CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

Application No.:	E-11-010
Applicant:	San Diego Gas and Electric Company
Location:	Bay Boulevard between Marina Parkway and a quarter of a mile north of Palomar Street, Chula Vista, San Diego County.
Project Description:	The project includes: (1) construct a new Bay Boulevard Substation approximately 0.5 miles south of the existing South Bay Substation; (2) demolish the existing South Bay Substation; (3) construct a 230-kilovolt (kV) loop-in; (4) extend 138 kV transmission lines; and (5) relocate 69 kV transmission lines.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

San Diego Gas & Electric Company (SDG&E) proposes to relocate and upgrade the existing South Bay Substation in Chula Vista to a new site, located on Bay Boulevard approximately 0.5 miles south of the existing substation (see Exhibit 1). The proposed project includes six

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components: (1) Construction of the Bay Boulevard Substation; (2) Demolition of the South Bay Substation; (3) 230 kV Transmission Line Loop-in; (4) 69 kV Transmission Line Relocation; (5) 138 kV Transmission Line Extension; and (6) Wetland mitigation at D Street Fill site (see Exhibits 2, 3a, 3b and 3c).

The key Coastal Act issues raised by this project are potential impacts to biological and visual resources. The project site is located on disturbed land that has supported primarily industrial uses. However, the proposed project will affect biological resources, including disturbed coyote brush, non-native grasslands and existing wetlands on and near the site (see Exhibits 6, 8 and 9). To address these impacts, **Special Condition 6** requires SDG&E to mitigate for temporary or permanent loss of non-native grassland or disturbed covote brush scrub through habitat restoration at a 1:1 ratio for non-native grasslands and 1.5:1 ratio for disturbed coyote brush scrub. To mitigate impacts to 2.45 acres of existing wetlands, SDG&E submitted a draft restoration and monitoring plan for restoration of 10 acres of tidal wetlands at the D Street Fill site in the San Diego Bay National Wildlife Refuge. Special Condition 10 requires that SDG&E submit a final restoration and monitoring plan that also includes a grading plan, a more specific planting plan, adaptive management techniques and a provision that mitigation monitoring continue until the success criteria have been met for 3 years without any remediation or maintenance activities except weeding and debris removal. To minimize the potential for adverse impacts to wildlife species, including nesting birds, raptors and other species, Special Condition 2 requires SDG&E to provide a qualified biological monitor to conduct preconstruction surveys and observe vegetation removal activities, to review all proposed temporary work areas, and to conduct nesting surveys. With these and other mitigation conditions in place, the staff recommends the Commission find the proposed project consistent with the sensitive habitat (Section 30240) and wetland (Section 30233) policies of the Coastal Act.

The proposed project also has the potential to degrade the visual resources in the vicinity of the proposed project. The visual landscape at the project site is industrial in character and dominated by existing transmission lines and structures. Removal of existing substation structures and several transmission poles would restore views of the Bay, thus enhancing the visual quality of a currently degraded area (see Exhibit 16). However, the addition of the new substation and associated infrastructure at the new site, although consistent with its industrial character, will further degrade the visual quality of this section of the bayfront as compared to existing conditions (see Exhibit 17). To address this impact, Special Condition 14 requires SDG&E to underground the last remaining overhead segment of 138kV line on Bay Boulevard, including two lattice towers and approximately 1000 feet of overhead line. Removal of these towers and overhead line will enhance views of the project site and will minimize visual impacts associated with the proposed project (see Exhibits 20a, 20b and 20c). Project opponents have requested that the Commission require that an additional 230 kV transmission line be undergrounded as part of this project, but undergrounding the 230 kV transmission line entering the substation from the east would be both infeasible and unwarranted. Thus, as conditioned, the staff recommends the Commission finds the project consistent with the public view protection policy (Section 30251) of the Coastal Act.

Commission staff recommends **approval** of coastal development permit application E-11-010, as conditioned.

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- Exhibit 3a Detailed Project Components Map (1 or 3)
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- Exhibit 4 Regional Location Map for the Proposed Mitigation Project
- Exhibit 5 Vicinity Map for Proposed Mitigation Project
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- Exhibit 7 Project Vicinity Map including location of San Diego Bay National Wildlife Refuge
- Exhibit 8 Project Wetlands Map
- Exhibit 9 Proposed Substation Site Wetlands Map
- Exhibit 10 Vegetation Communities Map for the Proposed Mitigation Project
- Exhibit 11 Memorandum from John Dixon, 1/27/14, "SDG&E Proposed "D" Street Mitigation Site"
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- Exhibit 16 Visual Simulation of Removal of the Existing South Bay Substation

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- Exhibit 17 Visual Simulation of the Proposed Bay Boulevard Substation Site
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- Exhibit 29 City of Chula Vista Resolution No. 2014-024

I. MOTION AND RESOLUTION

Motion:

I move that the Commission **approve** Coastal Development Permit E-11-010 subject to the conditions set forth in the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit E-11-010 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

- 1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

- 1. Natural Community Conservation Plan. SDG&E shall conduct activities in accordance with the Natural Community Conservation Plan (NCCP) (as implemented under an MOU between SDG&E, the United State Fish and Wildlife Service and the California Department of Fish and Wildlife signed on December 18, 1995) Operational Protocols to avoid, minimize, or mitigate impacts to biological resources.
- 2. **Biological Monitoring**. AT LEAST 60 DAYS PRIOR TO CONSTRUCTION, SDG&E shall select a qualified biological monitor or monitors and submit the monitor(s) name and qualifications to the Executive Director of the Coastal Commission (Executive Director) for review and approval. The monitor (s) shall be responsible for the following:
 - a. At least 14 days prior to any vegetation removal, the monitor(s) shall survey the site to identify any sensitive species and to recommend appropriate measures to ensure these species are protected. Results of all surveys and a list of recommended mitigation measures and/or monitoring protocols shall be submitted to the Executive Director prior to commencement of vegetation removal activities. SDG&E shall implement the monitor's recommendations unless the Executive Director finds that implementation of the monitor's recommendations is not necessary to protect sensitive species.
 - b. Prior to construction, the monitor shall review all proposed temporary work areas to determine if sensitive biological resources are present. To the maximum extent feasible, temporary work areas (cable pull sites, jack and-bore operations, etc.) shall be sited in locations that do not contain any sensitive habitat. The monitor shall submit a report to the Executive Director at least 30 days prior to construction that identifies all temporary work areas and describes any sensitive species present.
 - c. If construction activities, including but not limited to grading or site disturbance, are to occur between February 15 and September 15, a nesting bird survey shall be conducted to determine the presence of nests or nesting birds within 500 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey shall focus on special-status species, including but not limited to, California horned lark, California least tern, western snowy plover, Caspian tern, gull-billed tern, and other nesting birds that may be disturbed by human activity. All ground-disturbance activity within 500 feet of an active nest will be halted until that nesting effort is finished. The monitor shall review and verify compliance with these nesting boundaries and shall verify that the nesting effort has finished. Work may resume when no other active nests are found. Upon

completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to Executive Director.

If grading or site disturbance must occur within 500 feet of an active nest, SDG&E shall submit a noise report from a certified acoustician to the Executive Director to document the noise levels that would result from proposed construction activities at the active nests identified by the monitor. In the event the noise report indicates construction noise levels may exceed 60 dBA Leq(h) at nearby sensitive habitat areas and/or active nests, a temporary noise barrier shall be constructed to reduce noise levels to below 60 dBA Leq(h) to attenuate noise from construction equipment. If the installation of a temporary noise barrier is infeasible for specific construction activities, or if noise levels cannot be reduced below 60 dBA Leq(h), mufflers or other noise suppression devices that are more effective than the original manufacturer's specifications shall be used to help reduce noise levels. Noisemonitoring equipment shall be installed near active nests to monitor noise levels during construction in areas where noise walls are infeasible, and equipment shall be turned off when not required for active construction activities. If noise levels still exceed 60 dBA Leq(h) at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged, unless otherwise approved by the CDFW.

- d. If a raptor nest is observed during pre-construction surveys, the monitor(s) shall determine if it is active. If the nest is deemed inactive, SDG&E, under the supervision of the monitor, shall remove and dismantle the nest promptly from existing structures that would be affected by project construction. Removal of nests shall occur outside of the raptor breeding season (January 1 to July 31). If the nest is determined to be active, it shall not be removed and the monitor shall observe the nest to ensure nesting activities and/or breeding activities are not disrupted. If the monitor determines that project activities are disturbing or disrupting nesting activities, the monitor shall make recommendations to reduce the noise and/or disturbance in the vicinity of the nest, which SDG&E shall implement.
- e. Burrowing owl surveys shall be conducted in accordance with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) to determine the presence or absence of the burrowing owl within the project site limits, plus 250 feet beyond. In addition, the burrowing owl shall be looked for opportunistically as part of other surveys and the monitoring required during project construction. If the burrowing owl is absent, then no mitigation is required. If the burrowing owl is present, no disturbance shall occur within 160 feet of occupied burrows from September 1 through January 31, October 16 through March 31, or within 250 feet of occupied burrows from April 1 through October 15 and February 1 through August 31 (CDFW 19952012). During construction, any pipe or similar construction material that is stored on site for one or more nights shall be inspected for burrowing owls by the monitor(s) before the material is moved, buried, or capped.

Passive relocation of owls shall be implemented prior to construction only at the direction of CDFW and only if the previously described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). Relocation of owls shall only be implemented during the nonbreeding season (October 16 through March 31, September 1 through January 31; CDFW 19952012). Following passive relocation, the area of impact and the preserved foraging habitat with alternate burrows shall be surveyed daily for 1 week to confirm owl use of alternate burrows before excavating burrows in the impact zone. All passive relocation shall be conducted by a biologist approved by CDFW. If the alternate burrows are not used by the relocated owls, then the applicant shall work with CDFW to provide alternate mitigation for burrowing owls. If the alternate burrows are used, no other mitigation shall be required.

If it is not possible to preserve contiguous habitat on which to provide alternate burrows (e.g., on private land), and occupied owl burrows would be directly affected, then the owls shall be passively relocated without the creation of alternate burrows prior to construction (relocation should only be implemented during the nonbreeding season (September 1 through January 31)). The loss of occupied owl habitat shall be mitigated by acquiring and preserving other occupied habitat elsewhere as described in the Staff Report on Burrowing Owl Mitigation (CDFW 19952012) and the Burrowing Owl Survey Protocol and Mitigation Guidelines (The Burrowing Owl Consortium 1993), or as otherwise determined in consultation with the CDFW and the Executive Director.

- 3. **Avian Protection**. Structures shall be constructed to conform to the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines to help minimize impacts to raptors.
- 4. **Raptor Perch Deterrent Devices**. SDG&E shall install several rows of sufficient raptor perch deterrent devices (including but not limited to using spikes available from Mission Environmental) on the top of project components including buildings, structures, steel poles, and the proposed new lattice communication tower. These devices are intended to discourage raptors from landing on the surface and potentially preying on special-status avian wildlife species in the area. The condition of the raptor perch deterrent devices will be monitored on at least an annual basis and replaced if missing or showing signs of wear.
- 5. **Decumbent Goldenbush Restoration**. Impacts to decumbent goldenbush (*Isocoma menziesii*) shall be minimized by avoiding impacts to individual plants to the maximum extent practical. If avoidance is not feasible, individual plants shall be transplanted and relocated to an appropriate site (as determined by a qualified biologist approved by the Executive Director) within the project area. The plants shall be located as close as possible to their original location and in the same orientation (e.g., with the west-facing side of the plant still facing west when relocated). If relocation of decumbent goldenbush is not feasible or if transplanted individuals are unsuccessful, seeds shall be collected and used in restoration efforts following construction of the project.

6. Native Vegetation Mitigation. Where impacts to disturbed coyote brush scrub and nonnative grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, SDG&E shall identify a habitat restoration specialist to be approved by the Executive Director to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring shall include visual inspection of restored areas after 1 year. A second application shall be made if, after the second year, restoration is deemed unsuccessful. If restoration is still deemed unsuccessful after the second application, the Executive Director shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for affected sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio.

In addition, SDG&E shall mitigate for permanent impacts to disturbed coyote brush scrub at a ratio of 1.5:1 and non-native grasslands at a ratio of 1:1 for all permanent impacts that would result from construction activities. Evidence shall be provided to the Executive Director that 7.55 acres of coastal sage scrub and 9.46 acres of non-native grasslands have been deducted from NCCP credits.

- 7. **Topsoil Salvaging**. During construction, the upper 12 inches of topsoil (or less depending on existing depth of topsoil) shall be salvaged and replaced wherever open trenching activities are required through open land with native vegetation (not including graded roads and road shoulders) for the installation of the underground banks.
- 8. Noxious Weeds and Invasive Species Control Plan. PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a Noxious Weeds and Invasive Species Control Plan to the Executive Director for review and approval. The plan shall be implemented during all phases of project construction and operation. The plan shall include best management practices (BMPs) to avoid and minimize the direct or indirect effect of the establishment and spread of invasive plant species during construction that were not present prior to construction. Implementation of specific protective measures shall be required during construction, such as cleaning vehicles prior to off-road use, using weed-free imported soil/material, restricting vegetation removal, and requiring topsoil storage. Development and implementation of weed management procedures shall be used to monitor and control the spread of weed populations that were not present along the construction access and transmission line rights-of-way. Vehicles used during construction shall be cleaned prior to operation off maintained roads. Existing vegetation shall be cleared only from areas

scheduled for immediate construction work and only for the width needed for active construction activities. Noxious weed management shall be conducted annually for 2 years to prevent establishment and limit the spread of localized invasive plant species. This effort shall include weed abatement efforts targeted at plants listed as invasive exotics by the California Exotic Plant Pest Council in its most recent "A" or "Red Alert" list. Pesticide/herbicide use shall be limited to preemergent non-persistent pesticides and shall only be applied in accordance with label and application permit directions and restrictions for terrestrial and aquatic applications.

- 9. Dust Control Plan. PRIOR TO THE START OF CONSTRUCTION SDG&E shall submit a Dust Control Plan to the Executive Director for review and approval. The Plan shall include measures to control fugitive dust emissions during project construction, including: (a) pave or apply water three times daily, as needed to control fugitive dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; (b) prewater sites as appropriate up to 48 hours in advance of clearing; (c) reduce the amount of disturbed area where feasible; (d) spray all dirt stock-pile areas daily as needed; (e) cover loads in haul trucks or maintain at least 6 inches of free-board when traveling on public roads; (f) pre-moisten prior to transport and import and export of dirt, sand, or loose materials; (g) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets or wash trucks and equipment before entering public streets; (h) plant vegetative ground cover in disturbed areas as soon as possible following construction or in accordance with the landscape plan, taking into account the appropriate planting season; and (i) apply chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands that are unused for 14 consecutive days). The Plan shall describe how these measures will be implemented and monitored throughout construction.
- 10. **Final Wetland Restoration Plan**. PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a final restoration and monitoring plan for the D Street Fill Site to the Executive Director for review and approval. In addition to the components included in the draft restoration and monitoring plan, the final plan shall also include a grading plan, a more specific planting plan, adaptive management techniques that SDG&E may apply if the restoration site does not meet the interim success criteria and a provision for restoration monitoring until the success criteria have been met for 3 years without remediation or maintenance other than weeding and debris removal.
- 11. Mitigation of Temporary Wetland Impacts. PRIOR TO THE START OF

CONSTRUCTION, SDG&E shall document the existing condition of the wetland vegetation and substrate that will be temporarily affected by construction-related activities. WITHIN 90 DAYS OF PROJECT COMPLETION, SDG&E shall complete and submit to the Executive Director a post-construction survey to document actual impacts. If no impacts are documented, no mitigation will be necessary. Mitigation measures will be necessary if any impacts are detected by the 90-day post-construction survey, as follows:

a. If the 90-day post-construction survey identifies that permanent wetland impacts (i.e., alterations to hydrology or wetland vegetation that cannot be corrected in place) have

occurred, a supplemental wetland restoration plan to address mitigation of these impacts must be submitted to the Executive Director for approval within 90 days of completion of the post-construction survey. Mitigation shall be provided for any identified permanent wetland impacts at a ratio of not less than 4:1.

- **b.** If the 90-day post-construction survey identifies that temporary impacts remain, the area shall be revegetated with appropriate native plants at a 1:1 ratio. SDG&E shall submit a revegetation/restoration plan to the Executive Director for approval within 30 days of the 90-day post construction survey. This plan shall include, at a minimum, a clear statement of goals and objectives, restoration design, implementation and monitoring schedule and performance standards.
- **c.** The following goals, objectives, and performance standards shall apply for any necessary restoration:
 - i. Full restoration of all wetland impacts that are identified as temporary, but are still present beyond the 90 day self-recovery period. Restoration of temporarily affected areas shall include at a minimum, restoration to before-impact hydrology, removal of all non-native plant species, and replanting with native wetland species propagated from locally collected seeds or cuttings.
 - ii. Success criteria and final performance monitoring shall provide at least 90% coverage of areas disturbed by restoration activities within 1 year of completion of construction activities.
 - iii. Submittal, within 60 days of initial restoration work, of a post-restoration report demonstrating that the revegetated areas have been established in accordance with the approved design and implementation methods.
 - iv. A survey taken 1 year after revegetation identifying the quantity and quality of the restored plants. If the survey demonstrates that revegetation has been unsuccessful, in part or in whole, SDG&E shall submit a supplemental wetland restoration plan to the Executive Director for approval within 90 days of the 1year post-restoration survey. Mitigation shall be provided for any identified permanent wetland impacts at a ratio of not less than 4:1.
- 12. **Perimeter Wall Color Blending**. The color of the substation perimeter wall shall be chosen to blend with the existing site features (i.e., a dull grey, light brown or dull green) and minimize visual contrast with the bayfront landscape setting.
- 13. Landscaping Plan. PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a final landscaping plan to the Executive Director for review and approval. The final plan shall be in substantial conformance with the draft Landscaping Plan submitted with the Coastal Development Permit Application and shall partially screen views of the Bay Boulevard Substation and new utility poles from Bay Boulevard and locations farther east. Drought-tolerant, native species shall be used to the maximum extent possible. The landscaping plan shall be compatible with the protection of existing view corridors providing views of the Bay.

- 14. **138 kV Undergrounding**. SDG&E shall underground approximately 1000 feet of the 138 kV line as outlined in the description of the Bayfront Enhancement Alternative as part of SDG&E's August 6, 2012 submittal and shall include:
 - a. Removal of two, approximately 110-foot-tall 138 kV steel lattice towers (188700 and 188701 one tower is located west of Bay Boulevard and one tower is located within an existing parking lot east of Bay Boulevard).
 - b. Installation of one 138 kV 165-foot-tall steel cable pole in SDG&E's right-of-way (ROW) within a parking lot located east of Bay Boulevard. The new pole shall be located approximately 10 to 15 feet west of Tower 188700, which shall be removed.
 - c. Undergrounding of approximately 1,000 feet of 138 kV double-circuit duct package from the west side of Bay Boulevard to the proposed new cable pole within the existing 138 kV overhead alignment.
 - d. Installation of 138 kV transmission cable system within the newly installed underground duct package position from SDG&E's ROW on the west side of Bay Blvd to the new steel cable pole on the east side of parking lot.

PRIOR TO ISSUANCE OF THE PERMIT, SDG&E shall submit evidence to the Executive Director of CPUC approval of this additional undergrounding. If the CPUC does not approve this additional undergrounding, SDG&E shall apply for a permit amendment.

15. Stormwater Pollution and Prevention Plan. PRIOR TO THE START OF

CONSTRUCTION, SDG&E shall submit a Stormwater Pollution and Prevention Plan (SWPPP) to the Executive Director for review and approval. This plan shall identify measures to help stabilize soil in graded areas and reduce erosion including, but not limited to, silt fences, fiber rolls, street sweeping and vacuuming, storm drain inlet protection, stockpile and solid waste management, vehicle and equipment maintenance, desilting basins, berms and barriers, mulching, seeding or other measures. The SWPPP shall also include a hazardous substance management plan that identifies handling, storage, disposal and emergency response procedures related to hazardous waste.

16. Hazardous Substance Management and Emergency Response Plan. PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a project-specific Hazardous Substance Management and Emergency Response Plan to the Executive Director for review and approval. This plan shall identify measures that will reduce or avoid potentially hazardous materials for the purpose of worker safety, protection from groundwater contamination and proper disposal of hazardous materials. This plan shall include a training program to ensure workers can effectively implement hazardous materials procedures and protocols to comply with the applicable environmental laws and regulations, including hazardous materials spill prevention and response measures. The plan shall also include monitoring of all hazardous materials removal activities by an experienced environmental professional, approved by the Executive Director, with 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training. This professional shall monitor the work site for contamination (including the subsurface) and shall ensure the implementation of mitigation measures needed to prevent exposure to the workers or the public. These measures shall include signage and dust control.

- 17. **Final Hazardous Material Site Assessment**. AT LEAST 60 DAYS PRIOR TO CONSTRUCTION, SDG&E shall submit to the Executive Director for review and approval a final site assessment identifying where hazardous materials or wastes may be encountered. This assessment shall augment and consolidate previous studies performed for the project site. In the event that grading, construction, or operation of proposed facilities will encounter hazardous waste, SDG&E shall ensure compliance with all applicable federal, state and local regulations.
- 18. **Dewatering Plan**. PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a Dewatering Plan to the Executive Director for review and approval. This plan shall include a typical dewatering drawing that includes the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures and intake hose screening. The plan shall also include monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks. SDG&E shall also consult with the Regional Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering at any of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the Executive Director prior to dewatering activities.
- 19. Creek and Drainage Crossings. Creek and drainage crossings shall be conducted in a manner that does not result in a sediment-laden discharge or hazardous materials release to the water body. The following measures shall be implemented during jack-and-bore operations:
 - a. Site preparation shall begin no more than 10 days prior to initiating horizontal bores to reduce the time soils are exposed adjacent to creeks and drainages.
 - b. Trench and/or bore pit spoil shall be stored at an appropriate distance from the top of bank or wetland/riparian boundary for Telegraph Creek and the drainage along Bay Boulevard. Trench and/or bore pit, spoil storage locations shall be identified in the SPPP. Spoil shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).
 - c. Portable pumps and stationary equipment shall be located a sufficient distance away from water resources (i.e., wetland/riparian boundary, creeks, drainages). The SPPP shall identify locations for portable pumps and stationary equipment that maximize protection of water resources and identify which equipment requires secondary containment with adequate capacity to contain a spill (i.e., a pump with 10-gallon fuel or oil capacity should be placed in secondary containment capable of holding 15 gallons). A spill kit shall be maintained on site at all times.
 - d. Immediately following backfill of the bore pits, disturbed soils shall be seeded and stabilized to prevent erosion and temporary sediment barriers left in place until restoration is deemed successful.

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- 20. **Spill Prevention, Control, and Countermeasure Plan.** AT LEAST 60 DAYS PRIOR TO THE START OF OPERATIONS OF THE BAY BOULEVARD SUBSTATION, SDG&E shall submit a Spill Prevention, Control, and Countermeasure Plan to the Executive Director for review and approval. This plan shall include: discharge prevention measures; countermeasures for discharge discovery, response, and cleanup; and methods of disposal of recovered materials. In addition, the plan shall include a description of the worst-case spill and shall demonstrate that adequate equipment, personnel and protocols are in place to address the spill quickly and effectively.
- 21. **Cultural Resources.** All ground disturbing work shall be monitored by a qualified archaeologist and a Native American monitor from a culturally affiliated tribe recognized by the Native American Heritage Commission. If archaeological resources are encountered, SDG&E shall immediately stop work and notify the Executive Director to determine further actions that may include recordation, evaluation and data recovery or avoidance through preservation in place. Within 30 days of project completion, the project archaeologist shall submit a construction monitoring report to the Executive Director.
- 22. **Traffic Management Plan.** PRIOR TO THE START OF CONSTRUCTION, SDG&E shall submit a traffic management plan (TMP) to the Executive Director for review and approval. The TCP shall define the locations of all roads that would need to be temporarily closed due to construction activities, including hauling of oversized loads by truck, conductor stringing activities, and trenching activities. The TCP shall also define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard state and local guidelines. In addition, the TCP shall include provisions to stagger work shifts during the peak period of construction activity, which shall occur during the approximately 6-month grading and site development phase, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak traffic hours (7:30–8:30 a.m. and 4:30–5:30 p.m.) or as otherwise approved by the Executive Director. Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways. Construction workers shall be encouraged to carpool to the job site to the extent feasible.
- 23. Liability for Costs and Attorneys Fees. SDG&E shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the applicant against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

San Diego Gas & Electric Company (SDG&E) proposes to relocate and upgrade the existing South Bay Substation to a new site, located on Bay Boulevard approximately 0.5 miles south of the existing substation (see Exhibit 1). Specifically, the proposed project includes six components (see Exhibit 2):

- 1. Construction of the Bay Boulevard Substation
- 2. Demolition of the South Bay Substation
- 3. 230 kV Transmission Line Loop-in
- 4. 69 kV Transmission Line Relocation
- 5. 138 kV Transmission Line Extension
- 6. Wetland mitigation at D Street Fill site

1. <u>Bay Boulevard Substation.</u> This project component includes construction of a new, approximately 9.7 acre 230/69/12 kilovolt (kV) substation and related fixtures, facilities and equipment located on a 12.42-acre parcel (see Exhibit 3a). This parcel is located 0.5 miles south of the existing South Bay Substation on a former liquefied natural gas (LNG) facility site. Substation components would include: an approximately 10-foot tall concrete masonry perimeter wall; a water quality retention basin on the western border of the site; a new access road at the southern end of the site connecting the site with Bay Boulevard and providing the primary access point to the substation; three gates in the perimeter wall providing entrance into the substation; and internal access roads.

This project component would include:

230kV transmission components:

- 230 kV yard double 230 kV buses and five breaker-and-a-half bays with up to three breakers per bay. The 230 kV transmission line and transformer dead-end structure would be approximately 68 feet tall, including a 10 foot tall static mast.
- 230/69 kV transformers two 224 megavolt-ampere (MVA) transformers and associated circuit breakers, disconnects and controls. An oil containment basin would be constructed around each transformer with a capacity of at least 22,000 gallons (10% greater than the maximum oil capacity of the transformer of 20,000 gallons, ensuring at least 6 inches of freeboard).
- 230 kV transmission lines transmission lines from the east will be terminated with associated circuit breakers, disconnects, and controls within Bay 5 using overhead connections and at Bay 1 using an underground duct bank.

69 kV transmission components:

- 69 kV yard fourteen double bus breakers in a quad bus configuration would be constructed along the southern limit of the proposed site. The breakers bays would include steel structures approximately 45 feet tall. Two station lights and power transformers and associated disconnects would be located on the 69 kV steel structures.
- 69 kV lines six 69 kV lines would be constructed underground within a duct bank to terminate the 69 kV transmission lines with associated circuit breakers, disconnects, and controls.

- 69 kV capacitors two 69 kV capacitors and associated circuit breakers, disconnects, and controls.
- 69 kV ground transformers two 69 kV grounding transformers and associated circuit breakers, disconnects, and controls.

Communications tower:

• A communications tower would be constructed along the southern edge of the substation limits to facilitate monitoring of the substation operations by SDG&E. The tower would include a 75-foot tall lattice steel tower to support an 8-ft diameter microwave telecommunications disc. Communications equipment would be housed in a 12-ft wide by 20-ft long by 12-ft tall structure adjacent to the tower.

Control House:

• A transmission control house measuring approximately 32-ft wide by 50-ft long by 12-ft tall would be constructed from masonry blocks within the central portion of the site.

SDG&E estimates that construction of the Bay Boulevard substation will take approximately 18 months. In preparation for construction, approximately 94,250 cubic yards of on-site soil would be overexcavated and recompacted. Subsequent grading of the site would generate approximately 7,500 cubic yards of material for offsite disposal. To reach the desired elevation of 16-21 feet above mean sea level, SDG&E will import approximately 120,000 cubic yards of structural fill and 20,000 cubic yards of Class II base material.

2. <u>South Bay Substation Demolition</u>. The second major component of the project is the decommissioning and demolition of the 138/69 kV South Bay substation. Demolition of the substation would entail the removal of the control house, steel support structures, and electrical substation equipment. The foundations would be removed to a depth of approximately six feet below the existing grade and the substation footprint would be graded to blend in with the surrounding topography. All substation demolition work would occur within the existing substation fence line. SDG&E estimates that this work will take approximately 9-12 months.

Prior to the relocation of the South Bay substation, SDG&E would enter into a land exchange agreement with the Port and the State Lands Commission (SLC) for land with the South Bay Power Plant site. The existing substation is located on Public Trust Easement Parcel A and the related transmission and distribution facilities are located on Public Trust Easement Parcel B which are both owned by SDG&E. SDG&E would convey both those easement parcels to the SLC, and in exchange the Port and the SLC will convey a 12 acre parcel, free of the public trust, to SDG&E which will be used for the construction of the New Substation.

3. <u>230 kV Transmission Line Loop-in.</u> SDG&E proposes to loop the existing bundled-circuit 230 kV line, as well as the associated communication cables, into the Bay Boulevard substation. This would require the removal of one 165-ft tall steel cable riser pole and installation of one new 121-ft steel angle pole. The loop-in would also require construction of an approximately 1000 foot long underground interconnection on the north end of the site and an approximately

300 foot long overhead interconnection on the eastern portion of the site to the existing 230 KV transmission line. Any existing underground conduits that are not part of the interconnection work would be abandoned in place.

4. <u>69 kV Transmission Line Relocation.</u> The project includes relocation of six overhead 69 kV transmission lines and associated communication cables to the proposed Bay Boulevard substation. This would require the relocation of approximately 7500 feet of overhead line and the construction of approximately 4100 feet of underground line. The 69kV line would change from overhead to underground at five new steel cable riser poles to be installed near the proposed substation. In addition, 18 new wood transmission poles would be installed, 23 wood transmission poles, one wood distribution pole and six stub wood poles used for guying would be removed, and 22 wood transmission poles would be replaced. The existing 12 kV distribution circuit would be built on the new adjacent 69 kV poles. In areas where additional stability is required due to localized terrain or line tension concerns, stub wood poles or guy wires would be connected to the poles or a steel pole with a concrete foundation would be installed.

5. <u>**138 kV Transmission Line Extension.</u>** The project includes the connection of three existing 138 kV transmission lines. To facilitate this extension, a three-pole wood riser structure and four steel lattice structures would be removed, and one new steel cable riser pole, an approximately 3800 foot long underground duct bank and three concrete underground splice vaults would be installed. An additional 500 feet of underground duct bank would be constructed between the extension and the substation.</u>

6. <u>Wetland Mitigation</u>. To mitigate impacts to 2.45 acres of wetlands on the substation site, SDG&E proposes to restore up to 10 acres of tidal wetlands at the D Street fill site within the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge (see Exhibit 7) located approximately two miles north of the Bay Boulevard Substation Relocation site. The D Street fill site was created in the 1960s with the placement of dredge spoils from development projects in the Port of San Diego on native mudflat and vegetated marsh. As envisioned in the U.S. Fish and Wildlife Service's Comprehensive Conservation Plan, the marsh plain will be excavated to a mix of elevations to provide several different types of habitat, including mudflat, low marsh, mid-high marsh and transitional habitat to the existing uplands (see Exhibit 12) Specifically, the project is designed to create 5.9 acres of low salt marsh, 2.6 acres of mid-high salt marsh, 1 acre of mudflat, 0.5 acres of open water and 1.3 acres of uplands for a total of 11.3 acres. Additional details are included in Section D.2 of this report below.

B. JURISDICTIONAL BACKGROUND

The subject site is located within three different jurisdictions. A portion of the site is within the certified LCP jurisdiction of the City of Chula Vista, for which the City has coastal development permit issuing authority. Another portion of the site is within the Port of San Diego's jurisdiction under a Commission-approved Port Master Plan. Finally, a portion of the site is within the Coastal Commission's retained jurisdiction.

Section 30601.3 of the Coastal Act provides that when a project requires a coastal development permit from a local government with a certified Local Coastal Program and the Coastal Commission, a single, consolidated coastal development permit for the entire project may be processed by the Coastal Commission if the applicant and local government agree to that process. On January 9, 2014, the City of Chula Vista agreed to a consolidated permit under Section 30601.3 of the Coastal Act. The applicant also agreed to a consolidated permit for the portions of the project within the City of Chula Vista's jurisdiction.

In 2012, the Commission approved an LCP amendment for the City of Chula Vista and a Port Master Plan amendment, which, with the Port's incorporation of that amendment into its certified Port Master Plan, results in a portion of the project site also being within the Port. However, because the Port Master Plan does not authorize any specific development on the project site, based on Coastal Act Section 30715, the Commission issues permits for development on the Port portion of the site and the standard of review is Chapter 3 of the Coastal Act. Thus, while the proposed project spans three different jurisdictions, the Commission is authorized, based on Coastal Act Section 30715 and the consolidated permit process in Section 30601.3 to review the entire project for consistency with the Chapter 3 policies of the Coastal Act, with the City's LCP used for guidance.

C. OTHER AGENCY APPROVALS

United States Army Corps of Engineers

SDG&E has submitted an application for an individual permit. The public notice is anticipated to be published and distributed in mid- March of 2014.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is the lead agency under the California Environmental Quality Act (CEQA) for the proposed project. On October 23, 2013, the CPUC certified an EIR and granted SDG&E a permit to construct the South Bay Substation Relocation project.

D. BIOLOGICAL RESOURCES

Section 30240(b) of the Coastal Act states:

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30233(a) of the Coastal Act states:

The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1)New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

1. Environmentally Sensitive Habitat Areas

The project site is located on disturbed land that has supported primarily industrial uses. Despite the disturbed character of the site, there are biological resources on and near the site that could be adversely affected by project-related activities. The overall site consists of the existing substation site, the proposed project site and the transmission corridor between the two sites. The existing South Bay substation site is an industrial site and is bordered by industrial uses on the south, west and northwest. To the northeast and east are lands characterized in the EIR as "disturbed habitat," a small eucalyptus woodland, and roadways (see Exhibit 6). The proposed substation site is also industrial in character, but contains some disturbed vegetation including coyote brush scrub, non-native grasslands and ornamental vegetation. There are also seasonal ponds on the site. To the immediate west of the site are two salt crystallizer ponds that are part of the South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge. To the north and south are disturbed industrial lands, and to the east are Bay Boulevard and several industrial/commercial properties. The transmission corridor consists primarily of developed land, including roadways, and some ornamental vegetation along the border with Bay Boulevard.

There are no Environmentally Sensitive Habitat Areas (ESHAs) on the project site or within 500 feet of the project site. According to the EIR, "the high degree of site disturbance, the lack of sensitive habitat types, the isolation of the habitat from other areas, and the lack of rare species or suitable habitat to support rare species" contribute to the low quality of the habitat on the site. To confirm the EIR's conclusion and to inform an analysis of the biological value of existing wetlands (discussed in further detail in Section D.2 below), staff requested that SDG&E conduct a rare plant survey on the proposed substation site. Although no rare wetland plants were discovered, the 2011 survey found a single decumbent goldenbush (*Isocoma menziesii var. decumbens; CNPS 1b.2*) on the site. The decumbent goldenbush is listed by the California Native Plant Society as rare, threatened or endangered in California. A follow-up survey conducted in 2013 found that the decumbent goldenbush stand had expanded to nine plants. The Commission's biologist, Dr. John Dixon, reviewed both studies and determined that nine decumbent goldenbush plants do not qualify as ESHA (personal communication, Dr. Dixon, date 11/1/2013). He recommends, however, that SDG&E mitigate for the loss of these plants by salvaging the plants or the seeds and replanting them in an appropriate habitat.

Although there is no ESHA on the project site, there is ESHA in the general vicinity. The South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge (SDBNWR) is located immediately southwest of the proposed substation site. The northern portion of the Refuge consists of a series of saline ponds that make up a salt works operation currently managed by a private company under a lease agreement with the USFWS (see Exhibit 7). The ponds do not currently support wetland vegetation, fish or invertebrate species due to high salinity concentrations. They do, however, currently provide foraging and loafing habitat and the berms provide nesting habitat for several species of shore birds and wading birds, including several endangered and sensitive species. The USFWS adopted a Comprehensive Conservation Plan for the SDBNWR in 2006 that envisions the eventual restoration of all salt ponds in the complex to tidal wetlands which the Commission concurred in ND-070-06. Sweetwater Marsh, also part of the SDBNWR, is located a little over one mile north of the existing substation site. The City of Chula Vista's LCP designates Sweetwater Marsh as ESHA and includes several policies devoted specifically to protecting this valuable resource.

Vegetation

The proposed project would result in direct impacts, both temporary and permanent, to non-ESHA vegetation on the site. Temporary impacts include disturbance related to removal of existing poles, construction of new poles, underground construction activities to facilitate transmission interconnections, construction and improvement of access roads, and work at staging areas. Permanent impacts include removal of vegetation within the footprint of the proposed substation and new transmission poles. Most of these impacts are to disturbed nonnative vegetation communities including non-native grassland, ornamental vegetation and eucalyptus woodland; although there are some areas of disturbed native coyote brush scrub. SDG&E estimates that the project will result in the temporary impacts to 34.41 acres and permanent impacts to 13.91 acres of non-wetland vegetation. Table 1 includes a breakdown of the area of impact per vegetation community type. The project would also directly impact the decumbent goldenbush plants identified on the project site. In addition to direct on-site impacts, project-related construction activities have the potential to generate dust that could adversely impact vegetation communities in adjacent parcels.

To address these impacts, SDG&E included three applicant-proposed mitigation measures (APM) that have been adopted as special conditions of this CDP. **Special Condition 1**, requires

that SDG&E conduct activities in accordance with SDG&E's Natural Community Conservation Plan (NCCP) which includes protocols to "avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats" (EIR, p. D.5-41). **Special Condition 2** requires that a biological monitor, approved by the Executive Director, survey vegetation removal sites within 14 days of any planned vegetation removal to ensure that no sensitive species are impacted. To address impacts to the decumbent goldenbush, **Special Condition 5** requires SDG&E to avoid impacts to the decumbent goldenbush to the maximum extent practicable. If avoidance is not feasible, SDG&E will transplant individual plants to an appropriate site, as determined by a qualified biologist, within the project area. If relocation is not feasible or is not successful, SDG&E will collect seeds to use in restoration efforts following the construction of the proposed project. This condition is consistent with Dr. Dixon's recommendation to mitigate for the loss of these plants by salvaging the plants or the seeds and replanting them in an appropriate habitat.

In addition to these measures, the CPUC also required several mitigation measures related to the protection of vegetation communities which have also been incorporated into this CDP. Special Condition 6 requires SDG&E to mitigate for temporary or permanent loss of non-native grassland or disturbed coyote brush scrub through habitat restoration at a 1:1 ratio for non-native grasslands and 1.5:1 ratio for disturbed coyote brush scrub. Although these habitat areas are not considered ESHA, they can provide habitat for sensitive species and foraging habitat for raptors. This mitigation requirement is consistent with the City of Chula Vista's MSCP Subarea Plan and is explicitly included as part of the NCCP. In addition, to ensure impacts to native vegetation from construction activities remain temporary impacts, Special Condition 7 requires SDG&E to salvage and replace the upper 12 inches of topsoil wherever open trenching activities are required in areas with native vegetation. Special Condition 8 requires SDG&E to prepare and implement a noxious weeds and invasive species control plan. Also, Special Condition 9 requires SDG&E to submit a dust control plan to the Executive Director for review and approval prior to issuance of the permit. The purpose of the plan will be to describe measures SDG&E will implement to control fugitive dust during construction. This condition will ensure that impacts to the neighboring SDBNWR from fugitive dust are minimized. Finally, Special Condition 2b requires that to the maximum extent feasible, SDG&E locate temporary disturbance areas such as cable pull sites and jack-and-bore operations away from sensitive resources. SDG&E is also required to restore all areas of temporary disturbance to preconstruction conditions. With these mitigation measures in place, direct impacts to ESHAs will be avoided and indirect impacts from development in areas adjacent to ESHA are adequately mitigated to ensure against degradation of these areas.

Wildlife

Although the proposed project site is disturbed, it does have the potential to provide habitat to several general and special-status wildlife species. SDG&E's NCCP covers special-status species that have been observed on the site or have a moderate to high potential to be found on the site, including the two-striped garter snake, orange-throated whiptail, San Diego horned lizard, western spadefoot toad, northern harrier, white-tailed kite, western burrowing owl, American peregrine falcon, Belding's savannah sparrow, light-footed clapper rail, and San Diego

black-tailed jack rabbit. Western snowy plover and short-eared owls also have a moderate potential to exist on the proposed project site. Biological surveys conducted by Insignia in 2007 and 2010 did not observe any of these species but did observe several California horned larks, a California State Species of Special Concern. According to Insignia's report, the project site supports suitable foraging habitat for this species but does not contain suitable breeding habitat. Although the proposed substation site does include seasonal ponds, USFWS protocol-level wet and dry season surveys found no evidence of listed branchiopod species such as the Riverside and San Diego fairy shrimp.

The proposed project could result in both permanent and temporary adverse impacts to these species. Relocation of the proposed substation would permanently impact 8.74 acres of nonnative grassland and 4.94 acres of disturbed coyote brush, resulting in a permanent loss of potential breeding and foraging habitat. The quality of the habitat on the site is low, and as discussed above, SDG&E is required to mitigate the loss of this habitat. Thus, the project will result in no net loss of non-native grassland and covote brush scrub, and, assuming mitigation effort are successful, should improve the quality of habitat available to wildlife. Other permanent impacts to wildlife could result from vehicle traffic associated with maintenance activities and the addition of new structures to the landscape. However, maintenance activities will be sporadic and are not likely to substantially change the existing vehicle traffic patterns in the vicinity of the site. In addition, the new substation and transmission lines will be similar to the existing substation and transmission lines, and will not result in additional long-term impacts to wildlife. Furthermore, Special Condition 3 requires SDG&E to construct structures in conformance with the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines to minimize impacts to raptors. It is possible that raptors may use the proposed transmission structures as hunting perches, leading to increased predation pressure on special-status species on the site and in the neighboring SDBNWR. To address this concern, Special Condition 4 requires SDG&E to install sufficient raptor perch deterrent devices on the top of project structures to discourage raptors from landing on the surface.

Lighting, especially at night, could indirectly impact wildlife in the vicinity of the site. Night lighting can disrupt breeding patterns, increase the likelihood that nests are detected by nocturnal predators and contribute to bird strikes. The substation would be lighted by approximately fifteen 175-watt lamps placed adjacent to substation equipment. Each control structure would include four 75-watt lights that would be illuminated only if necessary in an emergency maintenance situation. Both the southern and northern entrance gates would be lighted 24 hours a day for safety and security purposes. All lights would be directed downward to minimize the potential for spillover into adjacent properties and habitats. In addition, there are exiting structures in the surrounding industrial area, including the existing substation, that are currently lighted at night. The proposed lighting is similar to the type and extent of lighting that currently exists and therefore would not result in additional adverse impacts.

Potentially more significant are temporary impacts associated with project-related construction activities. These activities could result in temporary impacts to wildlife species from creation of staging areas, operation of construction vehicles, grading and trenching activities, increased noise, dust and human activity. To minimize the potential for adverse impacts to wildlife species, **Special Condition 1** requires SDG&E to implement the operational protocols included

in SDG&E's NCCP. In addition to the specific protocols discussed above that, among other measures, define disturbance areas and restrict vehicle access, SDG&E would also be required to conduct pre-construction studies including focused biological surveys. These protocols are designed to avoid, minimize or mitigate impacts to biological resources that have been identified on the project site. **Special Condition 2a** requires SDG&E to provide a biological monitor during vegetation removal activities to prevent impacts to special-status species.

