a charge mode and a discharge mode. They are UL listed for bi-directional use and are monitored and controlled remotely. There will be on-site disconnects in the case of an emergency or unscheduled maintenance. They are robust in their design and are designed to last more than 30 years with proper preventive maintenance, scheduled maintenance, and occasional major overhauls.

MV transformers and additional electrical equipment will be installed outside the BESS enclosure. Underground wires and cabling will run from the battery cable collection box to a concrete pad housing the inverter and transformer. From the MV transformer, cabling will be run to the Project substation. All outside electrical equipment will be housed in the appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and screened from view, to the extent possible, on all sides.

2.2.3 Project Substation

A Project substation will be installed that will include open rack, air insulated switch gear and the main power transformer to step up from 34.5 kV to 138 kV, as well as a pole to connect the Project substation to the SDG&E switchyard.

2.2.4 SDG&E Switchyard

An SDG&E switchyard will be installed adjacent to the Project substation that will include open rack, air insulated switch gear to deliver power to the nearby Trabuco to Capistrano 138kV transmission line. There will also be a Transmission Control Center within the switchyard area.

2.2.5 Telecommunication Facilities

The Project will include telecommunication facilities for communication with the SDG&E/CAISO facilities and to support remote Project operations monitoring. To provide for communication with SDG&E facilities, a fiber-optic cable will be used to connect the Project site switchyard with the SDG&E point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The redundant fiber-optic cable will also be installed within the Project footprint. For remote monitoring and operations communication, the Project will use local exchange carrier services, connecting to existing telecommunication fiber-optic lines owned and managed by local telecommunication providers.

2.2.6 Water Detention Structures

As discussed above, the proposed Project layout consists of access roads, substation area, and battery storage area. The batteries and other equipment will sit on top of concrete foundations and the remaining operational areas will have aggregate surfacing. The Project has been designed to meet regulatory standards and reduce potential for stormwater to be discharged off site in exceedance of existing conditions.

Stormwater runoff from the Project site currently outflows to a unchannelized section of Oso Creek. Once the Project is complete our site will drain to existing Orange County Flood Control District (OCFCD) storm drainpipes/outfalls which are located northeast of the Project site.

The onsite stormwater runoff from the Project will be detained in an underground storage chamber system located under and adjacent to the access roads, and is sized for the 100-year storm event. From here, the water will be pumped north to one of two existing OCFCD outfalls. The Project's onsite discharge pumped into the storm drains/outfalls will be incorporated into, and consistent with the OCFCD's National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region (Order No. R9-2013-0001, NPDES No. CAS0109266, as amended by Order No., R9-2015-0001) authorized by the San Diego RWQCB. The flows to these outfalls will not be increased from the existing peak flowrates.

With respect to offsite flows, based on the exiting topography, an area across 50.99 acres drains toward the Project site from the west. The proposed stormwater design is to reroute stormwater runoff from the offsite area utilizing a drainage ditch along the western boundary of the Project site, that gradually releases water to the east of the Project site. The drainage ditch is sized for the 100-yr storm event. The ditch directs the drainage south then east along

the site boundary until it discharges at the southeastern corner of the site at natural flow rates. To further recreate existing flow conditions and mitigate erosive impacts associated with this discharge, the design ties the release point to a level spreader. The level spreader distributes the stormwater runoff evenly along the entire east edge of the site, promoting even and controlled release to the existing grade. This drainage design will reduce erosion from the current site conditions as it will both ensure the flow is spread over the entire north to south portion of the site and will also reduce the tributary area by the 12.4-acre site area.

2.2.7 Perimeter Wall, Landscaping and Aesthetics

A 10-foot-tall perimeter wall around the site will be constructed that consists of a prefabricated masonry material for both visual enhancement, security and fire protection. This wall will be combined with perimeter landscaping and a 20-foot-tall visual screening fence along the northeastern perimeter to minimize or eliminate visual impacts from public views. A detailed Landscape Plan is provided in Appendix 2B.