Construction of the proposed project could also adversely impact bird species on the site or in the immediate vicinity. The proposed project site does not contain much suitable nesting habitat, and as a result, the proposed project has the greatest potential to impact foraging habitat. However, most of the species likely to occur at the site, such as the northern harrier, white-tailed kite, western burrowing owl, forage over a large range. Thus, given the relatively small project footprint, impacts to these species from the loss of foraging habitat would be minimal. To further ensure that impacts to birds are minimized, Special Condition 2c requires that a nesting survey be conducted by a qualified avian biologist to determine the presence of nests within 500 feet of the project area, if construction activities occur during the nesting season (February 15-September 15). All ground-disturbance activity within 500 feet of an active nest will be halted until that nesting effort is completed. If active nests are discovered within 500 feet of the project site, SDG&E must complete a noise report that documents anticipated noise levels associated with construction activities. If noise levels exceed 60 dBA Leq(h) at a nearby sensitive habitat areas, SDG&E must erect a temporary noise barrier if feasible and/or install other noisesuppression devices to decrease the noise level to below 60 dBA Leq(h). If this is not possible, construction will be deferred until nesting activities are complete. In addition, although impacts to western burrowing owls are unlikely given the lack of suitable nesting habitat, Special Condition 2e requires SDG&E's biological monitor to survey the project site plus a 250 ft buffer area around the site within 30 days prior to the start of construction to determine the presence or absence of burrowing owls. In addition, the biologist will also survey the site during construction, including within pipes and other potential nesting sites, to determine if burrowing owls are present. If a burrowing owl is discovered, no disturbance shall occur near the occupied burrow. During the nonbreeding season, if burrows cannot be avoided, a qualified biologist may implement passive relocation at the direction of the California Department of Fish and Wildlife (CDFW) and as described in the Staff Report on Burrowing Owls issued by the CDFW in 2012. Finally, Special Condition 2b requires that to the maximum extent feasible, SDG&E locate temporary disturbance areas such as cable pull sites and jack-and-bore operations away from sensitive resources. SDG&E is also required to restore all areas of temporary disturbance to preconstruction conditions.

With these conditions in place, the proposed project is sited and designed to prevent adverse impacts to biological resources in and around the project site. Thus, the Commission finds the project, as conditioned, consistent with Coastal Act Section 30240(b).

2. Wetlands

The proposed project includes constructing a substation and replacing or constructing new transmission infrastructure on a site that currently supports seasonal wetlands. The proposed substation site is the former site of an LNG operation and includes a former retention basin that now contains four small seasonal wetlands (see Exhibits 8 and 9). Outside the retention basin

are three additional seasonal wetlands located near the base of a 230 kV tower. In total, these seasonal wetlands cover approximately 2.65 acres. In addition to these seasonal wetlands, the project site includes emergent wetlands, mulefat scrub and several ephemeral or intermittent drainages that are also considered wetlands under the definition in the Coastal Act. According to the EIR, the proposed project will result in the permanent filling of 2.45 acres of wetland and temporary impacts to 0.02 acres of wetland (see Table 2). Coastal Act Section 30233(a) requires a project that includes fill of wetlands to meet three tests. The first test requires that the proposed activity must fit into one of seven categories of uses enumerated in Coastal Act Section 30233(a). The second test requires that there be no feasible less environmentally damaging alternative. The third and last test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

Allowable Use Test

One of the seven allowable uses of fill and dredging under 30233(a) is "new or expanded port, energy, and coastal-dependent industrial facility." Since the proposed substation is a new energy facility, the Commission finds that the proposed project meets the allowable use test of Coastal Act section 30233(a).

Alternatives

The Commission must further find that there is no feasible less environmentally damaging alternative to the proposed placement of fill in wetlands. In addition to the proposed project, SDG&E and the CPUC considered various alternatives including alternate substation locations, project design alternatives, "no build" alternatives and one potentially feasible less environmentally damaging alternative proposed by SDG&E. The EIR analyzed 22 alternatives, eliminating 15 alternatives in an initial feasibility screening analysis, and carrying 7 alternatives through the full CEQA analysis. Several of the substation location alternatives were eliminated as infeasible because the parcel size was too small, the site was located too far from existing transmission infrastructure, or substation construction would require the displacement of existing uses. Two of the substation location alternatives that were carried forward in the CEQA analysis, the Tank Farm site and the power plant site would result in similar environmental impacts as the proposed project, including impacts to existing degraded wetlands and biological resources. However, constructing a substation on either of these sites would result in a greater aesthetic impact due to the sites' proximity to sensitive receptors such as Marina View Park. In addition, these substation location alternatives each pose a significant land use conflict with the Chula Vista Bayfront Master Plan (CVBMP). Large portions of both sites are designated as ecological buffers and potential habitat restoration areas, and the power plant site is also planned to be used for the new South Park.

Three other alternative substation locations, the Goodrich South Campus site, the Broadway and Palomar site and the H Street Yard Site would result in lesser impacts to biological resources, including wetlands, due to the developed nature of the sites and the lack of seasonal ponds (although impacts associated with the proposed transmission interconnection would remain the same). However, these alternatives would result in greater aesthetic impacts because of the proximity to sensitive receptors and greater land use impacts due to a lack of other industrial facilities in the vicinity. The EIR also evaluated upgrading the substation at the existing substation site. This alternative would avoid wetland impacts but would result in increased

aesthetic impacts due to the site's proximity to sensitive receptors and would conflict with the CVBMP's designation of the site for commercial recreation and the future location of a recreational vehicle (RV) Park. The EIR thus concluded that the proposed project site is the least environmentally damaging feasible alternative site for the relocated substation.

Under project design alternatives, the EIR evaluated several different substation configurations at the Bay Boulevard site. One alternative included construction of a 138/69kV substation, instead of a 230/138/69 kV substation as proposed. This alternative would result in a smaller footprint that could potentially avoid impacts to wetlands on the Bay Boulevard site. However, the EIR states, "With the planned removal of the existing South Bay Power Plant (SBPP), and without construction of a new substation that can accommodate a 230 kV system, service reliability to the area now served by the South Bay Substation would be materially reduced, possibly requiring involuntary shedding of load in the South Bay region (EIR p. ES-21)." Another alternative, called the GIS Substation Alternative, would use gas-insulated switchgear (GIS) technology to reduce the overall footprint of the substation to 4.4 acres, from 9.7 acres as proposed. The GIS substation would include two metal buildings used to house the GIS equipment and several steel A-frame structures. The buildings would be painted in a neutral color but would be up to 50 feet tall. The smaller footprint of the GIS substation would allow avoidance of the wetlands located on the proposed substation site and require less earthwork and imported fill. Similar to the proposed air-insulated substation, the GIS substation would be constructed to support 230, 138 and 69 kV transmission, thus providing adequate power to meet the needs of South San Diego Bay. However, the GIS alternative would result in additional visual impacts due to the presence of the buildings and additional overhead transmission lines and structures required for this type of substation. The GIS technology requires the use of SF_6 gas, a very potent greenhouse gas. The equipment would use approximately 200,000 tons of SF_6 annually, and the equipment has a leak rate of approximately 0.1 percent annually. In addition, although SDG&E would implement mitigation strategies including proper record keeping and reporting and a leak detection and repair program to minimize accidental releases, there would be a risk of a significant release of SF_6 . Finally, the GIS alternative would cost over 3 times as much as the proposed project. When all of these factors are taken into consideration, the EIR concluded, and the Commission agrees, the GIS alternative would not be less environmentally damaging than the proposed project.

The EIR also analyzed several "no build" alternatives. These alternatives all sought to meet the power needs of South San Diego Bay without constructing a new substation. For example, the EIR analyzed alternatives that used various combinations of transmission load management and energy conservation to achieve the project goals. These alternatives all have the environmental benefit of avoiding impacts to wetlands and other biological resources on the Bay Boulevard site. However, all of these alternatives were rejected during the screening analysis because they were not feasible on a scale that would provide adequate power to the region (as determined by the California Independent Service Operator (CAISO)) and would not replace the aging and obsolete equipment at the existing substation. The EIR also evaluated the "No Project Alternative" in which the existing substation would continue to operate in its existing location but without power generation from the South Bay Power Plant that has since been decommissioned and demolished. Under this alternative, to address the increase in South Bay load, portions of the 69 kV network would need to be reconductored to support the inadequate 138 kV system. To accomplish this,

SDG&E would need to substantially increase the ratings on some 69 kV lines, thus increasing the likelihood of equipment failure and power loss in the South Bay Region. In addition, the No Project Alternative would conflict with the Commission-approved CVBMP that envisions an RV park at the existing substation site. For these reasons, the EIR rejected the No Project Alternative as infeasible.

In conclusion, although SDG&E and the EIR evaluated several alternatives, these alternatives are either infeasible or would result in other significant coastal impacts and would not be less environmentally damaging than the proposed project. Thus, the Commission finds that the proposed project meets the second test of Coastal Act Section 30233(a).

Mitigation

The final requirement of Coastal Act Section 30233(a) is that filling and dredging of wetlands may be permitted if feasible mitigation measures have been provided to minimize any adverse environmental effects. In this case, the proposed project will result in the permanent fill of 2.45 acres of wetlands at the proposed site. To mitigate these impacts, SDG&E has proposed to create 10 acres of tidal wetlands at the D Street fill site, located about 2 miles north of the proposed project (see Exhibits 4 and 5). The D Street fill site is part of the Sweetwater Marsh Unit of the SDBNWR and was identified in the USFWS Comprehensive Conservation Plan as a site for intertidal wetland restoration. The site was created in the 1960s with the placement of 4-8 feet of dredge spoils from port development projects on native mudflat and marsh areas. A small square bay was carved out of the southeast boundary of the site in 1990 as part of an open water mitigation project. The site is highly disturbed with the exception of a narrow band of coastal salt marsh along the edges of the square bay (see Exhibit 10). Vegetation communities found on the site include southern coastal salt marsh, non-tidal disturbed southern coastal salt marsh vegetation, alkali playa and Baccharis sarothroides scrub. Biological surveys of the site found two plant species listed by the California Native Plant Society, beach golden aster (Heterotheca sessiliflora) and coast woolly-heads (Nemacaulis denudate) in the scrub habitat. The site also has the potential to support several sensitive bird species, such as the Belding's savannah sparrow (Passerculuis sandwichensis beldingi), and the wandering skipper (Panoquina errans), a sensitive butterfly species. In addition, the aquatic portion of the site has some potential to support federally threatened green sea turtles and pinnipeds, existing salt marsh and salt marsh vegetation could support foraging marsh bird species, and upland areas might be used by western burrowing owls. The existing habitat is extremely low quality for all of these species. Although individuals may experience some temporary disturbance associated with construction of the wetlands, the proposed tidal salt marsh restoration will dramatically improve the amount and quality of habitat available to these species, providing a net benefit to sensitive plant and wildlife species.

Available Mitigation Credit

Although highly disturbed, portions of the D-street fill site support wetland indicator species. This is important because existing wetlands on the site may decrease the amount of mitigation credit SDG&E receives from restoring the site. To determine the specific acreage of wetlands present on the site, the applicant's consultant conducted a jurisdictional wetland delineation based on field observations from May 29, 2011. This delineation indicated that the site included 2.4 acres of non-tidal habitat characterized as "disturbed salt marsh." Commission biologist, Dr.

John Dixon, reviewed the delineation and conducted a site visit on October 28, 2013. In a technical memo, included as Exhibit 11, Dr. Dixon stated that,

Although there is considerable bare ground and ice plant and other upland species are relatively abundant, there are also scattered patches of the upper salt marsh species alkali heath and salt grass, both of which are wetland indicator species. Based on topography many of those areas seemed to me unlikely to have wetland hydrology.

Based on this observation, Dr. Dixon recommended that the vegetation at the site be remapped to distinguish areas with predominantly upland vegetation from areas with predominantly wetland indicator species. A revised jurisdictional delineation was conducted by Nordby Consulting and was submitted in January 2014. The revised delineation did not accomplish what Dr. Dixon had recommended but did conclude that the entire site is upland because it is too high to be influenced by tidal waters or by ground water. However, Nordby also documented indicators of near surface hydrology and clay layers that could potentially retain precipitation and facilitate germination and growth of wetland species. Dr. Dixon reviewed the revised delineation and concluded that:

...strong evidence of upland conditions was not presented and, in the absence of more detailed vegetation mapping, I conclude that the area mapped as "non-tidal disturbed southern coastal salt marsh" has a predominance of wetland indicator species and is, therefore, presumptive wetland.

Based on this conclusion, Dr. Dixon determined how much credit SDG&E should receive from restoring the site. In his memo, he states:

Dredging a wetland for restoration purposes is one of the allowable uses under Section 30233 of the Coastal Act. However, the Commission only assigns mitigation credit for the proportional increase in wetland function that results from converting one wetland type to another.

To determine the "proportional increase in wetland function" related to restoration of the D Street Fill site, Dr. Dixon estimated a functional lift based on the change in functional value, relative to natural southern California tidal marshes, for vegetation, fish, birds, and the invertebrates that provide prey for fish and birds. He calculated that the average functional lift from the site is 0.9 and thus the mitigation credit for restoring 1.9 acres of the non-tidal disturbed salt marsh to tidal salt marsh would be reduced by 0.19 acres (see Exhibit 11 for additional details). The effect of this functional lift determination is to decrease the overall credit available from the 10 acre site by 0.19 acres to 9.81 acres. Based on a 4:1 mitigation ratio for an impact of 2.45 acres, SDG&E would be required to restore 9.8 acres of tidal wetlands. Although this leaves very little margin for error, SDG&E's proposed mitigation project at the D Street fill site appears sufficient to meet the mitigation requirement. Furthermore, although SDG&E has proposed to restore 10 acres of tidal wetlands, the proposed mitigation site is actually 11.3 acres (1.3 acres of the site are planned as upland areas). Thus, if necessary, SDG&E can expand the mitigation footprint within the site to increase the likelihood that the site meets the performance

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criteria included in the restoration plan and receives full mitigation credit for the restored wetland.

Proposed Wetland Restoration Plan

As part of its CDP application, SDG&E submitted a draft restoration and monitoring plan for the D Street fill site. This plan proposes to restore a variety of tidal marsh habitats, including low marsh, mid-high salt marsh, mudflat and open water habitat. The restored wetland will include two primary channels and a series of secondary and tertiary channels to deliver tidal water to the restoration areas. The plan also includes 1.3 acres of upland habitat to allow for eventual wetland migration associated with sea level rise. Exhibit 12 shows the proposed restoration plan, including acreages, for the D Street fill site. The draft restoration plan also includes a list of plant species to be planted within each habitat type, including the approximate spacing between plants and the method of establishment. SDG&E does not plan to install an irrigation system, but will provide supplemental watering to the higher marsh and transition zones as needed using a water truck.

The draft restoration plan also includes an implementation plan and measures for minimization and avoidance of sensitive resources. Key components of this plan include:

- SDG&E will hire a qualified habitat restoration ecologist and a licensed landscape contractor to manage project installation, maintenance and monitoring.
- Prior to the start of construction, a qualified biologist will conduct a focused rare plant survey to document any sensitive plant populations. If sensitive species are identified, SDG&E will first try to avoid the species, but if this is not feasible, the plants and/or seeds will be salvaged and replanted within the restoration area.
- Excavation and contour grading will occur between September 1 and February 1 to avoid the bird and wandering skipper breeding season.
- Some construction activities using hand labor may occur within the nesting season. In this case, pre-construction surveys will be conducted to identify sensitive resources and non-disturbance buffer zones will be determined in coordination with the USFWS and CDFW.
- To avoid potential sediment and erosion issues, excavation and hauling work will be postponed if the weather forecast calls for a greater than 40% chance of rain.
- SDG&E will implement all erosion control measures outlined in the SWPPP.
- SDG&E will implement the cultural resources mitigation measures listed in the SDBNWR CCP during all ground-disturbing activities. These measures include:
 - Consultation and concurrence with the State Historic Preservation Office.
 - Consultation with federally recognized Native American tribes with a cultural affiliation to the D Street fill site and other interested parties.
 - A Memorandum of Understanding between USFWS and tribal entities will be created and used to implement the inadvertent discovery clause found in the Native American Graves Protection and Repatriation Act.
- All ground-disturbing activities will be monitored by a qualified archeologist and Native American representative. If cultural resources are discovered, work will be suspended until the discovery is assessed and treatment is determined.

Monitoring of the restoration site is a critical component of the restoration plan. SDG&E proposes to begin monitoring by a qualified restoration ecologist during construction and planting to ensure that installation is carried out in accordance with the restoration plan. After initial wetland construction and planting, the restoration ecologist will work with the installation contractor to conduct regular maintenance including removal of invasive species during a 120-day plant establishment period. At the end of this period, a compliance monitoring period for at least 5 years will begin, including both qualitative and quantitative monitoring. Qualitative monitoring will occur at least quarterly during the first two years, semi-annually during years three and four and annually during year five and will include assessment of the overall site conditions, general condition of plants (including health/rigor and mortality), seed germination rates, native plant recruitment and identification of barriers to success. Quantitative monitoring will occur on a similar schedule and will include, at a minimum, point-intercept transects, diversity belt transects, and a condition-based rapid assessment for the restoration area and a reference site. Photo stations will also be set up at representative points to document change over the course of the monitoring period.

SDG&E will monitor the restoration site to determine if the restoration has met the required performance standards. These standards or success criteria, shown in Table 3, are based on the composition of native salt marsh habitat. In addition, SDG&E will also monitor the progress of the restoration area using a condition-based (California) rapid assessment method (CRAM). This method will allow SDG&E and staff to compare the performance of the restored wetland against similar types of wetlands all over California. SDG&E will provide a post-installation report and annual monitoring reports describing the methods and results of the monitoring program. If the restored wetland does not meet the performance standards, SDG&E, in consultation with staff, will implement remedial measures to correct any issues impacting success of the site. An adaptive management program will also be implemented throughout the installation and monitoring period to address any issues as they arise.

The components of the restoration program presented above were included in a draft restoration and monitoring plan submitted to staff in August 2012. **Special Condition 10** requires that SDG&E submit a final restoration and monitoring plan for the D Street Fill site for review and approval by the Executive Director. In addition to the elements included in the draft plan, the final plan shall also include a grading plan, a more specific planting plan and adaptive management techniques that SDG&E will apply if the restoration site does not meet the interim success criteria. To help insure that the restoration is self-sustaining, **Special Condition 10** also requires that monitoring continue until the success criteria have been met for 3 years without any remediation or maintenance activities except weeding and debris removal.

The proposed project would result in temporary impacts to 0.02 acres of wetlands. To ensure that these wetland areas are fully restored to their initial condition, and thus long-term impacts are avoided, the Commission is requiring **Special Condition 11**, which requires SDG&E to document the existing condition of wetland vegetation and substrate that will be temporary and to conduct a 90-day post-construction survey to identify impacts to vegetation and substrate that have not restored naturally in the 90 day period. If permanent impacts are identified, including any alterations to hydrology or wetland vegetation that cannot be corrected in place, SDG&E is required to submit a supplemental wetland restoration plan within 90 days of the post-

construction survey that includes wetland mitigation at a 4:1 ratio. If temporary impacts are identified after 90 days, SDG&E is required to submit a revegetation plan that includes replanting appropriate native species at a 1:1 ratio and monitoring the success of revegetation. If impacts remain after one year, SDG&E is required to submit a supplemental wetland restoration plan that includes wetland mitigation for any remaining permanent impacts at a 4:1 ratio. These requirements will ensure that impacts to wetlands anticipated to be temporary are in fact temporary, or in the unlikely event that permanent impacts do occur, these impacts will be adequately mitigated.

The proposed restoration, along with additional requirements included in Special Condition 10 and survey and reporting requirements included in Special Condition 11 are expected to ensure adequate mitigation of permanent and temporary impacts from project-related dredging and filling. Thus, with the inclusion of the D Street fill mitigation project and the imposition of Special Conditions 10 and 11 of this permit, the Commission finds that the third test of Coastal Act section 30233(a) has been met.

For the reasons described above, the Commission finds the project, as conditioned, consistent with Coastal Act Section 30233(a).

E. VISUAL RESOURCES

Section 30251 of the Coastal Act states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

The following section of the Chula Vista Bayfront LCP can be used as guidance, because the Commission has found it reflects its past interpretation of how specific planning has occurred for the project area in a manner consistent with Chapter 3 policies:

Land Use Plan Policies

Objective GD.2 states:

Utilities serving the bayfront shall be undergrounded.

Policy GD.2.A states:

The City will require undergrounding of utilities on private property and develop a priority based program of utility undergrounding along public ROWs.

Policy VW.1 states:

Public views shall be protected and provided from freeways, major roads, Bayfront perimeter. Policies regarding each of these categories are provided below.

Views from the Freeway and Major Entry. Development shall provide an attractive view onto the site and establish a visual relationship with San Diego Bay, marshes, and bayrelated development. High-rise structures shall be oriented to minimize view obstruction.

Views from Roadways within the Site (particularly from Bay Boulevard and Marina Parkway to the marshlands, San Diego Bay, parks, and other bay- related development). Development and activity sites shall preserve a sense of proximity to the bay and marshlands.

Views from the Perimeters of the Bayfront Outward. This view is primarily a pedestrianoriented stationary view and more sustainable. These views will be experienced from various parts of open space and pathway system locations and will enable persons to renew visual contact at close range with San Diego Bay and marshlands. Some closerange pedestrian views may be blocked to protect sensitive species in the National Wildlife Refuge.

High- rise Development Vistas. The limited high-rise development within the LCP Planning Area shall maximize the panoramic view opportunities created with increased height.

Policy VW.1.N states:

There are existing public bay views from Bay Boulevard between "E" Street and "F" Street, and between "L" Street and Palomar Street. At the time development is proposed in these locations, the City shall identify public view corridors that will ensure public views of the bay from Bay Boulevard are protected and preserved. The City shall coordinate with the Port District to protect public views from development on parcels within the Port District's jurisdiction.

Specific Plan policies:

Section 19.85.006. Form and appearance.

A. Form and Appearance Objectives. The following objectives shall serve as guidelines for use of land and water resources to preserve a sound natural environment:

1. Preserve existing wetlands in a healthy state to ensure the aesthetic enjoyment of marshes and the wildlife that inhabits them.

Change the existing industrial image of the Bayfront and develop a new identity consonant with its future prominent public and commercial recreational role.
 Improve the visual quality of the shoreline by promoting public and private uses that provide proper restoration, landscaping, and maintenance of shoreline areas.
 Remove, or mitigate by landscaping, structures or conditions that have a blighting influence on the area.

5. Eliminate or reduce barriers to linking the Bayfront to the rest of western Chula Vista and establish a memorable relationship between the Bayfront (and the areas and elements that comprise it) and adjoining areas of Chula Vista, the freeway, and arterial approaches to the Bayfront (see Exhibit 6, Form and Appearance Map).

Section 19.85.006.B Specific Provisions:

9. View Points. Development of the Bayfront shall ensure provision of three types of views:

a. Views from the freeway and major entry: ensure a pleasant view onto the site and establish a visual relationship with San Diego Bay, marshes, and Bay-related development.

b. Views from roadways within the Bayfront (particularly from Marina Parkway to the marshlands, San Diego Bay, parks, and other Bay-related development, street end views of the Bay from D Street, E Street, F Street, L Street, and Palomar Street, and the views of the Bay that will be created from the H Street corridor): locations shall preserve a sense of proximity to the Bay and marshlands.

c. Views from the perimeters of the Bayfront outward: views that are primarily pedestrian oriented, stationary, and more sustained should be experienced from parts of the open space and pathway system and enable viewers to renew visual contact at close range with the Bay and marshlands.

The proposed project has the potential to result in both beneficial and adverse impacts to the visual quality of the Chula Vista bayfront. The project includes demolition of the existing South Bay substation, construction and operation of the proposed Bay Boulevard substation, and some changes to the transmission lines and structures in the Bay Boulevard corridor. Both the existing and proposed substation sites are located in areas currently dominated by industrial facilities, including the former site of the South Bay Power Plant, a former liquefied natural gas (LNG) site and transmission lines (see Exhibit 2). Bordering these facilities to the east is Bay Boulevard, a two-lane arterial road that is fronted by low-rise commercial/office buildings to the east of the road. Interstate 5 is located father to the east. To the west of the existing substation site are additional industrial uses and the banks of San Diego Bay. To the west of the proposed substation site are salt production ponds that are part of the South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge (SBNWL) (see Exhibit 7).

The visual landscape surrounding the existing and proposed substation sites is dominated by industrial facilities and transmission lines. The proposed substation site can be characterized as disturbed with concrete foundations and a constructed berm associated with the former LNG site and several aboveground transmission lines prominent in the visual landscape. The existing South Bay substation contains large, lattice steel transmission support structures and equipment and almost no vegetation. Intermittent views of the Bay are available along Bay Boulevard between existing vegetation and industrial structures. Views from I-5 in this area are similarly affected by transmission infrastructure and industrial structures, although existing vegetation does provide partial screening of these facilities. The South Bay Power Plant was the focal point

of the landscape along this section of the bayfront for many years. However, this power plant has been decommissioned and is in the process of being demolished and the site remediated.¹

The nearest public park and recreation areas (Chula Vista Bayfront Park and Marina View Park) are located about a third of a mile north of the existing South Bay substation. Existing transmission lines are visible from this location but views of the existing substation are limited due to intervening landscape and proximity. Views of the existing and proposed sites as well as transmission infrastructure are completely open to boaters and others recreating on the Bay. Across the Bay, scenic vistas are available from a scenic turnout on SR-75, located approximately 1.8 miles west of the proposed substation site. Development on the eastern shore is visible from the scenic turnout, although specific structures are hazy and indistinct and do not serve as a visual focal point in the landscape.

The proposed project site is within the Chula Vista Bayfront Planning area boundary. This planning area has been the focus of a multi-year, broad-based effort to reenergize the Bayfront area. On August 9, 2012, the Coastal Commission unanimously approved amendments to the Chula Vista ("City") Local Coastal Program and the Port District's Master Plan that together enact the Chula Vista Bayfront Master Plan (CVBMP). The approved Master Plan changes land use designations and policies to accommodate the redevelopment of over 550 acres of Bayfront property with a variety of uses, including park, open space, hotel and conference space, office, retail and residential units (see Exhibits 13 and 14). Numerous stakeholders, including the City, Port, developers, environmental, labor and business groups, and local residents worked together for more than a decade to ensure that the resulting Master Plan met the needs of the community and is fully consistent with the Chapter 3 policies of the Coastal Act.

Several policies in the CVBMP seek to enhance the visual experience of the bayfront. The CVBMP establishes specific public view points, including views from the freeway and major entry points to the bayfront and views from roadways within the bayfront that should be protected. In the vicinity of the proposed project, this includes views from Bay Boulevard and from major entrypoints to the bayfront such as L Street to the north of the project site and Palomar Street to the south of the project site (see Exhibit 15). Currently, as discussed above, views from Bay Boulevard are characterized by industrial structures, transmission lines and intermittent views of the Bay. Views from the L street gateway are dominated by the former site of the SBPP and the existing South Bay substation. Views from Palomar Street are dominated by commercial buildings located on Palomar St. and both sides of Bay Boulevard and the salt works operation located on the SDBNWR salt ponds.

The proposed project includes (1) removal of the existing South Bay substation from the viewshed, (2) construction and operation of the proposed Bay Boulevard substation, and (3) changes in the overhead transmission lines along the bayfront. The EIR evaluated construction

¹ The Commission approved a two-phase demolition of the South Bay power plant. In June 2012, it approved CDP #E-11-027 allowing demolition of most above-ground structures, which the plan owner, Dynegy. completed in 2013. In January 2014, it approved CDP #E-12-015 allowing demolition and removal of many of the remaining below-ground structures, which Dynegy expects to complete over the next year. Ongoing remediation and redevelopment will be the subject of future coastal development permits.

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and operation impacts on visual resources resulting from each piece of the project. Each component is discussed in detail below.

Removal of the existing South Bay Substation

In the short-term, removal of the existing South Bay Substation may result in adverse impacts related to construction. However, once the substation is dismantled and all structures are removed, the visual landscape in this area will be dramatically improved. Removal of the substation is expected to take 9-12 months. During this time, construction equipment, materials and workers will be present and visible on the site. Views of the site from Bay Boulevard will be mostly screened, but at certain elevated locations (i.e., intersection of L Street and Bay Boulevard), motorists and pedestrians would have an unobstructed view of the site. However, these visual impacts will be temporary. To minimize impacts to the transmission system, SDG&E may need to perform some construction activities at night that would likely require night lighting. However, these impacts would not be significant given the temporary nature of the impact, the industrial character of the site and the current night lighting of nearby industrial and commercial buildings and I-5.

Permanent visual impacts from the removal of the South Bay Substation would be beneficial and consistent with the local government's efforts to enhance use of the Chula Vista Bay front. The existing substation site is now within the Port's jurisdiction, and the Port Master Plan identifies it as the future location of a 237 space RV park surrounded by green space and adjacent to a large 24 acre open space park with visitor-serving amenities. Views of the Bay from the L Street gateway and from Bay Boulevard will be significantly enhanced with the removal of the steel structures and other infrastructure associated with the existing substation (see Exhibit 16). In addition, several transmission poles located on the existing substation site will be removed, opening up views of the Bay from Bay Boulevard and L Street. Removal of the existing substation would result in enhanced views of and access to the Bayfront from the surrounding land uses and viewing locations.

Construction and Operation of the Bay Boulevard Substation

Similar to removal of the existing South Bay substation, visual impacts from construction of the proposed Bay Boulevard substation would be minor and temporary. Construction of the proposed substation is expected to take approximately 18 months. During this time, construction equipment, materials and workers will be present and visible on the site. The greatest visual impact would be to motorists traveling on Bay Boulevard. Most views of the site would be screened by vegetation and existing landforms, although breaks in the screening would afford some views of the construction site and project vehicles entering and existing industrial character of the site and the relatively short time frame for construction, these impacts would be minor. Also similar to the removal of the South Bay substation, SDG&E may need to perform some construction activities at night that would require night lighting. However, visual impacts from night lighting would not be significant given the temporary nature of the impact, the industrial character of the site and the current night lighting of nearby industrial and commercial buildings and I-5.

Operation of the proposed Bay Boulevard substation will add additional structures and transmission lines to the viewshed, although the area is generally characterized by industrial development. The proposed substation would add additional steel vertical and horizontal forms to the project site that vary in height from approximately 10 feet to 75 feet. These structures would be prominent in the viewscape (see Exhibit 17). Westward views of San Diego Bay from Bay Boulevard would be partially obstructed. The proposed structure would, however, be smaller in vertical scale than the existing transmission poles and lines on the site. The proposed project also includes a 10 ft tall masonry perimeter wall surrounding the substation that will screen some of the substation features close to the ground. The wall is set back about 200 ft. from Bay Boulevard, so views toward the Bay will not be completely blocked by the wall. SDG&E has identified two public view corridors across the proposed substation property that will provide unobstructed views of the Bay from Bay Boulevard. The first corridor is north of the proposed substation, between the perimeter wall and the edge of the property. This corridor is approximately 30 feet in width and would allow views of the Bay from Bay Boulevard facing west. The second corridor is located south of the proposed substation, again between the perimeter wall and the edge of the property. Here, the corridor extends between 30 and 130 feet and provides views of the Bay from Bay Boulevard facing southwest.

Changes to Overhead Transmission Lines

The proposed project includes several mostly minor changes to the existing transmission lines and structures along Bay Boulevard. The project area is currently industrial in character and has several existing transmission structures and lines, including six aboveground 69 kV lines, two 138 kV lines – one overhead (from the east) and one underground (north of the site) and two 230kV lines – one overhead (from the east) and one underground (north of the site) (See Exhibits 3a, 3b, 3c, 17 and 18). The proposed project would include installing 18 new poles, removing 36 existing poles and replacing 23 existing poles on each of the different lines, resulting in a net reduction in transmission poles. The proposed project would not add new transmission lines to the area, but would either connect existing lines into the substation or allow existing lines to bypass the substation.

The proposed changes to transmission lines and structures have the potential to result in adverse visual impacts. Visual impacts from construction-related activities would be similar to those described above. Proposed transmission line improvements would use structures and materials already present at the site. Several wooden poles would be replaced with steel poles (see Exhibits 3a, 3b and 3c). At the existing substation site, several existing wooden poles that connect various transmission lines into the substation will be removed, which, along with removal of the substation, will dramatically improve views of the existing substation site from Bay Boulevard and the L Street gateway (see Exhibit 16). The proposed connection of the 230kV line into the proposed relocated substation from the east and the 138 kV line bypass would add additional clutter to views of the relocated substation site from Bay Boulevard (see Exhibit 17). However, views from the Palomar Street viewpoint would not be substantially changed (see Exhibit 19).

Additional Undergrounding of Transmission Lines

In addition to the underground installation of transmission lines included in the proposed project, two additional undergrounding proposals have been introduced. During the CPUC process, SDG&E proposed a project alternative called the "Bayfront Enhancement Fund Alternative." This alternative is identical to the proposed project but included a five million dollar fund to be used on additional bayfront enhancements. Under this alternative, SDG&E proposed that 2.5 million dollars be used to remove additional existing overhead transmission facilities on the 138 kV line. Specifically, SDG&E would remove two 110-ft tall steel lattice towers, install one steel cable pole in a parking lot across Bay Boulevard, and underground a 1000-ft section of the 138 KV line under Bay Boulevard. SDG&E provided a visual simulation of the Bayfront Enhancement alternative, shown in Exhibits 20a, 20b and 20c. The additional funds would be allocated by a group of agency and community stakeholders and could be used for creation, restoration or enhancement of wetlands, coastal access enhancements, and habitat management and protection efforts. This alternative was proposed to address visual impacts associated with the project and "generate significant visual benefits" (SDG&E 2012). The CPUC analyzed this alternative in the EIR and rejected it because it "would not reduce or avoid significant effects of the project and, therefore, would not provide more meaningful data about ways to lessen or avoid project impacts deemed significant" (EIR p. C-55). Because the CPUC did not approve this alternative, SDG&E is no longer proposing to include bayfront enhancement. However, the Chula Vista City Council has expressed continued support for this alternative (see Exhibit 29).

In addition to the Bayfront Enhancement Alternative, another undergrounding alternative was proposed by Inland Industries, the owner of the commercial property across Bay Boulevard from the proposed substation site. To address visual impacts associated with the proposed substation, Inland Industries has proposed undergrounding either 300 ft. or 1000 ft. of the existing 230kV tie line coming into the substation from the east. Under the first alternative, the 230kV line would cross over Bay Boulevard and transition to an underground line approximately 300 feet east of the substation, but still on the SDG&E parcel. Under the second alternative, the 230kV line would transition to an underground cable in the back of an existing parking lot approximately 1000 ft. from the substation and across Bay Boulevard. Inland Industries claims that undergrounding the 230kV line coming into the substation would eliminate the need for several of the taller substation structures, significantly lowering the profile of the substation. This claim, however, is unsubstantiated. Visual simulations of these alternatives, provided by Inland Industries and including the lower profile substation, are shown in Exhibit 21.

Inland Industries claims that undergrounding the 230 kV line as described above is necessary for two reasons: (1) to mitigate the significant aesthetic impacts from the proposed project in order to find the project consistent with visual protection policies of the Coastal Act and the City's approved LCP, and (2) to mitigate the impacts to community values that would unfairly deprive the residents of southern Chula Vista of public access to bayfront amenities. The CPUC considered both these claims at several points during the CEQA and permitting process. In its final decision, issued October 17, 2013, the CPUC rejected Inland Industries' claims that the proposed project did not result in significant visual impacts, reaffirming the EIR's findings that the proposed project did not result in significant visual impacts and was consistent with the visual protection policies of the Coastal Act and the City's LCP. The CPUC also rejected Inland Industries' community values argument stating that while community values are "an important and necessary consideration in selecting among project alternatives...they are not a basis under

CEQA for imposing conditions that are not required to mitigate the project's significant environmental impacts" (CPUC 2013). Furthermore, the CPUC found that:

...as between Inland Industries, whose participation in this proceeding is premised on its interest as the owner of land parcels adjacent to the Proposed Project that, according to Inland Industries, are ideally suited for redevelopment and will be negatively impacted by the Proposed Project, and the City of Chula Vista and the Port District, who participated with numerous other federal, state and local agencies and environmental and civic organizations to develop the Chula Vista Bayfront Master Plan, we find that the City of Chula Vista and the Port District better represent the values and interests of the Chula Vista community. These parties have expressed their support for the Proposed Project, even in the absence of additional measures that would enhance its aesthetics. As the Proposed Project is supported by the parties who best represent the Chula Vista community...we do not find that we need to modify the project in the manner identified by Inland Industries.

Coastal Act Consistency Analysis

As described above, the existing visual landscape at both the site of the existing substation and the proposed relocated substation are industrial in character and dominated by existing transmission lines and structures. The proposed development would improve the visual landscape at the existing substation site. Removal of substation structures and several transmission poles would restore views of the Bay, thus enhancing the visual quality of a currently degraded area, consistent with Section 30251 of the Coastal Act.

Analysis of consistency with the visual protection policies of the Coastal Act at the proposed substation site is more complicated. The proposed substation site is located in an industrial area where the existing visual landscape is compromised by existing industrial structures and transmission infrastructure. Furthermore, the proposed site is not located in a scenic area, nor are there parks or other public access points in the immediate vicinity that would support sight-seeing or other visual enjoyment of the Bay. In this sense, the proposed development is generally visually compatible with the character of the surrounding area. However, Coastal Act Section 30251 also requires development to "restore and enhance the visual quality in visually degraded areas," where feasible. This is also an important goal in the CVBMP. Improvements in the visual quality of the historically industrial bayfront were an important goal of the CVBMP and were factored into land use designations and visual protection policies for the planning area.

The City planned for the relocation of the substation to the proposed location. Part of the planning process for the CVBMP included several land swaps that would facilitate the planned development. One of these land swaps involved an exchange of land between SDG&E, the Port and the State Lands Commission that anticipated the relocation of the South Bay substation to the Bay Boulevard site, which is designated for industrial uses, and the designation of the existing substation site for future park space and commercial recreation uses (see Exhibits 14 and 29). Therefore, by removing the existing substation, the visual quality of this part of the project site will improve. However, the addition of the new substation and associated infrastructure at the new site will further degrade the visual quality of this section of the bayfront as compared to

existing conditions. To minimize visual impacts, **Special Condition 12** requires that the color of the masonry wall be chosen to blend with the existing site features (i.e., a dull grey, light brown or dull green) to minimize visual contrast with the bayfront landscape setting. To further minimize potential visual impacts, **Special Condition 13** requires SDG&E to submit a landscaping plan to the Executive Director for review and approval to partially screen views of the substation site and new utility poles from Bay Boulevard, locations farther east, and the office park to the south. These permit conditions will help minimize impacts to views of the site from Bay Boulevard.

Additional undergrounding, if feasible, is likely to restore and improve the visual quality of this part of the bayfront. The Commission believes that for the project to be found consistent with the visual protection policy of the Coastal Act, SDG&E needs to implement, if feasible, the undergrounding described in what SDG&E has called the "Bayfront Enhancement Alternative." This alternative would result in the removal of two 110-ft tall steel lattice towers, installation of one steel cable pole in a parking lot across Bay Boulevard, and undergrounding of a 1000-ft section of the 138 kV line under Bay Boulevard. One of these lattice towers is a prominent feature in the foreground of the view of the site from Bay Boulevard (see Exhibit 17). Removal of this structure would de-clutter the landscape and thus improve views of the site from Bay Boulevard and views north of the site (see Exhibits 20a, 20b and 20c). Undergrounding of this 1000-foot section of the 138 kV line along the entire bayfront (see Exhibit 29). The Commission is therefore requiring in **Special Condition 14** implementation of the Bayfront Enhancement Alternative. **Special Condition 14** requires SDG&E to underground the last remaining overhead segment of 138kV line on Bay Boulevard. This includes:

- Removal of two approximately 110-foot-tall 138 kV steel lattice towers (188700 and 188701 one tower is located west of Bay Boulevard and one tower is located within an existing parking lot east of Bay Boulevard).
- Installation of one 138 kV 165-foot-tall steel cable pole in SDG&E's right-of-way (ROW) within a parking lot located east of Bay Boulevard. The new pole would be located approximately 10 to 15 feet west of Tower 188700, which would be removed.
- Undergrounding of approximately 1,000 feet of 138 kV double-circuit duct package from the west side of Bay Boulevard to the proposed new cable pole within the existing 138 kV overhead alignment.
- Installation of 138 kV transmission cable system within the newly installed underground duct package position from SDG&E's ROW on the west side of Bay Blvd to the new steel cable pole on the east side of parking lot.

The Commission notes that to implement the Bayfront Enhancement Alternative, SDG&E would need to obtain CPUC approval. According to CPUC staff, a process is in place that would allow SDG&E to apply for a modification to its permit. This could result in a delay of the start of construction. In a letter to Commission staff dated January 16, 2014, the California Independent System Operator (CAISO) emphasizes the urgent need for this project to ensure a long-term reliable power supply for the region (see Exhibit 22). Although a Commission requirement for

additional undergrounding could result in a delay, due to the relatively simple project scope and low cost associated with the Bayfront Enhancement Alternative undergrounding, it is the Commission's understanding that the CPUC could act relatively quickly on such a permit modification. If so, undergrounding of the 1000 ft. section of 138 kV line described in the Bayfront Enhancement alternative would be a feasible mitigation measure that would enhance views of the Bay at the proposed project site and meet the requirements of Coastal Act Section 30251 to restore visually degraded areas where feasible.

In letters to Commission staff dated January 21, 2014, January 28, 2014 and February 25, 2014, Inland Industries has asserted that the Commission should also require SDG&E to underground either 300 ft or 1000 ft of the existing 230kV tie line coming into the proposed substation from the east (see Exhibits 23, 24 and 25). Similar to the Bayfront Enhancement alternative, removal of additional transmission structures would de-clutter the landscape and would likely enhance views of the site from Bay Boulevard (see Exhibits 21). However, Inland Industries' proposal raises operational concerns that the Commission believes renders this mitigation measure infeasible. SDG&E claims that to ensure reliability and to facilitate efficient maintenance, the 230 kV line entering the substation from the east must remain above ground. The proposed Bay Boulevard substation from the east supplies power from Miguel substation located more than 10 miles inland. Because of its status as the primary source of power to the substation, SDG&E contends that it is critical to maintain the integrity and reliability of this line and this is best accomplished by keeping the feed line above ground. In a memo to staff dated December 20, 2013 (see Exhibit 26), SDG&E states,

As SDG&E stated in sworn testimony before the CPUC, undergrounding any portion of this line going into the new substation negatively impacts the thermal rating of the line and effectively introduces a bottleneck into the primary source for the new substation.

This can be problematic as SDG&E tries to integrate power from inconsistent sources (i.e., solar power farms) located in other parts of the State. SDG&E maintains that the only way to underground the 230 kV line entering the substation from the east and maintain the thermal rating of the line would be to use a three-cable bundle, thus requiring an additional above-ground transition structure that would be more visually intrusive than the proposed project. Furthermore, SDG&E claims that outage restoration times can be 10-20 times longer for underground cable than for overhead cable. Keeping outage restoration times as low as possible is especially important for a power feed line, as could cut off all power leaving the substation.

Inland Industries argues that, despite SDG&E's claims to the contrary, their proposed recommendation for undergrounding is technically feasible. Consultants hired by Inland Industries evaluated the technical and economic feasibility of undergrounding the 230 kV line and submitted the resulting technical report to staff on January 21, 2014 (see Exhibit 24). Inland Industries claims that by making a small change to the configuration of the underground duct bank, the capacity of the cable would be increased, allowing the underground line to maintain the intended rating without adding an additional line or structure. This report again claims that undergrounding the 230 kV line into the substation would eliminate the need for several of the

A-frame structures, thus lowering the overall profile of the substation. In support of this claim, the report states that using underground entrances for the 230 kV line would allow the tie line terminations to be accomplished through a 34 foot riser instead of SDG&E's proposed 68 foot riser. In addition, the report states that "the basic mechanics of using overhead and underground designs in substations at 230 kV are well known to the industry and are established practice."

In a response to Inland Industries' January 21, 2014 report and submitted to staff on January 27, 2014 (see Exhibit 28), SDG&E refutes each of Inland Industries' claims and points out that Inland Industries has not, to date, submitted a site-specific analysis showing that its proposed undergrounding is feasible at this location. For example, SDG&E points out that the duct bank configuration proposed by Inland Industries would require a significantly larger trench and does not take into account potential obstructions from existing infrastructure or interactions with existing lines that could lower the rating of the line. SDG&E also claims that the 230kV feed line, if undergrounded, would need to cross the San Diego Metropolitan Transit System railroad right of way. To facilitate this crossing, SDG&E would be required to implement a jack-and-bore construction technique (similar to other planned crossings) to minimize surface disruptions. SDG&E claims that this construction technique precludes the use of the alternate underground duct bank configuration proposed by Inland Industries and would have a negative effect on the thermal rating of the line. In addition, these construction methods would require significantly more traffic control on Bay Boulevard and on I-5 and could result in additional environmental impacts.

In addition to technical feasibility concerns, it is likely that the additional undergrounding proposed by Inland Industries would result in significant time delays and regulatory concerns. Should the project be modified significantly from the project that was approved by the CPUC, SDG&E would be required to seek CPUC approval of any modifications. Unlike the relatively straightforward undergrounding required in **Special Condition 14**, Inland Industries' proposal is more technically complicated, and, putting aside the technical feasibility issue, would require significantly more time to allow for design and regulatory approval by the CPUC, thus significantly pushing back the in-service date for the substation. As discussed above, significant delays would be problematic due to the urgent need for an upgraded substation in the region (see Exhibits 23 and 29). Even if SDG&E were to overcome problems related to the time delay, there is no certainty that the CPUC would approve a significant modification to the project, especially considering that it has already analyzed and rejected Inland Industries' proposals.

After analyzing the evidence presented by both SDG&E and Inland Industries, the Commission agrees that additional undergrounding of the 230 kV line as proposed by Inland Industries is both infeasible and unwarranted. Although it may be theoretically possible to underground the 230kV feed line into the proposed substation, the significant site specific challenges and potential for additional environmental impacts, the importance of maintaining a reliable power feed line into the proposed substation and the regional need to have the upgraded substation in service as soon as possible lead to a conclusion of infeasibility. Even if Inland Industries' proposal were found to be feasible, the adverse impacts associated with these factors would far outweigh the positive benefit to visual resources from the proposed undergrounding at an existing visually degraded industrial site. This is particularly true given the particular location of the proposed project. The proposed site is not located in a residential area, nor are there parks or

other public access points in the immediate vicinity that would support sight-seeing or other visual enjoyment of the Bay. Thus, any benefit from Inland Industries' proposed undergrounding would be conferred primarily to passing motorists and adjacent landowners. In contrast, adverse impacts associated with additional time delays and a potentially less reliable power source could affect the entire San Diego Bay Region and possibly beyond.

In addition to an analysis of consistency with Coastal Act Section 30251, the policies of the CVBMP should also be used as guidance. As discussed above, the CVBMP establishes specific public view points, including views from the freeway and major entry points to the bayfront and views from roadways within the bayfront that should be protected. The two viewscapes applicable to the proposed substation are views from Bay Boulevard and the Palomar Street gateway located south of the project site. Due to the distance between the Palomar St. gateway from the proposed substation site and the presence of existing industrial and commercial buildings, the proposed substation would not significantly impact views from the Palomar St. gateway to the bayfront. However, the proposed substation would add additional industrial structures to the Bay Boulevard viewscape in the immediate vicinity of the site. Removal of the existing lattice tower immediately adjacent to Bay Boulevard as required in Special Condition 14 will enhance views of the project site and will minimize visual impacts associate with the proposed project. In addition, the view corridors to the north and south of the substation will provide unobstructed views of the Bay from Bay Boulevard at the propose project site. The Commission therefore finds the proposed project, as conditioned, would be consistent with visual resource protection policies of the CVBMP that apply to the project site.

Additional CVBMP policies relate directly to undergrounding of utilities. Objective GD.2 states that all utilities serving the bayfront shall be undergrounded and Policy GD.2.A states that the City will require undergrounding on private property and the development of a priority-based program to underground utility lines along public right-of-ways. Consistent with this Policy, SDG&E and the City entered into an MOU in 2004 that allowed for the undergrounding of all transmission lines located within the bayfront and designated the City's 20A funds² to pay for the undergrounding. In accordance with this MOU, the 230 kV line constructed along the bayfront extending north of the proposed site was installed underground. The 138 kV line running along the bayfront was also undergrounded as part of this effort. Consistent with these policies, the project as proposed by SDG&E includes undergrounding of the 230 kV and 138 kV lines north of the substation. Also consistent with these policies, Special Condition 14 requires additional undergrounding of an approximately 1000 ft. section of the 138 kV line just to the east of the substation, thus completing the undergrounding of the 138 kV line along the entire bayfront. The project, as conditioned, does include overhead lines, most notably the 230 kV line entering the substation from the east. However, as discussed above, undergrounding this section of 230 kV line is infeasible. Thus, while these policies are only guidance, the project, as conditioned, is still consistent with these CVBMP policies to the maximum extent feasible.

Conclusion

² Rule 20A funds were established by utility companies for the purpose of funding local undergrounding projects. Local governments have access to these funds to prioritize and implement undergrounding projects within their communities.

The proposed project as a whole, as conditioned, will enhance views of the Bayfront and will restore and enhance visual quality in a visually degraded area. The proposed construction of the new substation is also consistent with the existing industrial character of the project site. Furthermore, the proposed project, as conditioned, is consistent with the City's planning efforts in the project vicinity and is consistent with the visual protection policies of the CVBMP to the maximum extent feasible. For these reasons, the Commission concludes that the proposed project, as conditioned, would be consistent with the requirements of Section 30251 of the Coastal Act to avoid significant public view degradation, be consistent with the visual character of the surrounding area, minimize natural landform alteration, and, where feasible, restore and enhance visual quality in visually degraded areas.

F. WATER QUALITY/HYDROLOGY

Section 30231of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Project related construction activities have the potential to result in erosion and sedimentation that could degrade the water quality of nearby waters. The proposed substation site is adjacent to salt ponds that are part of the SDBNWR and the existing substation is approximately 500 feet from San Diego Bay. Sedimentation can lead to increased turbidity and nutrient concentrations which can degrade aquatic habitats. **Special Condition 15** requires SDG&E to submit a Stormwater Pollution and Prevention Plan (SWPPP) to the Executive Director for review and approval prior to the start of construction activities. This plan will identify measures to help stabilize soil in graded areas and reduce erosion such as silt fences, fiber rolls, street sweeping and vacuuming, storm drain inlet protection, stockpile and solid waste management, vehicle and equipment maintenance, desilting basins, berms and barriers, mulching, seeding or other measures. The SWPPP will also include a hazardous substance management plan that identifies handling, storage, disposal and emergency response procedures. In addition, **Special Condition 9** requires SDG&E to submit a Dust Control Plan to describe how SDG&E will control fugitive dust emissions during project construction. These measures will also protect nearby waters from dust and sediment deposited by the wind.

Construction activities could also result in inadvertent releases of hazardous materials into nearby waters. Hazardous materials, such as fuel oil, lubricants and oils may be used during construction and could, if released, pollute nearby water resources including San Diego Bay. To address this potential impact, **Special Condition 16** requires that SDG&E prepare a project-specific Hazardous Substance Management and Emergency Response Plan for the construction period to reduce or avoid potentially hazardous materials for the purpose of worker safety,

protection from groundwater contamination and proper disposal of hazardous materials. This plan must include a training program to ensure workers can implement hazardous materials procedures and protocols including spill prevention and response measures. In addition, SDG&E will be required to hire an environmental professional with adequate training to monitor the site and implement mitigation measures during removal of hazardous materials. The selection of this professional would be subject to approval by the Executive Director. Finally, **Special Condition 17** requires SDG&E to conduct a final site assessment to augment previous studies that identify where hazardous materials or wastes may be encountered. If construction activities will encounter hazardous waste, SDG&E must handle and dispose of this waste in accordance with all applicable federal, state and local laws.

Discharges of wastewater produced from dewatering activities associated with construction activities could also adversely impact the water quality of nearby groundwater and surface water. The water table at the project site is relatively high (between 5 and 13.5 feet below surface), and as a result, dewatering may be required during trenching and excavation activities. Water produced by dewatering activities typically has high sediment content and may include hazardous materials if the surrounding soil is contaminated. To address these potential impacts, **Special Condition 18** requires SDG&E to submit a dewatering plan to the Executive Director for review and approval. This plan will contain a typical dewatering drawing including the location of all equipment and monitoring procedures to ensure that spills are addressed quickly and adequately. In addition, SDG&E is required to consult with the Regional Water Quality Control Board (RWQCB) to determine if discharge permits are necessary for any dewatering activities. In addition, Special Condition 19 includes specific measures to be implemented during jack-and-bore operations for Creek and drainage crossings including restrictions on timing and the location of specific equipment and post-operation restoration guidelines that will minimize the potential for water quality impacts.

During operation of the proposed substation, water quality impacts could result from the accidental release of hazardous materials or the release of stormwater runoff from the site due to modified drainage patterns at the site. Accidental releases of mineral oil stored in the seven proposed transformers, or fuel oil and lubricants used by maintenance vehicles and equipment could degrade the water quality of groundwater or surface water in the vicinity of the project site. Special Condition 20 requires SDG&E to minimize the potential for an accidental release by submitting a Spill Prevention, Control and Countermeasure Plan to the Executive Director for approval at least 60 days before the start of construction. This plan shall include discharge prevention measures, countermeasures for discharge discovery, response, and cleanup and methods of disposal of recovered materials. The plan shall also include a description of the worst-case spill and shall demonstrate that adequate equipment, personnel and protocols are in place to address the spill quickly and effectively. Furthermore, construction of the proposed substation will elevate the site from current conditions, thus changing the existing drainage patterns. The proposed substation includes construction of a drainage basin on the western perimeter of the site. The purpose of this basin is to collect and direct surface runoff from the site to the existing concrete lined ditch at the northwest corner of the site. This system will ensure stormwater flows do not exceed the capacity of the storm drain system.

With these measures in place, the Commission finds that the project would maintain the biological productivity and the quality of coastal waters in the project vicinity and would be consistent with Section 30231 of the Coastal Act.

G. CULTURAL RESOURCES

Section 30244 of the Coastal Act states:

Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The proposed project involves ground-disturbing activities and thus has the potential to impact existing cultural resources. SDG&E conducted a cultural resource survey in 2010 to identify existing known resources and the potential for unknown resources. Record searches for known resources within a mile of the project site identified two recorded sites. The first resource is a previously mapped flaked lithic tool. The location of the tool was highly disturbed due to previous industrial activity. It was not relocated, and is located beneath an existing parking lot. The second resource is the Coronado Belt Line Railroad, built in 1888 to service Coronado and the communities along San Diego Bay. The rail line runs through the project boundaries but is not listed as a historic landmark or historic resource. This resource was initially listed in 2002 but was determined to be ineligible for listing and has since been removed from the list. Field surveys did not identify any additional artifacts. Given the disturbed nature of the site, project activities are not likely to further impact known cultural resources in the vicinity of the site.

It is possible, however, that project-related activities could uncover or disturb unknown artifacts at the project site. According to the EIR, the probability of subsurface archeological deposits within the project area is low based on previous work in the area. However, to minimize the potential for adverse impacts to previously unknown cultural resources, **Special Condition 21** requires that all ground-disturbing work be monitored by a qualified archaeologist and a Native American monitor from a culturally affiliated tribe recognized by the Native American Heritage Commission. If archaeological resources are encountered, SDG&E will be required to immediately stop work and notify the Executive Director to determine further actions. These actions may include recordation, evaluation and data recovery or avoidance through preservation in place. With this mitigation measure the Commission finds that the proposed project, as conditioned, will mitigate potential adverse effects to archeological resources, consistent with Section 30244 of the Coastal Act.

H. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30213 of the Coastal Act states:

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Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Development providing public recreational opportunities are preferred.

The proposed project is located on private industrial Bayfront property that is not currently open to the public. If the proposed project is approved, the existing South Bay substation will be removed. In anticipation of this demolition, the site has been zoned for low-cost visitor serving uses. The CVBMP (which includes the Port Master Plan) envisions that this site will be converted to an RV park providing low-cost accommodations and public access to part of the Bayfront that has been closed to the public for decades. The proposed substation site will continue to be closed to the public for safety reasons. Thus, the project will result in a net increase in direct public access to the Bayfront.

The project has the potential for indirect impacts to the public from noise associated with project-related construction activities. The maximum noise level during construction of the Bay Boulevard substation is likely to occur during site preparation activities due to operation of heavy equipment needed for earth moving and soil compaction. According to the EIR, these types of equipment can generate noise levels ranging from 81 to 89 dBA at 50 feet. However, the nearest sensitive receptors are residential developments located approximately 0.25 miles to the east. At these developments, maximum construction noise levels would be attenuated to less than 65 dB and would not result in a significant increase over ambient noise levels. The nearest public recreation area, Marina Park, is located more than 0.8 miles north of the proposed substation site. Due to the significant distance from the construction, noise impacts from construction of the proposed substation are not likely to adversely impact bayfront recreational users. Demolition of the existing South Bay substation will also generate noise that could impact Marina Park visitors. The existing substation is located about a third of a mile from Marina Park. Demolition activities are expected to last for approximately 6 months and are also expected to generate noise levels between 81 and 89 dB at 50 feet. At Marina Park, noise levels associated with project-related construction would be less than 60 dB. Given the Park's proximity to I-5 and the distance from the site, construction-related noise from demolition of the existing substation would not be significant.

Increased traffic from construction vehicles may hinder the public's ability to get to the bayfront, resulting in adverse impacts to public access. Construction of the Bay Boulevard substation would generate approximately 12,520 trips to the site over a 17 month construction period. Transmission corridor improvements and dismantling of the South Bay substation would add an additional 1800 trips over a 34 month construction period. The project would also generate approximately 60-130 trips per day by construction workers during peak construction periods. The most significant impact from this additional traffic would be experienced on Bay Boulevard between H St. and J St., with a maximum increase of 5% in Average Daily Traffic (ADT). According to the Project EIR, this increase would be insignificant.

Nevertheless, construction-related traffic could create short-term impacts on traffic volumes, especially at already congested intersections such as L Street and Bay Boulevard. To address this potential impact, **Special Condition 22** requires SDG&E to submit a traffic management plan (TCP) that identifies the location of temporary lane closures, safety and notification

measures, detours for vehicles, bicycles and pedestrians if necessary. This plan shall also include a provision to stagger work shifts during the 6-month grading and site development phase which corresponds to the peak period of construction activity. In addition, workers shall be encouraged to carpool to the work site to the maximum extent feasible. These measures would protect public access to the coast.

Operation and maintenance of the substation would not result in adverse impacts to public access from traffic or noise. The substation would be unmanned and would not result in a significant increase in noise above ambient levels. In general, regular operation of the substation will involve a single pickup truck visiting the substation several times a week and several larger construction and maintenance trucks visiting the substation several times a year. This is similar to maintenance traffic at the existing substation 0.5 miles north of the proposed substation site. Thus, continued maintenance of the substation would not generate significantly increased traffic.

The Commission therefore finds that, as conditioned, the proposed project would not result in adverse impacts public access and recreation and would be consistent with Sections 30210, 30213 of the Coastal Act.

I. LIABILITY FOR COSTS AND ATTORNEYS FEES

Coastal Act section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. *See also* 14 C.C.R. § 13055(e). Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application. Therefore, consistent with Section 30620(c), the Commission imposes Special Condition 23, requiring reimbursement of any costs and attorneys fees the Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee challenging the approval or issuance of this permit.

J. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The California Public Utilities Commission, acting as lead CEQA agency, certified an EIR for the proposed project on October 23, 2013.

The proposed development has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing biological resources, fill of wetlands, visual resources, water quality, cultural resources and public access will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the

Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

E-11-010 (SDG&E)

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

California Public Utilities Commission, Decision 13-10-025 - Decision Granting San Diego Gas & Electric Company a Permit to Construct the South Bay Substation Relocation Project, October 23, 2013.

California Public Utilities Commission, Final Environmental Impact Report for the South Bay Substation Relocation Project (State Clearinghouse No. 2011071031), October 23, 2013.

California Public Utilities Commission, Transcript from California Public Utilities Commission Meeting on October 17, 2013. Transcribed by Colleen McGovern RPR, CSR 10360.

Dixon, John, email communication to Kate Huckelbridge on 11/1/2013, 8/17/2012 and 8/16/2012.

Inland Industries, Submittals to the Coastal Commission on January 21, 2014, January 28, 2014 and February 25, 2014.

San Diego Gas and Electric, Inc., Coastal Development Permit Application and accompanying documents. Originally submitted June 2, 2011 and supplemented on August 6, 2012, December 20, 2013, January 27, 2014 and February 25, 2013.

San Diego Gas and Electric, Inc., Phone Conversation on January 15, 2014.

San Diego Gas and Electric, Inc., Draft Restoration and Monitoring Plan for the D Street Fill Site. Originally submitted in August 2012.

Impact Type	Developed	Seasonal	Emergent	Non-	Eucalyptus	Ornamental	Disturbed	Disturbed
		Wetland	Wetland	native	Woodland	Vegetation	Habitat	Coastal
				Grassland				Coyote
								Brush
								Scrub
Permanent	0.20	2.41	0.03	8.74	0	0.05	0.18	4.94
Impacts								
(acres)								
Temporary	15.82	0	0.03	4.57	0.26	5.26	22.87	1.45
Impacts								
(acres)								
Total	16.02	2.41	0.06	13.31	0.26	5.31	23.05	6.39
(acres)								

 Table 1: Vegetation Community Impacts

Type of Impact	Wetland Type	Acreage of CCC Impact	
Temporary	Seasonal Pond/Seasonal Wetland	0	
	Emergent Wetland	0.01	
	Mulefat Scrub	0	
	Disturbed Wetland Scrub	0	
	Unvegetated	<0.01	
	Temporary Impact Total	0.02	
Permanent	Seasonal Pond/Seasonal Wetland	0.61	
	Emergent Wetland	0.03	
	Mulefat Scrub	0.06	
	Disturbed Wetland Scrub	1.75	
	Permanent Impact Total	2.45	

Milestone	Native Cover (absolute) ¹	Nonnative Cover (absolute)	Container Plant Survival	Tidal Hydrology
120-Day Maintenance Period	N/A	<10% overall, <5% target invasive species on-site	100%	Inlet/outlet flushing adequately, no significant erosion observed, tertiary channels and mid-marsh flooding during moderate high tides.
Year 1	20% native cover	<10% overall, <5% target invasive species on-site	90%	Inlet/outlet remains open, no significant erosion observed, tertiary channels continue to develop, evidence of flooding (rack) in high marsh.
Year 2	40% native cover	<10% overall, <5% target invasive species on-site	90%	Inlet/outlet remains open, no significant erosion observed, tertiary channels continue to develop, evidence of flooding (rack) in high marsh.
Year 3	55% native cover	<5% overall, <1% target invasive species on-site	80%	Inlet/outlet remains open, no significant erosion observed, tertiary channels continue to develop, evidence of flooding (rack) in high marsh.
Year 4	70% native cover	<5% overall, <1% target invasive species on-site	80%	Inlet/outlet remains open, no significant erosion observed, tertiary channels continue to develop, evidence of flooding (rack) in high marsh.
Year 5	90% native cover	<5% overall, 0% target invasive species on-site	80%	Inlet/outlet remains open, no significant erosion observed, tertiary channels continue to develop, evidence of flooding (rack) in high marsh.

 Table 3

 Wetland Mitigation Performance Standards and Success Criteria

¹ Native plant cover percentages in the restoration areas will be compared to the salt marsh reference site.

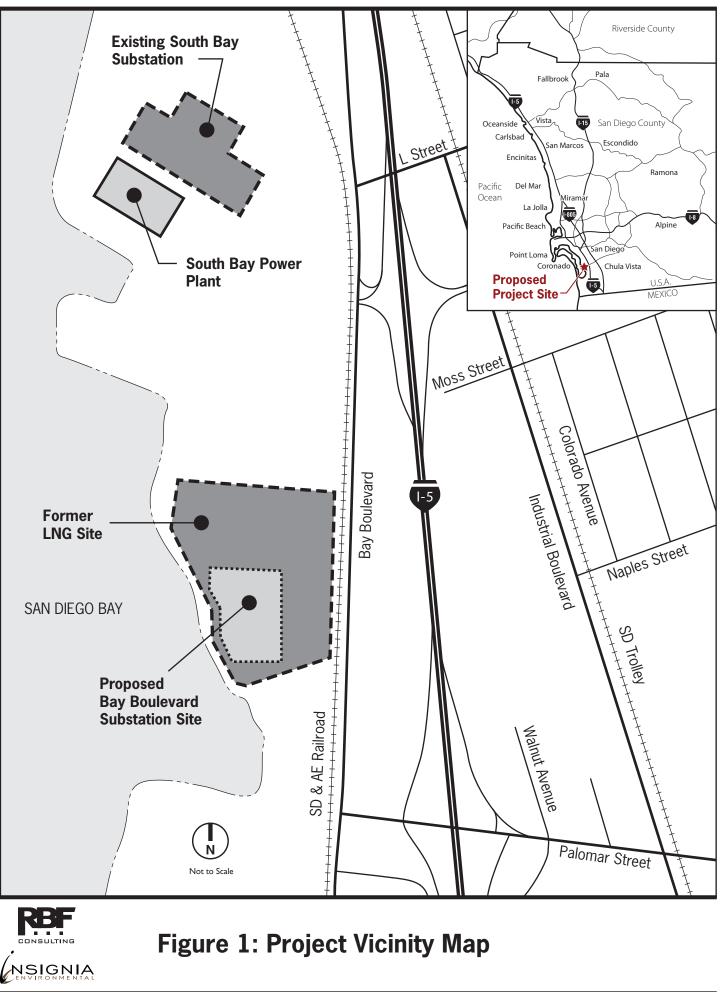




Figure 2: Project Overview Map



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EXHIBIT 3a

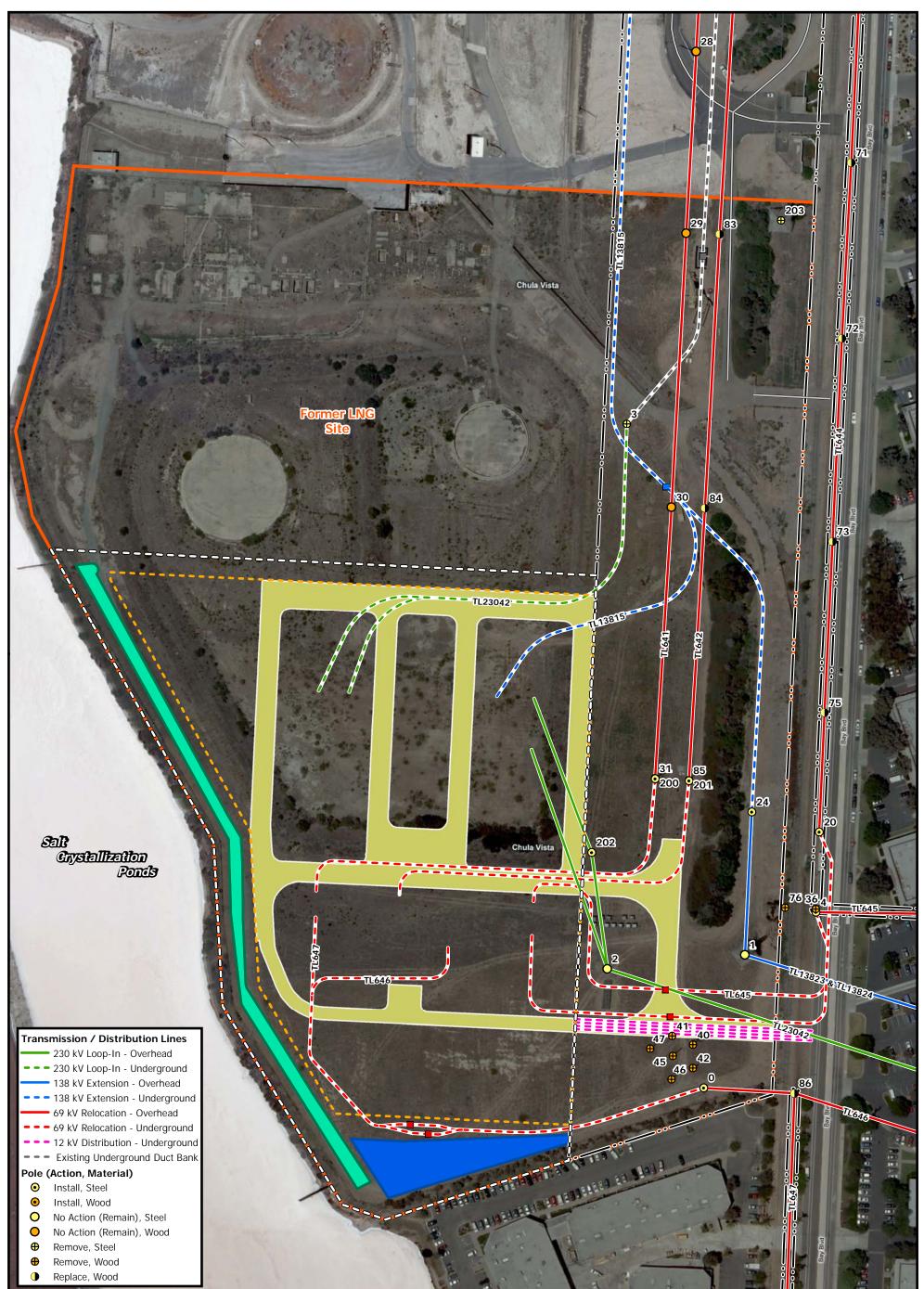


Figure 3: Detailed Project Components Map 1 of 3

South Bay Substation Relocation Project



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EXHIBIT 3b

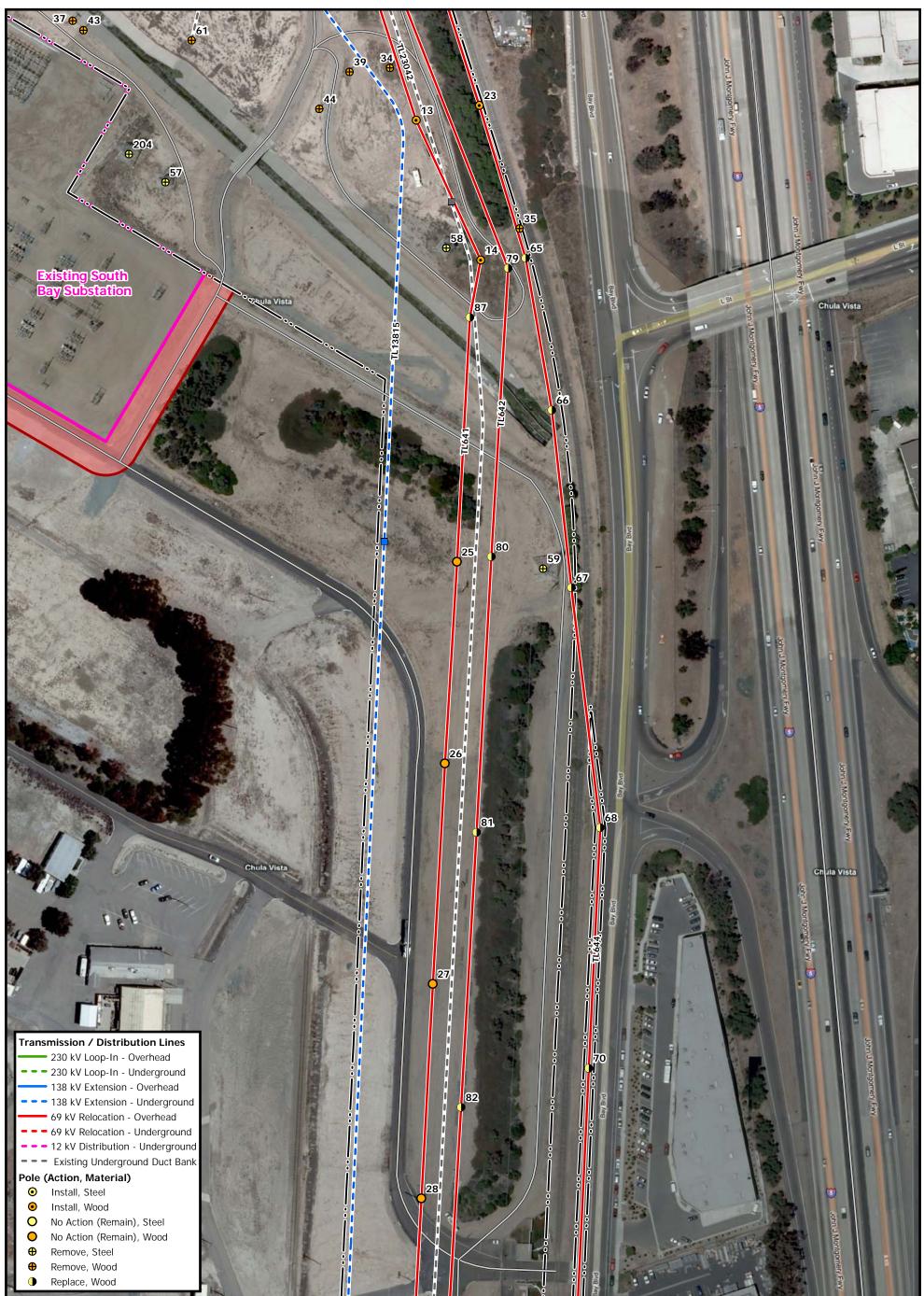




Figure 3: Detailed Project Components Map 2 of 3

South Bay Substation Relocation Project



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EXHIBIT 3c



Figure 3: Detailed Project Components Map 3 of 3

South Bay Substation Relocation Project



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SDG&E Draft Restoration and Monitoring Plan - D Street Fill Site

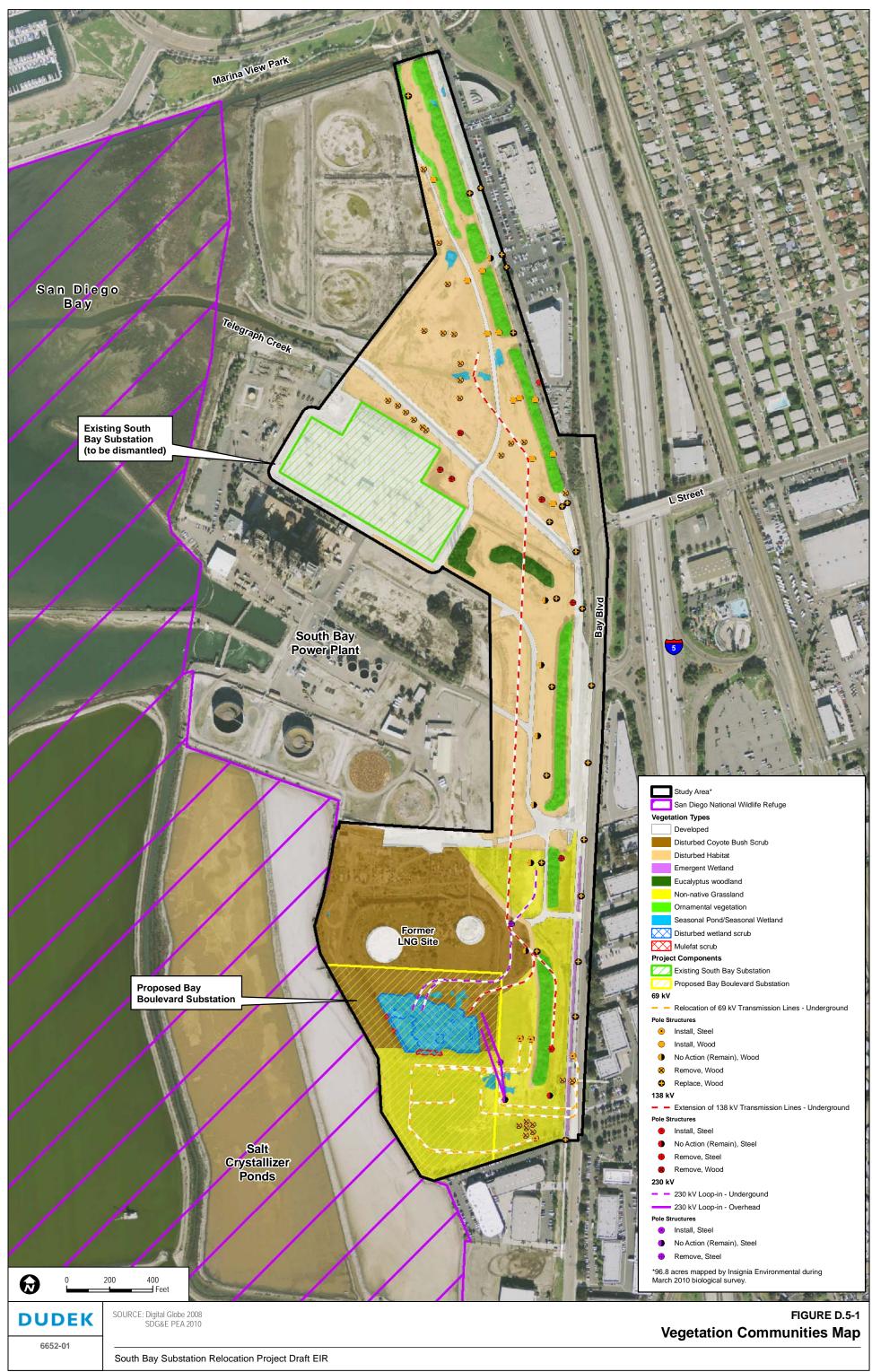
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Figure 1 **Regional Location**

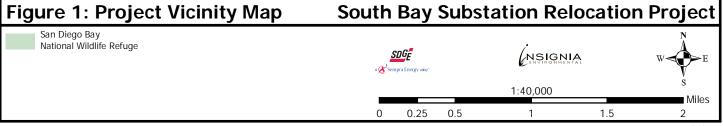
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SDG&E Draft Restoration and Monitoring Plan – D Street Fill Site Path: P:\2011\60225513\06GIS\6.3_Layout\Reports\Vicinity.mxd, 2/7/2012, steinb





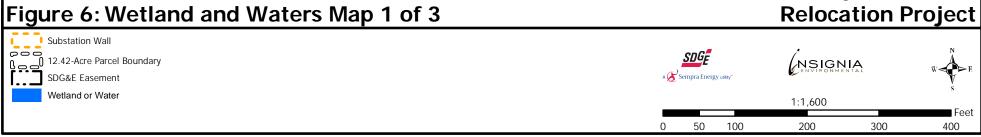


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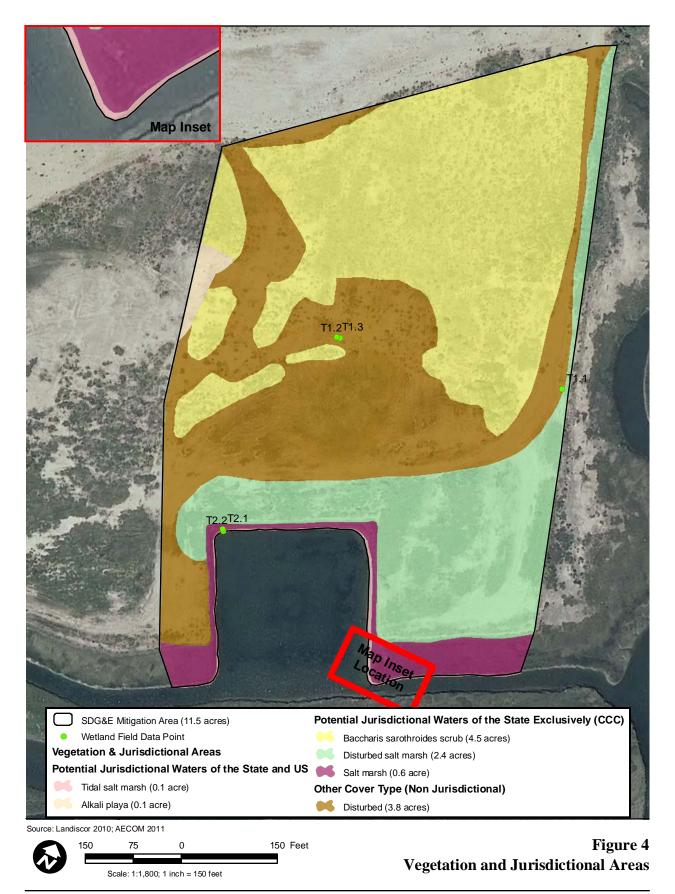




South Bay Substation Relocation Project



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SDG&E Draft Restoration and Monitoring Plan – D Street Fill Site Path: P:\2011\60225513\06GIS\6.3_Layout\Reports\Veg.mxd, 2/7/2012, steinb

ARCATA, CA 95521 (707) 826-8950 EXHIBIT 11

EDMUND G. BROWN, Jr., Governor

CALIFORNIA COASTAL COMMISSION NORTH COAST DISTRICT 1385 8th Street, Suite 130



MEMORANDUM

FROM:	John D. Dixon, Ph.D. Ecologist
TO:	Kate Huckelbridge
SUBJECT:	SDG&E Proposed "D" Street Mitigation Site
DATE:	January 27, 2014

Documents reviewed:

AECOM. 2012. SDG&E substation relocation project draft Restoration and Monitoring Plan for the D Street fill site. A report to SDG&E dated August 2012.

AECOM. 2013. Jurisdictional delineation report for waters of the U.S. and State of California: South Bay mitigation (D Street fill site) project jurisdictional delineation, San Diego County, California. A report to SDG&E dated August 2013.

Collins, B. (USFWS). 2012. Letter to C. Terzich (SDG&E) dated February 24, 2012 regarding "Potential wetland mitigation opportunities at the D Street fill for the SDG&E South Bay Substation relocation project, Chula Vista, California."

Dixon, J. (CCC) 2013. Email dated October 30, 2013 to Dick Rol (AECOM) with 4 attachments providing guidance on delineating wetlands and environmentally sensitive habitat areas for the Coastal Commission.

Nordby Biological Consulting. 2014. Jurisdictional delineation report for waters of the U.S. and State of California: South Bay mitigation (D Street fill site) project jurisdictional delineation, San Diego County, California. A report to SDG&E dated January 2014.

AECOM (2012) proposed restoration of the "D" Street fill site as mitigation for habitat impacts associated with the relocation of the South Bay Substation in Chula Vista. Their restoration and monitoring plan included a map of wetlands based on 2011 field work, but did not include the actual technical wetland delineation. AECOM (2013) is a technical wetland delineation for the area based on field work conducted on May 29, 2011. The maps of wetlands are essentially the same in the two reports and include 0.6 ac of tidal salt marsh and 2.4 ac of non-tidal habitat characterized as "disturbed salt marsh." I observed this area during a site visit with representatives of San Diego Gas and Electric, their biological consultants, and others on October 28, 2013. Although there is considerable bare ground and ice plant and other upland species are relatively abundant, there are also scattered patches of the upper salt marsh species

alkali heath and salt grass, both of which are wetland indicator species. Based on topography many of those areas seemed to me unlikely to have wetland hydrology. I suggested that the area be reevaluated and the vegetation be mapped in more detail to distinguish areas with predominantly upland vegetation from areas with predominantly wetland indicator species. Were there strong evidence of upland conditions for any of the latter areas, the wetland presumption might be rebutted. I later provided some general guidance for wetland delineations and examples of prior Commission actions concerning difficult sites (Dixon 2013).

We recently received a revised wetland delineation (Nordby 2014). Nordby refined the vegetation map by removing some large areas of bare ground and added a new patch of "nontidal disturbed southern coastal salt marsh" (equivalent to the earlier "disturbed salt marsh"). The net effect of these changes was to reduce the acreage of this habitat type to something less than 2.42 ac (on page 12 the acreage is stated to be about 2.3 ac but in Figure 3 it is stated to be 1.93 ac). There was no attempt to distinguish areas with predominantly upland vegetation from those with predominantly wetland indicator species. However, Nordby concluded that the whole area is upland based on the observation that it is too high to be affected by tidal waters or by ground water, which in March 2013 was deeper than six feet below the surface. However, he also documented some indicators of near surface hydrology and the presence of shallow clay layers that could perch water and concluded that the clay layers "retain precipitation and facilitate germination and persistence of saltgrass (FAC) and alkali heath (FACW)." The fact that the soil profile is unnatural and comprised of fill is not germane. Also, one sample point (T2.2) was mapped as being in upland but was demonstrated on the data sheet to be wetland. In short, strong evidence of upland conditions was not presented and, in the absence of more detailed vegetation mapping, I conclude that the area mapped as "non-tidal disturbed southern coastal salt marsh" has a predominance of wetland indicator species and is, therefore, presumptive wetland.

It is proposed to convert the majority of the "D" Street site to tidal wetland. Dredging a wetland for restoration purposes is one of the allowable uses under Section 30233 of the Coastal Act. However, the Commission only assigns mitigation credit for the proportional increase in wetland function that results from converting one wetland type to another. For the Poseidon mitigation, a scientific advisory panel made up of independent university scientists recommended that the functional lift be estimated as the average change in functional value, relative to natural southern California tidal marshes, for vegetation, fish, birds, and the invertebrates that provide prey for fish and birds. The proportional improvement is given by (After – Before)/After. For vegetation, cover in natural saltmarshes is about 90%. In the disturbed saltmarsh at "D" Street, the average cover of salt marsh species at five sampling points in the two wetland delineations was 19%. So, the functional lift would be (90-19)/90 = .79. For fish, the functional lift would obviously be 1.0. We have no data for birds or invertebrates, but can make some reasonable guesses. Relatively few salt marsh birds are likely to use the poor habitat that is currently present, but a few species like killdeer may occasionally be present. Assigning a functional lift of 0.9 is probably conservative. Similarly, there are probably very few invertebrates currently present that could provide food chain support and a lift of 0.9 would be conservative. These estimates (0.79, 1.0, 0.9 & 0.9) would provide an average functional lift of 0.9. Therefore, the average current value of the disturbed salt marsh is 0.1 compared to the restored site and the mitigation credit for restoring the non-tidal disturbed salt marsh to tidal salt marsh would be

reduced by 0.19 ac or 0.23 ac (depending on which acreage in Nordby (2012) is correct). Ten acres of wetland restoration on the 11.3-ac site is proposed. When adjusted for existing functional values, there would be about 9.8 acres of mitigation credit available. About 2.4 ac of impact must be mitigated. At a 4:1 (mitigation:impact) ratio, 9.6 acres of mitigation are required. It therefore appears that the "D" Street site can provide the necessary mitigation acreage.