The Project will incorporate an approximate 20-foot landscape buffer around the perimeter for screening and aesthetic enhancement. The landscape buffer will consist of a mixture of trees, shrubs, groundcover, and vines to create a varied, aesthetically pleasing visual buffer. Trees within the landscape buffer will include species native to southern California, 24-inch box size, with heights of 20 to 60 feet and widths of 15 to 40 feet, depending on the tree type. Additional information related to planting sizes, spacing, quantities, and representative tree photographs are included in Appendix 2B. All plantings will require minimal supplemental irrigation until established.

The applicant has provided visual simulations of the Project with landscaping from several public vantage points. Pursuant to CEC Application Requirements and Appendix G of the CEQA Guidelines, if the Project is located in an urbanized area the Project should not conflict with applicable zoning and other regulations governing scenic quality. As the City of San Juan Capistrano qualifies as an “urbanized area” under CEQA, the urbanized area threshold requiring an assessment of scenic quality policy and regulation consistency is the appropriate threshold to apply (and is referenced below. While visual simulations are not required to make this assessment, the applicant has offered these figures to further clarify the Project’s conformity with policies and standards governing scenic quality (See Section 4.13 herein, and See also Figures 4.13-2 and 2a and 4.13-3 and 3a)

2.2.8 Site Access and Security

Interstate-5 is the largest highway in the area and provides regional access to the Project site from the north and south. Access to the Project site will be provided via an existing access road off of Camino Capistrano approximately 0.6 miles northeast of the Project site. A new access road will be improved from the entry access road off Camino Capistrano along the east side of the property to the Project site. Road improvements shall consist of converting existing dirt roads into gravel roads and widening the roads to meet OCFA and SDG&E standards (30-foot wide). There will be three separate entrances/driveways into the BESS facility in accordance with OCFA standards. The three entrances/driveways will be located along the northern border of the BESS yard.

As noted above, perimeter walls will be installed around the perimeter of the Project site for safety and security purposes as well as for visual screening. Access will only be available to authorized personnel. A Knox box will be provided at all access gates to allow for emergency access.

Permanent motion-sensitive, directional security lights will be installed to provide adequate illumination around the substation area and points of ingress/egress. All lighting will be shielded and directed downward to minimize the

potential for glare or spillover onto adjacent properties. Security cameras will be placed on site and monitored 7 days a week and 24 hours per day.

2.2.9 Loop-In Transmission Line

A loop-in transmission line will be constructed that will transfer power to and from the proposed Project and the SDG&E Trabuco to Capistrano 138kV transmission line approximately 500 feet to the east of the Project site, which runs north-south adjacent to the railroad. The loop-in transmission line will be supported by up to 5 pole structures which will be sited to fully avoid Oso Creek. These poles consist of two poles on the Project site within the SDG&E switchyard, west of Oso Creek, and three pole on the east side of Oso Creek (two of which will be replacing existing poles); only one pole on the east side of Oso Creek will be new).

2.2.10 Fire Protection System

Compass Energy Storage LLC will use battery storage systems that are NFPA 855 Code compliant and UL certified and that include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system will be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules.

The perimeter wall discussed above will also provide fire protection – both to prevent wildfire from impacting the site and to reduce the chance of an on-site fire from escaping beyond the property. The fire wall shall also serve as a decorative wall for the Project site. In addition, fire hydrants will be installed in accordance with OCFA standards.

In coordination with City and County fire and public safety officials, the Project will prepare a detailed Hazard Mitigation Analysis and Emergency Response Plan as part of the building permit process to be approved prior to the commencement of construction (See Section 4.17, Wildfire and Fire Prevention).

2.2.11 Operations and Maintenance Area

The Project would include up to six conex containers to house equipment and materials necessary to complete operations and maintenance activities. Additionally, there would be a prefabricated mobile office trailer with self-contained water and sanitary for technicians to utilize while on-site for routine inspections and maintenance of the Project.

2.3 Construction

2.3.1 Schedule and Workforce

The physical construction/site activities of the proposed Project is expected to last up to 18 months, including 3 months of testing and commissioning. Table 2-2 includes proposed construction phasing. Please note, the specific dates included in Table 2-2 are representative and should be used to recognize the estimated work durations (i.e., workdays per phase column).