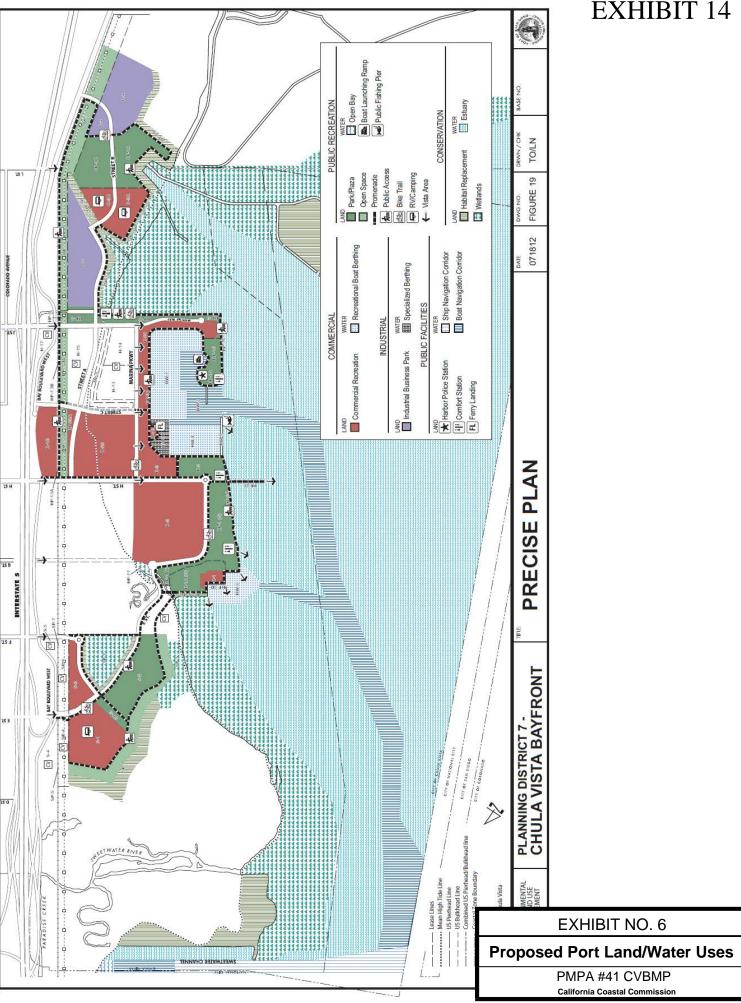
SDG&E Draft Restoration and Monitoring Plan – D Street Fill Site Path: P:\2011\60225513\06GIS\6.3_Layout\Reports\RestoConcept.mxd, 2/7/2012, steinb

Scale: 1:1,800; 1 inch = 150 feet

Restoration with Maximum Salt Marsh Diversity

and Modification of Existing Subtidal Basin

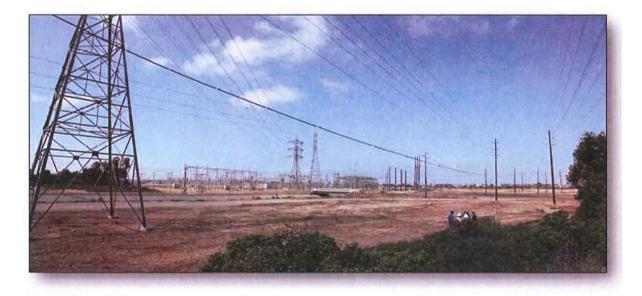






Chula Vista Bayfront LCP Amendment Land Use Plan

Figure 3: Simulation of the Removal of the Existing South Bay Substation



Existing South Bay Substation



Visual Simulation after Demolition and Removal



Existing Conditions



KOP 1: View West from Bay Boulevard at Proposed Entrance Gate toward Bay Boulevard Substation Site

Visual Simulation

DUDEK

SOURCE: SDG&E PEA 2010

6652-01

South Bay Substation Relocation Project Draft EIR

FIGURE D.2-2



Existing Conditions



Visual Simulation

DUDEK

SOURCE: SDG&E PEA 2010

6652-01

South Bay Substation Relocation Project Draft EIR

FIGURE D.2-2a KOP 1a: View Northwest from Bay Boulevard at Proposed Entrance Gate toward Transmission Interconnections

EXHIBIT 19



Existing Conditions



KOP 5: Bay Boulevard Northbound, View Looking Northwest Toward Transmission Interconnections

Visual Simulation

DUDEK

SOURCE: SDG&E 2011, Response to CPUC Data Request #5, Submitted to CPUC May 24, 2011

FIGURE D.2-6

South Bay Substation Relocation Project Draft EIR



Existing Condition (View from Bay Boulevard at the proposed entrance gate, looking west)



EXHIBIT 20a

Visual Simulation of the air-insulated substation with enhanced mitigation at the proposed Bay Boulevard Substation site (View from Bay Boulevard at the proposed entrance gate, looking west)

Figure B-5: Bayfront Enhancement Simulation - Viewpoint 1 SDG&E South Bay Substation Relocation Project



View from Bay Boulevard looking north

Visual Simulation looking north from Bay Boulevard



EXHIBIT 20b

Figure B-7: Bayfront Enhancement Simulation - Viewpoint 3 SDG&E South Bay Substation Relocation Project



View from Bay Boulevard looking south

Visual Simulation looking south from Bay Boulevard



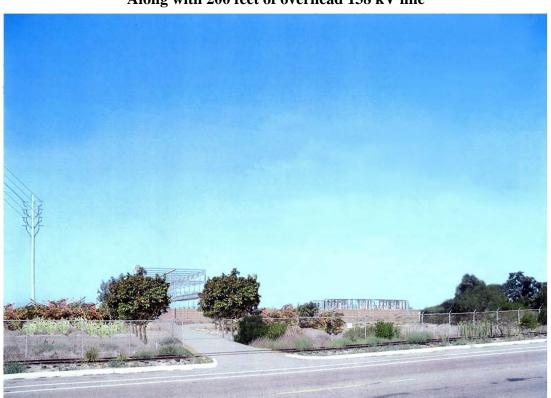
Figure B-8: Bayfront Enhancement Simulation - Viewpoint 4 SDG&E South Bay Substation Relocation Project

EXHIBIT 20c

EXHIBIT 21



Visual Simulation



230 kV Line Installed Undergroundfor Approximately 300 feet Along with 200 feet of overhead 138 kV line

Visual Simulation 230 kV Line Installed Underground for Approximately 1,000 feet Along with the remaining 200 feet of the 138 kV line





California Independent System Operator Corporation

Via e-mail

January 16, 2014

Ms. Alison Dettmer Deputy Director California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 942015-2219

adettmer@coastal.ca.gov

Re: Need for the Bay Boulevard 230/69 kV Substation Project

Dear Ms. Dettmer:

This letter is to express the California Independent System Operator's (ISO) support for the Bay Boulevard 230/69kV substation project in the City of Chula Vista and to reiterate the urgent need for this project. This project was approved by the ISO Board of Governors in February, 2010, based on a recommendation from the ISO's technical staff (see the attached memo from ISO staff dated February 3, 2010).

The ISO has the responsibility for ensuring the safe, reliable, and economic operation of the bulk power system serving California. In the ISO's view, the basic reliability need for this project has not changed. In fact, this project has become even more critical with the passage of time, and failure to complete this project in a timely fashion may have the risk significant negative impacts for the transmission system and ratepayers. These potential impacts fall into several categories:

Reliability – The South Bay Power Plant (SBPP), retired at the end of 2010, provided not just a significant amount of megawatts (MW) to the South Bay region, but also provided significant voltage and reactive power (MVAR) support to the 69 kV and 138 kV systems serving the region. This new Bay Boulevard 230/69kV substation project was a key component in the long term reliable supply to the area with the retirement of the South Bay Power plant, and we are well past the targeted in-service date of June, 2012.

Ms. Alison Dettmer January 16, 2014 Page 2

Economics – As discussed extensively by SDG&E's technical staff in testimony before the California Public Utilities Commission, this project is a critical component of upgrading the 230 kV bulk power system in and around San Diego to accommodate new efficient conventional generation as well as new wind and solar generation. Without the Bay Boulevard substation, we are facing increased risk of uneconomic redispatch of thermal generation in the San Diego area and the possible reduction in allowable dispatch of renewable generation in the Imperial Valley.

Policy – The Bay Boulevard substation helps address several policy goals. As stated above, it is a critical component of accommodating renewable generation, for the purposes of meeting the 33% Renewable Portfolio Standard (RPS) goal by 2020.

The ISO understands that the Coastal Commission is considering whether the substation design can be revisited. As any material design changes would require CPUC approval, we strongly discourage any changes to the project design at this late stage, which would unduly delay the project. In light of the delays experienced in securing CPUC approval of the Bay Boulevard substation project, it is not reasonable to revisit the approved design of the substation absent a compelling reason that justifies the increased reliability risks and costs to ratepayers.

Please consider this a request for your support to accommodate the construction of the Bay Boulevard substation as soon as possible and as approved by the CPUC.

Sincerely,

Neil Millar Executive Director, Infrastructure Development

cc: Will Speer (WSpeer@semprautilities.com) John Jontry (jjontry@semprautilities.com)

Attachments:



City of Chula Vista South Bay Substation Relocation Project Report Prepared by

Torben Aabo Principal Engineer Power Cable Consultants, Inc.

Mark Fulmer Principal MRW Associates, LLC Glenn Reddick, P.E. Principal Engineer Glenn Riddick Professional Services

Introduction

As part of the planned re-development of the bay front area in the city of Chula Vista, San Diego Gas & Electric (SDG&E) intends to relocate its existing South Bay Substation from its current location to an area along Bay Boulevard less than ½ mile south. SDG&E also intends to upgrade the substation from 138kV/69 kV to 230 kV/69 kV and interconnect the new Bay Boulevard Substation with the existing 230 kV transmission line that was constructed as part of SDG&E's Otay Metro Power Loop (OMPL) and extends from SDG&E's Miguel Substation to its Silvergate Substation. According to SDG&E, the proposed location will require that the 230 kV lines enter the new substation overhead from the east through an existing easement and interconnect with the new substation through use of large, tall A-frame structures within the substation.

SDG&E's proposed overhead 230 kV interconnection design would effectively and unnecessarily preclude installation of a low profile substation and result in a facility and overhead interconnecting 230 kV tie lines which would produce significant and avoidable impacts to visual and scenic resources. Such a visually intrusive design in an environmentally highly sensitive location adjacent to sensitive wetlands would be inconsistent with the overall pattern of planning and development along the Chula Vista bayfront as a whole.

Inland Industries has been joined by residents, community organizations and members of the Chula Vista City Council in expressing that these adverse impacts on visual and scenic resources, adjacent sensitive wetlands, potential recreational and park use, and future land use and development potential are unnecessary and could be avoided through use of a legally and technically feasible low profile substation design alternative that would also be cost effective. Inland Industries has retained qualified experts with substantial electrical engineering and regulatory experience to evaluate the feasibility of such design alternatives. This technical review considered a substantial body of project data including the technical design specifications and site data submitted by SDG&E, the Proposed Project Application for a Coastal Development Permit, the record of proceedings before the California Public Utilities Commission ("CPUC") and the feasibility analysis regarding the 230kV tie lines submitted to the Coastal Commission by SDG&E.

In summary, this technical review finds that such a low profile substation design could be achieved by installing the proposed 230 kV tie lines entering the new Bay Boulevard Substation from the east underground rather than overhead. This would eliminate not only the overhead 230 kV tie lines, but

would also permit interconnection of the 230 kV lines without the necessity for any large or tall A-frame structures within the substation.

This analysis finds this alternative is legally feasible since it would render the 230kV tie line component of the Proposed Project consistent with the Chapter 3 provisions of the Coastal Act dealing with development and impacts to visual and scenic resources and sensitive wetlands, and the Certified Chula Vista Local Coastal Program ("LCP") requiring undergrounding of utilities within the LCP area. We note the existing Right-of-Way (ROW) owned by SG&E has already been approved for underground utilities in accordance with the existing agreement with the property owners, and necessary approvals from the California Public Utilities Commission (CPUC) could be secured through the CPUC's established petition for modification process following California Coastal Commission approval of this alternative. We further note that an underground interconnection approximately 1,000 feet long between the new Bay Boulevard Substation and the existing 230 kV lines north of the substation site was included in SDG&E's proposed South Bay Substation Relocation Project and has already been approved by the CPUC. As a result, it would not be particularly difficult or time consuming to secure CPUC approval to modify the project and incorporate undergrounding of the 230 kV interconnection between the new substation and the existing 230 kV line east of the substation site.

Qualifications

Inland Industries has asked Torben Aabo of Power Cable Consultants (PCC) with the assistance of Mark Fulmer of MRW & Associates and Glenn Reddick of Glenn Reddick Professional Services, to evaluate the technical and economic feasibility of undergrounding the 230 kV transmission circuit prior to entering the substation from the east since this is the critical factor for determining the feasibility of the low profile substation design Inland is advocating and for successfully mitigating the adverse impacts of SDG&E's proposed substation design on aesthetics, recreational and park use, and future land use and development potential in the affected area.

Chula Vista South Bay Substation Relocation Project Undergrounding 230 kV Line

Torben Aabo has more than 40 years experience in transmission cables and has successfully assisted property owners in several states to have section of overhead lines installed underground based on safety and esthetic reasons. The most recent project Mr. Aabo was involved in was the successful ruling by the California Public Utility Commission ordering the undergrounding of 3.5 miles of 500 kV transmission line through the city of Chino Hills, California. Mr. Aabo's CV is attached as Appendix A. Mark Fulmer is a Principal at MRW & Associates, LLC, with over twenty years of experience in technical, economic and rate analysis in the energy industry. In its most recent major SDG&E transmission case, the CPUC engaged MRW to assist the Commission in evaluating the costs, benefits, and risks of SDG&E's proposed Sunrise Powerlink Transmission Project. Mr. Fulmer's is in Appendix B. Glenn Reddick is a Registered Professional Engineer in four states and an expert in electric transmission and distribution planning with over 35 years of experience in the field. Mr. Reddick's is in Appendix C.

Technical Review

This report concludes that undergrounding the 230 kV transmission tie lines entering the new Bay Boulevard Substation from the east could be achieved in two alternative ways both of which are technically and economically feasible. The capacity SDG&E claims will be required for the 230 kV tie lines entering the new substation from the east in order to meet its project objectives could be achieved through use of a two cable bundle in two separate duct banks and a single 230 kV transition pole. The incremental cost of the additional undergrounding required to enable use of a low profile substation design would have a negligible impact on utility rates.

South Bay Substation Relocation Project System Capacity & Load Requirements

SDG&E states that the capacity and load requirements for the 230 kV tie lines entering the proposed new Bay Boulevard Substation must have an ampacity rating of 1,175 MVA (2,950 amperes) (Normal/Emergency) in order to meet the project objectives of its South Bay Substation Relocation Project. SDG&E claims that the 230 kV tie lines must have this ampacity rating in order to eliminate a potential overload that the California Independent System Operator (CAISO) forecast may otherwise occur between SDG&E's Miguel Substation and its proposed new Bay Boulevard Substation under certain potential contingency conditions in 2022. The amount of the potential overload forecast by the CAISO has not been disclosed to Inland, but SDG&E states that the CAISO has advised it that SDG&E's planned design capacity of 1,175 MVA (2,950 amperes) (Normal/Emergency) for the 230 kV lines entering the new Bay Boulevard Substation from the east would be sufficient to eliminate the potential overload.

SDG&E's proposed overhead 230 kV tie line and high profile substation design would meet this load requirement. SDG&E claims, however, that the necessary ampacity could not be achieved if the 230 kV tie line entering the new substation from the east is undergrounded unless a three-cable bundle (with nine runs of cable) is used. SDG&E further claims that this would require two separate 230 kV transition structures to transition the 230 kV line from overhead to underground and that the two transition structures necessary to underground the tie lines would be more visually intrusive than SDG&E's proposed high profile substation design and overhead 230 kV tie lines.

Potential Capacity of Underground Cable Configurations

Whether or not a low profile substation design alternative which would in turn significantly reduce the adverse impacts noted is feasible as believed and advocated by Inland, thus depends in part upon whether

SDG&E's project design ampacity, of 1,175 MVA (2,950 amperes) (Normal/Emergency), can be achieved through an underground design using one rather than two transition poles. For the reasons explained below, this study concludes that it can be.

In order to determine the capacity of a proposed electric transmission line, an ampacity study is generally required. The ampacity, or thermal rating, of a transmission line is a measure of the maximum amount of electrical current a conductor can carry before sustaining immediate or progressive deterioration. It is based on physical and electrical properties of the material and construction of the conductor and of its insulation, ambient temperature, and environmental conditions adjacent to the conductor. For example, a larger conductor increases the ampacity rating and a lower ambient temperature can significantly increase the ampacity. When multiple conductors are in close proximity, each contributes heat to the others and diminishes the amount of external cooling affecting the individual cable conductors. To account for this, if the engineering design entails close proximity of conductors in ducts in underground conduit, the overall ampacity of bundled insulated conductors are derated. The derating factor varies depending on the depth and distance between the circuits. Conductors in a single duct bank configuration are typically in much closer proximity than conductors in two separate duct banks and, therefore, require a higher derating factor and have a lower ampacity rating than conductors in separate duct banks further apart. Likewise, the ampacity rating can be significantly increased by moving the conductors further apart in two separate duct banks.

In justification of its claim that its design ampacity requirements for the 230 kV tie line entering the new Bay Boulevard Substation from the east cannot be achieved except through use of a three-cable bundle and two separate transition structures, SDG&E provided several ampacity studies in proceedings before the CPUC on its South Bay Substation Relocation Project. See SDG&E's late-filed Exhibit #17, "Ampacity Studies SDG&E Data Response #3 to Inland Industries, dated November 9, 2012" in CPUC docket A.10-06-007. One of these studies was performed by Black &Veatch (B&V) and denoted as, "1 Ampacity Calculations for South Bay Alt BV." In this study B&V used the following parameters for its ampacity calculations:

- 86% load factor
- Single point grounding
- 230 kV XLPE cable construction
- 30^{0} C earth ambient temperature
- 6" PVC ducts
- 3 feet to the top of the duct bank
- 60 thermal rho for duct bank material
- 90 thermal rho for native soil
- Calculations performed based on CymCap 6.0 rev 5

In order to evaluate SDG&E's claims regarding necessary requirements in order to underground the 230 kV tie lines and utilize a low profile substation design, PCC performed an ampacity study. It did so using Power Delivery Consultants' ampacity program PowerAmp for Windows and based its calculations on the same parameters used by B&V.

Table 1 lists the PCC calculated values with two 4000 kcmil copper conductor cables per phase installed in a vertical duct bank configuration as shown in Figure 1. It also lists the ampacity calculated by B&V for this configuration. PCC's results and B&V's results are very close. The less than 2% difference between the B&V and PCC's calculated values are due to minor differences in the ampacity programs

Table 1

Ampacity Calculations for Vertical Duct Bank with two Cables per Phase								
Conductor size kcmil	Circuit spacing inches	Required rating		PCC calculations Load factor = 86%		B&V calculations		
		Amperes	MVA	Amperes	MVA	Amperes	MVA	
4000	12	2950	1175	2926	1170	2879	1147	
4000	15	2950	1175	3020	1203	NA	NA	

used for the calculations.

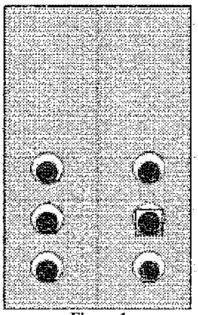


Figure 1 Vertical Duct Bank Configuration

As can be seen from the values listed in Table 1, with the cables spaced 12" the cables will only be able to carry 90 % of the design load SDG&E claims will be required. Separating the cables by another 3" however, to a distance of 15", increases the capacity of this cable configuration (i.e., two 4000 kcmil copper conductor cables per phase installed in a vertical duct bank configuration as shown in Figure 6) so that it exceeds SDG&E's design requirements - the cables will be able to carry 28 MVA above the rating SDG&E claims will be required to meet its project objectives.

Table 2 summarizes the results of PCC's calculations with two cables per phase placed in a horizontal configuration as shown in Figure 2.

Ampacity Calculations for Horizontal Duct Bank with Two Cables per Phase									
Conductor size kcmil	Circuit spacing	Required	l rating	PCC calculations Load factor = 86%					
	inches	Amperes	MVA	Amperes	MVA				
4000)	12	2950	1175	3312	1319	-		
4000)	15	2950	1175	3444	1372]		

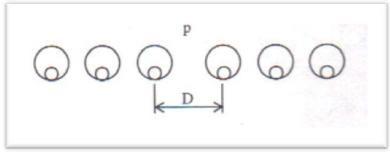


Figure 2 Horizontal Duct Bank Configuration

If the cables are installed in the horizontal configuration as shown in Table 2 and Figure 7, the rating of the circuit will also exceed SDG&E's design requirements with the cables spaced either 12" or 15" apart.

Feasibility & Benefits of Undergrounding 230 kV Transmission Circuits

Undergrounding of transmission circuits is a well-established and relatively common practice by electric utilities. The first underground transmission cable, at 138 kV, was installed in the 1930s. Since then, transmission cables with voltages as high as 500 kV have been installed and shown to have an excellent reliability record. SDG&E has installed several 230 kV XLPE transmission cable circuits, including portions of the Sunrise circuit, which SDG&E has compared to the South Bay Substation 230 kV project, and portions of the existing OMPL located along the northern portion of the Chula Vista bay front. SDG&E has also proposed and the CPUC has approved undergrounding a 1,000 foot portion of the new 230 kV tie line extending north from the new Bay Boulevard Substation. The CPUC also recently ordered Southern California Edison Company to underground additional portions of its high voltage 500 kV Tehachapi Renewable Transmission Project in the City of Chino Hills.

We identify two options for undergrounding the 230 kV transmission tie line entering the proposed substation from the east:

- 1. Undergrounding the tie line starting adjacent to the Bay Boulevard approximately 300 feet east of the substation site; or
- 2. Undergrounding the tie line starting at the back of the existing parking lot approximately 1,000 feet east of the substation site.

This evaluation finds no evidence for any land use, regulatory, structural or engineering restriction which would preclude the undergrounding of the proposed overhead 230kV tie lines as suggested in the options discussed. From an electrical engineering perspective both of these options are technically feasible and consistent with well-established practice by electrical utilities.

The following Figures show visual simulations of the existing 230 kV and 138 kV overhead transmission lines and structures; SDG&E's proposed new high profile Bay Boulevard Substation and overhead 230 kV tie lines; and the alternative low profile substation design advocated by Inland with the two alternatives for undergrounding the 230 kV tie lines entering the substation from the east. All figures are based upon site data and images utilized by SDG&E.

Existing 230 kV Structure

Figure 3 shows the existing lines and structures.

Figure 3 Existing 230 kV and 138 kV Structures near Proposed South Bay Substation

Figure 4 is a visual simulation of SDG&E's proposed high profile substation design showing how the proposed new Bay Boulevard Substation will look if the 230 kV tie lines are installed overhead.



Visual Simulation

Figure 4 Visual Simulation of SDG&E Proposed South Bay Substation with 230 kV Overhead Line Entering the Substation Prepared by SDG&E for the CPUC EIR Figure 5 shows the proposed substation with the 230 kV line undergrounded beginning approximately 300 feet east of the substation site. The simulation includes the undergrounding of the 200 feet of the 138 kV tie line, including the existing lattice tower and new transition pole which the City of Chula Vista is requesting and SDG&E supported as part of the Bayfront Enhancement Alternative (BEFA) Note the significant reduction in the height of the substation that could be achieved through this alternative as a result of the elimination of the large A-frames.



Visual Simulation Figure 5

Visual Simulation with the 300 feet of 230 kV Line Undergrounded along with 200 feet of overhead 138 kV line

Figure 6 shows the parking lot where the proposed transition structure would be located when moving the 230 kV transition structure further from and off of the bay front to a location approximately 1,000 ft. east of the substation site. This alternative would require installing one transition pole structure in an existing parking lot.



Figure 6 Proposed Location of Transition Structure with 1,000 feet of Underground Transmission Cable

Chula Vista South Bay Substation Relocation Project Undergrounding 230 kV Line

Figure 7 is a visual simulation showing the effect of installing the 230 kV line underground beginning approximately 1,000 feet east of the substation siteIt also includes the 138 kV undergrounding as well. Note the significant reduction in visual impacts that could be achieved through this alternative as a result of the elimination of the transition structure and 230 kV lines on the bay front side of Bay Boulevard along with finishing the last 200 feet of the 138kV tie line. Compare Figure 4 (showing SDG&E's proposed overhead tie line and high profile substation design); Figure 5 (showing undergrounding the 230 kV tie line 300 feet east of the substation site with the transition pole along Bay Boulevard and with a low profile substation design); and Figure 7 (showing undergrounding the 230 kV tie line with the transition pole off the bay front in the existing parking lot 1,000 feet east of the substation site and with a low profile substation design).



Visual Simulation

Figure 7 230 kV Line Installed Underground for Approximately 1,000 feet Along with the remaining 200 feet of the 138 kV line

Estimated Costs for Undergrounding 230 kV Line

The estimated project cost to relocate the South Bay Substation has been listed by SDG&E as \$157 million. Tables 3 and 4 include PCC's cost estimates for undergrounding the 230 kV line for 300 ft. and 1000 ft. respectively. The estimate to underground 300 ft. is \$2.47 million and will add 1.6% to the overall project cost. Installing 1000 ft. of the 230 kV line underground is estimated to cost \$4.33 million which will add 2.8% to the overall project cost.

Table 3Estimated Cost for Undergrounding 300 ft. of 230 kV XLPE Cable Circuit

		Cost/Foot			
		or unit		Project Cost	
Cable and Accessories	Feet/units	cost \$		\$	
4000 kcmil segmental copper conductor	1,800	\$	250	\$	450,000
Feet/reel/300/# of reels	6				
Terminations	12	\$	50,000	\$	600,000
Grounding boxes, installed	6	\$	5,000	\$	30,000
Open sheath connecting boxes, installed	6	\$	5,000	\$	30,000
Installation Requirements					
Escavation and installation of ductbank for 7 ducts	300	\$	129	\$	38,700
300 ft. of 6" PVC duct	2,100	\$	13	\$	27,300
Pulling in cables	1,800	\$	7	\$	12,600
Installing 12 terminations	12	\$	20,000	\$	240,000
Fiber optic communication cable and duct, installed	300	\$	25	\$	7,500
350 kcmil copper grounding cable, installed	300	\$	8	\$	2,400
Transition structure	1	\$1	.50,000	\$	150,000
Substation termination structure	2	\$	75,000	\$	150,000
Spare Material					
230 kV XLPE 4000 kcmil copper conductor cable	300	\$	250	\$	75,000
230 kV termination	1	\$	60,000	\$	60,000
230 kV splice	1	\$	25,000	\$	25,000
Contingency					
15 % contingency	1			\$	284,775
Project Management					
15 % Project Management	1			\$	284,775
Mobilization Cost					
Contractor on site	0				
Estimated Project Cost				\$2	2,468,050

Table 5Estimated Cost to Underground 1000f ft. of 230 kV XLPE Cable Circuit

		Cost/Foot				
		or unit		Project Cost		
Cable and Accessories	Feet/units	(cost \$		\$	
4000 kcmil segmental copper conductor	6,000	\$	250	\$1	L,500,000	
Feet/reel/1000/# of reels	6					
Terminations	12	\$	50,000	\$	600,000	
Grounding boxes, installed	6	\$	5,000	\$	30,000	
Open sheath connecting boxes, installed	6	\$	5,000	\$	30,000	
Installation Requirements						
Excavation and installation of ductbank for 7 ducts	1,000	\$	129	\$	129,000	
1000 ft. of 6" PVC duct	7,000	\$	13	\$	91,000	
Pulling in cables	6,000	\$	7	\$	42,000	
Installing 12 terminations	12	\$	20,000	\$	240,000	
Fiber optic communication cable and duct, installed	1,000	\$	25	\$	25,000	
350 kcmil copper grounding cable, installed	1,000	\$	8	\$	8,000	
Transition structure	1	\$1	L50,000	\$	150,000	
Substation termination structure	2	\$	75,000	\$	150,000	
Spare Material						
230 kV XLPE 4000 kcmil copper conductor cable	1,000	\$	250	\$	250,000	
230 kV termination	1	\$	60,000	\$	60,000	
230 kV splice	1	\$	25,000	\$	25,000	
Contingency						
15 % contingency	1			\$	499,500	
Project Management						
15 % Project Management	1			\$	499,500	
Mobilization Cost						
Contractor on site	0					
Estimated Project Cost				\$4	1,329,000	

Economic Impacts

The costs of high-voltage transmission lines and substations owned by any of the three major California utilities (SDG&E, Pacific Gas & Electric Company and Southern California Edison in California) are collected from the ratepayers of all three utilities, no matter which utility actually builds the line. (This is because the three utilities operate the transmission grid as a unified system, so that a line built by one effects the deliverability of power to the other two.) This cost sharing includes the costs of undergrounding and other mitigations needed for line approval. As a result, for example, SDG&E customers are paying a share of the \$224 million cost to underground portions of the Tehachapi Renewable Transmission Project that runs through the City of Chino Hills, even though the line is being built by Southern California Edison. Similarly, the cost of the South Bay Substation, including all undergrounding, will be partially borne by customers of the other two utilities. Furthermore, as the South Bay Project is deemed necessary by the state power grid operator (the California Independent System Operator), "20A" undergrounding funds need not be used for any of the undergrounding costs.

Mark Fulmer of MRW & Associates, LLC ("MRW") was retained to assess the economic impacts of the proposed undergrounding for customers of SDG&E. Mr. Fulmer found that, given a cost of \$4.5 million for the incremental undergrounding and the state-wide sharing of transmission costs, the proposed additional undergrounding of the 230-kV line would increase retail electric rates for SDG&E customers by an average of 0.00028 cents per kWh, which is equivalent to a rate increase of 0.0017%. This rate increase would result in a bill increase of about 1.7 cents per year for the typical residential customer. As rate impacts scale directly with project costs, even if the actual cost of the incremental undergrounding were off by a factor of two, the rate impacts would be negligible. For perspective, even at double the cost, this rate impact is well under the cost of operating a night light.

Design Impact of Undergrounding the 230 kV Line

As indicated, SDG&E's proposed design includes a 230kV tie line which results in an unnecessarily high profile facility at a currently vacant site that is highly intrusive and degrades visual and scenic resources on the coast. The proposed substation design would require two 68 feet tall A-frame type structures to terminate the 230 kV overhead transmission tie lines entering the new substation from the east. The use of these tall structures to terminate the 230 kV transmission line results in other relatively tall structures in the substation as a matter of convenience and not a matter of cost or design necessity.

Figure 8 shows the visual impact of SDG&E's proposed project design with the 230 kV tie lines overhead and the resulting 68 feet tall A-frame structures in the substation to terminate the 230 kV overhead lines.



Figure 8 SDG&E's Visual Simulation of the Bay Boulevard Substation

Again as indicated, SDG&E claims that to meet its project objectives, the 230 kV tie lines entering the new substation from the east will have to be designed to achieve an ampacity rating of 1175 MVA. In order to do so, it claims that a three-cable bundle (with nine runs of cable) will be necessary and that two separate transition poles will have to be installed, rather than one transition pole, to accommodate all of the necessary cables.

Figure 9 shows the visual simulation prepared by SDG&E of what the new Bay Boulevard Substation area allegedly would look like if the 230 kV tie line entering the new substation is undergrounded beginning approximately 300 ft. east of the substation site.

PCC's ampacity study shows that two 4000 kcmil copper conductor cables per phase will carry the required load. Therefore, only one transition structure will be required, not two as shown in SDG&E's visual simulation.

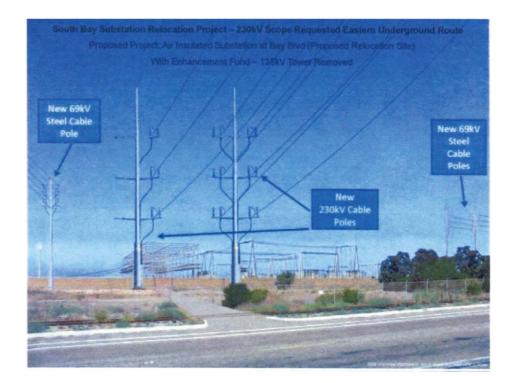


Figure 9 SDG&E Visual Simulation of Bay Boulevard Substation with Three Cables per Phase Undergrounded Beginning 300 ft. East of Substation Site

Undergrounding the remaining 230kV transmission line will permit minor modifications to the South Bay substation design that lowers the overall height of the 230kV section of the substation and substantially reduces impacts to visual and scenic resources and eliminates the need for multiple A-frame structures which also present adverse impacts to adjacent sensitive wetlands. It is estimated that the tallest structure in the 230kV section could be reduced from 68 ft. in height to approximately 34 ft. and meet all requirements of CPCU General Orders 95 and 128, requirements of the National Electrical Safety Code and of CAISO. Given the configuration of the substation, the 34 foot rigid bus replacing the A-frames and overhead cross bus conductors would not be an impediment to equipment traffic in the substation and the maintenance needs of the substation. Removal of the A-frame and overhead conductor to the 230kV/ 69kV transformer requires minor modifications to the substation layout but can be accomplished within the proposed site.

Figure 10 shows a typical 230 kV switchyard with overhead line entry and68 foot high A-Frame structures for termination of the 230 kV tie lines as SDG&E has proposed for the new Bay Boulevard Substation.

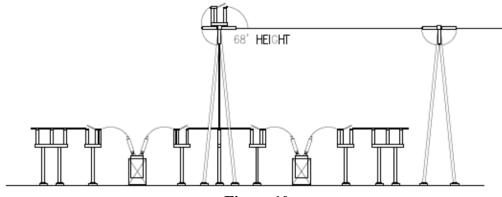
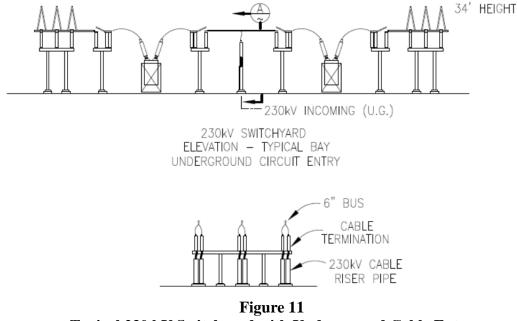


Figure 10 Typical 230 kV Switchyard with Overhead Circuit Entry

Figure 11 shows the same typical switchyard with undergrounded entrances for the 230 kV tie lines, which eliminates the need for the 68 foot high A-Frame structures and permits the 230 kV tie line terminations to be accomplished through lower 34 foot high riser structures.



Typical 230 kV Switchyard with Underground Cable Entry

SDG&'s proposed design for the new Bay Boulevard Substation includes underground entrances and lines for the other 230kV tie lines exiting the new Bay Boulevard Substation to the north and there is no technical reason why it cannot use a similar design for the 230 kV tie lines entering the new substation from the east. The basic mechanics of using overhead and underground designs in substations at 230kV are well known to the industry and are established practice.

Figure 12 is a visual simulation showing the Bay Boulevard Substation with the 230 kV tie lines undergrounded beginning approximately 1000 feet east of the substation site.



Visual Simulation

Figure 12 Visual Simulation Showing the Bay Boulevard Substation with Two Cables per Phase Undergrounded Beginning 1000 ft. East of Substation Site Along with the remaining 200 feet of 138 kV line

Conclusions

The study shows:

- Two 4000 kcmil copper conductor XLPE transmission cables per phase is sufficient to meet SDG&E's project capacity objectives and will carry the required load for the new Bay Boulevard Substation.
- Only one 230 kV transition structure is required because two 230 kV cables per phase are sufficient to carry the design load.
- Installing the 230 kV tie line entering the new substation from the east underground using XPLE cable beginning approximately 300 ft. east of the substation site will result in a substantially improved low-profile substation design, avoid unnecessary adverse impacts to visual and scenic resources and to adjacent sensitive wetlands, allow compliance with the Certified Chula Vista LCP regarding undergrounding of utilities, and will be consistent with the overall pattern of planning and development in the Chula Vista LCP and Bayfront Master Plan as a whole.
- Installing the 230 kV tie line entering the new substation from the east underground using XPLE cable beginning approximately 1000 ft. east of the substation site will further avoid unnecessary adverse impacts on visual and scenic resources and to adjacent sensitive wetlands by removing the 230 kV transition structure and related overhead 230 kV lines from the vicinity of the bay front.
- The estimated costs to underground the 230 kV tie lines entering the substation from the east will add very little to the total overall cost of the South Bay Substation Relocation Project and will

provide significant benefits to the public.

• The rate impact of this additional undergrounding on the average ratepayers will be negligible - less than the cost of operating a night light during one year.

Recommendations

It is recommended that the Coastal Commission find that placement of the 230kV tie line entering the new Bay Boulevard Substation from the east underground is technically and economically feasible. Together with the Commission's consistency review of the proposed configuration with the Chapter 3 provisions of the Coastal Act and the Chula Vista Certified LCP, the Commission can and should condition its approval of a Coastal Development Permit ("CDP") for SDG&E's South Bay Substation Relocation Project on undergrounding the 230 kV tie line entering the new Bay Boulevard Substation from the east. Such undergrounding should preferably begin approximately 1,000 feet east of the substation site but not less than 300 feet east of the site thus resulting in a low profile substation design through elimination of the several tall A-frame structures currently proposed.

20 January 2014

Appendix A Torben Aabo's CV

Torben Aabo, Principal Engineer

Torben Aabo received a Bachelor's Degree in electrical engineering from Aarhus Technical College, Denmark, in 1967 and did graduate work in electrical engineering and industrial management at Fairleigh Dickinson University in New Jersey, 1972-1974.

He joined Phelps Dodge Cable and Wire Company in 1970 and his early assignments at the Extra High Voltage Research Laboratory involved with studies in dielectric and thermal testing and analysis of 500 kV pipe-type and 138 kV solid dielectric cable systems. He participated in the original 138 XLPE failure investigations at Waltz Mills, Pennsylvania.

Mr. Aabo joined Power Technologies, Inc. (PTI), in 1974 and participated in the design of many pipe-type and solid dielectric transmission cable circuits. Research projects were part of his responsibilities at PTI and included projects to increase pipe-cable section length, fluid leak location on pipe-type cable systems, and investigations of alternate insulation material.

In 1995, Mr. Aabo formed Power Cable Consultants, Inc. (PCC), a consulting company specializing in engineering projects for underground transmission and distribution cable systems. His work involves failure investigations of 600 V through 400 kV cables and their accessories in the US, Europe, Asia, and the Middle East. Other failure investigations involved 400 kV XLPE termination failure and several 345 kV and 240 kV XLPE transmission cable system failures. For 15 years he was one of the main instructors of a principle and practice transmission cable course.

He has been involved with several 115 and 138 kV transmission cable projects which involved initial cost evaluation, bid specifications, pre-bid meetings, supplier evaluation, EMF issues, factory inspections and final acceptance testing of the cable circuits. He participated in the development of operations and maintenance manuals for both HPFF and XLPE transmission cable systems.

Being an expert witness, Mr. Aabo testified in a number of cases throughout the US. He testified before the Commonwealth of Virginia State Corporation Commission regarding undergrounding a section of a proposed 230 kV overhead transmission line. When a 115 kV overhead line was proposed in Telluride, Colorado, he testified before the Public Utilities Commission of the State of Colorado in favor of an underground installation. He also testified before the Connecticut Siting Council regarding 345 kV proposed overhead and underground transmission circuits. Being involved with a proposed 115 kV overhead transmission line, he testified before the Vermont Public Service Board concerning undergrounding portions of the line. He also testified before the California Public Utility Commission which resulted in undergrounding the first 500 kV XLPE cable system in the US.

Mr. Aabo has participated in 345 kV and 38 kV submarine cable failure investigations in which he was part of the QA team during the repair processes. He also participated in the upgrading and development of new umbilical cable systems for the operation of deep sea Remote Operating Vessels (ROV).

Mr. Aabo was a team member on projects investigating the large power outage covering most of New Jersey in July 1999. In 2000 he became a team member investigating distribution manhole events and auditing electric utilities distribution systems. Follow-up projects were initiated through 2012. He has also participated in primary and secondary cable evaluations after other utility black-outs to determine causes of failures and potential insulation aging. Additionally Mr. Aabo has worked with auditing primary and secondary network systems.

Mr. Aabo is a life member of IEEE and a voting member of the Insulated Conductors Committee (ICC). He was past chairman of working groups involved with development of transmission cables.

Torben Aabo <u>TECHNICAL PUBLICATIONS</u>

1. "Forced Cooling Tests on 230 kV and 345 kV HPOF Cable Systems," IEEE Winter Power Meeting, New York, NY, 1976, Paper A76 201-4, (co-authors, J.A. Williams and E.D. Eich).

2. "Thermal Analysis of 230 kV and 345 kV HPOF Cables," IEEE 1976 Underground Transmission and Distribution Conference, Atlantic City, NJ, September 1976, (co-authors, J.A. Williams and E.D. Eich).

3. "Increasing Pipe Cable Section Lengths," 7th IEEE/PES Transmission and Distribution Conference, Atlanta, GA, April 1978, (co-authors, J.A. Moran and J.F. Shimshock).

4. "Cell Tests for Dielectric Performance of Glass," 7th IEEE/PES Transmission and Distribution Conference, Atlanta, GA, April 1978, (co-authors, J.A. Williams and K.R. Kormanyos).

5. "Thermo-Mechanical Bending of Pipe Type Cables," PTI Newsletter, *Power Technology*, Issue 30, July 1982.

6. "Thermo-Mechanical Bending Effects in EHV Pipe-Type Cables," IEEE/PES 1984 T&D Conference, Kansas City, MO, April 29 - May 4, 1984, (co-authors J.A. Moran and J.F. Shimshock).

7. "Pressure Surge Reflector for Pipe Type Cable System," Paper 89 TD 369-0 PWRD, presented at the IEEE/PES T&D Conference, New Orleans, LA, April 2-7, 1989, (co-authors, H. Chu, H.A. ElBadaly, R. Ghafurian, R.J. Ringlee, J.A. Williams, and J. Melcher).

8. "Pulling Pipe Type Cables," presented at the EPRI Cable Pulling Workshop, New Orleans, LA, October 10-11, 1989, (co-author, J.A. Moran).

9. "A Fourier Transform Technique for Calculating Cable and Pipe Temperatures for Periodic and Transient Conditions," IEEE Paper No. 91 WM 248-5 PWRD, IEEE/PES Winter Meeting, New York, NY February 3-7, 1991, (co-authors, G. C. Thomann, E. C. Bascom, R. Ghafurian, and T. M. McKernan).

10. "Pressure Surge Testing of Pothead and Joint for Pipe Type Cable Circuits," IEEE/PES 1991 Transmission & Distribution Conference, Dallas, TX, September 22-27, 1991, (co-authors, J. A. Williams, R. J. Ringlee, H. Chu, and R. Ghafurian).

11. "Field Test Program and Results to Verify HPFF Cable Rating," IEEE/PES 1991 Transmission & Distribution Conference, Dallas, TX, September 22-27, 1991, (co-authors, J.A. Williams, E.C. Bascom, and B. Horgan).

12. "Laboratory Analysis of Failed Samples: What is Important?" presented at a panel session "Cable, Joint and Termination Failure Analysis" during the IEEE/PES 1991 Transmission & Distribution Conference, Dallas, TX, September 22-27, 1991.

13. "Underground Transmission Cables: Cost Effective Ampacity Improvements." PTI's Newsletter, *Power Technology*, Issue No. 75, October 1993, (co-author, W. G. Lawson).

Chula Vista South Bay Substation Relocation Project Undergrounding 230 kV Line

14. "Upgrading the Ampacity of HPFF Pipe-Type Cable Circuits," IEEE/PES 1994 Transmission and Distribution Conference, Chicago, IL, April 11-16, 1994 (co-authors, W. Graham Lawson, Sunil V. Pancholi).

15. "Hybrid Transmission: Aggressive Use of Underground Cable Sections with Overhead Lines." 36th CIGRE Session, 25-31 August 1996 (co-authors, E.C. Bascom, III, D.A. Douglass, and G.C. Thomann).

16. "Diagnostic Testing of Cable Systems," presented at the Pennsylvania Electric Association T&D Committee Meeting, September 1996 (co-author, Edwin Pultrum).

17. "Testing of XLPE Transmission Cable Terminations at Three Utilities," EPRI Report TR-108073, Final Report, May 1997 (co-author, Edwin Pultrum).

18. "Directional Drilling Installation of Transmission Cable & Fiber Optic Circuit," presented at the 1997 T&D World EXPO, Atlanta, Georgia, November 11 - 13, 1997 (co-author, Isaac Green).

19. "Diagnostic Tool for Distribution Cables: VLF Partial Discharge Detection," presented at the 1997 T&D World EXPO, Atlanta, Georgia, November 11 - 13, 1997 (co-author, Willem Boone).

20. "Cost Effective Maintenance of Distribution Cable Circuits Using Diagnostic Testing," presented at the 1998 Doble Conference, Boston, Massachusetts, March 30 – April 3, 1998 (co-author, Willem Boone).

21. "Diagnostic Testing Comes to the Rescue," Transmission & Distribution World magazine, July 1998 (co-authors Stanley V. Heyer, et. al.)

22. "Cost Effective Diagnostic Maintenance Testing of Distribution Cable Circuits," presented at the 2000 T&D World EXPO, Cincinnati, Ohio, April 26 - 28, 2000 (co-author, Edward Horgan).