Table 2-2. Proposed Construction Phasing

| Phase Name | Start Date | End Date | Days per Week | Work Days per Phase |
|---|------------|-----------|---------------|---------------------|
| Access Road Site Preparation, Grading, and Paving | 1/13/2025 | 2/4/2025 | 5 | 16 |
| Site Preparation | 1/29/2025 | 2/12/2025 | 5 | 10 |
| Switchyard Site Preparation | 1/29/2025 | 2/12/2025 | 5 | 10 |
| Site Grading | 1/29/2025 | 3/12/2025 | 5 | 30 |
| Switchyard Grading | 1/29/2025 | 2/12/2025 | 5 | 10 |
| Battery/Container Installation | 3/13/2025 | 3/19/2026 | 5 | 265 |
| Switchyard Installation | 1/29/2025 | 12/4/2025 | 5 | 221 |
| Loop-In Transmission Line Foundation and Tower Erection | 12/29/2025 | 2/10/2026 | 5 | 31 |
| Loop-In Transmission Stringing and Pulling | 2/10/2026 | 2/24/2026 | 5 | 20 |
| Stormwater Detention Structures and Waterline Installation and Landscaping Installation | 3/13/2025 | 7/17/2025 | 5 | 90 |
| Commissioning | 3/20/2026 | 7/24/2026 | 5 | 90 |
| Decommissioning | 6/1/2050 | 1/1/2051 | 5 | 154 |

The proposed Project will be constructed by several specialized construction contractors. Construction will primarily occur during daylight hours, Monday through Saturday between 7:00 a.m. and 6:00 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule will be coordinated with the appropriate agencies and will conform to City regulations.

2.3.2 Site Grading and Earthwork

Construction activities will include excavation and grading of the Project site. Site preparation and construction will occur in accordance with all federal, state, and City zoning codes and requirements. Noise-generating construction activities will be limited to Monday through Saturday between 7:00 a.m. and 6:00 p.m. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels will be located away from noise receptors to the extent feasible. The contractor will conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed established noise levels.

The Project site grading is anticipated to include approximately ~~15,480~~ 15,980 cubic yards (cy) of cut and 74,070 cy of fill for a net of ~~58,590~~ 58,090 cy.¹

¹ Grading quantities have been adjusted to account for nominal additional grading (500 cy) that will be needed to construct the additional entrances/driveways along the northern border of the BESS yard.

All applicable federal, state, and local requirements and best management practices (BMPs) will be incorporated into the construction activities for the Project site. Beginning work on the Project site will involve preparing the land for installation of the BESS-related infrastructure, access driveways, and temporary construction staging areas. The construction contractor will be required to incorporate BMPs consistent with the City zoning ordinance and with guidelines provided in the California Stormwater Quality Association’s Construction BMP Handbook (CASQA 2019), as well as a soil erosion and sedimentation control plan to reduce potential impacts related to construction of the proposed Project. Prior to initial construction mobilization, pre-construction surveys will be performed, and sediment and erosion controls will be installed in accordance with state and City guidelines. Stabilized construction entrances and exits will be installed at driveways to reduce tracking of sediment onto adjacent public roadways.

Site preparation will be consistent with City BMPs and the South Coast Air Quality Management District Rule 403: Fugitive Dust (SCAQMD 2005). Site preparation will involve the removal and proper disposal of existing debris that would unduly interfere with Project construction or the health and safety of on-site personnel. Dust-minimizing techniques will be employed, such as placement of wind control fencing, application of water, and application of dust suppressants. Conventional grading will be performed throughout the Project site but minimized to the maximum extent possible to reduce unnecessary soil movement that may result in dust. Earthworks scrapers, excavators, dozers, water trucks, paddlewheels, haul vehicles, and graders may all be used to perform grading. Land-leveling equipment, such as a smooth steel drum roller, will be used to even the ground surface and compact the upper layer of soil to a value recommended by a geotechnical engineer for structural support. Soil movement from grading will be balanced on the site. However, Class II road base will be imported to create necessary compaction under the equipment, as determined by geotechnical testing and Project specifications.