23. "Diagnostic Testing Reveals Cable Health," Transmission & Distribution World magazine, August 2000

24 "High Voltage Testing of an ROV Electro-Optical Tether Cable," presented at the IEEE/MTS Oceans 2001 Conference Proceedings, Honolulu, HI, November 5-8 2001. IEEE Press. (co-authors, Ed Mellinger, A. Bowen, C. Katz, R. Petitt).

For further information, contact: **Power Cable Consultants, Inc. Torben Aabo Principal Engineer 510 Charlton Road Ballston Spa, NY 12020-3211 USA phone 518 384-1613, cell 518 441 8085** e-mail t.aabo@ieee.org

Appendix B Qualifications of MRW & Associates and Mark Fulmer

MRW & Associates, LLC (MRW) is a leading source of regulatory and business knowledge of the California and western U.S. energy markets and has been a regular participant in rate cases, transmission cases, and other regulatory proceedings at the California Public Utilities Commission since the firm's founding over 25 years ago. MRW provides regulatory assistance, market insight, and technical analysis to key players in the energy markets, including utilities, developers, municipalities, customer advocates, policymakers, and regulators. In the most recent major SDG&E transmission case, the California Public Utilities Commission engaged MRW to assist the Commission in evaluating the costs, benefits, and risks of SDG&E's proposed Sunrise Powerlink Transmission Project.

Mark Fulmer is a Principal at MRW & Associates, LLC, with over twenty years of experience in the energy industry. Much of this work has been in the regulatory arena, advising end-use customers, trade groups, energy service providers, utilities, and regulatory commissions on ratemaking, resource planning, energy efficiency, demand-side management, and competitive retail markets. Mr. Fulmer is an expert in utility ratemaking. He leads the firm's rate analysis practice and regularly provides clients with retail rate forecasts and evaluations of tariff options and rate structure proposals. Mr. Fulmer provides testimony frequently before the California Public Utilities Commission on electric and gas rate issues and regulatory matters related to competitive retail markets. He has additionally submitted testimony before the Federal Energy Regulatory Commission and state utility commissions in Arizona, Hawaii, Pennsylvania, and Rhode Island, as well as supporting testimony in ten other states and Canadian provinces. Prior to joining MRW, Mr. Fulmer provided consulting services related to demand-side management, deregulation, and integrated resource planning. He holds a master's degree in engineering from Princeton University, where he conducted graduate research at the Center for Energy and Environmental Studies.

MARK E. FULMER

PROFESSIONAL Principal EXPERIENCE MRW & Associates, LLC (1999 - Present)

Conduct economic and technical studies in support of clients involved in regulatory and legislative proceedings and power project development. Advise clients on the economic issues associated with taking electricity service from non-utility sources or self-generating power. Work includes expert testimony on rate matters; economic analysis of end-use energy-efficiency projects, retail rate and wholesale price forecasting, and pro forma analysis of cogeneration and distributed generation facilities.

Project Engineer Daniel, Mann, Johnson & Mendenhall (1996 - 1999)

Acted as project manager and technical advisor on energy efficiency projects. Work included management of PG&E program to promote innovative energy efficient technologies for large electricity users. Coordinated the implementation of an intranet-based energy efficiency library. Directed technical and market analyses of small commercial and residential emerging technologies.

Associate

Tellus Institute

(1990-1996)

Advised public utility commissions in five states on electric and gas industry deregulation issues. Submitted testimony on the rate design of a natural gas utility to the Pennsylvania Public Utilities Commission. Testified before the Hawaii PUC on behalf of a gas distribution utility concerning a competing electric utility's demandside management plan. Analyzed national energy policies for a set of nongovernmental agencies, including critiquing the DOE's national energy forecasting model. Developed model to track transportation energy use and emissions and used the model to evaluate state-level transportation policies. Developed model to track greenhouse gas emission reductions resulting from state-level carbon taxes.

Research Assistant

Center for Energy and Environmental Studies, Princeton University (1988-1990)

Researched the technical and economic viability of gas turbine cogeneration using biomass in the cane sugar and alcohol industries. First researcher to apply "pinch" analysis and a mixed-integer linear programming model to minimize energy use in cane sugar refineries and alcohol distilleries.

EDUCATION

M.S.E., Mechanical and Aerospace Engineering, Princeton University, 1991 B.S., Mechanical Engineering, University of California, Irvine, 1986

SELECTED PUBLICATIONS

- A Technical and Economic Assessment of the Co-Production of Electricity and Alcohol From Sugar Cane. Presented at the *International Engineering Conference on Energy Conversion (IECEC-90)*. American Institute of Chemical Engineers. New York, NY. August 1990. Principal author and presenter.
- 2. Cogeneration Applications of Biomass Gasifier/Gas Turbine Technologies in the Cane Sugar and Alcohol Industries. Proceedings, *Energy and Environment in the 21st Century*, MIT Press. Cambridge, Massachusetts. 1991. Co-author.
- 3. The Environmental Impacts of Demand-Side Management. Electric Power Research Institute report TR-101673. 1992. Co-author.
- 4. The Role of Gas Heat Pumps in Electric DSM. Presented at the 6th National Demand-Side Management Conference. Miami Beach, Florida. March 1993. Principal author and presenter.
- 5. Applying an Integrated Energy/Environmental Framework to the Analysis of Alternative Transportation Fuels. Invited paper at the European Council for an Energy Efficient Economy (ECEEE) 1993 Summer Study. Principal author.
- 6. Mistakes, Misconceptions, and Misnomers in DSM Cost-Effectiveness Analysis. Peer reviewed paper at the ACEEE 1994 Summer Study. Principal author and presenter.
- 7. A Social Cost Analysis of Alternative Fuels for Light Vehicles. *Energy Strategies for a Sustainable Transportation System*, ACEEE. Washington, DC. 1995.
- 8. Strategies for Reducing Energy Consumption in the Texas Transportation Sector. Project for the Texas Sustainable Energy Development Council. Austin, Texas. June 1995. Co-author.
- 9. Evaluation of Food Processing Effluent Treatment Alternatives. Paper presented at the American Chemical Society meeting, Las Vegas, Nevada. December 1997. Co-Author.
- Market Transformation Effect Indicators for Government, Utilities, Retailers and Manufacturers. Invited panelist in a roundtable discussion at the American Council for an Energy Efficient Economy (ACEEE) 1998 Summer Study.
- 11. California: Crisis Over? Project Finance NewsWire, Chadbourne & Parke. October 2001. Co-author.
- 12. California: Back to Basics or Déjà Vu? Natural Gas & Electricity, Volume 20, Number 12. July 2004. Co-author.
- 13. Nuclear Fuel Reprocessing: Issues and Future Prospects. Report for the California Energy Commission. (Final Draft). March 2006. Co-author.
- 14. AB 1632 Assessment of California's Operating Nuclear Plants. California Energy Commission, CEC-100-2008-005-F. October 2008. Co-author.
- 15. Framework for Evaluating Greenhouse Gas Implications of Natural Gas-fired Power Plants in California. California Energy Commission, CEC-700-2009-009-F. May 2009. Co-author.

PREPARED TESTIMONY

Rhode Island Public Utilities Commission No. 2025
Prepared Testimony on Behalf of Rhode Island Department of Public Utilities and Carriers
(Commission Staff). Testimony addressed the costs, savings, and cost-effectiveness of the proposed
demand-side management programs of Providence Gas Company. April 1993.

Chula Vista South Bay Substation Relocation Project Undergrounding 230 kV Line

- Pennsylvania Public Utility Commission R-943029
 Prepared Testimony on Behalf of the Pennsylvania Office of Consumer Advocate. Testimony
 reviewed 1307(f) filing of Columbia Gas of Pennsylvania, particularly the impact of the proposed gas
 cost recovery mechanism on residential customers. May 1994.
- Public Utilities Commission of the State of Hawaii No. 94-0206 Prepared Testimony on Behalf of the Gas Company of Hawaii (Gasco). Testimony identification of Gasco's concerns regarding HECO's proposed DSM programs for competitive energy end-use markets. December 1994.
- 4. FERC Docket Nos. EL00-95-075 and EL00-98-063 Affidavit on Behalf of Duke Energy Trading and Marketing LLC. March 20, 2003.
- CPUC Rulemaking 01-10-024 Prepared Testimony on Behalf of the Alliance for Retail Energy Markets. Testimony addressed the utility procurement plans with respect to resource adequacy. June 23, 2003.
- 6. CPUC Rulemaking 01-10-024 Rebuttal Testimony on Behalf of the Alliance for Retail Energy Markets. July 14, 2003.
- Arizona Corporation Commission No. E-00000A-02-0051, E-01345A-01-0822, E-00000A-01-0630. E01933A-02-0069, E-01933A-98-0471 Rebuttal Testimony on Behalf of Constellation NewEnergy, Inc. and Strategic Energy, L.L.C. Testimony addressed the future of the Arizona Independent System Administrator. July 28, 2003.
- Arizona Corporation Commission No. E-00000A-02-0051 Reply Testimony on Behalf of Constellation NewEnergy, Inc. and Strategic Energy L.L.C. August 29, 2003.
- 9. Arizona Corporation Commission No. E-01345A-03-0437 Direct Testimony on Behalf of Constellation NewEnergy and Strategic Energy, Inc. February 3, 2004.
- Arizona Corporation Commission No. E-01345A-03-0437 Cross Rebuttal Testimony of Mark E. Fulmer on Behalf of Constellation NewEnergy and Strategic Energy, Inc. March 30, 2004.
- 11. CPUC Rulemaking 03-10-003 Direct Testimony of Mark F. Fulmer or

Direct Testimony of Mark E. Fulmer on Behalf of The City and County of San Francisco on Community Choice Aggregation Transaction Costs. April 15, 2004.

CPUC Rulemaking 03-10-003

Reply Testimony of Mark E. Fulmer on Behalf of The City and County of San Francisco on Cost Responsibility Surcharge for Community Choice Aggregation. May 7, 2004.

12. CPUC Rulemaking 03-10-003

Rebuttal Testimony of Mark E. Fulmer on Behalf of The City and County of San Francisco on Cost Responsibility Surcharge for Community Choice Aggregation. May 20, 2004.

CPUC Rulemaking 04-04-003

Testimony of Mark Fulmer on Behalf of Strategic Energy LLC and Constellation NewEnergy concerning the Long Term Procurement Plans of PG&E, SCE and SDG&E. August 6, 2004.

13. CPUC Rulemaking 04-04-003

Rebuttal Testimony of Mark Fulmer on Behalf of Strategic Energy LLC and Constellation NewEnergy concerning the Long Term Procurement Plans of PG&E, SCE and SDG&E. August 20, 2004.

14. CPUC Rulemaking 03-10-003

Opening Testimony of Mark E. Fulmer on Behalf of the City and County of San Francisco on Allocation of Costs for Community Choice Aggregation Phase 2. April 28, 2005.

15. CPUC Rulemaking 04-12-014

Testimony of Mark E. Fulmer on Behalf of the Alliance for Retail Energy Markets Concerning Southern California Edison's Test Year 2006 General Rate Case Application. May 6, 2005.

16. CPUC Rulemaking 03-10-003

Rebuttal Testimony of Mark E. Fulmer on Behalf of the City and County of San Francisco on Allocation of Costs for Community Choice Aggregation Phase 2. May 16, 2005.

17. CPUC Rulemaking 04-12-014

Testimony of Mark E. Fulmer on Behalf of the Alliance for Retail Energy Markets Concerning Southern California Edison's Test Year 2006 General Rate Case Application. May 25, 2005.

18. CPUC Application 06-03-005

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition Concerning Phase 2 of the Pacific Gas and Electric Co. 2007 General Rate Case Marginal Cost, Revenue Allocation and Rate Design. October 27, 2006.

19. CPUC Application 07-01-045

Testimony of Mark E. Fulmer on Behalf of The Alliance for Retail Energy Markets and The California Manufacturers and Technology Association Concerning Southern California Edison's Application to Update is Direct Access and Other Service Fees. June 22, 2007.

20. CPUC Rulemaking 08-03-002

Testimony of Mark Fulmer Behalf of Debenham Energy, LLC. Concerning Tariffs Supportive of Green Distributed Generation. October 31, 2008.

21. CPUC Application 09-02-022

Testimony of Mark E. Fulmer on Behalf of The Direct Access Customer Coalition Concerning Pacific Gas & Electric's 2009 Rate Design Window Application. July 31, 2009.

22. CPUC Application 09-02-019

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition Concerning the Cost Recovery Proposed By PG&E in its Application to Implement a Photovoltaic Program. August 14, 2009.

23. Superior Court of San Francisco

Deposition of Mark E. Fulmer on Behalf of the City and County of San Francisco in PG&E v. CCSF. (Verbal deposition only.) September 2, 2009.

- 24. California Superior Court of San Francisco Court Case No. CGC-07-470086 Testimony of Mark E. Fulmer on Behalf of the City and County of San Francisco in Pacific Gas & Electric Company v. City and County of San Francisco. (Trial exhibits only in electronic file.) September 25, 2009.
- 25. CPUC Application 09-12-020

Testimony of Mark E. Fulmer on Behalf of The Direct Access Customer Coalition Concerning Phase 1 of Pacific Gas & Electric Company's Test Year 2011 General Rate Case. May 19, 2010.

26. CPUC Application 10-03-014

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition Concerning Phase 2 of Pacific Gas & Electric's Test Year 2011 General Rate Case Application. October 6, 2010.

27. CPUC Rulemaking 07-05-025

Testimony of John P. Dalessi, Mark E. Fulmer, Margaret A. Meal on Behalf of the Joint Parties on a Fair and Reasonable Methodology to Determine the Power Charge Indifference Adjustment (PCIA) and the Competition Transition Charge (CTC). January 31, 2011.

28. CPUC Rulemaking 07-05-025

Testimony of Mark E. Fulmer on Behalf of the Direct Access Parties Concerning the Transitional Bundled Service Rate, Direct Access Switching Rules, Minimum Stay Provisions, and Energy Service Provider Financial Security Requirements. January 31, 2011.

29. CPUC Rulemaking 07-05-025

Rebuttal Testimony of Mark E. Fulmer on Behalf of The Direct Access Parties Concerning the Transitional Bundled Service Rate, Direct Access Switching Rules, Minimum Stay Provisions, and Energy Service Provider Financial Security Requirements. February 25, 2011.

30. CPUC Rulemaking 07-05-025

Rebuttal Testimony of John P. Dalessi, Mark E. Fulmer, Margaret A. Meal on Behalf of The Joint Parties on a Fair And Reasonable Methodology to Determine the Power Charge Indifference Adjustment (PCIA) and the Competition Transition Charge (CTC). February 25, 2011.

- 31. CPUC Application A.11-03-001, 11-03-002, 11-03-003 Testimony of Mark E. Fulmer on Behalf of The Direct Access Customer Coalition and The Alliance for Retail Energy Markets Concerning Competitive Issues in the 2012-2014 Demand Response Program Proposals. June 15, 2011.
- 32. CPUC Application 11-03-001, 11-03-002, 11-03-003 Rebuttal Testimony of Mark E. Fulmer on Behalf of The Direct Access Customer Coalition and The Alliance for Retail Energy Markets Concerning Competitive Issues in the 2012-2014 Demand Response Program Proposals. July 11, 2011.

33. CPUC Application 11-06-004

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition and the Alliance for Retail Energy Markets concerning PG&E's 2012 Energy Resource Recovery Account (ERRA) and 2012 Generation Non-bypassable Charges Forecast. August 26, 2011.

36. CPUC Application 11-05-023

Testimony of Mark Fulmer on Behalf of the Direct Access Customer Coalition, the Alliance for Retail Energy Markets and the Western Power Trading Forum concerning the Application of San Diego Gas & Electric for Authority to Enter into Purchase power Tolling Agreements with Escondido Energy Center, Pio Pico Energy Center, and Quail Brush Power. September 22, 2011.

37. CPUC Application 11-06-007

Testimony of Mark Fulmer on Behalf of the Direct Access Customer Coalition Concerning Phase 2 of Southern California Edison's Test Year 2012 General Rate Case Application. February 6, 2012.

38. CPUC Application 11-12-009

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition, the Alliance for Retails Energy Markets and the City and County of San Francisco Concerning Pacific gas & Electric Company's Application to Revise Direct Access and Community choice Aggregation Service Fees. May 14, 2012.

39. CPUC Rulemaking 12-03-014

Testimony on Behalf of the Alliance for Retail Markets, Direct Access Customer Coalition, and Marin Energy Authority. With Sue Mara. June 25, 2012.

40. CPUC Rulemaking 12-03-014

Reply Testimony on Behalf of the Alliance for Retail Energy Markets, Direct Access Customer Coalition, and Marin Energy Authority. With Sue Mara. July 23, 2012.

41. CPUC Application 12-03-001

Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets Concerning PG&E Company's Application to Implement Economic Development Rates for 2013-2017. August 24, 2012.

42. CPUC Application 12-02-001

Rebuttal Testimony of Mark E. Fulmer on Behalf of the Alliance for Retail Energy Markets Concerning Pacific Gas & Electric Company's Application to Implement Economic Development Rates for 2013-2017. October 19, 2012.

43. CPUC Application 12-04-020

Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets, the Direct Access Customer Coalition and 3 Phases Renewables Regarding Pacific Gas and Electric Company's Application to Establish a Green Option Tariff. October 19, 2012.

44. CPUC Application 12-04-020

Rebuttal Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets, the Direct Access Customer Coalition and 3 Phases Renewables Regarding Pacific Gas and Electric Company's Application to Establish a Green Option Tariff. November 9, 2012.

Chula Vista South Bay Substation Relocation Project Undergrounding 230 kV Line

- 45. CPUC Application 11-11-002 Testimony of Mark Fulmer on Behalf of the City of Long Beach. November 16, 2012.
- 46. CPUC Application11-11-002

Rebuttal Testimony of Mark Fulmer on Behalf of the City of Long Beach. December 14, 2012.

47. CPUC Investigation 12-10-013

Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets and the Direct Access Customer Coalition Regarding the Rate Treatment of the San Onofre Nuclear Generating Station. September 10, 2013.

48. CPUC Application 13-06-015

Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets and the Direct Access Customer Coalition Regarding San Diego Gas & Electric's Application for Approval of an Amended Power Purchase Tolling Agreement with Pio Pico Energy Center. September 20, 2013.

49. CPUC Investigation12-10-013

Rebuttal Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets and the Direct Access Customer Coalition Regarding the Rate Treatment of the San Onofre Nuclear Generating Station. September 23, 2013.

50. CPUC Application 13-06-015

Rebuttal Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets and the

Direct Access Customer Coalition Regarding San Diego Gas & Electric Company's Application for Approval of an Amended Power Purchase Tolling Agreement with Pio Pico Energy Center. October 4, 2013.

51. CPUC Application 13-08-004

Testimony of Mark Fulmer on Behalf of the Alliance for Retail Energy Markets and the Direct Access Customer Coalition Regarding the Southern California Edison's 2014 "ERRA" Forecast. November 20, 2013.

52. CPUC Application 13-06-011

Testimony of Mark Fulmer on Behalf of the Core Transport Agent Consortium Concerning Pacific Gas & Electric Company's Core Gas Capacity Planning Range. November 20, 2013.

53. CPUC Application 13-04-012

Testimony of Mark E. Fulmer on Behalf of the Direct Access Customer Coalition Concerning Phase 2 of Pacific Gas and Electric Company's Test Year 2014 General Rate Case Application. December 13, 2013.

54. CPUC Application 13-06-011

Testimony of Mark Fulmer on Behalf of the Core Transport Agent Consortium Concerning Pacific Gas & Electric Company's Core Gas Capacity Planning Range. December 18, 2013.

Appendix C Glen Reddick's CV

Glenn Reddick, P.E

Glenn Reddick Professional Services

7800 Chaplin Ct Elk Grove, Ca 95758

Mr. Reddick has been awarded a Bachelor of Science degree in Electrical Engineering. Prior to forming Glenn Reddick Professional Services in 2000, he held management/technical positions with Hercules Municipal Utility, Navigant Consulting, Resource Management International, Greiner Engineering and Q. T. Colwell and Associates.

Mr. Reddick is a Registered Professional Engineer in four states and has over 35 years of broad based experience in the electric energy industry. He has served in a lead role for projects associated with transmission design, substation design, and distribution design. He is an expert in electric transmission and distribution planning, operations, maintenance and reliability. He has served as an expert witness before state and federal regulatory agencies on issues related to the planning, design, capital cost, operation and maintenance of transmission, substation and distribution facilities.

Condition Assessment/Value of Electric T&D	Independent Consultant Reports for Bond
Assets	Issues
Long Island Power Authority (New York)	California Department of Water Resources
Pasadena Water and Power (California)	Kerrville Public Utility Board (Texas)
City of Mesa (Arizona)	City of Santa Fe (New Mexico)
Laguna Pueblo (New Mexico)	Long Island Power Authority (New York)
Western Resources (Kansas)	Sacramento Municipal Utility District (California)
Transmission and Distribution Reliability	Testimony before Regulatory Bodies
Improvement Programs	
Potomac Electric Power (D.C.)	Federal Energy Regulatory Commission
Dominion Electric (Virginia)	Texas Public Utility Commission
City of Lodi (California)	Guam Public Utility Commission
Duquesne Power Company (Pennsylvania)	Connecticut Department of Utility Control
Pennsylvania Power & Light (Pennslyvania)	California Public Utility Commission
San Antonio City Public Service (Texas)	Illinois Commerce Commission
Transmission Interconnection Planning	Transmission and Substation Design
Ensearch (Hawaii)	City of Roseville Electric (California)
Oxbow Power (Nevada)	San Antonio City Public Service (Texas)
Lucasfilms (California)	Basic Industries (Nevada)
Basic Power (Nevada)	City of North Little Rock (Arkansas)
City of Dover, De (Delaware)	Sacramento Municipal Utility District (California)
Special Projects	T&D Audits for Regulatory Bodies
Developed Y2K black start procedures for	New York Public Service Commission
Sacramento Municipal Utility District	Niagara Mohawk
(California)	

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On the job training for National Electric Administration (Philippines)	Connecticut Department of Utility Control Connecticut Light and Power and Northeast Utilities
Relay protection for Lake 1, 50 MW turbine	Illinois Commerce Commission
(California)	Commonwealth Edison
Developed new Substation standards for City	Guam Public Utility Commission
Public Service San Antonio (Texas)	Guam Power Authority

Speaking Engagements

National Rural Electric Cooperative Association (NRECA) Featured speaker, 1991 national seminar on Substation Automation evaluation and implementation in Atlanta, Georgia

Institute of Electrical and Electronic Engineers (IEEE) Speaker, 1993 San Francisco seminar on Substation Design



SCHWARTZ SEMERDJIAN BALLARD & CAULEY LLP

JOHN S. MOOT Direct dial: (619) 557-3531 e-mail: johnm@ssbclaw.com

January 28, 2014

Dr. Charles Lester Executive Director California Coastal Commission 45 Freemont, Suite 2000 San Francisco, CA 94105

Re: SDG&E SOUTHBAY SUBSTATION CHULA VISTA, CALIFORNIA

Dear Dr. Lester:

I write to you with regard to the proposed SDG&E substation in Chula Vista, California (tentatively scheduled as Item #10b on the Commission's February 12, 2014 agenda). SDG&E proposes to construct the new substation to replace obsolete substation equipment at another location, accommodate regional energy needs now that the South Bay Power Plant is retired and provide for future transmission and distribution load growth for the South Bay region. The project would also locate the substation outside the boundary of the City of Chula Vista Bayfront Master Plan, ("CVBMP") allowing for the redevelopment of the Southern Chula Vista Bayfront. However, the newly proposed location is adjacent to the San Diego Association of Governments ("SANDAG") continuous Bayshore Bikeway, a 24 acre public park planned just to the north, a National Wildlife Reserve on the San Diego Bay directly west as well as walking paths, planned greenbelts and look out areas all of which are part of the transformation of the southern Chula Vista and the Coastal Commission.

The proposed project is partially within the Commission's original jurisdiction and partially within that of the City of Chula Vista. By agreement with the City, the Commission is considering one permit for the entire project. The project should be, and can be made to be, consistent with both the Chapter 3 policies of the Coastal Act and with the policies of the City of Chula Vista's certified Local Coastal Program.

There is universal agreement that the project is both necessary to accommodate regional energy needs and desirable in order to facilitate the City's long-term planning goals. However, there are remaining matters about which there is disagreement: whether SDG&E should place underground approximately 1000 feet of the 230 kV transmission line that are presently proposed to enter the new substation from the east on transmission lines hanging from tall power poles on the bayfront onto large and visually intrusive A-frame structures. Additionally, a

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Bayfront Enhancement Alternative offered by SDG&E during the CPUC proceeding proposes removal of a 165 lattice tower and 200 feet of 138 kV overhead lines.

As part of this project SDG&E already proposes to place underground an approximately 1000 foot segment of 230 kV line at the north end of the substation, as well as a separate 138 kV line running along a ¹/₂ mile segment of the southern Chula Vista Bayfront. All the high voltage power poles and lines on the northern bayfront have already been removed and undergrounded. The current 230 kV line runs underground along the bayfront by passing entirely the existing 138 kV substation which is being replaced.

Failing to place both this eastern segment of 230 kV transmission line underground as well as the small remaining above ground 138 KV line will obstruct and mar views to and along the coast from public viewpoints contrary to the explicit requirement of Public Resources Code section 30251 (all subsequent references to statutory sections are to the Coastal Act). It will also violate the standards of the City's certified LCP that require placing these utility lines underground. SDG&E contends that placing this segment of the transmission line underground is infeasible because it will cost more than they budgeted in their original plan. In fact, placing the lines underground is both legally required, feasible and has minimal rate impacts.

Section 30251 provides in part that: "Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas". The City of Chula Vista's certified LCP provides that: "Utilities servicing the bayfront shall be undergrounded" (Objective GD2) According to the City, this language is broader and more inclusive language than more specific language in the LCP when it was originally passed by Chula Vista City Council at the same time the CVBMP was approved. This language stated "High-voltage (230 KV) transmission lines shall be placed below ground." (Policy A. FA7) Constructing the new portion of 230 kV transmission lines above ground directly contradicts both section 30251 and the language and intent of the City's certified LCP, and cannot be approved consistent with the Coastal Act.

A report prepared by Torben Aabo, Glenn Reddick, P.E. and Mark Fulmer (the Aabo report) regarding the feasibility of placing this eastern segment of 230 kV transmission line underground has previously been provided to your staff. That report concludes:

"It is recommended that the Coastal Commission support the undergrounding of approximately 1000 feet of the 230 kV line entering the South Bay substation. This will eliminate the 230 kV transmission towers near the substation as well as eliminating several tall A-frame structures within the substation. The result will make the substation and its surroundings have less visual impact on the bay front area."



Graphic representations of how this undergrounding will mitigate these visual impacts are contained in the Aabo report.

In response, SDG&E has submitted its own internal report (Feasibility Review) on the feasibility of this proposed modification arguing that the recommendation of the Aabo report is not a feasible or reasonable alternative. We will discuss the content of these reports, but first it is important to emphasize the coastal visual resources at stake.

Included with this letter are a number of pictures and visual simulations that demonstrate the significant visual impact that this project, if not properly mitigated, will have upon protected coastal resources. The first two photographs Figures 1.1 and 1.2 are a street level view of the location where the new substation is being built.

FIGURE 1.1





FIGURE 1.2



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FIGURE 1.3





Figures 2.1 and 2.2 are the street level view simulations prepared by SDG&E for the project EIR done for the California Public Utilities Commission ("CPUC").

FIGURE 2.1

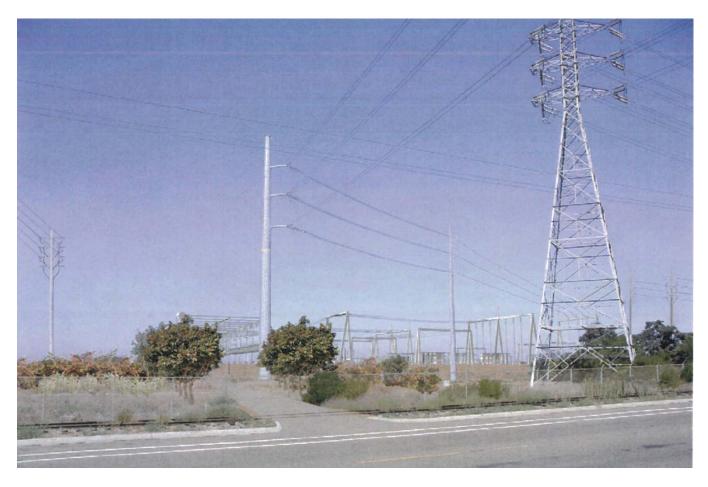




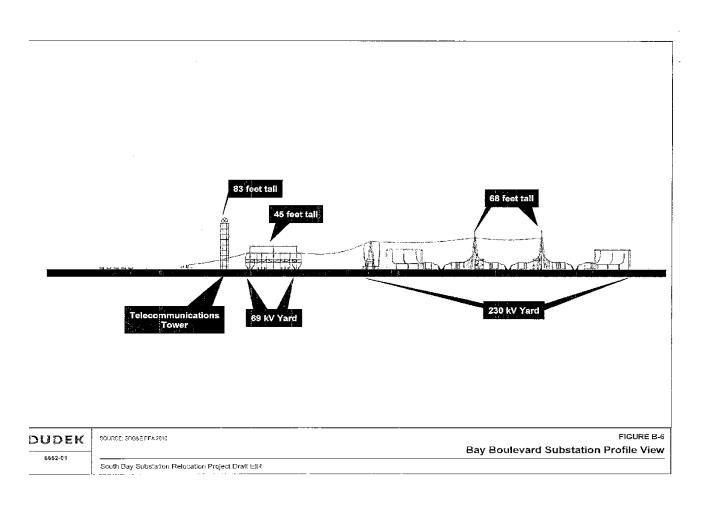
FIGURE 2.2



The height of this new development is depicted in Figure 3 from the Project EIR.

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FIGURE 3.0



Thus it is clear that this new development for the proposed project, if not properly mitigated, will have significant visual impacts upon protected coastal resources in the coastal zone.

Although SDG&E has attempted to insinuate that this is not a public visual issue, the public view amenities contemplated in CVBMP and the views from SANDAG'S Bay Shore Bikeway facility clearly demonstrate that significant public resources are at stake.

Figure 4.1 is the illustrative map of CVBMP. It depicts a long term vision for the pattern of future development of the entire Chula Vista Bayfront. Figure 4.2 shows the southern portion of the bayfront where the 24 acre park and 12 foot wide pedestrian trail and lookout areas are to be



interwoven throughout the park and would connect to the trail system in this Otay region (Section 3.0, Project Description of Otay area in FEIR). The new substation and transmission lines servicing it will clearly be visible from the park, lookout areas and public trail planned along the entire length of the Bayfront.

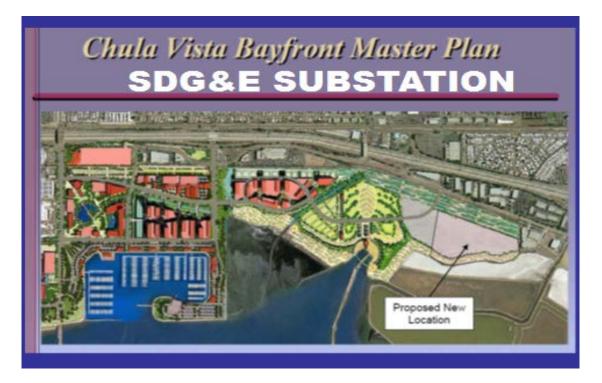
FIGURE 4.1



Chula Vista Bayfront Master Plan Illustrative Locally and State-Approved Land Use Plan by City of Chula Vista and Port of San Diego



FIGURE 4.2



Figures 4.1 and 4.2 show the close proximity of the substation to the National Wildlife Preserve to the west, home to several endangered species and a prime bird watching location on the bay.



Figures 5.1 and 5.2 show SANDAG Bayshore Bikeway on the new section built and directly adjacent to the proposed new substation. Those using the bikeway would pass directly by the new substation to their west as they look toward the shoreline.

FIGURE 5.1





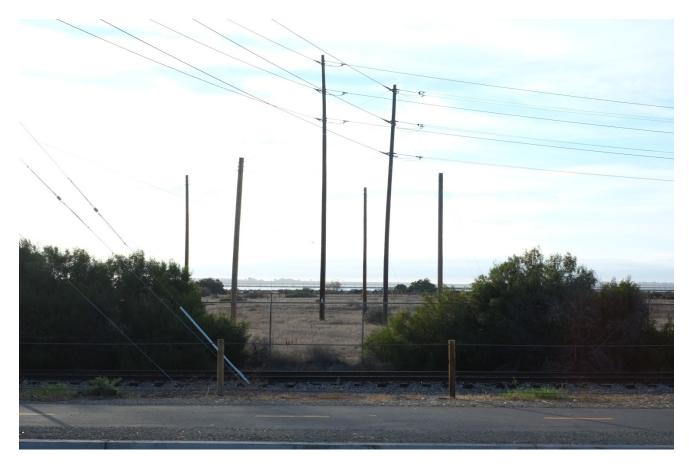
FIGURE 5.2





Figure 5.2 shows the closest public transport station to the proposed 24 acre park, bike system, pedestrian walking trails and lookouts. Significantly, all public amenities on the southern bayfront all passes directly by SDG&E's new construction. Lastly, Figure 6.1 and 6.4 shows the areas adjacent to the substation and recently demolished power plant that will be opened up for public view once the 24 acre park, RV Park, walking trails and greenbelt are completed as contemplated and approved CVBMP.

FIGURE 6.1



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FIGURE 6.2





FIGURE 6.3



Figure 6.2 shows how the current and, unless mitigated, the new substation will impact views to and along the coast.

SDG&E in its response does not contest that the new construction they propose will have significant visual impacts upon the planned public resources and long term vision of this coastal zone. Nor do they attempt to argue that the project as proposed is consistent with the policies of the Coastal Act or of the City's certified LCP. Instead, they assert in the Feasibility Review that the project modifications "depicted in Inland's renditions are not feasible and should not be considered reasonable alternatives or modifications to the project". The arguments in this Review are not supported by any evidence but rather are specious and self-contradictory.

Much of SDG&E's argument is based not upon the feasibility of the modifications but rather upon an attack on the "air-brushed renditions" in the Aabo report. According to SDG&E's Review, the renditions do not account for site constraints or design requirements, were not supported by detailed engineering plans, nor were they developed with input from SDG&E. It is not the task of those who would protect public views in the coastal zone to do detailed engineering plans in order to assert the primacy of those views (the Legislature has already done that), nor is it reasonable to suggest that SDG&E would have made its engineers available for consultation on a design inconsistent with that being proposed by its executives. These arguments are simply specious.

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With regard to site constraints and design requirements, SDG&E presents no evidence to support its conclusions. At no time in response to the CPUC's Scoping Memo, nor in its four separate filings after the undergrounding of these lines was raised, did SDG&E ever assert the need or requirement for new additional land because of additional undergrounding. In fact, what we do know from these reports suggests that it is feasible to place this 230 kV transmission line underground, just as has been done by SDG&E and other major utilities at other locations in California and as is being done by SDG&E with the northern 230 kV line in this project. As the Aabo Report makes clear and SDG&E does not dispute, undergrounding of transmission circuits is a well-established practice by electric utilities, including SDG&E. SDG&E's current 230 kV line between the existing substation it connects to, has reliably and safely operated since 2004 like the Chula Vista Bayfront section underground. Modern substations designed with complete undergrounding of lines in urban and sensitive environments are being built today and are clearly technically feasible. (See Attachments A and B).

In this context, SDG&E has presented absolutely no evidence to suggest that there are site constraints or design requirements that make this particular 230 kV line and substation unique, and unlike other similar lines at this very location and at other locations. Given the clear evidence of significant visual impacts from the above-ground placement of this proposed transmission line, and the well-established practices of electric utilities to underground transmission lines, even up to 500 kV, the burden is clearly upon SDG&E to present specific and detailed evidence, including, if they think it necessary, engineering plans, that demonstrates that this particular transmission line coming in at this particular location at this particular site is unlike the other lines and locations and sites which have successfully employed undergrounding. The Feasibility Review does not even attempt to provide this evidence.

The only attempt that SDG&E makes to be specific is to assert that its "standard profile" design for a substation has been optimized over the years, whereas the "low profile" design that would be required to allow for undergrounding the transmission line "would require the bus sections to be installed close to ground level and would not allow for access or maintenance vehicles to drive underneath the structure. They do not explain how reducing the height of the tallest tower structures from 68 feet to 34 feet would require installations that would not allow the passage of vehicles that are already standardized in height to fit under freeway overcrossings.

SDG&E goes on to say that if undergrounding the transmission lines were required, it would also require the need for an additional 6-10 acres of land for the facility. Again, because they provide no engineering plans, it is impossible to evaluate how much, if any additional land might be required. They have approximately 2 and one half acres of additional open land on the site itself, not enclosed in the proposed parameter wall to accommodate "design" changes. Even if more land was required, the remaining portion of the old LNG site just north of the proposed substation has the same zoning designation and is under the same jurisdiction as the present

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building site, land that they obtained at no cost from the Port District. It is irresponsible to suggest, without evidence, that the Port District, the City and the State Lands Commission would not approve additional land for the project if it were needed to create a low profile design fully consistent with the requirements of the Coastal Act.

Nor is the possibility of modifying the project to make it consistent with the Coastal Act and the certified LCP something that was not anticipated by SDG&E. Although SDG&E asserts the prospect of additional delays associated with obtaining CPUC approval of design changes, SDG&E, in its comments on the Proposed CPUC decision asked that to avoid potential regulatory conflicts between the CPUC Permit to Construct and the still to be obtained Coastal Development Permit, that, if reconfiguration of specific associated facilities was found by the Coastal Commission to be necessary to ensure compliance with the Coastal Act, that the CPUC include authorization in their permit to perform those activities required to ensure compliance. At the time SDG&E was specifically aware that the Chula Vista certified LCP required undergrounding of new transmission lines and that the coastal permit would probably require that this line along with the 138 kV line and lattice tower referenced in the City's MOU be placed underground. SDG&E was also fully aware that the CPUC Technical Workshop Report they referenced found that the current substation performed adequately through 2017. In short, SDG&E always anticipated that it would have to go back to the CPUC to obtain modifications of the CPUC Permit in order to comply with Coastal Act requirements.

In conclusion, the Coastal Commission must require that an additional 1000 feet of 230 kV transmission line entering the proposed substation from the east be placed underground as well as the 200 feet of 138 kV lines requested by the City of Chula Vista as mitigation to avoid substantial visual impacts that the towers and the high profile substation would otherwise have upon critical coastal resources existing and planned in the area. The coastal impacts on this previously underserved and ethnically diverse area of the city are clear. The proposed mitigation is not technically infeasible, nor is it in any sense unreasonable. SDG&E has presented no substantial evidence to the contrary, and its conclusions presented without evidence in the Feasibility Review do not justify abandoning compliance with Coastal Act policies. This mitigation is simply a cost of doing business that SDG&E would rather not bear. The



Commission should enforce the Coastal Act and require that SDG&E mitigate the additional impacts upon critical coastal visual resources of these transmission lines by requiring they be placed underground just as lines on the rest of the entire bayfront already have been. Only with this mitigation can the project be approved consistent with the Coastal Act and the City's certified LCP.

Sincerely,

John S. Moot of Schwartz Semerdjian Ballard & Cauley LLP

cc: Allison Dettmer , Deputy Director Kate Huckelbridge, Ph.D California Coastal Commission Energy, Ocean Resources and Federal Consistency Division 45 Freemont, Station 2000 San Francisco, CA 94105

SCHWARTZ SEMERDJIAN BALLARD & CAULEY LLP

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JOHN S. MOOT Direct dial: (619) 557-3531 e-mail: johnm@ssbclaw.com

February 25, 2014

Dr. Charles Lester Executive Director California Coastal Commission 45 Freemont, Suite 2000 San Francisco, CA 94105

Re: SDG&E SOUTHBAY SUBSTATION CHULA VISTA, CALIFORNIA

Dear Dr. Lester:

This letter is written in response to San Diego Gas & Electric's Response to Inland Industries "City of Chula Vista South Bay Substation Relocation Project" Report dated January 27, 2013 (hereinafter SDG&E's Report).

Accompanying this letter are Memoranda prepared by the authors of Inland's original report to the Coastal Commission, which directly respond to SDG&E's Report regarding issues within their areas of expertise. Attachment A is a Memorandum from Torben Aabo, principal engineer at Power Cable Consultants Inc. that addresses the underground cable configuration recommended by Mr. Aabo, including evidence that SDG&E has used these same cable configurations to maintain the required ratings on other 230 kV lines on another project in San Diego. Attachment B is a memorandum from Glenn Reddick, PE, that addresses the design impact of undergrounding the 230 kV lines and provides evidence that demonstrates how SDG&E modified and deviated from its standard substation design to meet visual and aesthetic issues on a similar 230 kV substation upgrade project. Attachment C is a memorandum from Jaleh Farooz of Advanced Energy Solutions, that addresses SDG&E comments on the project system capacity and load requirement. This memorandum addresses the alleged risk of additional delay. It provides evidence that this is not a real issue, since the California Independent System Operator (CAISO) does not even model this substation to come on line until 2017. CAISO's most recent study does not show any reliability-based overload for the current line through 2023.

Also accompanying this letter as Exhibits 1 through 5 are specific documents referred to in this letter.

SCHWARTZ SEMERDJIAN BALLARD & CAULEY LLP

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INTRODUCTION

Much of SDG&E's Report consists of claims that Inland does not demonstrate technical feasibility, provide engineering drawings taking into consideration specific site conditions or provide technical support for the low profile design changes being recommended. It is, of course, not Inland Industries burden to do so. SDG&E is the applicant seeking a Coastal Development Permit. As made clear in numerous decisions of the Coastal Commission, it is the applicants burden when proposing a new development to site and design the proposed project to protect views to and along the ocean and scenic coastal areas, to ensure that the project is visually compatible with the character of the surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. It is not the task of those who seek to protect public views in the coastal zone to provide detailed engineering plans in order assert the primacy of those views. The legislature has already asserted that primacy and has created no exception for investor owned utilities. SDG&E's new upgraded substation is not a coastal dependent use.

SDG&E has not met its burden. The project as proposed, since it does not underground all of the transmission lines, creates and adds to visual blight in this coastal area, and is blatantly inconsistent with the visual policies of the Coastal Act. SDG&E provides no evidence to contradict this inconsistency. Instead it asserts, without substantial evidence, that it is neither technically feasible nor cost efficient to avoid or mitigate these impacts. These arguments fail to provide any Coastal Act basis for approval of the project as proposed. Instead, SDG&E must be required to avoid these significant impacts by placing the transmission lines underground. Only in this manner can the project be approved consistent with the Coastal Act the City of Chula Vista's certified LCP.

VISUAL IMPACTS AND THE STANDARD OF REVIEW

The visual impacts of the project as proposed by SDG&E are obvious and blatant. They are demonstrated clearly in our previous letter of January 28, 2014, and the simulations that were provided with it and Inlands previous report. The project as proposed is inconsistent with section 30251 of the Coastal Act. The project is also inconsistent with the will of the community as evidenced both by the language of the City's certified LCP and by recent legislative action of the Chula Vista City Council. This part of Chula Vista is undergoing a substantial restoration pursuant to the City's Chula Vista Bay Front Master Plan intended to make this scenic coastal area more accessible to the community. Views of the proposed new substation will be open to the public not simply from public roads but also from bicycle and pedestrian trails adjacent to and within the restored area. It cannot be emphasized strongly enough that the quality of these views matter to the community.

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As noted above, the Chula Vista City Council recently passed a resolution noting the public interest at stake and affirming its support for additional undergrounding of utilities lines and other measures to address visual impacts that are inconsistent with the City's Certified LCP and the city's visions and policies as set forth in the Certified Chula Vista Bay Front Master Plan. The City Council specifically requested that the Coastal Commission consider the benefits of requiring the undergrounding of any and all transmission lines associated with the project to the extent that such undergrounding enhances compliance with the Coastal Act and the City's LCP policies, and creates a positive improvement in visual impacts caused by the project, minimizing visual blight. A copy of this resolution is attached as Exhibit 1.

It is somewhat ironic that SDG&E, instead of addressing the visual impacts of its own project, would focus on Inland Industries' industrial zoned property and the existing "industrial view shed". In 1974 when Inland Industries sought a development permit from the Coastal Commission's predecessor organization, the San Diego Coast Regional Commission, that permit initially was denied because of the view obstructions and because their site was a coastal zone resource of considerable significance because of the vistas across the shoreline and the site's proximity to the bay. The Regional Commission required the proposed buildings to be redesigned to promote and enhance the protection of visual access even though the property was in an industrial zone with SDG&E's existing power lines in the view shed. Inland modified the design of their building as a condition of its permit. See attached Exhibit 2. Nothing less should be expected of SDG&E, an investor owned for profit utility that has the resources at its disposal to comply with the Coastal Act. Unless it is conditioned to require that all transmission lines be placed underground to avoid significant visual impacts, SDG&E's project cannot be approved consistent with the Coastal Act and the City's certified LCP.

Nor does reliance upon the EIR prepared for the California Public Utility Commission (CPUC) proceeding provide a shield for SDG&E from compliance with the Coastal Act. SDG&E, in its introductory section of its Response, notes that the Final Environmental Impact Report prepared for the CPUC concluded that there were no significant visual impacts. It then goes on to assert that additional mitigation should not be necessary. As the Commission is well aware, the standard for visual impacts under CEQA is different from that of the Coastal Act, and much less stringent in its application. The Commission is responsible for its own CEQA compliance and it does this by applying the Coastal Act standards to significant coastal impacts. The fact that the CPUC applied a CEQA checklist standard to the visual impacts of the proposal is irrelevant to the Commission's legal duty to apply the standards of the Coastal Act to those impacts.

A similar argument was made by the City of Newport Beach with respect to their Marina Park Project (NPB-MAJ-1-12 Marina Park, (W17a) March 6, 2013) which, in it its original application, proposed a 73 foot high light house tower. That original application was denied. Subsequently, Newport Beach sought an LCP Amendment, arguing that the Marina Park EIR had analyzed the 73-foot tower and its impacts on visual and scenic resources as well as upon

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community character, and found them to be less then significant. Newport Beach further argued that the proposed height was functionally necessary in order to provide a navigational element for watercraft and an enclosure for a telecommunications and tsunami warning system. The Coastal Commission did not find the Marina Park EIR assessment to be adequate as a Coastal Act analysis because it did not provide evidence that the tower was consistent with the chapter 3 scenic resource policies, because it failed to analyze how the structure was compatible with the surrounding area, and because it failed to provide evidence as to why the tower was required to be 73 feet in height. The commission noted that Newport Beach failed to demonstrate why a structure that conformed to the 35-foot height limit could not provide these functions.

Similarly, in the case at hand, the CPUC EIR does not provide evidence that the 68 foot high Aframes, 80 foot telecommunication tower and predominant substation structures are consistent with chapter 3 scenic policies. It does not explain why SDG&E's communication tower and steel A-frames must be 68 and 80 feet tall. As in the Newport Beach matter, SDG&E has failed to demonstrate why a structure that conforms to the surrounding 45 foot height limit and the City of Chula Vista's LCP could not provide these functions. Indeed, because Chula Vista's LCP requires that all surrounding parcels have a 44 or 45 foot height limit, the project as proposed is clearly out of character within the surrounding community.

SDG&E MISREPRESENTS ITS ABILITY TO BUILD A LOW PROFILE SUBSTATION

SDG&E asks the Commission to rely upon its expertise as illustrated in its design plans, and asserts that this is the best that it can do. However, the CPUC now has confirmed that SDG&E has not submitted any architectural or engineering plan that have been "approved" for this specific proposed site and that the only "plans" are those generally described and depicted in the pages in the EIR. It is ironic that SDG&E should criticize Inland for not providing engineering drawings depicting how the underground cable can be configured to meet site conditions or how the substation profile can be designed on the site, when SDG&E in fact has no such engineering plan themselves, or at least any that they are willing to subject to public scrutiny. Absent some site-specific plans, SDG&E assertions and hypothetical site constraints demonstrate nothing. There is no substantial evidence on which the Commission can reasonably rely in determining that further compliance with Chapter 3 provisions of the Coastal Act is not feasible.

In essence, SDG&E is asking the Commission to take its word that the design it proposes is their standard design and is the best they can do. SDG&E represents to the Commission that its standard design for 230 kV substations is uniform throughout its service territory and necessary for safety requirements, system reliability and system maintainability. Their own filings with the CPUC show this is not the case. For example, SDG&E is proposing a non-standard low profile substation design for its rebuild and upgrade of an old 138/12 kV air insulated substation to a 230/138/12 kV gas insulated substation as part of its South Orange County Reliability Enhancement ("SCORE") Project. This San Juan Capistrano substation is proposed as part of a



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"reliability enhancement project". The difference in the visual impacts of the existing substation compared to the one proposed by SDG&E for the SCORE project is plain for the eye to see.





Existing Views of Capistrano Substation



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Computer Rendering of Proposed Capistrano Project

Attached as Exhibit 3 is the CPUC Notice of Preparation of Environmental Impact Report proposed by SDG&E that sets forth in the project description the upgrading of the old 138 kV substation to the new 230 kV gas insulated substation that is shown in the simulation in the Proposed Environmental Assessment which is depicted above and included in Mr. Reddick's Report. A comparison of that design demands similar treatment for the project proposed in Chula Vista.

When required, SDG&E also utilizes site-specific underground engineering designs that deviate from their standard design. In his memorandum, Torben Aabo points specifically to cable configurations that SDG&E used on the Sunrise Power Link which varied the depth of the underground line, cable spacing and duct bank configuration where it was necessary to go under roads and sewer lines and to meet other site specific constraints. Thus, SDG&E has demonstrated that on other projects when it is required it can retain electrical design engineers and substation designers who are able both to maintain the ratings of underground lines and produce a new modified low profile design that will meet Coastal Act requirements.

THE PROJECT IS NOT TECHNICALLY INFEASIBLE

SDG&E continually asserts that undergrounding of the transmission lines in this area is infeasible, but the evidence does not support this conclusion. In fact, much of the evidence contrary to that assertion is contained within SDG&E's own environmental analysis. For example, on this project, as noted by Mr. Aabo in the Bay Front Enhancement Alternative (BFEA), SDG&E proposed placing a transition pole on the eastside of the Inland easement and then undergrounding the 138kV transmission from the easement under Bay Boulevard and the MTS ROW. For this BFEA SDG&E submitted with its letter dated August 31, 2012 to the CPUC a 39 page report analyzing the undergrounding of BFEA 138 kV transmission line just as was done for the project EIR. For this undergrounding of 138 kV line through the easement no feasibility or reliability constraints were noted by SDG&E. Yet somehow, 200 feet to the south

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and for the 230 kV line through this same easement, SDG&E asserts that Mr. Aabo's proposal is infeasible? This makes no sense.

For the BFEA, SDG&E maintained no re-circulation of the EIR is necessary (see SDG&E letter August 3, 2012, page 11 of attached introduction contained in Exhibit 4). SDG&E already shows on the same project site to the north of the substation 1,000 feet of undergrounding of the same 230 kV line and making interconnections with the substation from below ground. Again, no feasibility issues are asserted. Indeed, the Project EIR and the SDG&E study of the undergrounding of the 138 kV lines through the easement support the conclusion that what Mr. Aabo proposes can in fact be done, without any additional delay, based on the environmental analysis already done and supplemented by the BFEA analysis. This impact analysis is attached as Exhibit 4.

SDG&E also appears to assert that these new transmission lines are not new development. It claims that it is simple reconfiguring a "loop-in" to the proposed substation in an apparent attempt to argue that the "loop-in" is a not a "new" line of the type that the Chula Vista LCP was clearly written to address. The certified LCP requires new high voltage transmission lines to be undergrounded as noted in the City Council Resolution attached as Exhibit 1. This "Loop-in" however is not simply a reconfiguration; it is a new line that does not currently exist.

The current 230 kV line running from the San Miguel Substation goes overhead to the bay front and then to a transition pole where it goes underground the length of the Chula Vista bay front up to the Sweetwater River. At this point it comes up at a transition pole and proceeds north to the Silver Gate Substation. The current 230 kV line does not connect to or "loop-in" to the existing 138 kV substation. Since there is no 230 kV line going into the current substation by any reasonable definition of "new", SDG&E must comply with the LCP for the new transmission line.

SDG&E in its Response on page 5 points to attachments B and C to show how the line is being "modified to loop-in to the substation" by removing the existing transition pole and putting in a new pole (which is not a transition pole) which then takes the line overhead into the substation. SDG&E attempts to argue that this "consolidation" is an improvement, ignoring the associated substation's structures which are not currently present that are designed to accommodate this new line coming in overhead. Nothing in this "consolidation" changes the fact that this loop in line is new, that it does not currently exist, and that it is being constructed in conjunction with a massive new substation that, taken together block and impede views to the bay front.

Equally, if not more important, this new overhead line and its associated structures shown in SDG&E's simulation is not the ultimate arrangement they intend to build on the coast. In fact they are piece mealing the project. In section B of the project EIR at page B-23, SDG&E notes additional components to the initial arrangement described on page B-16. It is only this initial

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arrangement that is shown in their visual simulation, not the ultimate arrangement described on page B-23. As noted in the Memoranda from Jaleh Firooz and Glenn Reddick, the reference in the ultimate arrangement is to the "transmission from the OMPL alignment located east of the proposed substation" and refers to a second transmission line in addition to the one in the initial arrangement.

To address a potential overload on the new San Miguel and Bay Boulevard Line which they apparently anticipate may exist sometime after the substation goes into operation, SDG&E apparently is proposing to add another transmission line from the San Miguel Substation into the Bay Boulevard Substation as the "ultimate arrangement." Figure B-7 in the EIR in conjunction with page B-4 shows how the ultimate arrangement in fact brings two lines through the easement requiring a second overhead pole to bring the second line overhead into the substation. SDG&E's visual simulation shows only the three circuits of the existing 230 kV line coming into the overhead pole while the ultimate design brings three more circuits with a second 230 kV line in the manner that Figure B-7 shows would include yet another new pole. These sections of the EIR are attached as Exhibit 5.

It is critical to understand the actual visual and scenic impacts of the ultimate arrangement described on page B-23. One of the reasons SDG&E insists on showing in their simulation attached to their response two transition poles on the bay front for their three cable per phase undergrounding beginning 300 feet east of the substation site (Figure 9 Aabo/Reddick Report) is that while one of those transition poles is not necessary for the vertical or horizontal duct bank configuration recommended by Mr. Aabo, if a second transition line is added a second transmission pole is needed for this new line. This is one of the very reasons that Mr. Aabo proposes that any transition poles be placed at the eastern end of the easement and undergrounded through the easement as SDG&E proposed for the 138 kV line in the BFEA. By not showing the ultimate arrangement in its simulation, SDG&E in effect obscures and minimizes the ultimate visual and aesthetic impacts of the project by not submitting actual architectural and preliminary engineering plans. If those plans were required they would clearly show that this ultimate arrangement is not adequately described and analyzed in the EIR. In order for the Coastal Commission to assess Chapter 3 impacts, a full project description as well as preliminary design and engineering drawings are necessary. The more general description in the EIR and the figures that accompany it are woefully insufficient for the issuance of a permit to construct. For all of these reasons, SDG&E's argument that undergrounding transmission lines in order to avoid significant visual impacts is not feasible is not supported by substantial evidence. The project description is incomplete and thus misleading, and alternatives exist to ensure that the visual impacts can be substantially mitigated. A low profile substation with underground transmission lines is both feasible and reasonable.

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COST AND DELAY ARE SPURIOUS ISSUES INDICATING ONLY SDG&E'S UNWILLINGNESS TO COMPLY WITH THE COASTAL ACT

Cost and delay do not provide a legitimate basis to avoid compliance with Coastal Act. Throughout the process, SDG&E has tried to avoid scrutiny of its design of the substation by asserting that its project cannot withstand additional delays "caused by Inland." First, the workshop report prepared by the CPUC and previously sent to staff showed that the current substation performs adequately through the year 2017. As noted by Jaleh Farooz, the CAISO's most recent reliability studies do not indicate that the proposed substation will come online until 2017 (2013-2014 ISU Transmission Plan, February 3, 2014, page 282). Further, the current 2013-2014 draft CAISO transmission plan identifies no liability based overload for the existing 230 kV Miguel-Silver Gate transmission line and Mr. Millar's recent letter to Ms. Dettmer carefully avoids discussion of the CAISO draft 2013-2014 Transmission Plan, instead referring to "material designed changes" which would "unduly delay the project" and that "it is not reasonable to revisit the approved design."

In reality, as recently documented by the CPUC, there are no actual "approved" design and engineering plans for the substation on this site at this time. Since no actual design and engineering plans exist other than the diagrams and figures in the EIR, design delay is not really an issue. SDG&E has three years to bring the substation online and if the timing was in fact so critical it's hard to believe they would not have a fully prepared set of architectural and engineering plans ready for the project.

As previously pointed out, the EIR already examined the undergrounding of 1000 feet of 230 kV line on the project site and SDG&E has already submitted their report analyzing the environmental impact of undergrounding through the easement. Any delay that SDG&E tries to conjure up is simply a red herring.

Further, if there was any delay, such delay would fall squarely at the feet of SDG&E. Since the 2004 Memorandum of Understanding ("MOU"), SDG&E knew and agreed that when it submitted its plans for the relocated substation those plans would include the removal of the 138 kV lattice tower which would necessitate the undergrounding documented in the BFEA. SDG&E was also aware of section 1.3 in the same MOU in which the very section discussing the 230 kV transmission line states that in the event that additional transmission and distribution lines are needed along the bay front, "SDG&E agrees it will file for such lines to be undergrounded as the preferred alternative..." However when it came time to file their application with the CPUC, SDG&E deliberately chose not to comply with the sections of the MOU that required them to show the undergrounding of transmission lines that is now at issue. Furthermore, when SDG&E filed its application with the CPUC, it was fully aware of the

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language of Chula Vista's LCP that explicitly spelled out that 230 kV transmission lines "shall" be placed underground. To now say enforcement of the MOU and Chula Vista's LCP, which SDG&E has been trying to avoid throughout this process, would now cause unacceptable delay and thus cannot be considered at this time is the kind of sophistry any Greek philosopher would stand in awe of.

With respect to the cost for the additional undergrounding of the 230 kV line, SDG&E spends little time discussing it because as referenced in Mark Fulmer's initial report, it is indeed minimal. The additional cost of undergrounding the transmission lines is spread statewide. If the additional cost is \$4.5 million, as Mr. Aabo found, the rate impact is 1.7 cents per year for the typical residential customer. If it is \$8 million, as SDG&E asserts, it's just over 3 cents per month. Even at 8 million dollars, the rate impact is well under the cost of operating a night-light. Even if the cost of compliance with the Coastal Act were a legitimate criterion for a Commission decision on mitigation, which it is not, the rate payer cost of complying with the Coastal Act in this instance is simply not a significant factor.

CONCLUSION

For the reasons discussed above, and based upon the evidence submitted previously as well as with this letter, we request that the Executive Director recommend to the Commission and that the Commission find that compliance with the Coastal Act requires that SDG&E underground its transmission lines in order to avoid significant visual impacts that would otherwise be contrary to Coastal Act section 30251 and to the City of Chula Vista's certified LCP. The visual impacts of the project as proposed by SDG&E are clear. These impacts can be avoided in their entirety simply by requiring that SDG&E do what it has already shown that it can do in other similar projects in other communities, and in other portions of this project. This mitigation is feasible, and SDG&E has provided no credible evidence to suggest that it is not. The Commission should require this mitigation of undergrounding the transmission lines, and with this mitigation, approve the project so that SDG&E can begin properly to develop its design and engineering plans to further the successful completion of the Chula Vista Bay Front Master Plan.



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Sincerely wst John S. Moot

of Schwartz Semerdjian Ballard & Cauley llp

 cc: Allison Dettmer, Deputy Director Kate Huckelbridge, Ph.D
 California Coastal Commission
 Energy, Ocean Resources and Federal Consistency Division
 45 Freemont, Station 2000
 San Francisco, CA 94105

RESOLUTION NO. 2014-024

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA IN SUPPORT OF THE RELOCATION OF THE SDG&E BAYFRONT SUBSTATION INCLUDING THE BAYFRONT ENHANCEMENT FUND ALTERNATIVE AND CONSIDERATION OF ADDITIONAL UNDERGROUNDING OF UTILITY LINES AND OTHER MEASURES TO ADDRESS VISUAL IMPACTS CONSISTENT WITH THE CITY'S CERTIFIED LOCAL COASTAL PROGRAM AND THE COASTAL ACT

WHEREAS, on October 12, 2004, the City of Chula Vista ("City") entered into a Memorandum of Understanding ("MOU") with San Diego Gas & Electric ("SDG&E") to facilitate, among other things, the relocation of the existing SDG&E Bayfront 138kV substation ("Substation"), and the undergrounding of existing and future utility transmission and distribution lines and towers along the Bayfront; and

WHEREAS on April 25, 2006, the City of Chula Vista ("City") created an undergrounding district within the Chula Vista Bayfront to underground the 138 kV electrical transmission lines and supporting structures including Tower 188701 consistent with its Bayfront Master Plan efforts and the "MOU" entered into with San Diego Gas & Electric ("SDG&E"); and

WHEREAS, on January 6, 2010, SDG&E and the San Diego Unified Port District ("Port District") entered into that certain Real Estate and Exchange Agreement to facilitate the exchange of properties encumbered by SDG&E and the Port District to allow for the relocation of the existing Substation; and

WHEREAS, on August 9, 2012, as the result of an effort of over ten years of collaborative planning and community outreach on the part of the City and the Port District the California Coastal Commission ("CCC") certified the Chula Vista Local Coastal Program Amendment (the "LCPA" or "LCP") and the San Diego Port District Port Master Plan Amendment/Chula Vista Bayfront Master Plan ("CVBMP"); and

WHEREAS, the Certified LCP's policies and regulations envision the relocation of the existing Substation to a site on Bay Boulevard near Palomar Street located approximately one-half mile south from its current location (the "Relocation Site"); and contain specific land use policies stating that utilities serving the bayfront shall be placed underground (LUP Objective GD.2); and further it is the City's stated position that such certified language is an expansion upon prior approved draft language which stated high voltage (230 kV) transmission lines shall be placed underground; and

WHEREAS, the CVBMP designates the site currently occupied by the Substation for the development of a Community Park, RV Park, and Industrial Park; and

Resolution No. 2014-024 Page 2

WHEREAS, said development would not be implemented without the relocation of the Substation to the Relocation Site; and

WHEREAS, without the relocation of the Substation from its current site the City's LCP and CVBMP's vision, objectives, and policies would not be implemented; and

WHEREAS, on October 17, 2013, the California Public Utilities Commission ("CPUC") granted a Permit to Construct the Substation at the Relocation Site, but without all of City's desired Project elements to address visual impacts; and

WHEREAS, the CCC will consider the issuance of a Coastal Development Permit, pursuant to the Coastal Act, for the construction of the Substation at the Relocation Site; and

WHEREAS, the City has consistently advocated for the relocation of the Substation before the CPUC and the CCC, including the Project alternative commonly known as the Bayfront Enhancement Fund Alternative; and

WHEREAS, the City desires to reaffirm its previous support for the relocation, including Bayfront Enhancement Fund Alternative, and the consideration of additional undergrounding of utility lines and other measures to address visual impacts consistent with the City's certified LCP, the California Coastal Act, the implementation of the Chula Vista Bayfront Master Plan and their vision and policies.

NOW, THEREFORE, the City Council of the City of Chula Vista does hereby resolve as follows:

1. The City Council reaffirms its strong support and requests Coastal Commission approval of the following:

a. The relocation of the SDG&E Substation (the "Project") from its existing site within the CVBMP, now designated for redevelopment into a Community Park, RV Park and Industrial Park, to the 12-acre Relocation Site to the south of the existing site, currently designated and zoned for industrial use.

b. The upgrade of the existing SDG&E Substation at the Relocation Site to a 230/69kVsubstation designed to meet the long term, reliable energy supply needs of the region.

c. The version of the Project commonly known as the "Bayfront Enhancement Fund Alternative," which has been identified by SDG&E in its application with the CCC as its "preferred least environmentally damaging feasible alternative," particularly those elements that remove Transmission Tower 188701, replace Transmission Tower 188700 with a steel pole and underground the related 138kV lines, and including the provision for funding of the Living Coast Discovery Center and other projects coordinated with the U.S. Fish & Wildlife Service.

d. Request that the CCC condition the permit to include landscaped berms and/or vegetative screening selected or maintained to provide year round screening and architectural features such as screen walls to address the adverse Visual effects of the proposed project.

2. Prior to any final action, the City Council also requests that the Coastal Commission independently complete the feasibility analysis and consider the benefits of requiring the undergrounding of any and all additional transmission lines proposed as part of the Project to the extent such undergrounding enhances compliance with the Coastal Act and LCP policies and creates a net positive improvement in visual impacts caused by the Project, minimizing visual blight.

3. The City Council desires that the Project be developed consistent with (i) its MOU with SDG&E; (ii) its Certified LCP approved by the City Council on September 25, 2012; (iii) the Coastal Act; (iv) best practices for the development of such facilities in environmentally sensitive areas; and (v) the energy needs of the region. Towards this end, the City Council requests that the CCC take particular notice of and be guided by the following:

a. Section 1.7 of the MOU which provides for the removal of Tower 188701 and related undergrounding as part of the Project (attached hereto as Exhibit A).

b. LCP, LUP Objective GD.2 which provides for the undergrounding of utilities serving the Bayfront, and LUP Policy VW.1.A and Specific Plan Section 19.85.006 which provide for development ensuring views that preserve a sense of proximity to the Bay (attached hereto as , Exhibit B).

c. Coastal Act Section 30251 which provides for consideration and protection of visual qualities of coastal areas as a resource of public importance (attached hereto as Exhibit C).

d. Such other relevant documents and submittals consistent with City objectives for the Project.

Presented by

Assistant City Manager

Approved as to form by

2 Glen R. Googins City Attorney

PASSED, APPROVED, and ADOPTED by the City Council of the City of Chula Vista. California, this 11th day of February 2014 by the following vote:

AYES: Councilmembers: Aguilar, Ramirez and Salas

· NAYS:

Councilmembers:

Bensoussan and Cox

ABSENT: Councilmembers: None

ATTEST:

)

)

Donna R. Norris, CMC, City Clerk

STATE OF CALIFORNIA COUNTY OF SAN DIEGO CITY OF CHULA VISTA

I, Donna R. Norris, City Clerk of Chula Vista, California, do hereby certify that the foregoing Resolution No. 2014-024 was duly passed, approved, and adopted by the City Council at a regular meeting of the Chula Vista City Council held on the 11th day of February 2014.

Executed this 11th day of February 2014.

Donna R. Norris, CMC, City Clerk

EXHIBIT A

EXTRACT FROM

MEMORANDUM OF UNDERSTANDING BETWEEN SAN DIEGO GAS & ELECTRIC COMPANY AND THE CITY OF CHULA VISTA

SECTION

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1.7 Switchyard: In the event the Project has been constructed, the Main-Street Substation has been Upgraded to 230 kV, and the South Bay Power Plant can be and is retired, replaced, or relocated such that the facility cannot be returned to service without new authorization from any and all required authorities, and all necessary SDG&E Board and FERC, CPUC and California Independent System Operator (CallSO) approvals acceptable to SDG&E are acquired for the relocation of the switchyard, SDG&E will relocate the switchyard at no cost to the City provided that the City provides, at no cost to SDG&E, adequate land for the new switchward in an acceptable location and land rights as defined below to SDG&E to interconnect with its electric system. The approvals acquired for the relocation of the switchvard shall be deemed acceptable to SDG&E provided that it is not materially different from the switch vard relocation application (submitted and as may be revised by SDG&E), not materially detrimental to SDG&E, and the cost of said relocation will be fully collected in rates. SDG&E will consider the following factors in determining an acceptable location: (I) The new location must have permanent easement and the same entitlements as are current! y held by SDG& E for the existing switchyard or an alternative acceptable to SDG&E. (2) Such a new Switchyard would be located at an alternative location on Chula Vista's Bayfront, west ofl-5, adjacent to existing right of way and on land that is environmentally clean and seismically acceptable, or, if circumstances warrant, at such location as the parties may mutually select. (3) The footprint for a new Switchyard would be at least 450 x 650 feet depending on the connections. The cost to SDG&E is currently estimated to be approximately \$50 million. Upon relocation of the Switchvard and pursuant to sections 1.4A and IAC, the 138 kV circuit located from Tower 281763 to approximately Tower 188701 will be undergrounded once the City has designated the 20.A funds or other alternative funding the City may have (with Tower 188700 remaining above ground). SDG&E will work with the City to minimize overhead structures once the location of the new Switchyard is determined. SDG&E will include the removal of the other 138 kV circuit and the Supporting Structures, including Tower 188701, with its application for the relocation of the Switchvard. This removal of said 138 kV, Supporting Structures, and Tower 188701 will be done and paid for by SDG&E consistent with its rules and regulations. The City will timely process all necessary City permits and support SDG&E in its applications to accomplish this construction, consistent with all laws and regulations applicable to SDG&E and the City.

End of Document

EXHIBIT B

EXTRACT FROM

CHULA VISTA LOCAL COASTAL PROGRAM

LAND USE PLAN (LUP) AND SPECIFIC PLAN (SP)

LUP OBJECTIVE GD.2

Objective GD.2 Utilities serving the bayfront shall be undergrounded.

LUP POLICY VW.1.A

Policy VW.1.A Public views shall be protected and provided from freeways, major roads, Bayfront perimeter Policies regarding each of these categories are provided below.

Views from the Freeway and Major Entry. Development shall provide an attractive view onto the site and establish a visual relationship with San Diego Bay, marshes, and bay-related development. High-rise structures shall be oriented to minimize view obstruction.

Views from Roadways within the Site (particularly from Bay Boulevard and Marina Parkway to the marshlands, San Diego Bay, parks, and other bay-related development.) Development and activity sites shall preserve a sense of proximity to the bay and marshlands.

Views from the Perimeters of the Bayfront Outward This view is primarily a pedestrian-oriented stationary view and more sustainable. These views will be experienced from various parts of open space and pathway system locations and will enable persons to renew visual contact at close range with San Diego Bay and marshlands. Some close-range pedestrian views may be blocked to protect sensitive species in the National Wildlife Refuge.

High-rise Development Vistas. The limited high-rise development within the LCP Planning Area shall maximize the panoramic view opportunities created with increased height.

SP SECTION 19.85.006

19.85.06 Form and appearance.

- A. Form and Appearance Objectives. The following objectives shall serve as guidelines for use of land and water resources to preserve a sound natural environment.
 - 1. Preserve existing wetlands in a healthy state to ensure the aesthetic enjoyment of marshes and the wildlife that inhabits them.
 - 2. Change the existing industrial image of the Bayfront and develop a new identity consonant with its future prominent public and commercial recreational role.
 - 3 Improve the visual quality of the shoreline by promoting public and private uses that provide proper restoration, landscaping, and maintenance of shoreline areas.

Exhibit B Page 2 of 3

4. Remove, or mitigate by landscaping, structures or conditions that have a blighting influence on the area.

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5. Eliminate or reduce barriers to linking the Bayfront to the rest of western Chula Vista and establish a memorable relationship between the Bayfront (and the areas and elements that comprise it) and adjoining areas of Chula Vista, the freeway, and arterial approaches to the Bayfront (see Exhibit 6, Form and Appearance Map).

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Exhibit B Page 3 of 3



EXHIBIT C

CALIFORNIA COASTAL ACT SECTION 30251

CALIFORNIA PUBLIC RESOURCES CODE

<u>30251.</u>

4

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

End of Document

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STATE OR CALIFORNIA-CALIF	ORNIA COASTAL ZONE CONSERVATION COMMISSION	RONALD R	EAGAN, Governor
SÂN DIEGO COAST REGIO			MALCOLM A. LOVE Chairman
SAN DIEGO, CALIFORNIA 92120-TEL.(714) 280-5992 DEVELOPMENT PERMIT		,	ROBERT C. FRAZEE Vice Chairman
Date: Applicant:	August 31, 1974 Inland Industries, Inc. 5060 Santa Fe Street San Diego, Ca.	F1725	JEFFERY D. FRAUTSCHY Representative to the California Coastal Zone Conservation Commission — THOMAS A, CRANDALL Executive Director
Project Address:	West of I-5, East of Bay Boulevard, Sou North of Palomar, City of Chula Vista.	th of Moss S [.]	treet,

Dear

Sir:

You are hereby granted a development permit. This permit is issued after a hearing before the Commission and after the Regional Commission found that the proposed development will not have any substantial adverse environmental or ecological effect and is consistent with the findings and declarations set forth in Section 27001 and objections set forth in Public Resource Code Section 27302.

This permit is limited to development described below and set forth in material on file with the Commission, and subject to the terms, conditions, and provisions, hereinafter stated:

A. <u>DEVELOPMENT</u>:

Construct the first phase of a three phase industrial park; to consist of three one story buildings with 174 parking spaces. PROJECT ADDRESS ABOVE .

B. TERMS AND CONDITIONS:

- 1. That the applicant agrees to adhere strictly to the current plans for the project as submitted to the Commission.
- 2. That the applicant agrees to notify the Commission of any substantial changes in the project.
- 3. That the applicant will meet all the local code requirements and ordiances, and obtain all necessary permits from State and Federal Agencies.
- 4. That the applicant agrees to conform to the permit rules and regulations of the California Coastal Zone Conservation Commission.
- 5. That the applicant agrees that the Commission staff may make site inspections of the project during construction and upon completion.
- 6. That construction on the project will start within 180 days following final approval of the project by the appropriate governmental agency.

SEE ATTACHED SHEET

Terms and conditions are to run with the land. These terms and conditions shall be perpetual and it is the intention of the parties to bind all future owners and possessors of the subject property.

11/73

SAN BIEGO COAST REGIONAL COMMISSION 8154 MISSION GORGE ROAD, SUITE 220 SAN DIEGO, CALIFORNIA: 92120-TEL: (714) 280.0992		MALCOLM A: LOVE Chairman ROBERT C: FRAZEE Vice Chairman
CONTROL NO:	STAFF RECOMENDATION	JEFFERY D. FRAUTSCH Representative to the Celifornia Coastal Zone Conservation Commission
APPLICANT:	Inland Industries Inc. 5060 Santa Fe Street San Diego, CA 92109	THOMAS A. CRANDALL Executive Director
LAST DAY FOR ACTION:	September 24, 1974 DATE OF PUBLIC HEARING: July 26, 1974	
VOTE REQUIRED:	Staff recommends that a two-thirds of authorized membership vote be required, as per Section 27401(d) of the California Coastal Zone Conservation Act of 1972 involving "Any development which would substantially interfere with or detract from the line of sight toward the sea from the State Highway nearest the coast."	
CCMMISSIONERS ABSENT AT PUBLIC HEARING:	Frazee, McNeely, Parker, Johnson	
PROJECT LOCATION:	West of I-5, east of BayBoulevard, south of Moss Street, north of Palomar, in the city of Chula Vista	
PROJECT DESCRIPTION:	To construct the first phase of a three phase industrial park: to consist of three (3) one story buildings with a floor area of 58,600 sq. ft. on a 3.82 acre parcel, complimented with 174 parking spaces. The total project site is 19.45 acres, although the first phase for which a permit is currently requested represents the development of only 166,500 sq. ft. or 3.82 acres of the total site for three light industrial warehouses totaling 58,600 sq. ft. The entire project will be a multi-tenancy light industrial complex, wit an estimated service area of 15 miles. The entire phased project will result in an estimated 300,000 sq. ft. of building area, covering about 36.8% of the approximately 20 acre parcel. Estimated trip generation from the completed project will be 2,000 per day, based on an estimated 100 trips per acre. The number of employees should not exceed 50 for the first phase.	

STAFF RECOMMENDATION

Staff recommends that the San Diego Coast Regional Commission NOT ISSUE a permit for the proposed project.

REASONS FOR RECOMMENDATION

1. <u>Vista obstruction</u> - The northern end of the project site sloces to the west at approximately T₂. At the south end of the site adjacent to Palomar Street, the land slopes westerly at approximately 3.5%. This topography provides traffic moving south to north on T=5 a partially obstructed vista of South San Diego Bay. Traffic moving from north to south along 1=5 is afforded a relatively unobstructed vista of the coastal lands north of Imperial Beach and these west of Ghula Vista, an area proposed by some for a publicity owned wildhife refuge. It should be noted that this vista is partially obstructed by the SDC&F, power facility storage tanks. In effect, the proposed development, when all phases are complete, will create a "wall effect" along a several hundred yard long stretch of T=5 with resulting loss of views seaward.

STAFF RECOMENDATION, F1725

2. <u>Non-conformance with the CPO Coastal Area Planning and Management Policies-adopted</u> <u>November 19, 1973</u> - Chapter 17 of CPO's Plan provides that: "Not only should actual physical access be promoted, but the enhancement and protection of visual access should also be a goal of all jurisdictions in the region." Further, the CPO Coastal Vista Map identifies this area as one of the two areas along the south San Diego Bay where scenic vistas are present from 1-5.

3. <u>Irrevocable commitment of coastal land resources</u> - This twenty acre site is situated east of the salt evaporator flatlands fringing south San Diego Bay and west of I-5: The staff's position is that the site in question is a coastal zone resource of considerable significance because of the vista across the shoreline plains to the Bay, and because of the proximity to the Bay's edge. Section 27402 of the Act provides that no permit shall be issued unless the Regional Commission finds that the proposed development is consistent with the objectives set forth in Section 27302. Section 27302(d) states that the only projects which can be approved are those that avoid irreversible and irretrievable commitments of coastal zone resources, which includes views and other scenic amenities:

4. <u>Compatibility with surrounding uses</u> - The proposed project is consistent with surrounding land uses and may be an appropriate use of the site in question. However, it seems to the staff that the entire project should be designed by the applicant in such a way as to preserve vistas seaward. Further, the approval of this initial phase without a design for the entire project that is sensitive to the preservation of views will make it more difficult to preserve views in later phases (e.g. the initial phase will set a precedent for later phases).

STAFF RECOMMENDATION: F1725

WHEREAS Inland Industries, Inc., 5060 Santa Fe Street, San Diego, propose to construct the first phase of a three phase industrial park to consist of three one-story buildings with a floor area of 58,600 sq. ft. on a 3.82 acre parcel, complimented with 174 parking spaces. Site is west of I-5, east of Bay Boulevard, south of Moss Street, north of Palomar, in the City of Chula Vista;

WHEREAS, the Commission finds that the applicant has not sustained the burden of proof that the proposed project is consistent with the findings and declarations set forth in the California Public Resources Code Section 27001 and with the objectives set forth in the California Public Resources Code Section 27302; nor has the applicant sustained the burden of proving that the proposed project will not have any substantial adverse environmental or ecological effect; and

THEREFORE, BE IT RESOLVED that the San Diego Coast Regional Commission deny a permit for the proposed development.

ADCRTED by the San Diego Coast Regional Commission by vote of _____ yes, ____ no, ____ abstention on this day, ______, 1974.

STAFF RECORDEDATION: F-1725

- KHEREAS, Inland Industries, Inc., 5060 Santa Fe Street, San Diego, California, proposes to construct the first phase of a three phase industrial park west of I-5, east of Bay Boulevard, south of Moss Street, north of Palomar, in the city of Chula Vista;
- WHEREAS, The Commission finds that the proposed project does not have a substantial adverse environmental or ecological effect;
- THEREFORE, BE IT RESOLVED that the San Diego Coast Regional Commission approve the proposed development as submitted by the applicant provided:
 - 1. That a vista corridor shall be preserved consisting of a parallelogram extending across the subject property in the minimum width of 136 feet measured from the most southerly point of Building 3 of the development, extending south to the most northerly point of any building structure hereafter erected on the applicant's property lying to the south of the development. This vista corridor is approximately delineated by the parallelogram labelled "1" on the map attached hereto as Exhibit A. This vista corridor shall be recorded as a restriction on the use of the property in perpetuity.
 - 2. That an additional vista corridor shall be preserved consisting of 320 feet of frontage along the easterly boundary of applicant's property extending from the southernmost point of the sewer easement at its intersection with the easterly property line, north to the intersection of the northernmost utility easement with the easterly property line, and then westerly along the northern boundary of the utility easement to the westerly property line. This vista corridor is labelled "2" on the map attached hereto as Exhibit A. This vista corridor shall be recorded as a restriction on the use of the property in perpetuity.
 -) That no building structure or landscaping shall be constructed or placed in either of the above-described vista corridors without a permit from the San Diego Coast Regional Commission or its successor agency.
 - 4. That landscaping on the site of the present development shall be in conformance with the landscape plan on file with the Commission, which maintains the direct lines of sight toward the San Diego Bay from I-5 and which softens the visual impact of the parking areas within the project in the lines of sight to the Bay.
 - 5. That in approving this proposed development, the San Diego Coast Regional Commission is in no way committing itself to approval of any additional development on the remainder of the Chula Vista business complex site. Also, the Commission, or its successor agency, shall retain the right to review future permit applications for additional development on undeveloped portions of the applicant's property with particular emphasis on preserving, where possible, bay vistas not already preserved by the specific vista corridors described in conditions 1 and 2 above.

PAGE 5

- 6. That the applicant agrees to adhere strictly to the current plans for the project as submitted to the Commission.
- 7. That the applicant agrees to notify the Commission of any substantial changes in the project.
- 8. That the applicant will meet all the local code requirements and . ordinances.
- 9. That the applicant agrees to conform to the permit rules and regulations of the California Coastal Zone Conservation Commission.
- 10. That the applicant agrees that the Commission staff may make site inspections of the project during construction and upon completion.
- 11. That construction on the project will start within 180 days following issuance of this permit.

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ADOPTED by the San Diego Coast Regional Commission by vote of 9 yes, 0 no, <u>1</u> abstention on this day, <u>August 16</u>, 1974. STATE OF CALIFORNIA PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298 Edmund G. Brown Jr., Governor



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NOTICE OF PREPARATION ENVIRONMENTAL IMPACT REPORT FOR THE SOUTH ORANGE COUNTY RELIABILITY ENHANCEMENT PROJECT PROPOSED BY SAN DIEGO GAS AND ELECTRIC COMPANY

APPLICATION NO. A.12-05-020

To:All Interested PartiesFrom:Andrew Barnsdale, CEQA Project Manager, CPUC Energy DivisionDate:January 9, 2013

Si usted necesita más información o una copia de este documento en español, por favor, llame al (855) 520-6799 o visite la siguiente página Web. <u>http://tinyurl.com/clsee4g</u>

A. INTRODUCTION

San Diego Gas and Electric Company (SDG&E) filed an application for a Certificate of Public Convenience and Necessity (CPCN) with the California Public Utilities Commission (CPUC) for the South Orange County Reliability Enhancement project (SOCRE project) to rebuild and upgrade a portion of its transmission infrastructure in South Orange County. In accordance with the California Environmental Quality Act (CEQA), the CPUC is the Lead Agency and is preparing an environmental review document to evaluate the proposed project.

This Notice of Preparation (NOP) indicates the CPUC's intent to prepare an Environmental Impact Report (EIR) in accordance with CEQA. The EIR would describe the nature and extent of the environmental impacts of the SOCRE project and project alternatives, and would discuss mitigation measures for adverse impacts.

With this NOP, the CPUC provides information about the SOCRE project description, location, and potential environmental impacts, and requests comments from interested persons, organizations, and agencies regarding the scope and content of the environmental information, including project alternatives and mitigation measures that should be included in the EIR. For agencies receiving this notice, the CPUC would like to know your views as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the SOCRE project. Each responsible agency receiving this NOP is invited to respond by providing the CPUC with specific details about the scope, environmental issues, alternatives, and mitigation measures related to each responsible agency's area of statutory responsibility that must be explored in the EIR. In accordance with CEQA Guidelines Section 15082(b)(1)(B), responsible and trustee agencies should also indicate their respective level of responsibility for the SOCRE project in their response.

This NOP will be circulated for a public review and comment period beginning January 9, 2013 and ending at 5:00 pm on February 8, 2013. Two scoping meetings will be held to receive comments, as described in Section E.

B. SUMMARY OF THE SOCRE PROJECT

Background and Project Purpose

The purpose of the proposed SOCRE project is to increase the reliability and operational flexibility of SDG&E's South Orange County 138-kilovolt (kV) system to reduce the risk of electrical outages. The project would also upgrade aging electrical infrastructure in the South Orange County area, including SDG&E's Capistrano Substation in the City of San Juan Capistrano.

The existing 230-kV transmission network at SDG&E's Talega Substation (located on Marine Corps Base Camp Pendleton) provides power for the South Orange County service area. Power supplied by the Talega Substation is transmitted to seven distribution substations—Capistrano, Laguna Niguel, Margarita, Pico, San Mateo, Rancho Mission Viejo, and Trabuco—over a 138-kV transmission network.

The SOCRE project would improve reliability by providing a second 230-kV power source to SDG&E's South Orange County service area and modernizing aging infrastructure, including rebuilding the Capistrano Substation, which was constructed in the 1960s, and upgrading components of the Talega Substation. Once upgraded, Capistrano Substation would become San Juan Capistrano Substation. The new substation would accommodate two new 230-kV lines and two additional 138-kV lines that would be rerouted to the upgraded substation. An existing 138-kV line would be routed to Talega Substation.

Project Description

Components of the SOCRE project would include:

- 1. Rebuilding and upgrading the existing 138/12-kV air-insulated Capistrano Substation (2 acres) as a 230/138/12-kV gas-insulated substation (6.4 acres) called San Juan Capistrano Substation;
- 2. Replacing a segment of a single-circuit 138-kV transmission line between the Talega and Capistrano substations with a new double-circuit 230-kV transmission line (7.5 miles), and relocating several transmission and distribution line segments (2 miles, combined) located near the two substations to accommodate the proposed 230-kV line; and
- 3. Relocating a 12-kV distribution line into new and existing underground conduit and overhead on new structures from the proposed San Juan Capistrano Substation to Prima Deschecha Landfill (6 miles).

Approximately 140 transmission and distribution line structures would be removed and approximately 120 would be installed. Approximately 0.30 miles of new right-of-way (ROW) would be acquired by SDG&E for the proposed transmission lines. Construction of the SOCRE project is anticipated to begin in November 2013 and would take approximately 4 years.

Project Location

The components of the SOCRE project would be primarily located in existing SDG&E ROW within the cities of San Juan Capistrano and San Clemente as well as unincorporated Orange and San Diego counties. South Orange County includes residential, commercial, industrial, recreational, and open space land uses. The existing 138-kV transmission line, which would be replaced by the proposed double-circuit 230-kV transmission line, crosses Interstate 5 east of the Capistrano Substation, and then continues southeast to the Rancho San Juan residential development and Prima Deschecha Landfill. From there, the transmission line continues southeast through the City of San Clemente and unincorporated Orange and San Diego counties to the Talega Substation, located within U.S. Marine Corps Base Camp Pendleton and San Diego County.

In addition, a 12-kV distribution line would be installed in existing and new underground conduit and overhead on new and replaced structures, from Capistrano Substation in the City of San Juan Capistrano to the Rancho San Juan residential development and Prima Deschecha Landfill. Figure 1 shows the location of the project components.

Operations and Maintenance

Operation and maintenance activities by SDG&E would not increase in intensity, frequency, or duration with implementation of the SOCRE project and would be very similar to existing operation and maintenance activities. Standard transmission line operation and maintenance activities include repairs, pole brushing in accordance with fire break clearance requirements, herbicide applications, and tree trimming to maintain a clear working space area around all poles. Typical activities would also include routine aerial and ground inspections, patrols, and preventive maintenance to ensure service reliability, as well as emergency work to maintain and restore service continuity.