Trenching will be required for placement of underground electrical and communication lines as well as stormwater facilities, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. After preparation of the site, concrete pads, equipment enclosures, and equipment vaults will be installed per geotechnical engineer recommendations. The SDG&E switchyard and Project substation area will have a grounding grid installed and will be covered with aggregate surfacing for safe operation.

During this work, multiple crews will be working on the site with various equipment and vehicles, including vehicles for transporting the batteries and other equipment. As the BESS enclosures are constructed, the electrical collection and communication systems will be installed. The wiring will connect to the appropriate electrical and communication terminations and the circuits will be checked and commissioned prior to operation. The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) will consist of approximately 75 to 100 workers (average). It is estimated that construction will require the vehicle trips and equipment listed in Table 2-3.

Table 2-3. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|---|----------------------------|----------------------------------|--------------------------------|---------------------------|----------|-------------|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Average Daily Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| Access Road Site Preparation, Grading, and Paving | 40 | 4 | 20 | Graders | 1 | 8 |
| | | | | Tractors/loaders/backhoes | 1 | 8 |

Table 2-3. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|---------------------------------|----------------------------|----------------------------------|--------------------------------|---------------------------|----------|-------------|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Average Daily Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| Site Preparation | 40 | 4 | 20 | Rubber-tired loaders | 1 | 8 |
| | | | | Skid steer loaders | 1 | 8 |
| | | | | Graders | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Rubber-tired loaders | 2 | 8 |
| | | | | Skid steer loaders | 2 | 8 |
| Switchyard Site Preparation | 40 | 4 | 2 | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Rubber-tired dozers | 2 | 8 |
| Grading | 40 | 4 | 80 | Graders | 4 | 8 |
| | | | | Rubber-tired loaders | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Plate compactors | 2 | 8 |
| | | | | Rollers | 2 | 8 |
| | | | | Skid steer loaders | 2 | 8 |
| Switchyard Grading | 40 | 4 | 0 | Rollers | 2 | 8 |
| | | | | Rubber-tired dozers | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| Wall Earthwork and Installation | 40 | 4 | 40 | Excavators | 2 | 8 |
| | | | | Trenchers | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Rough terrain forklifts | 2 | 8 |
| Battery/Container Installation | 40 | 20 | 8 | Air compressors | 4 | 8 |
| | | | | Cranes | 2 | 8 |
| | | | | Excavators | 2 | 8 |
| | | | | Generator sets | 4 | 8 |
| | | | | Plate compactors | 2 | 8 |
| | | | | Rollers | 2 | 8 |
| | | | | Rough terrain forklifts | 2 | 8 |
| | | | | Skid steer loaders | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |

Table 2-3. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|---|----------------------------|----------------------------------|--------------------------------|---------------------------|----------|-------------|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Average Daily Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| Switchyard Installation | 40 | 20 | 0 | Aerial lifts | 4 | 8 |
| | | | | Air compressors | 2 | 8 |
| | | | | Bore/drill rigs | 2 | 8 |
| | | | | Cranes | 1 | 8 |
| | | | | Excavators | 1 | 8 |
| | | | | Generator sets | 2 | 8 |
| | | | | Rollers | 2 | 8 |
| | | | | Rough terrain forklifts | 2 | 8 |
| | | | | Rubber-tired dozers | 2 | 8 |
| | | | | Skid steer loaders | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 4 | 8 |
| | | | | Trenchers | 4 | 8 |
| Loop-In Transmission Foundation and Tower Erection | 10 | 4 | 0 | Air compressors | 2 | 8 |
| | | | | Cranes | 1 | 8 |
| | | | | Forklifts | 2 | 8 |
| | | | | Generator sets | 2 | 8 |
| | | | | Pumps | 2 | 8 |
| | | | | Welders | 2 | 8 |
| Loop-In Transmission Stringing and Pulling | 8 | 4 | 0 | Forklifts | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Generator sets | 2 | 8 |
| Stormwater Structures and Waterline Installation and Landscaping Installation | 40 | 4 | 8 | Excavators | 2 | 8 |
| | | | | Trenchers | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| Commissioning | 160 | 0 | 0 | NA | NA | NA |
| Decommissioning | 40 | 4 | 0 | Cranes | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| | | | | Concrete/industrial saws | 2 | 8 |
| | | | | Rubber-tired dozers | 2 | 8 |

2.3.3 Construction Water Use

During construction of the proposed Project, water will be required for common construction-related purposes, including but not limited to dust suppression, soil compaction, and grading. Dust-control water may be used during ingress and egress of on-site construction vehicle equipment traffic and during the construction of the energy storage equipment. A sanitary water supply will not be required during construction because restroom facilities will be provided by portable units serviced by licensed providers.

The water used is anticipated to be supplied by purchase from the local water purveyor, Moulton Niguel Water District.

2.3.4 Solid and Nonhazardous Waste

The Project will produce a small amount of solid waste from construction activities. This may include paper, wood, glass, plastics from packing material, waste lumber, insulation, scrap metal and concrete, empty nonhazardous containers, and vegetation waste. These wastes will be segregated, where practical, for recycling. Non-recyclable wastes will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III (nonhazardous waste) landfill.

2.3.5 Hazardous Materials

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. A hazardous materials business plan will be provided. The hazardous materials business plan will include a complete list of all materials used on site and information regarding how the materials will be transported and in what form they will be used. This information will be recorded to maintain safety and prevent possible environmental contamination or worker exposure. During Project construction, material safety data sheets for all applicable materials present at the site will be made readily available to on-site personnel.

2.3.6 Hazardous Waste

Small quantities of hazardous wastes will most likely be generated over the course of construction. These wastes may include waste paint, spent construction solvents, waste cleaners, waste oil, oily rags, waste batteries, and spent welding materials. Workers will be trained to properly identify and handle all hazardous materials. Hazardous waste will be either recycled or disposed of at a permitted and licensed treatment and/or disposal facility. All hazardous waste shipped off site for recycling or disposal will be transported by a licensed and permitted hazardous waste hauler.

2.4 Operations

The BESS and all associated equipment will be remotely monitored and controlled. Qualified technicians would visit the site approximately 1-2 times per month to conduct routine inspections and maintenance as well as semi annual and annual services. Periodically, batteries and various components may be replaced or renewed to ensure optimal performance.

Operational water will be limited to water necessary for landscape irrigation and to supply on-site fire hydrants.

2.4.1 Solid and Nonhazardous Waste

The Project will produce a small amount of waste associated with maintenance activities, which could include broken and rusted metal, defective or malfunctioning electrical materials, empty containers, and other miscellaneous solid waste, including typical refuse generated by workers. Most of these materials will be collected and delivered back to the manufacturer or to recyclers. Non-recyclable waste will be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a Class III landfill.

2.4.2 Hazardous Materials

Limited amounts of hazardous materials will be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based batteries for emergency backup. Appropriate spill containment and cleanup kits will be maintained during operation of the Project. A spill prevention control and countermeasures plan will be developed for site operations.

2.4.3 Hazardous Waste

Fuels and lubricants used in operations will be subject to the spill prevention control and countermeasures plan to be prepared for the proposed Project. Solid waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the proposed Project.

2.5 Decommissioning

Decommissioning of the Project at the end of its useful life would include the removal of BESS equipment from the foundations, disconnection of wiring, and removal of site infrastructure. A Decommissioning Plan has been prepared and included as part of this application (see Appendix 2C). The facilities would be decommissioned and dismantled, and the site would be restored. The vast majority of the Project components are recyclable and the batteries and other equipment and materials will be recycled to the extent feasible to minimize disposal in landfills. The switchyard area will be deeded to SDGE and will remain in place for ongoing use and operation.

Decommissioning activities will require a workforce of approximately 20 workers and would take approximately 4 months to complete. In general, activities would include the following:

- Dismantling and removal of all aboveground equipment (battery enclosure units, Excavation and removal of all underground cabling less than 3 feet below ground
- Removal of fencing
- Break up and removal of concrete pads and foundations
- Scarification of compacted areas
- Seeding of disturbed areas with a native seed mix

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