The Talega and San Juan Capistrano substations would be unmanned substations. Workers would routinely visit each substation several times a week for standard operations and several times a year for equipment maintenance.

Project Alternatives

Pursuant to CEQA, a reasonable range of alternatives to the proposed project will be identified and analyzed in the EIR. During the 45-day comment period following publication of the Draft EIR, agencies and the public will be given the opportunity to comment on the alternatives considered.

C. CPUC PROCESS

The CPUC conducts two parallel processes when considering development proposed by a regulated utility: an application process, in which the CPUC reviews the utility's proposal (such as SDG&E's CPCN application for the SOCRE project) and considers whether the project is needed and is in the public interest; and an environmental review process pursuant to CEQA. The CPCN application process focuses on utility ratepayer and public benefit issues, and is undertaken by the CPUC's Administrative Law Judges Division.

The CEQA process for utility applications is led by the CPUC's Energy Division, which will direct the preparation of the SOCRE project EIR. Through the EIR process, the CPUC will determine whether the SOCRE project would result in significant impacts on the environment, and whether those impacts could be avoided or reduced to less than significant levels. The EIR will be used by the CPUC in conjunction with other information prepared for the CPUC's formal record to act on SDG&E's application. If, through the EIR process, the CPUC determines the project would result in significant environmental impacts that could not be mitigated to less than significant levels but still approves the project, the Commission's decision on the application will include a Statement of Overriding Considerations that presents the economic, legal, social, and technological benefits, or other benefits, that outweigh the project's impacts.

D. SCOPE OF EIR AND DISCUSSION OF POTENTIAL IMPACTS

Under CEQA, agencies are required to consider environmental impacts that may result from a proposed project, to inform the public of potential impacts and alternatives, and to facilitate public involvement in the assessment process. The EIR prepared for the SOCRE project will include a detailed description of the proposed project and project objectives, and a description of the affected environment. The EIR will also include an evaluation of environmental impacts, evaluate a reasonable range of alternatives to the project, and identify appropriate mitigation measures for any significant adverse impacts

The Proponent's Environmental Assessment, prepared by SDG&E for the SOCRE project, identified environmental impacts that would result from the construction and operation of the project (Table 1).

Environmental Issue Area	Potential Issues or Impacts	
Aesthetics	Construction and operation of the project could result in impacts on the overall visual character of the project area.	
Air Quality and Greenhouse Gases	Construction of the project could result in emissions of sulfur hexafluoride and criteria pollutants as identified by the South Coast Air Quality Management District.	
Cultural Resources	Construction of the project could result in impacts on cultural and paleontological resources.	
Geology, Soils, and Mineral Resources	Construction and operation of the project could result in impacts related to seismic-related ground failure, landslides, and unstable soils.	
Hazards and Hazardous Materials	Construction and operation of the project could result in impacts related to hazards and hazardous materials.	
Noise	Construction of the project at night could result in noise impacts.	
Public Services	Construction of the project could result in impacts on existing parks and recreational areas in the project area.	
Transportation and Traffic	Construction of the project could result in impacts related to traffic congestion and deterioration of levels of service, as well as cumulative traffic impacts.	

Table 1: Initially Identified SOCRE Project Issues or Impacts

The EIR may identify additional impacts. For significant impacts, and where feasible, mitigation measures will be proposed to avoid or reduce the impact.

E. PROJECT SCOPING PROCESS AND MEETINGS.

Circulation of this NOP opens a public review and comment period on the scope of the CEQA document that begins on January 9, 2013 and ends on February 8, 2013 at 5:00 p.m. All interested parties, including the public, responsible agencies, and trustee agencies, are invited to present comments about the SOCRE project and the scope of the EIR.

The CPUC invites interested parties to the following public scoping meetings for the SOCRE project in order to learn more about the project, ask questions, and submit comments:

Wednesday, January 23, 2013

Thursday, January 24, 2013

San Juan Capistrano Community Hall 25925 Camino Del Avion San Juan Capistrano, CA 92675 Bella Collina Towne and Golf Club 200 Avenida La Pata San Clemente, CA 92673

Open House: 6:30 p.m. to 7:00 p.m. Presentation and Public Comment Session: 7:00 p.m. Written scoping comments may also be mailed, faxed, or emailed to the CPUC during the NOP comment period specified above. Please include a name, address, and telephone number of a person who can receive future correspondence regarding the EIR. Please send your comments to:

> Andrew Barnsdale California Public Utilities Commission RE: SOCRE Project c/o Ecology and Environment, Inc. 505 Sansome Street, Suite #300 San Francisco, CA 94111

Emailed comments may be sent to: <u>SOCRE.CEQA@ene.com</u>. Faxed comments may be sent to (415) 398-5326. Voice messages may be left at: (855) 520-6799. For mailed, faxed, and emailed comments, please include your name and mailing address in your comment, and include the words "South Orange County Reliability Enhancement Project" or "SOCRE."

Comments received during the scoping period will be considered during preparation of the SOCRE project EIR. Public agencies and interested organizations and persons will have an additional opportunity to comment on the SOCRE project during the 45-day public review period to be held after the publication and circulation of the Draft EIR.

Agency Comments

This NOP was sent to responsible and trustee agencies, cooperating federal agencies, and the State Clearinghouse. We are interested in the views of your agency regarding the scope and content of the environmental information, as these responses will reflect your agency's statutory responsibilities in connection with the SOCRE project. Responses should identify the issues to be considered in the CEQA document, including significant environmental issues, alternatives, mitigation measures, and whether your agency will be a responsible agency or a trustee agency. Please send responses to the address noted above.

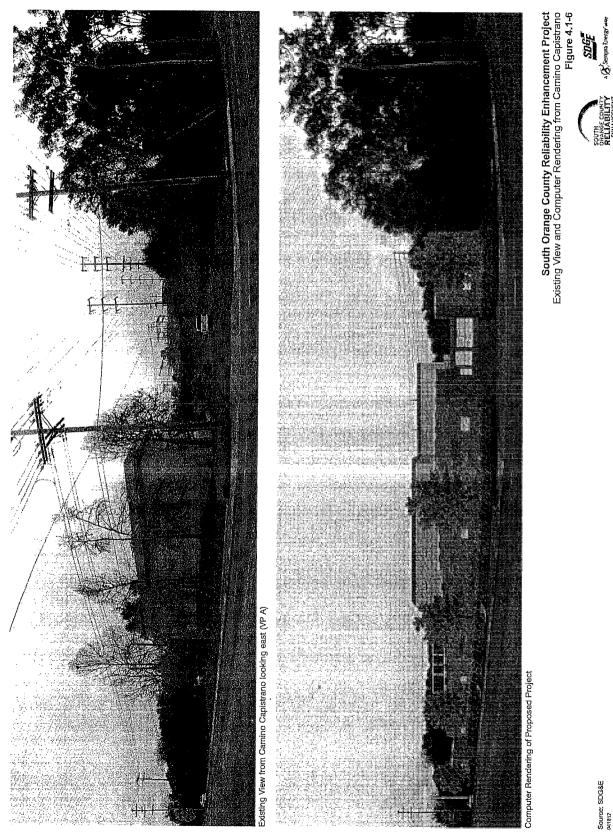
G. ADDITIONAL INFORMATION

Information about the SOCRE project and the CEQA process is available on the CPUC's project website: http://tinyurl.com/clsee4g

The website will be used to post all public documents related to the CEQA document. No public comments will be accepted on this website; however, the website will provide a sign-up option for interested parties to be placed on the project mailing list and a printable comment form.

The CEQA Guidelines are available at the following website: <u>http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines</u>

Appendix G of the CEQA Guidelines, which serves as an environmental checklist for all CPUC CEQA documents, is available at the following website: <u>http://www.ceres.ca.gov/ceqa/guidelines/pdf/appendix_g-3.pdf</u>

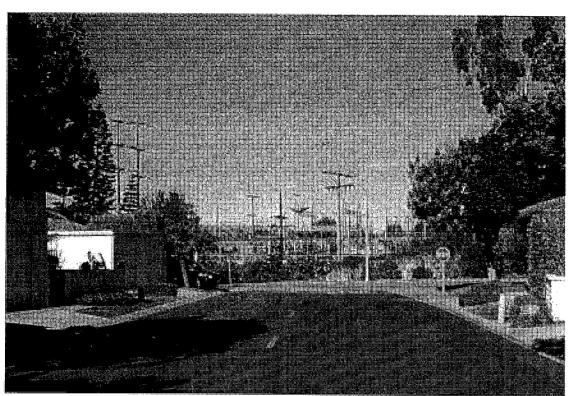


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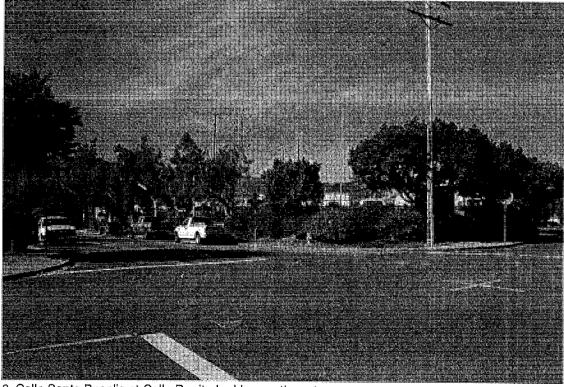
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5. Via El Rosario looking north

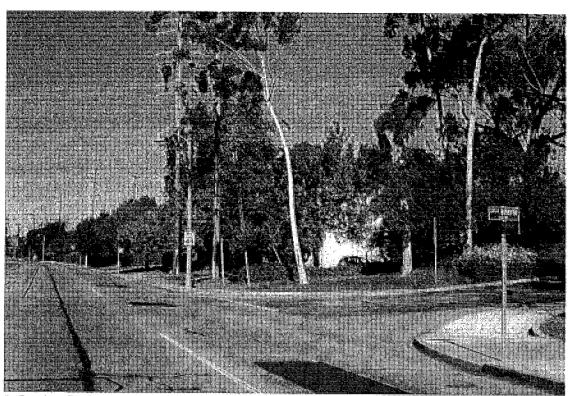


6. Calle Santa Rosalia at Calle Bonita looking northwest

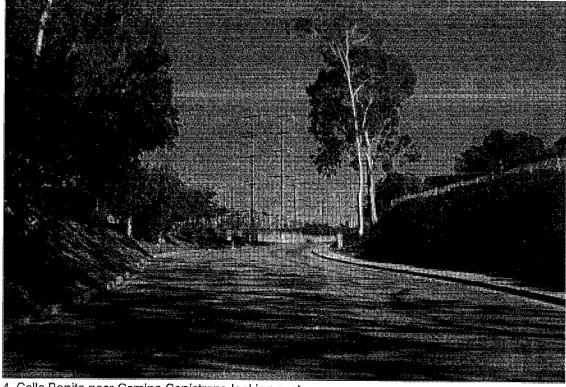
South Orange County Reliability Enhancement Project Photographs of the Existing Project and Vicinity

Refer to Figure 4.1-2a for photograph viewpoint locations





3. Camino Capistrano near Calle Bonita looking north



4. Calle Bonita near Camino Capistrano looking east

South Orange County Reliability Enhancement Project Photographs of the Existing Project and Vicinity

Refer to Figure 4.1-2a for photograph viewpoint locations





JOHN S. MOOT Direct dial: (619) 557-3531 e-mail: johnm@ssbclaw.com

SDG&E Letter to Jensen Uchida of California Public Utilities Commision

August 31, 2012



Dave Geler Vice President – Electric Operations

> 8330 Century Park Ct San Diego • CA 92123-1530

August 31, 2012

Mr. Jensen Uchida, California Public Utilities Commission c/o Dudek 605 Third Street Encinitas, California 92024

Re: Draft Environmental Impact Report for South Bay Substation Relocation Project (State Clearinghouse No. 2011071031)

Dear Mr. Uchida:

Enclosed please find comments by San Diego Gas & Electric Company (SDG&E) on the Draft Environmental Impact Report (Draft EIR) prepared by the California Public Utilities Commission (CPUC) for the proposed South Bay Substation Relocation Project (Proposed Project). SDG&E appreciates CPUC's detailed review of the Proposed Project and agrees that all of the potential impacts of the Proposed Project are less than significant or can be mitigated to a "less than significant" level. SDG&E notes that the CPUC can approve the Proposed Project upon certification of the Final EIR in compliance with the California Environmental Quality Act (CEQA) because all of the potential impacts of the Proposed Project can be mitigated. SDG&E urges the CPUC to prepare the Final EIR and approve a new, relocated substation, which is critical to ensuring electric reliability and meeting local, regional, and statewide environmental planning goals.

Although SDG&E agrees with most of the analysis and conclusions in the Draft EIR, SDG&E does not agree that either the No Project or the Existing South Bay Substation Site alternative is environmentally superior to the Proposed Project or the Bayfront Enhancement Alternative. To the contrary, SDG&E strongly believes that neither of these alternatives is environmentally superior to the Proposed Project or the Bayfront Enhancement Alternative.

In erroneously concluding that the Existing South Bay Substation Site alternative is environmentally superior, the Draft EIR does not fully consider SDG&E's reliability objectives. Reliability is a fundamental purpose of the Proposed Project. To ensure reliability, SDG&E proposes to rebuild the existing substation, which is more than 50 years old, and reconfigure the existing transmission system to provide for future transmission and distribution load growth for the South Bay region. The "environmentally superior" alternatives identified in the Draft EIR do not fully meet these objectives. SDG&E must reconstruct and upgrade the existing substation within a reasonable period of time to accommodate regional energy supply needs subsequent to the retirement of the South Bay Power Plant and ensure reliability.

SDG&E further believes that the CPUC should not eliminate substation relocation as a fundamental project objective. Substation relocation is a primary objective of SDG&E because it is an established objective of the California Coastal Commission, California State Lands Commission, the City of Chula Vista, the San Diego Unified Port District, and community and regional stakeholders. The proposed relocation site is the product of more than a decade of collaboration by stakeholders to develop

and approve the Chula Vista Bayfront Master Plan. The alternatives identified in the Draft EIR do not meet these objectives and therefore should be rejected as socially and environmentally infeasible. Moreover, SDG&E fully supports the Bayfront Enhancement Alternative as a means to ensure compliance with the California Coastal Act.

SDG&E is concerned that the Draft EIR understates the environmental benefits associated with the Proposed Project and prematurely dismisses the <u>Bayfront Enhancement Alternative</u> due to lack of specificity. The enclosed materials address the perceived lack of specificity by describing the projects SDG&E proposes to undertake; specifically additional visual improvements and undergrounding along Bay Boulevard, and funding to support the Living Coast Discovery Center and on-going habitat restoration efforts at the nearby San Diego Wildlife Refuge "Salt Works" property. SDG&E requests that the CPUC reconsider the Bayfront Enhancement Alternative, which was originally developed by SDG&E as a reasonable and cost-effective environmentally superior alternative to offset the coastal wetland impacts of the Proposed Project. SDG&E believes that the Bayfront Enhancement Alternative is a feasible proposal in light of the potential economic, social and environmental costs associated with the No Project or Existing South Bay Substation Site alternatives. We request that the Final EIR acknowledge that the Proposed Project and proposed Bayfront Enhancement Alternative are environmentally superior to any other alternative.

SDG&E has designed the Proposed Project and the Bayfront Enhancement Alternative to deliver environmental benefits that no other alternative—not even the "environmentally superior" alternatives identified in the Draft EIR—would deliver. These benefits include the following:

- Enabling low-cost visitor serving uses, public access, and other California Coastal Act priorities within the Master Plan Area by removing the existing substation from its current location;
- Advancing California Coastal Act priorities by removing more than 0.5 mile of existing overhead electrical facilities (including five lattice towers and approximately 3,800 feet of existing overhead lines) within a visually degraded industrial area and transmission line corridor; and
- Realization of long-standing United States Fish and Wildlife Service (USFWS) plans and priorities within the Sweetwater Marsh by providing comprehensive restoration and monitoring activities within approximately 10 acres of the San Diego Bay National Wildlife Refuge Sweetwater Marsh Unit to offset impacts to approximately 2.43 acres of low-quality wetlands within a former liquefied natural gas (LNG) facility.

The Bayfront Enhancement Alternative would ensure compliance with the Coastal Act restrictions on development within wetlands and provide the following *additional* environmental benefits:

 Additional visual enhancements along Bay Boulevard resulting from the <u>removal</u> of two more existing lattice towers and an additional 700 to 1,000 feet of existing overhead transmission lines;

;

- Endowment funding towards the continued operation of the Living Coast Discovery Center; and
- Funding towards the on-going management of the Salt Works property through an existing refuge benefit organization with an endowment or similar mechanism.

For all of the reasons described in the attached materials, SDG&E respectfully requests that CPUC prepare the Final EIR and (1) confirm that the Proposed Project and Bayfront Enhancement Alternative (as depicted in Attachment A: Figures and described in Attachment B: Bayfront Enhancement Alternative Description and Preliminary Impact Analysis) are environmentally superior to all other project alternatives; (2) revise the mitigation measures identified for the Proposed Project as proposed in Attachment C: Proposed Mitigation Measure Revisions; and (3) incorporate the technical corrections and clarifications described in Attachment D: Technical Corrections and Clarifications.

SDG&E fully supports the Proposed Project and Bayfront Enhancement Alternative. We appreciate CPUC's detailed consideration of the enclosed comments and looks forward to receiving the Final EIR.

Sincerely, Dave Geier

Vice President – Electric Operations San Diego Gas & Electric Company (

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SDG&E SOUTH BAY SUBSTATION RELOCATION PROJECT DETAILED COMMENTS ON THE DRAFT EIR

INTRODUCTION

SDG&E commends CPUC staff and Dudek on their review of the Proposed Project. SDG&E agrees with the conclusion in the Draft EIR that all of the potential impacts associated with the Proposed Project can be mitigated to a level below significant and urges the CPUC to approve the Proposed Project.

SDG&E's primary concern with the Draft EIR is that it erroneously concludes that the "No Project" and "Existing South Bay Substation Site" alternatives are environmentally superior to the Proposed Project. SDG&E does not agree with this conclusion for the reasons discussed in detail below. As an initial matter, the "Existing South Bay Substation Site" alternative does not meet even the CPUC's project objectives because it does not "[p]rovide for future transmission and distribution load growth for the South Bay region." Draft EIR at C-3. Moreover, the "Existing South Bay Substation Site" alternative does not meet SDG&E's project objective of respecting the land use plans and goals adopted by the City of Chula Vista (City), the California Coastal Commission (CCC), California State Lands Commission, the Unified Port District of San Diego (Port District), and community and regional stakeholders. Finally, the Draft EIR fails to recognize the environmental benefits of either the Proposed Project or the Bayfront Enhancement Alternative in finding the "Existing South Bay Substation Site" alternative or "No Project" alternative to be "environmentally superior" to either the Proposed Project or the Bayfront Enhancement Alternative.

In addition, SDG&E believes that the Draft EIR prematurely dismisses the Bayfront Enhancement Alternative as a potentially environmentally superior alternative. SDG&E has refined the Bayfront Enhancement Alternative to include more details, and requests that the Final EIR acknowledge the environmental benefits of the Bayfront Enhancement Alternative, which SDG&E believes is the environmentally superior alternative. As set forth below, because the Bayfront Enhancement Alternative would not have a substantial adverse environmental effect, inclusion of this information would not require recirculation of the Final EIR.

SDG&E also requests revisions to some of the mitigation measures to ensure proportionality and to facilitate compliance during construction, and correction of technical inaccuracies in the Draft EIR that should be corrected in the Final EIR.

The comments and attached materials more fully describe SDG&E's concerns and include proposed modifications to the mitigation measures and Draft EIR to address these concerns. Finally, SDG&E explains in the following paragraphs that none of the information in these comments would trigger recirculation of the Draft EIR under CEQA, the CEQA Guidelines, or interpreting caselaw.

SDG&E appreciates CPUC's consideration of these comments.

THE DRAFT EIR ERRONEOUSLY CONCLUDES THAT THE "NO PROJECT" AND "EXISTING SOUTH BAY SUBSTATION SITE" ALTERNATIVES ARE ENVIRONMENTALLY SUPERIOR TO THE PROPOSED PROJECT

SDG&E is troubled by the Draft EIR's conclusion that the "No Project" and "Existing South Bay Substation Site" alternatives are environmentally superior to the Proposed Project. This conclusion does not fully consider SDG&E's system reliability objectives, disregards SDG&E's 2004 Memorandum of Understanding (MOU) with the City of Chula Vista and the Bayfront Master Plan, and underestimates the environmental benefits that would result from the relocation of the substation and the development of the Proposed Project.

The Final EIR Should Fully Consider SDG&E's System Reliability Objectives

SDG&E proposes to construct the Proposed Project to replace the existing South Bay Substation, which is more than 50 years old, in order to maintain system reliability. As a California public utility, SDG&E is required to provide reliable electric service to all of its customers. The Draft EIR recognizes that a project objective is to "Provide for future transmission and distribution load growth for the South Bay region." Draft EIR at C-3. Consistent with this obligation, a primary objective of the Proposed Project is to design a flexible transmission system that would accommodate regional energy needs and provide for future transmission and distribution load growth for the South Proposed Project has been designed to fully meet these objectives, SDG&E is concerned that the "No Project" and "Existing South Bay Substation Site" alternatives would not.

While it is technologically feasible to replace much of the equipment at the existing South Bay Substation, replacing the equipment at the existing location presents logistical challenges and is impractical due to space constraints and the need to keep the existing substation energized during construction. In order to upgrade some of the equipment to modern seismic standards, including some of the structural steel, additional land may be required or substation components may need to be either eliminated or relocated outside of the existing substation footprint.

SDG&E is required to meet the North American Electric Reliability Corporation (NERC) transmission planning reliability standards approved by the Federal Energy Regulatory Commission (FERC), as well as the transmission planning criteria adopted by the California Independent System Operator (CAISO) and the Western Electricity Coordinating Council (WECC). The existing 138 kilovolt (kV) and 69 kV transmission system in the South Bay area is no longer adequate for current and forecasted transmission system conditions according to the power flow analysis provided in response to Data Request 14 (SDGE-ED-014: Q 1-3)². Although SDG&E will take all necessary steps to ensure that the transmission system is operated safely and reliably, leaving the existing system in place under the "No Project" or "Existing South Bay Substation Site" alternatives increases the risk of damage to transmission equipment and reduces the ability to meet customer load, particularly during periods of high electric demand.

Significantly, neither of these alternatives would accommodate distribution load at the existing South Bay Substation site, which does not have the adequate physical space to allow for future distribution load without expansion. SDG&E notes that prior to the Notice of Preparation, both the City and the Port approved the Master Plan, which can reasonably be expected to substantially increase load in the immediate area. Thus the need to accommodate distribution load is not speculative, but rather is reasonably foreseeable and within SDG&E's obligation to provide reliable electric service within its

¹ Because CEQA recognizes that a "no project" alternative does not achieve the project's objectives, CEQA Guideline §15126.6(e)(2) requires an EIR to identify an environmentally superior alternative other than the "no project" alternative. *Accord, e.g., Mira Mar Mobile Community v. City of Oceanside*, 119 Cal. App. 4th 477, 489 (2004) ("The discussion of the no project alternative satisfied CEQA because it allowed decision makers to compare the environmental impacts of the project with the impacts of no project."). Plainly, the "No Project" alternative here would not meet SDG&E's reliability objective. As the CPUC requires SDG&E to provide reliable electric service, the "No Project" alternative is not feasible even though CEQA requires that it be

² Response to Data Request 14 (SDGE-ED-014: Q 1-3) was submitted pursuant to CPUC Section 583 and General Order 66-C and is considered confidential/privileged material in its entirety--review and access restricted.

territory. In order to accommodate distribution load under either the "No Project" and "Existing South Bay Substation Site" alternatives, SDG&E would have to identify a new site for the distribution substation. The estimated cost of obtaining, permitting, and developing a site for use as a distribution substation is approximately \$6 million - \$30 million.³ In sum, rebuilding the South Bay Substation at the existing location would only <u>partially</u> achieve SDG&E's reliability objectives for the Proposed Project, which include replacing aging and obsolete infrastructure, designing a flexible transmission system that can accommodate regional energy needs, and providing for future growth for the South Bay region. The Final EIR should highlight the fact that that neither of the "No Project" or "Existing South Bay Substation Site" alternatives would meet the reliability objectives that would be met with the Proposed Project.

The Final EIR Should Fully Consider the Objective of Facilitating Implementation of the Bayfront Master Plan and Furthering SDG&E's 2004 Memorandum of Understanding with the City

SDG&E's Project Objective 3 is to "Facilitate the City of Chula Vista's bayfront redevelopment goals by relocating the South Bay Substation and furthering the goals of the SDG&E-City of Chula Vista MOU." The Draft EIR acknowledges the fact that both the City and Port District approved the Master Plan in 2010, and that shortly thereafter, SDG&E filed its application to relocate the substation in order to, among other things, facilitate the implementation of the Master Plan. However, in an effort to expand the range of potentially feasible alternatives to be considered by the CPUC, the Draft EIR deletes relocation of the substation as one of the objectives of the Proposed Project. Unfortunately, alternatives that do not relocate the existing Substation do not meet this important Project objective.

On August 9, 2012, after the Draft EIR was released, the California Coastal Commission certified the Port Master Plan and Local Coastal Program Amendments that comprise the Bayfront Master Plan.⁴ This approval was the product of over 10 years of focused collaboration by the City, Port, and multiple other participating community stakeholders to develop a comprehensive plan for redevelopment of the Chula Vista Bayfront. The Master Plan envisions the establishment of three distinct districts—Otay, Harbor, and Sweetwater—within the City and bordering the San Diego Bay. The Master Plan calls for future development of these lands with a mixture of hotels, mixed-use office and commercial buildings, retail uses, cultural uses, residential units, and reconfiguration of an existing marina. The Master Plan contemplates removal of the existing substation site from the Master Plan area and redevelopment of the site with park and recreational vehicle park uses. These uses are considered low-cost visitor-serving uses under the California Coastal Act.

³ This estimated range is based on a computational method using the following assumptions and limitations: (1) Recent land sale comparisons, or "Comps", suggest a raw land cost could range from \$2 million to \$3 million; however, SDG&E's Real Estate team has had experience handling land purchases for similar use in excess of \$8 million. This estimated cost would increase for any of the following factors: unwilling seller; necessity to relocate an existing business; demolition of any existing buildings; (2) The estimated cost to loop two 69 kV transmission lines into a new substation would range from \$3 million to \$8 million assuming the distribution substation site is within 0.5 mile of the existing 69 kV transmission lines. If the substation site is further than 0.5 mile, additional transmission costs may be required; (3) Without knowing specific site conditions; site development costs can range up to \$13 million if grading requirements are not overly excessive. The cost for developing a PEA and filing a Permit to Construct for a separate distribution substation is estimated to be approximately \$1 million.

⁴ See California Coastal Commission website, Coastal Commission agenda for August 2012 meeting, available at <u>http://www.coastal.ca.gov/meetings/mtg-mm12-8.html</u>. The Coastal Commission's staff reports, findings, and other approval documentation are available as links to Items 13a. and 13b. on the agenda for August 9, 2012. These materials are hereby incorporated by reference.

More recently, on August 27, 2012, the City of Chula Vista City Council passed a resolution supporting the relocation of the existing substation to the proposed relocation site to achieve the development of the Master Plan and opposing any project alternative that is not consistent with the Master Plan, including the "Existing South Bay Substation Site" Alternative.⁵ The recent Coastal Commission and City actions further underscore the importance of retaining SDG&E's objective of facilitating the Master Plan and compliance with the 2004 MOU with the City, and relocating the substation to the site originally identified by the Port and approved by the State Lands Commission. To be clear, SDG&E remains fully committed to advancing the Master Plan as envisioned and approved by the City, Port District, and, most recently, the California Coastal Commission, and urges the CPUC to reconsider relocation of the substation for purposes of facilitating the Master Plan and implementing the 2004 MOU with the City to be an appropriate and fundamental Project objective. The proposed relocation site was originally identified by the Unified Port District and has been approved by the State Lands Commission (subject to a number of conditions precedent) in 2010⁶.

SDG&E believes that relocation of the substation, as proposed, will advance important state, regional, and local objectives, and that these objectives should be afforded full consideration and the dignity of law in the Final EIR. Because the underlying circumstances of the Proposed Project and relocation are unique, the range of alternatives is reasonable and has not been artificially constrained if the Final EIR rejects alternatives that would not relocate the substation outside of the redevelopment area. By relocating the existing South Bay Substation to the proposed site outside of the redevelopment area identified by the Port and approved by the State Lands Commission, SDG&E will help facilitate the redevelopment of the existing substation site in accordance with state, regional, and local planning objectives. For these reasons, Objective 3, facilitating the City's Bayfront redevelopment goals by relocating the South Bay Substation and furthering the goals of the SDG&E–City MOU, is a fundamental objective of the Proposed Project that should have been considered in the development and review of alternatives.

The Final EIR Should Acknowledge the Relative Environmental Benefits of the Proposed Project as Compared to the Consequences of the "No Project" and "Existing South Bay Substation Site" Alternatives

The Draft EIR does not adequately take into account the substantial environmental benefits associated with removal of existing overhead facilities that would occur with the Proposed Project.

California State Lands Commission's Notice of Exemption, No. 2010028095, filed with the California Governor's Office of Planning and Research on February 4, 2010.

⁵ See City of Chula Vista website, City Council Agenda for August 27, 2012 available at

http://www.chulavistaca.gov/City_Services/Administrative_Services/City_Clerk/PDFs/2012_08_27AgendaSpecial_000.pdf. The agenda item details, including the draft resolution, are available at

http://www.chulavistaca.gov/City_Services/Administrative_Services/City_Clerk/PDFs/Binder2012-08-27Special-Revised.pdf. These materials are hereby incorporated by reference.

⁶ See Board of Port Commissioners Meeting Agenda and Staff Report for Agenda Item 20, dated January 5, 2010, approving a real estate exchange agreement with SDG&E for relocation of the South Bay Substation and a Land Exchange Agreement facilitating exchange of property between the Unified Port District and SDG&E (<u>http://www.portofsandiego.org/public-documents/doc_view/2620-01-05-10-bpc-meeting-agenda.html</u>); California State Lands Commission Meeting Agenda and Staff Report for Agenda Item C-37, dated February 1, 2010, approving a Land Exchange Agreement facilitating exchange of property between the Unified Port District and SDG&E (<u>http://archives.slc.ca.gov/Meeting_Summaries/2010_Documents/02-01-10/Voting_Record.pdf</u>); Agreement for the Exchange of Lands in the City of Chula Vista Between the California State Lands Commission, the San Diego Unified Port District and San Diego Gas and Electric Company, dated April 8, 2010. *See also*

⁽http://www.ceqanet.ca.gov/NOEdescription.asp?DocPK=639988). All of these materials are hereby incorporated by reference.

Because the Draft EIR understates the environmental benefits associated with removing these facilities, SDG&E has developed additional materials to illustrate those Proposed Project components and resultant environmental benefits. (See Attachment A: Figures.)

A major environmental benefit associated with the Proposed Project is the relocation of the substation. As discussed above, the proposed relocation will implement the Bayfront Master Plan, which has been certified by the California Coastal Commission, approved by the City of Chula Vista and Port, and has broad community stakeholder support. More specifically, the proposed relocation will make way for low-cost visitor-serving uses (*i.e.*, park and recreational vehicle uses) within the Chula Vista Bayfront and Coastal Zone, consistent with the California Coastal Act. The new substation will be constructed within a previously disturbed site located in the industrial zone. Although the site features low-quality wetlands that have developed over time within a former industrial pollution-control basin, SDG&E believes that the impacts to the wetlands can be mitigated and are outweighed by the benefits conferred by the Proposed Project.

In addition to removing the existing substation from its current location, the Proposed Project includes the removal of extensive electric transmission facilities currently located along Bay Boulevard. Specifically, the Proposed Project would result in removal of five steel lattice towers and the undergrounding of approximately 3,800 feet of existing overhead 138 kV lines, removal of three 138 kV wood poles (one existing three-wood cable pole structure), removal of an existing 230 kV 165-foot steel cable pole, and a net reduction of approximately eight 69 kV wood poles. Although some new facilities would need to be constructed to implement the Proposed Project, including one new 230 kV approximately 121-foot steel pole and one new 138 kV approximately 165-foot steel cable pole, the rerouting and undergrounding of existing transmission facilities would result in a net reduction of overhead facilities within SDG&E's electric transmission corridor west of Bay Boulevard. Removal of these facilities would result in substantial environmental benefits and would advance California Coastal Act policies and priorities. Figure A-1: Overhead Alignment Map and Figure A-2: Overhead 138/230 kV Facilities Schematic in Attachment A: Figures illustrate the existing overhead facilities that would be removed with implementation of the Proposed Project, and the visual benefits that would result from viewpoints along Bay Boulevard. Figure A-1: Proposed Project Overhead Alignment Map 2 of 9 in Attachment A: Figures depicts facilities that will be located aboveground after Proposed Project implementation. In addition, Figure A-3: Simulations in Attachment A: Figures provides existing and simulated photographs that portray the aesthetic benefits that would result from approval of the Proposed Project. The environmental benefits associated with the undergrounding work are significant and include the protection, restoration and enhancement of visual resources within the Coastal Zone, consistent with Chapter 3 of the California Coastal Act.

Importantly, the removal of the substation site from the Chula Vista Bayfront Master Plan area would not occur under either the "No Project" or "Existing South Bay Substation Site" alternatives, and the proposed undergrounding work along Bay Boulevard would not occur under *any* of the alternatives identified in the Draft EIR as "environmentally superior" to the Proposed Project. (The Draft erroneously states on page C-41 that the GIS Substation Alternative will include undergrounding of the 138 kV transmission line. This is incorrect and should be corrected in the Final EIR.) The alternatives analysis in the Draft EIR should be revised to fully acknowledge the benefits associated with the Proposed Project.

Just as the Draft EIR understates the environmental benefits associated with the Proposed Project, so does it understate the environmental impacts of the "No Project" and "Existing South Bay Substation Site" alternatives. Although the Draft EIR briefly acknowledges that the benefits of the Proposed Project would not occur under either of these alternatives, the Draft EIR relies on the CPUC's pre-emption authority to conclude that these alternatives do not pose impacts of their own: Under the No Project Alternative, visual effects of the existing South Bay Substation along the Chula Vista Bayfront would continue. In addition, the potential visual benefits from removing the five lattice steel structures within the limits of the South Bay Power Plant (SBPP) property as proposed would not occur, and ongoing visibility of these industrial structures would continue to provide interrupted views of San Diego Bay for travelers along Bay Boulevard. While the No Project Alternative would not further the redevelopment goals envisioned in the Chula Vista Bayfront Master Plan, pursuant to the General Order No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project. Consequently, the No Project Alternative would not conflict with any applicable plans, policies, or regulations of an agency with jurisdiction over the project.

(Draft EIR at E-22.)

Under [the Existing South Bay Substation Site Alternative], the visual effects of the existing South Bay Substation along the Chula Vista Bayfront would continue. In addition, the potential visual benefits from removing the five lattice steel structures within the limits of the SBPP property as proposed would be lost, and ongoing visibility of these industrial structures would continue to provide interrupted views of San Diego Bay for travelers along Bay Boulevard. While the Existing South Bay Substation Site Alternative would not further the redevelopment goals envisioned in the Chula Vista Bayfront Master Plan, pursuant to General Order No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project. Consequently, the Existing South Bay Substation Site Alternative would not conflict with any applicable plans, policies, or regulations of an agency with jurisdiction over the project.

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(Draft EIR at E-33,)

These statements ignore the additional potential adverse impacts of not constructing the Proposed Project or of reconstructing the South Bay Substation at its existing location. Additional environmental consequences would include potential impacts associated with as-needed in-kind replacement of the existing South Bay Substation under the "No Project" alternative or by constructing the "Existing South Bay Substation Site" alternative in order to maintain system reliability, improve ability to withstand seismic events, and to provide for limited load growth for the South Bay region. These impacts include those associated with additional projects/project components as described in SDG&E response to Data Request SDGE-ED-014: Q2, as needed to meet CAISO planning criteria and a new distribution substation to meet distribution load growth.⁷ CEQA requires that the CPUC consider the environmental consequences of these alternatives. As described previously, the existing South Bay Substation must be replaced to maintain system reliability and cannot be replaced in the configuration required to fully satisfy current load demands at the existing location.

In short, the Draft EIR understates the potential consequences of the "No Project" and "Existing South Bay Substation Site" alternatives. One of the primary purposes of the Proposed Project is to accommodate regional energy needs. In reviewing the otherwise robust analysis contained in the Draft EIR, the Draft EIR fails to acknowledge the additional consequences of <u>not</u> approving the Proposed Project when it concludes that the "No Project" and "Existing South Bay Substation Site" alternatives are environmentally superior to the Proposed Project. In fact, the analysis erroneously concludes that for the "No Project" alternative, "overall impacts would be reduced due to the elimination of construction activities associated with the proposed Bay Boulevard Substation," and the "Existing South Bay Substation Site" alternative "would reduce project-related long-term environmental impacts associated with wetlands that have been identified as significant and mitigable (Class II), while not resulting in more

⁷ SDG&E's response to Data Request SDGE-ED-014: Q2 is hereby incorporated by reference.

overall impacts than the Proposed Project." See Draft EIR at E-22. SDG&E believes that the "No Project" and "Existing South Bay Substation Site" analyses contained in the Draft EIR should be amplified to include a more robust recognition that if the substation relocation is not approved within a reasonable period of time, SDG&E will fail to meet CAISO planning criteria and distribution load in the area.

THE BAYFRONT ENHANCEMENT ALTERNATIVE WAS PREMATURELY DISMISSED AS A POTENTIALLY ENVIORNMENTALLY SUPERIOR ALTERNATIVE

The Draft EIR eliminates the Bayfront Enhancement Alternative from further consideration due to a lack of specificity about the proposed projects that could be undertaken with Bayfront Enhancement Funds. SDG&E has refined the Bayfront Enhancement Alternative to include additional details and requests that CPUC reconsider the Bayfront Enhancement Alternative in the Final EIR.

Additional Visual Enhancements Proposed as Part of Bayfront Enhancement

SDG&E proposes that \$2,500,000 of the Enhancement Funds be used to remove additional existing overhead electric transmission facilities. More specifically, this component of the Bayfront Enhancement would include:

- Removal of two, approximately 110-foot-tall 138 kV steel lattice towers (188700 and 188701). As shown in Figure A-1: Existing Overhead Alignment Map 1 of 9 and Bayfront Enhancement Alternative Overhead Alignment Map 3 of 9 in Attachment A: Figures, one tower is located west of Bay Boulevard and one tower is located within an existing parking lot east of Bay Boulevard.
- Installation of one 138 kV 165-foot-tall steel cable pole in SDG&E's right-of-way (ROW) within a parking lot located east of Bay Boulevard. The new pole would be located approximately 10 to 15 feet west of Tower 188700, which would be removed.
- Undergrounding of between 700 and 1,000 feet of 138 kV double-circuit duct package from the west side of Bay Boulevard to the proposed new cable pole within the existing 138 kV overhead alignment.⁸
- Installation of 138 kV transmission cable system within the newly installed underground duct package position from SDG&E's ROW on the west side of Bay Blvd to the new steel cable pole on the east side of parking lot.

Like the undergrounding that is already included in the Proposed Project, the removal of these two lattice towers and associated facilities would generate significant visual benefits, consistent with California Coastal Act Chapter 3 policies regarding the restoration and enhancement of visual resources, particularly within visually degraded areas. The facilities to be removed and the resulting environmental benefits are depicted visually in Figure A-1: Overhead Alignment Map and Figure A-2: Overhead 138/230 kV Facilities Schematic in Attachment A: Figures. Figures A-1: Bayfront Enhancement Alternative Overhead Alignment Map 3 of 9 in Attachment A: Figures depicts facilities that will be

⁸ The original estimate of additional undergrounding for the Bayfront Enhancement Alternative was 1,000 feet, which was communicated to other parties. Based on subsequent review, the length of additional transmission line to be undergrounded is currently estimated to be 765 feet. Because all of these numbers are based on preliminary conceptual engineering and subject to change with final project design and pole placement, SDG&E currently assumes that the additional undergrounding under the Bayfront Enhancement Alternative would fall within the range of 700 to 1,000 feet. From an environmental benefits and impacts perspective, a difference of 300 feet is not material.

located aboveground after Project implementation. Figure A-3: Simulations in Attachment A: Figures provides existing and simulated photographs that portray the additional aesthetic benefits that would result from approval of the Bayfront Enhancement Alternative.

SDG&E has analyzed the potential impacts associated with the proposed visual enhancements, which are provided in Attachment B: Bayfront Enhancement Alternative Description and Preliminary Impact Analysis. SDG&E has concluded that these activities would involve little or no impacts to wetlands as trenching, jack and bore, and the addition of work areas within a parking lot, Bay Boulevard, and existing SDG&E right-of-way would avoid impacting wetlands other than those described for the Proposed Project. Additional undergrounding is anticipated to have only short-term and minimal adverse environmental impacts to air quality, noise, and traffic and transportation, as described in Attachment B: Bayfront Enhancement Alternative Description and Preliminary Impact Analysis, while providing significant, long-term environmental benefits.

Funding Proposed as Part of the Bayfront Enhancement Alternative

SDG&E proposes to contribute the remaining \$2.5 million of enhancement funds to existing endowment or similar funding mechanism for the Living Coast Discovery Center (Center) and management of the Salt Works property. Direct contributions to these funding mechanisms would not result in any adverse environmental impacts, as funds would be used to enable the continuance of existing operations. At the same time, contributions to these existing funding mechanisms would enable the continuation of the activities described in the following paragraphs.

The Center provides environmental interpretation and education for the salt water marsh and associated upland habitats of San Diego Bay through an existing museum with aquariums and interactive displays, as well as live animals and invertebrates. The Center also offers a unique opportunity for public access to coastal marsh areas that would not normally be available, and exposes the public and schoolchildren to the San Diego Bay's wetland and marsh habitats and inhabitants for coastal recreation and educational opportunities. SDG&E proposes to provide \$2,000,000 to the Center's endowment fund to support the continuation of these programs.

The funding contributed toward the continued management of the Salt Works property would assist the San Diego National Wildlife Refuge with maintaining aspects of the existing salt pond system in order to continue providing foraging habitat for seabirds and migratory birds along the bayfront. SDG&E proposes to provide \$500,000 to the Friends of the San Diego Wildlife Refuge endowment or similar funding mechanism to support these on-going efforts.

The Bayfront Enhancement Alternative is described in more detail in Attachment B: Bayfront Enhancement Alternative Description and Preliminary Impact Analysis and should be incorporated into the Final EIR.⁹ SDG&E requests that CPUC re-evaluate the Bayfront Enhancement Alternative in the Final EIR based upon these additional details and assess whether this alternative is the environmentally superior alternative to the Proposed Project.

THE MITIGATION MEASURES PROVIDED IN THE DRAFT EIR SHOULD BE REVISED TO ELIMNATE REDUNDANCIES AND UNNECESSARY MEASURES

The Draft EIR concludes that all impacts of the Proposed Project can be mitigated, and recommends specific mitigation measures to address these potential impacts. SDG&E concurs that all of the impacts of the Proposed Project can be mitigated. SDG&E is concerned, however, that some of the

⁹ As discussed elsewhere in these comments, none of this information triggers recirculation of the Draft EIR.

proposed mitigation measures are unwarranted, unnecessary and/or disproportionate to a particular impact. In addition, SDG&E is concerned that CPUC may be unable to expeditiously approve minor modifications and refinements during construction—even where prudent and justified—potentially triggering subsequent CPUC review and approval. Therefore, SDG&E requests modifications to some of the mitigation measures contained in the Draft EIR.9 SDG&E's requested revisions to the mitigation measures are included in Attachment C: Proposed Mitigation Measure Revisions.

As discussed more fully in Attachment C: Proposed Mitigation Measure Revisions, some of the proposed mitigation measures are unwarranted, unnecessary and/or disproportionate to the particular impact. For example, MM BIO-3, MM BIO-7, and MM BIO-11 each impose specific buffer requirements without substantiation or recognition of SDG&E's Natural Communities Conservation Plan (NCCP).

SDG&E's NCCP, which includes an Endangered Species Act (ESA) Section 10(A) permit and a California Endangered Species Act (CESA) Section 2081 permit (for incidental take) with an Implementation Agreement with the USFWS and the California Department of Fish and Game (CDFG), respectively, for the management and conservation of multiple species and their associated habitats, as established according to the ESA and CESA, as well as California's Natural Community Conservation Planning Act. The NCCP is a comprehensive program of measures to protect and enhance the recovery of species covered by the CDFG and USFWS. The NCCP previously underwent CEQA review to confirm that implementation will not result in significant impacts on the environment. Based on its review of the SDG&E NCCP, CDFG determined that no CEQA mitigation measures were necessary and issued a Negative Declaration.

The NCCP allows SDG&E to develop, maintain, and repair its facilities within the NCCP coverage area. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement, and the NCCP meet all applicable standards and requirements of the CESA, ESA Natural Communities Conservation Plan Act, and Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area. By law, no additional protective or mitigation measures, compensation, or preservation measures can be required for the Proposed Project. The NCCP, as an approved Section 10(A) and 2081 permit, is an existing condition. While the Draft EIR appears to have included it in the environmental baseline for the Proposed Project, modifications have been suggested to the NCCP protocols and additional mitigation measures have been proposed. Because any potential impacts to covered species have been pre-assessed and pre-mitigated by the NCCP, the Proposed Project will not impact covered species. Therefore, no modification or enhancement of the requirements is necessary, and the CPUC should not impose additional mitigation measures that are not required by the wildlife agencies.

SDG&E respectfully requests that the Final EIR incorporate the modifications requested in Attachment C: Proposed Mitigation Measure Revisions.

ADDITIONAL TECHNICAL CORRECTIONS AND CLARIFICATIONS SHOULD BE INCORPORATED INTO THE FINAL EIR TO REFLECT AN ACCURATE AND COMPLETE ADMINISTRATIVE RECORD

In addition to the foregoing comments, SDG&E has identified several technical corrections and clarifications that should be incorporated into the Final EIR to ensure an accurate and complete document. Those technical corrections and clarifications are identified in Attachment D: Technical Corrections and Clarifications. SDG&E respectfully requests that the Final EIR incorporate the technical corrections and clarifications requested in Attachment D: Technical Corrections and clarifications.

RECIRCULATION IS NOT REQUIRED AS A MATTER OF LAW

SDG&E expects that opponents of the Proposed Project, in an effort to cause delay and derail a timely decision on the Proposed Project, will argue that recirculation of the Draft EIR is required.

Under CEQA, recirculation is not required unless "significant new information" is added to an EIR after public notice of the availability of the draft EIR.¹⁰ The California Supreme Court has emphasized that a decision to recirculate an EIR should be the exception and not the rule:

By codifying the "significant new information" language of Sutter, the Legislature apparently intended to reaffirm the goal of meaningful public participation in the CEQA review process. It is also clear, however, that by doing so the Legislature did not intend to promote endless rounds of revision and recirculation of EIR's. Recirculation was intended to be an exception, rather than the general rule. Significantly, at the time section 21092.1 was enacted, the Legislature had been, and was continuing to streamline the CEQA review process. Recognizing the legislative trend, we previously have cautioned: "[R]ules regulating the protection of the environment must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development and advancement." In our interpretation of section 21092.1, we have given consideration to both the legislative goals of furthering public participation in the CEQA process and of not unduly prolonging the process so that the process deters development and advancement.

Laurel Heights Improvement Ass'n v. Regents of Univ. of California, 6 Cal. 4th 1112, 1132 (Cal. 1993) (citations omitted) (emphasis added).

Importantly, the CEQA Guidelines provide: "New information added to an EIR is <u>not</u> '<u>significant' unless</u> the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon <u>a substantial adverse environmental effect</u> of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) <u>that the project's proponents have declined</u> to implement."¹¹ The Guidelines also identify four examples of "significant new information": (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented. (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance. (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it. (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."¹² "Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."¹³

The CPUC also has recognized that recirculation is only required under limited circumstances. In Decision 04-08-046, the CPUC noted:

"We also disagree regarding the need to recirculate the FEIR based on the six new route options. An FEIR always contains new information not in the draft EIR, in the form of public comments and responses thereto. New information added to an EIR is not "significant" for purposes of triggering the

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¹⁰ Cal. Code Regs. Tit. 14 § 15088.5(a).

¹¹ Id. (emphasis added),

¹² Id. (emphasis added).

¹³ 14 Cal. Code Regs. § 15088.5(b).

recirculation requirement unless "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project." (CEQA Guidelines § 15088.5(a).) ... We conclude that the six route options would not introduce "new significant environmental impacts" or a "substantial increase in the severity of an environmental impact," conditions which would require recirculation. (CEQA Guidelines §15088.5(a)(1) and (2).)"

D. 04-08-046 at 13-14 (emphasis added); accord, e.g., D. 01-02-043 ("We also note that Laurel Heights plainly states that CEQA does not require recirculation when any new information is added, nor does CEQA generally require recirculation of a Final EIR, even though, by definition, a Final EIR contains new information not in the Draft in the form of public comments and responses thereto.")

None of SDG&E's proposed changes to the Draft EIR would require recirculation under these legal principles. Similarly, none of the anticipated comments from other interested parties would require recirculation.

Turning first to the information provided in these comments regarding the environmental benefits and consistency with the Bayfront Master Plan of the Proposed Project and the Bayfront Enhancement Alternative, recirculation is not triggered; nor is recirculation triggered by the information provided in these comments regarding the failure of the "No Project" and "Existing South Bay Substation Site" alternatives to provide such environmental benefits and consistency with the Master Plan. 14 Cal. Code Regs. § 15088.5(b) ("Recirculation is not required where the new information added to the EIR merely clarifies or makes insignificant modifications in an adequate EIR"); *Laurel Heights*, 6 Cal. 4th at 1137 (new studies on noise "merely serve to amplify, at the public's request, the information found in the draft EIR" and do not require recirculation); *id.* at 1139-40 (loading dock description similarly "merely clarifies the existing description of the environmental impacts"); *Marin Municipal Water District v. KG Land California Corp.*, 235 Cal. App. 3d 1652, 1668 (1991) ("Recirculation is not required if a revision simply clarifies, amplifies, or makes insignificant modifications to an adequate EIR."); *Chaparral Greens v. City of Chula Vista*, 50 Cal. App. 4th 1134, 1149 (1996) ("the materials merely amplify the information already set forth in the PEIR regarding the significant impact of the project on biological resources").

In addition, none of the limited additional information contained in this letter constitutes "significant new information" such that recirculation under CEQA is required because the new information does not identify new significant impacts, an increase in impact severity, or a new feasible alternative or mitigation measure that SDG&E declines to implement. 14 Cal. Code Regs. § 15088.5(a). In other words, adding such information to the EIR would not change the EIR "in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." 14 CCR § 15088.5(a); accord, e.g., Western Placer Citizens for an Agricultural and Rural Environment v. County of Placer, 144 Cal. App. 4th 890, 904 (2006) (because the phasing changes "reflect an improvement in the environmental condition when compared to the original project" (owing to the delayed and reduced impacts), the change from the EIR did not require recirculation); Laurel Heights, 6 Cal. 4th at 1140 (no recirculation required where clarification "does not reveal a new or more severe adverse environmental impact"); Federation of Hillside and Canyon Assns. v. City of Los Angeles, 126 Cal. App. 4 1180, 1199-1200 (2004)(no supplemental EIR where "Petitioners have not shown that the changed circumstances compel the conclusion that the significant environmental effects will be different or more severe"): 14 CCR 15382 ("significant effect on the environment' means a substantial, or potentially substantial, adverse change").

Further, SDG&E's proposed clarifications and changes to the mitigation measures in the Draft EIR cannot trigger recirculation as a matter of law. Again, Section 15088.5(a) provides: "New

information added to an EIR is <u>not 'significant' unless</u> the EIR is changed in a way that <u>deprives the</u> <u>public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the</u> <u>project</u> or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." Mitigation measures are included to mitigate identified "substantial adverse environmental effect[s] of the project," and thus the public has had an opportunity to comment upon such effects. A change in how they are mitigated is not "significant new information" that could trigger recirculation.

Although interested parties and/or responsible agencies may feel compelled to submit extensive comments on the adequacy of the Draft EIR under CEQA Guidelines § 15096 and may go so far as to request recirculation of the Draft EIR, recirculation is not triggered as a matter of law unless the definition of "significant new information" is met. See 14 Cal. Code Regs. § 15088.5(a). Recirculation is not required simply because a responsible agency or any other party may claim inadequacies and requests a new document. See id.; see also Laurel Heights, 6 Cal. 4th at 1136-42 (a community group's assertions that an EIR was inadequate and required recirculation did not demonstrate a need to address "significant new and information" and, therefore, did not trigger recirculation). The Final EIR can either address the issues raised in comments or can disagree with the comments submitted, even if those comments are from a responsible agency. See 14 Cal. Code Regs. § 15088.5(b) ("Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."); see also Marin Mun. Water Dist. v. KG Land Cal. Corp., 235 Cal. App. 3d 1652, 1667 (1991) (new, amplifying information that was not significant did not trigger recirculation).¹⁴

More importantly, any "voluntary" recirculation is wholly inappropriate for several reasons. First, as discussed previously, the Draft EIR found no significant and unavoidable impacts associated with the Proposed Project. Therefore, the public has not been deprived of a meaningful opportunity to comment upon "a substantial adverse environmental effect of the project."

Opponents may argue that recirculation is required to account for new information regarding the Bayfront Enhancement Alternative. That argument would be mistaken. New detail on a project's design or features does not trigger recirculation unless the new detail constitutes "significant new information" under CEQA and the CEQA Guidelines. The CEQA Guidelines provide: "New information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a <u>substantial adverse environmental effect of the project</u> or a <u>feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.</u>" 14 Cal. Code Regs. 15088.5(a) (emphasis added); *accord, e.g., Laurel Heights*, 6 Cal. 4th 1120 ("We conclude that recirculation is only required when the information added to the EIR changes the EIR in a way that deprives the public of a meaningful opportunity to comment upon a substantial effect of the project alternative or mitigation added to the EIR changes the EIR in a way that deprives the public of a meaningful opportunity to comment upon a substantial effect of the project or a feasible project alternative or mitigation measure that would clearly reduce such an effect and that the project's proponents have declined to implement."); *id.* at 1129, 1142 ("Recirculation is only required when a discussion of a new feasible project alternative, which will not be implemented, is added to the EIR"); *California Oak Foundation v, the*

¹⁴ More specifically, CEQA requires that "the major environmental issues raised when the lead agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice." 14 Cal. Code Regs. § 15088(c). CEQA does not compel resolution of concerns that are raised in comments, even if those concerns are raised by a responsible agency.

Regents of the University of California, 188 Cal. App. 4th 227, 266 (2010). The mere fact that information is added does not, by itself, trigger recirculation.¹⁵

Here, the additional design information provided by SDG&E regarding the transmission structures that would be removed and placed underground do not constitute significant new information because the information does not disclose "a <u>substantial adverse environmental effect of the project</u>" or a "feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." The information provided shows a substantial beneficial, not adverse, environmental effect from implementing the Proposed Project with the Bayfront Enhancement Alternative. Further, SDG&E has agreed to construct the Bayfront Enhancement Alternative, if approved by the CPUC, and thus it is not a feasible mitigation measure or feasible alternative that "the project's proponent has declined to implement."

As set forth in its previous comments, SDG&E believes that the Final EIR should find the Proposed Project, and the Bayfront Enhancement Alternative, to be "environmentally superior" to any alternatives, including those identified as "environmentally superior in the Draft EIR. A change in the EIR's conclusion does not trigger recirculation unless it is caused by "significant new information" as defined in CEQA and the CEQA Guidelines. As SDG&E notes, the Final EIR should clarify the environmental benefits of the Proposed Project and the Bayfront Enhancement Alternative, and the consistency of the Proposed Project and the Bayfront Enhancement Alternative with the Bayfront Master Plan. The Final EIR should also clarify the lack of such environmental benefits from the "No Project" and "Existing South Bay Substation Site" alternatives, the inability of those alternatives to meet the Project objective of serving distribution load in the area, and the inconsistency of those alternatives with the Bayfront Master Plan. Clarifications, however, do not trigger recirculation. Similarly, the new information about specific transmission infrastructure to be removed or undergrounded as part of the Bayfront Enhancement Alternative is not "significant new information" because it does not reveal a "substantial adverse environmental effect" and, in any event, is mitigation that SDG&E is prepared to implement. There is nothing in CEQA or the CEQA Guidelines that requires recirculation simply because the agency changes its conclusion about the "environmentally superior" project.

CONCLUSION

SDG&E appreciates CPUC and Dudek's review of the Proposed Project and SDG&E's comments on the Draft EIR. For all of the reasons described in these materials, SDG&E respectfully requests that CPUC prepare the Final EIR and (1) confirm that the Proposed Project and Bayfront Enhancement Alternative (as depicted in Attachment A: Figures and described in Attachment B: Bayfront Enhancement Alternative Description and Preliminary Impact Analysis) are environmentally superior to all other project alternatives; (2) revise the mitigation measures identified for the Proposed Project as proposed in Attachment C: Proposed Mitigation Measure Revisions; and (3) incorporate the technical corrections and clarifications described in Attachment D: Technical Corrections and Clarifications.

¹⁵ For example, the California Court of Appeal recently upheld the certification of an EIR for an athletic center and several other related projects at the University of California, Berkeley campus. *California Oak Foundation v. the Regents of the University of California*, 188 Cal. App. 4th 227 (2010). The Court rejected claims that recirculation was required in light of a seismic study and agency correspondence that was not included in the final EIR, and that additional detail about future projects should have included in the final EIR. *Id.* at 267-68. The California Court of Appeal has also held that an EIR studying a water district's moratorium on water hookups did not require recirculation in light of detail from a newly released master water supply plan that the moratorium would last 10 years. *See, e.g., Marin Mun. Water Dist. v. KG Land Cal. Corp.*, 235 Cal. App. 3d 1652, 1667-68 (1991). The EIR had already stated that the moratorium could last more than five or six years, and the additional detail pegging the moratorium at 10 years did not constitute "significant new information." *Id.*

ATTACHMENT B: BAYFRONT ENHANCEMENT ALTERNATIVE DESCRIPTION AND PRELIMINARY IMPACT ANALYSIS

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SAN DIEGO GAS & ELECTRIC COMPANY SOUTH BAY SUBSTATION RELOCATION PROJECT BAYFRONT ENHANCEMENT ALTERNATIVE DESCRIPTION AND PRELIMINARY IMPACT ANALYSIS

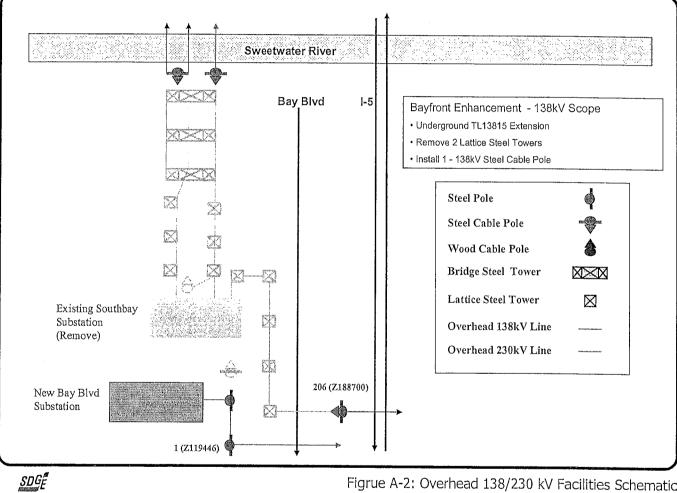
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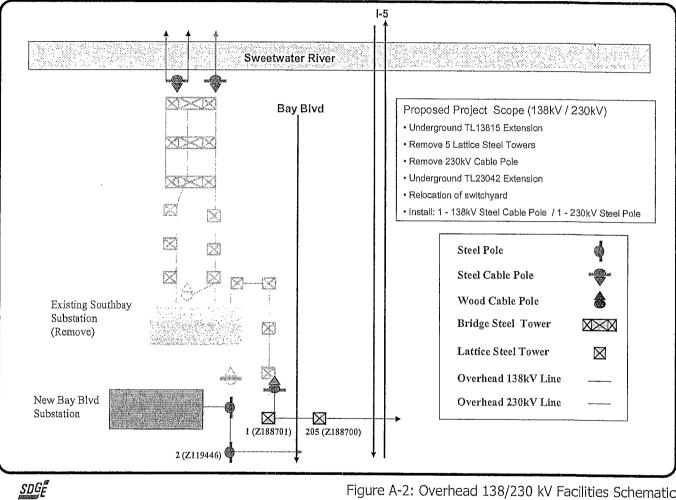


August 2012



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Figrue A-2: Overhead 138/230 kV Facilities Schematic Bayfront Enhancement Alternative (Page 3 of 3)



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Figure A-2: Overhead 138/230 kV Facilities Schematic Proposed Project (Page 2 of 3)

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1 – INTRODUCTION

The Bayfront Enhancement Alternative (Project) was originally described as an alternative to the South Bay Substation Relocation Project (Proposed Project) in San Diego Gas & Electric Company's (SDG&E's) responses to Data Request Number 5, which was submitted to the California Public Utilities Commission (CPUC) in May 2011.¹ SDG&E has requested that the CPUC approve the Bayfront Enhancement Alternative as the environmentally superior alternative to ensure consistency with section 30233(a) of the California Coastal Act, which precludes development within wetlands unless "there is no feasible less environmentally damaging alternative," among other things.² The Bayfront Enhancement Alternative would include the same components as the Proposed Project, as well as the same mitigation activities that would compensate for impacts to jurisdictional water features and wetlands. However, the Bayfront Enhancement Alternative would include an additional \$5 million funding mechanism that would be used to provide environmental benefits in the Chula Vista bayfront area. SDG&E proposed to use these funds for removing towers and undergrounding an additional section of the existing 138 kilovolt (kV) overhead transmission line along the bayfront and contributing to existing endowment or equivalent funding sources to support on-going programs that benefit the bayfront area.

This Project Description provides a detailed explanation of the uses proposed for the funding component of the Bayfront Enhancement Alternative, including specific monetary amounts, implementation of the proposed enhancement projects, and the timing requirements associated with the enhancement activities. A preliminary environmental impact analysis of the identified resources is also provided for the proposed enhancement activities. This level of detail was not previously available for inclusion in the Draft Environmental Impact Report (EIR). As a result, the Bayfront Enhancement Alternative was eliminated in the Draft EIR based on the lack of adequate information to make a determination regarding its potential impacts and benefits. This document clarifies and amplifies the information contained in the Draft EIR regarding the Bayfront Enhancement Alternative. The descriptions detailed in Section 2 – Description provide sufficient detail to allow for consideration of the potential impacts and benefits provided by the Bayfront Enhancement Alternative in the Final EIR. Coupled with the mitigation proposed to avoid or reduce impacts associated with construction of the Bayfront Enhancement Alternative. the funding established for additional enhancement would result in net environmental benefits to aesthetic, biological, coastal, and recreational resources that should render it as the "environmentally superior" alternative and demonstrate that there is no "feasible less environmentally damaging alternative" in the Final EIR.

2 – DESCRIPTION

The following subsections provide a detailed description of the potential enhancement projects that may be implemented through the funding provided by the Bayfront Enhancement Alternative, including the amount of funding to be set aside for the various projects and the

² California Public Resources Code §30233(a).

¹SDG&E response to Data Request SDGE-ED-005 is hereby incorporated by reference.

timing for implementation of the projects. The Bayfront Enhancement Alternative is subject to modification by the CPUC and/or California Coastal Commission.

2.0 TOWER REMOVAL/UNDERGROUNDING 138 KV TRANSMISSION LINE

Through coordination with the City of Chula Vista (City), SDG&E has identified visual enhancements that would substantially improve the aesthetic value of the bayfront. These actions are described in the following subsections.

2.0.0 Funding

Approximately \$2.5 million of the funding provided by the Bayfront Enhancement Alternative would be set aside for aesthetic improvements, specifically, the removal of two steel lattice towers and undergrounding of approximately 700 to1,000³ feet of existing 138 kV transmission line along and across Bay Boulevard in the Coastal Zone.

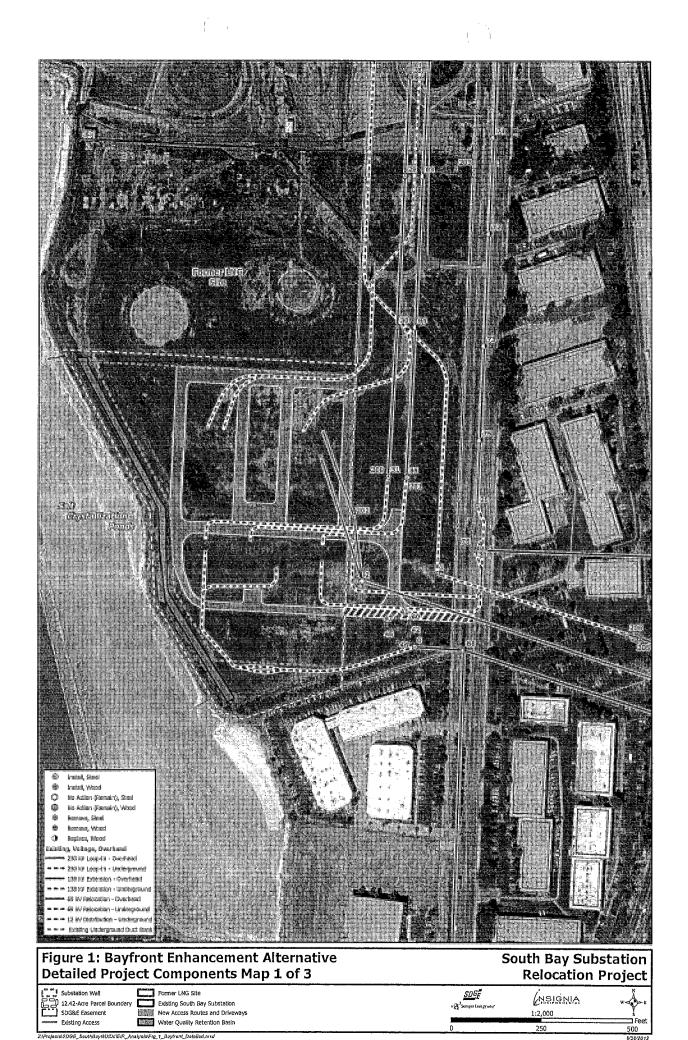
2.0.1 Implementation

The Bayfront Enhancement Alternative would involve the same components as the Proposed Project, including construction of a new substation, loop-in of an existing 230 kV transmission line, extension of existing 138 kV transmission lines, relocation of existing 69 kV transmission lines, and demolition of the existing South Bay Substation. The Bayfront Enhancement Alternative would also include the additional undergrounding of approximately 700 to 1,000 feet of existing 138 kV overhead transmission line. The 138 kV underground duct bank that is included as part of the Proposed Project would be extended further south and eastward from the position where it is proposed to transition to an overhead configuration as part of the Proposed Project. In addition to eliminating cable riser pole 24, the extended duct bank would allow for the removal of Tower 1 (188701) on the west side of Bay Boulevard and Tower 205 (188700). which is located in the parking lot on the east side of Bay Boulevard. As part of the Bayfront Enhancement Alternative, existing Tower 205 (188700), which is located in the parking lot on the east side of Bay Boulevard, would be removed and replaced with a new cable riser pole. From the new cable riser pole eastward, the 138 kV transmission line would continue in its current overhead configuration within SDG&E's existing right-of-way (ROW). The differences between the overhead alignment for the Proposed Project and the Bayfront Enhancement Alternative are depicted in Figure 1: Bayfront Enhancement Alternative Detailed Project Components Map.

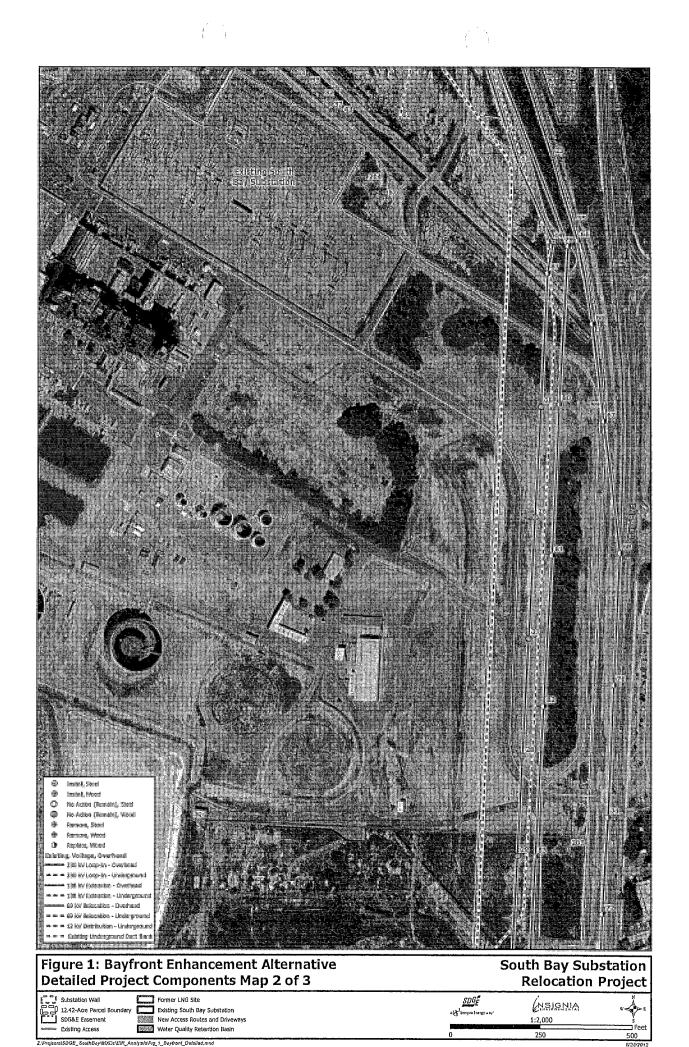
Construction Work Areas and Activities

Tower removal and construction of the underground duct bank extension associated with the Bayfront Enhancement Alternative would occur within the existing SDG&E ROW. A detailed

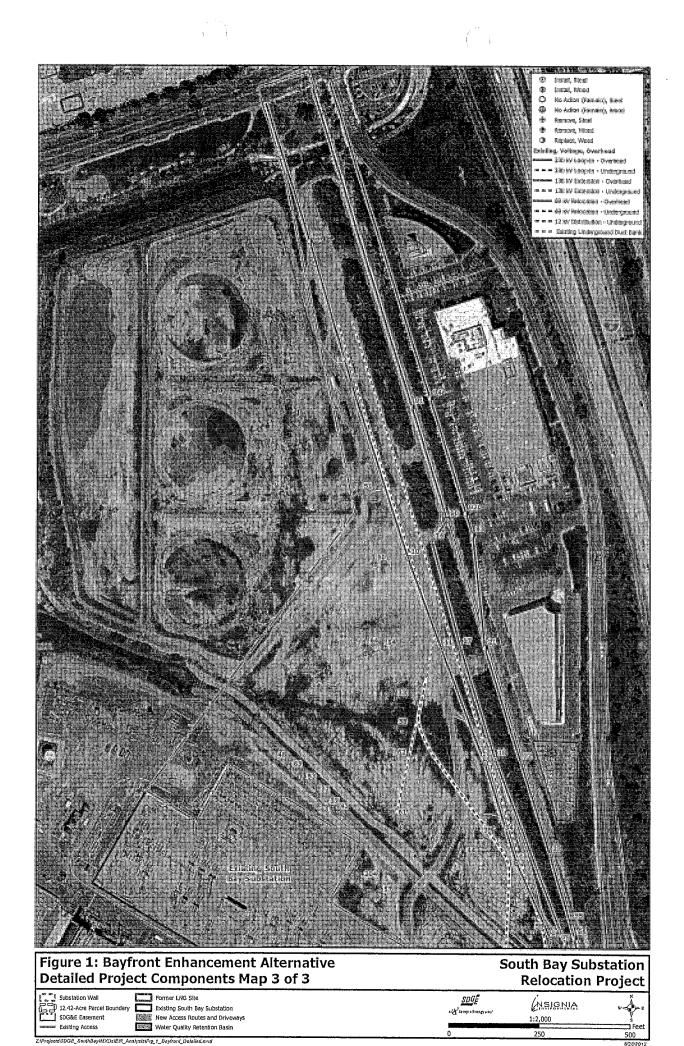
³ The original estimate of additional undergrounding for the Bayfront Enhancement Alternative was 1,000 feet, which was communicated to other parties. Based on subsequent review, the length of additional transmission line to be undergrounded is currently estimated to be 765 feet. Because all of these numbers are based on preliminary conceptual engineering, and subject to change with final project design and pole placement, SDG&E currently assumes that the additional undergrounding under the Bayfront Enhancement Alternative would fall within the range of 700 to 1,000 feet. From an environmental benefits and impacts perspective, a difference of 300 feet is not material.







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description of the construction methods used for the Project components that correspond to the Proposed Project are provided in Chapter 3 – Project Description of the Proponent's Environmental Assessment (PEA). The following subsections describe the construction areas required and the activities that would be involved with the tower removal and underground duct bank extension.

Staging/Work Areas

As provided in the PEA for the Proposed Project, temporary tower work areas would measure approximately 150 foot in diameter. Tower 1 (188701) is located within an existing SDG&E easement along the west side of Bay Boulevard. As stated in the PEA, SDG&E's entire transmission corridor may be used temporarily as a construction work area. Tower 205 (188700) is located in an existing parking lot on the east side of Bay Boulevard. The entire south side of the parking lot, from the 230 kV transmission line on the south side to the building located north of the tower would be used for removal of the tower and installation of the new cable riser pole, as well as for trenching associated with installation of the underground duct bank.

To accommodate the extension of the underground duct bank, temporary workspaces centered on the duct bank alignments would be established. This area would be cleared and graded, as needed, to provide a safe working space for the operation of construction equipment.

The 138 kV duct bank extension would require an approximately 50-foot-wide workspace. A total of approximately 700 to 1,000 linear feet of temporary workspace requiring approximately 0.9 acres would be established prior to construction. Steel plating would be placed over excavated areas, where appropriate, to maintain vehicular and pedestrian traffic. The jack-and-boring construction technique may also be used to avoid impacts to jurisdictional water features or for crossing under Bay Boulevard. Jack-and-bore pits would measure approximately 150 feet long and 150 feet wide. The final design for these activities will be prepared following the release of the Final EIR.

In addition, as described in Chapter 3 – Project Description of the PEA for the Proposed Project, staging associated with the Bayfront Enhancement Alternative undergrounding would occur at the existing H & Bay Yard, which is located approximately 1.2 miles north of the proposed substation site.

Steel Cable Riser Pole Installation

Installation of the steel cable riser pole in the parking lot located east of Bay Boulevard would begin by fencing off the work area in the parking lot. The pole would be placed on a new concrete foundation. Following the preparation of the pole work area, the foundation process would begin with the excavation of a hole in the proximity of Tower 205 (188700) using a truck-mounted excavator. The foundation hole would measure approximately seven to eight feet in diameter and 35 to 45 feet deep, requiring the excavation of between approximately 50 and 84 cubic yards (CY) of soil, depending on site conditions. Following excavation of the foundation hole, a reinforcing steel cage and anchor bolts would be assembled and installed. Following the cage installation, a form would be built and concrete would be poured to a height of approximately six to 24 inches above grade. The foundation would require between approximately 51 and 86 CY of concrete to be delivered to the foundation location. Concrete

would be delivered directly to the pole's location in concrete trucks with a capacity of up to 10 CY.

The steel cable riser pole would be delivered in two or more sections to the pole installation site via flatbed truck and assembled on site using a small truck-mounted crane. The crossarms would be bolted to the pole, and the insulators would be bolted to the crossarms. After assembly, a large crane would be used to lift and set the poles into place on the anchor bolts imbedded in the concrete foundation. The nuts on the foundation would then be tightened and secured.

Conductor Stringing

Prior to stringing the overhead line from the new cable riser pole, temporary guard structures typically consisting of vertical wood poles with crossarms—would be installed at the Interstate (I-) 5 crossing, preventing the conductors from sagging onto other lines during the conductor installation. In some cases, bucket trucks may also be used for guard structures.

Tower Removal

Existing steel lattice structures 1 (188701) and 205 (188700) would be dismantled and removed by cranes and aerial manlifts into steel member sections. The sections would be transferred to a flatbed truck using a small truck-mounted crane. The lattice structures would be further dismantled within SDG&E's utility easement or at the H & Bay Yard. Following disassembly, the individual steel members would be cut into smaller sizes, placed in recycling receptacles, and transported to an approved SDG&E recycling center.

Once the structures have been removed, their associated reinforced concrete foundation pads and piers would be jack-hammered to approximately one to two feet below grade. All debris located near the vicinity of the foundations would be removed from the site and would be recycled or disposed of at an approved facility. The remaining hole would then be backfilled with material similar to the surrounding area and the site would be restored.

Underground Duct Bank Extension

Construction activities associated with extension of the 138 kV duct bank would involve the same techniques described for the underground transmission construction in Chapter 3 – Project Description of the PEA, and would potentially include trenching, jack-and-boring, duct bank installation, vault installation, cable pulling, splicing, termination, and clean-up and post-construction restoration.

The 138 kV duct bank would be extended approximately 700 to 1,000 feet underneath Bay Boulevard to the new cable riser pole that would replace Tower 205 (188700) in the parking lot on the east side of Bay Boulevard. The preliminary design would include approximately 595 feet of trenching that would occur consistent with the description provided in the Chapter 3 – Project Description of the PEA. The jack-and bore construction method would be used for approximately 170 feet to cross under the drainage feature containing an emergent wetland that runs parallel to Bay Boulevard, continuing to the parking lot on the east side of Bay Boulevard, in accordance with the description provided in Chapter 3 – Project Description of the PEA. Duct banks would be installed consistent with the description provided in Chapter 3 – Project Description of the PEA. The approximately 700- to 1,000-foot underground duct bank extension would require the installation of one additional vault in the parking lot on the east side of Bay Boulevard, which would provide access to the underground cables for maintenance, inspection, and repair during operation. Approximately two feet of additional clearance would be required at underground vault locations.

Following installation of the conduit, SDG&E would install cables in the duct banks. Each cable segment would be pulled into the duct bank, spliced at each of the vaults along the route (if applicable), and terminated at the transition where the lines convert to overhead. Cable pulling would occur consistent with the description provided in Chapter 3 – Project Description of the PEA.

Construction Equipment and Personnel

The list of equipment that would be used to extend the 138 kV duct bank and remove towers 1 (188701) and 205 (188700), as well as the approximate duration of use, is provided in Table 1: Construction Equipment Summary. The equipment required for installation of the 138 kV steel cable riser pole in the parking lot east of Bay Boulevard was previously provided in the analysis of the Proposed Project, which included the installation of proposed cable riser pole 24. Cable riser pole 206 for the Bayfront Enhancement Alternative replaces cable riser pole 24 that was originally proposed as part of the Proposed Project. In addition to use of the equipment listed in Table 1: Construction Equipment Summary, pick-up trucks and construction worker vehicles are anticipated to travel on a daily basis to and from the work areas. It is anticipated that any additional maintenance and/or delivery trucks would travel to and from the staging areas as per the Proposed Project. Extension of the 138 kV duct bank and removal of the two towers is anticipated to require eight operators, 15 foremen, and 15 linemen for approximately four to eight weeks.

Operation and Maintenance

The transmission facilities associated with the Bayfront Enhancement Alternative would continue to be inspected, maintained, and repaired following completion of the Project. Operation and maintenance activities would involve both routine preventive maintenance and emergency procedures to maintain service continuity. Aerial and ground inspections of the facilities would be performed. Aboveground components would be inspected annually, at a minimum, for corrosion, equipment misalignment, loose fittings, and other common mechanical problems. The other Project components would be conducted consistent with the description provided in Chapter 3 – Project Description in the PEA.

2.0.2 Timing

Removal of the two towers, installation of the new cable riser pole, and construction of the approximately 700- to 1,000-foot-long 138 kV underground extension would occur following completion of the Bay Boulevard Substation, 230 kV loop-in, and relocation of the 69 kV transmission lines that are included as part of the Proposed Project and Bayfront Enhancement Alternative. It is anticipated that the tower removal and approximately 700- to 1,000-foot 138 kV duct bank extension would require approximately four to eight weeks to complete.

Activity	Equipment	Use	Approximate Quantity	Approximate Duration On Site (days)	Average Duration of Use (hours per day)
	Dump/Haul Truck	Transport excavated materials and import backfill	3	24	8
	Small Mobile Crane (12-ton)	Lift and place materials	1	24	4
	Backhoe	Excavate trenches	1	24	8
138 kV	Concrete Truck	Pour concrete	5	24	8
Underground Duct Bank	Drill Rig with Augers	Excavate trenches	1	24	6
Extension	Compactor	Compact backfill within the trench	2	24	8
	Asphalt Paver	Pave access roads	1	2	6
	Asphalt Emulsion Truck	Pave access roads	1	2	6
	Vibrating Roller	Compact soil and asphalt	1	2	6
	Asphalt Haul Truck	Transport asphalt		2	10
Foundation Installation	Concrete Truck	Pour concrete	1	12	3
	Drill Rig with Augers	Foundation construction	1	12	6
	Backhoe	Foundation construction	1	12	6
	Dump/Haul Truck	Haul excavated inaterials	2	12	4
	Handheld Compactor	Compact soil around structure foundations	1	12	4
Steel Pole Installation	2-ton Flatbed Truck	Deliver pole to site	1	2	2
	Large Crane	Tower erection	1	2	6
	Bucket Truck/Manlift	Tower erection and conductor Installation	2	2	8

Table 1: Construction Equipment Summary

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San Diego Gas & Electric Company South Bay Substation Relocation Project

Activity	Equipment	Use	Approximate Quantity	Approximate Duration On Site (days)	Average Duration of Use (hours per day)
Structure Removal	2-ton Flatbed Truck	Remove pole sections and hardware from site	1	2	2
	Bucket Truck/Manlift	Tower erection and conductor Installation	1	2	6
	Dump/Haul Truck	Haul excavated materials and import backfill	2	2	4
	Excavator	Break foundations and load material	1	2	6
	Jackhammer	Break foundations	2	2	6
	Large Crane	Lower pole sections and load onto trucks	2	2	8

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Bayfront Enhancement Alternative Description and Preliminary Impact Analysis

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San Diego Gas & Electric Company South Bay Substation Relocation Project

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2.1 LIVING COAST DISCOVERY CENTER

Through informal consultation with stakeholders, such as the City, Unified Port District of San Diego (Port District), the United States (U.S.) Fish and Wildlife Service (USFWS), SDG&E has identified proposed opportunities to enhance coastal resources and provide environmental benefits in the Chula Vista Bayfront area by bolstering existing environmental programs. One identified option is for SDG&E to provide endowment funds or the equivalent for the Living Coast Discovery Center (Center).⁴ The Center is located approximately 2.25 miles northwest of the proposed Bay Boulevard Substation site at 1000 Gunpowder Point, as depicted in Figure 2: Enhancement Projects Location Map. The details regarding this option are provided in the subsections that follow.

2.1.0 Funding

Approximately \$2 million of the remaining \$2.5 million would be provided to the Center through its established endowment fund to support its continued operation and existing programs.

2.1.1 Implementation

The Center provides environmental interpretation and education for the salt water marsh and associated upland habitats of San Diego Bay through an existing museum containing aquariums and interactive displays, live animals, and invertebrates that is uniquely situated on the Sweetwater Marsh National Wildlife Refuge. The Center provides a unique opportunity for the public to access coastal marsh areas that would not be normally available and exposes the public and schoolchildren to the San Diego Bay's wetland and marsh habitats and its wildlife inhabitants for coastal recreation and educational opportunities. Since 1987, the Center has provided a superb living-museum experience while promoting coastal resource conservation and environmental stewardship through education as a low-cost visitor center. It is accredited by the American Association of Museums and features internationally recognized exhibits of plants and animals native to bay and marsh/wetland habitats. The Center provides bilingual graphics. interactive learning, and a unique educational setting as the only interpretive center within an urban wildlife refuge in the U.S. Annually, the Center welcomes nearly 70,000 visitors and over 15,000 school children that are exposed to the importance of watershed ecology, habitat preservation, and environmental conservation. The funding that SDG&E would contribute to supporting endowments would provide educational and recreational opportunities for approximately 4,500 visitors per year, including visitors and families with children and students from the locally underserved area, in addition to augmenting existing educational and other programs that provide ongoing revenue sources.

As previously discussed, SDG&E would provide endowment funds, or the equivalent, for the Center. The use of this funding would further the goals of the Center, which include the following:

- Promoting environmental stewardship among visitors
- Enhancing educational opportunities for students and providing resources for teachers

⁴ Additional information about the Living Coast Discovery Center can be accessed through its website at <u>http://www.thelivingcoast.org/</u>.



 Enhancement Project Location Existing South Bay Substation Proposed Bay Boulevard Substation Site 	SDGE A & Senipra Energy valy"	(N.S.I.G.N.IA 1:24,000	W S S Miles
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• Increasing attendance by new schools, adding to annual memberships, and increasing participation by special groups, such as scouts and others

These funds would be used to assist with the continued operation and existing programs of the Center indefinitely.

2.1.2 Timing

Funding would be provided for the use of the Center prior to operation of the Project, or as otherwise required by the Project approvals.

2.2 SALT WORKS PROPERTY MANAGEMENT

Through coordination with the USFWS, SDG&E has identified actions that would provide opportunities to enhance coastal habitat for breeding, migratory, and wintering birds in the San Diego Bay. The Salt Works property is located approximately 0.6 mile south of the proposed Bay Boulevard Substation site, as depicted in Figure 2: Enhancement Projects Location Map. These actions are described in the following subsections.

2.2.0 Funding

Approximately \$500,000 of the funding provided by the Bayfront Enhancement Alternative would be set aside to enable the San Diego National Wildlife Refuge (Refuge) to meet some of the goals described in its Final Comprehensive Conservation Plan (CCP)/Environmental Impact Statement (EIS), which focused on improving habitat quality for avian species on the Salt Works property. Specifically, SDG&E would provide funds to ensure the long-term maintenance by the Refuge for the existing salt pond system, which that supports brine invertebrates and provides food for nesting seabirds and other migratory birds in the San Diego Bay.

2.2.1 Implementation

In the Final CCP/EIS, which was adopted on September 29, 2006, the Refuge proposed to enhance opportunities for seabird nesting, restore native habitat in the Otay River floodplain, and restore tidal circulation within the majority of the salt ponds on the Salt Works property. In addition, the Refuge proposed to maintain certain features or aspects of the existing salt ponds in order to continue providing this area for foraging, roosting, loafing, and nesting habitat for a variety of avian species in the San Diego Bay. In order to maintain the existing salt ponds, the Refuge manages water in an area of approximately 275 acres within the Salt Works property in ponds that are too high to benefit from tidal circulation. In addition, about 45 acres of the 275acre managed-water system is devoted to the production of brine invertebrates, which provide food for nesting seabirds and other migratory birds in the San Diego Bay. SDG&E's proposed Enhancement Funds would be used to assist with the operation and maintenance of the brine production area, which is the same property that would be purchased by SDG&E to mitigate for impacts to wetlands resulting from the Project. The brine production area would be maintained at the existing high-salinity levels to allow for a continued source of water that can support brine invertebrates. To achieve the hypersaline environment, water would be supplied to the brine ponds from the managed-water area. Once the water is moved to the brine ponds, salinity levels would be increased through evaporation. In addition, some high-salinity water would be pumped back into the managed water area in order to maintain the appropriate salinity levels.

2.2.2 Timing

SDG&E proposes to provide the funding to the Friends of the San Diego Wildlife Refuges, a non-profit organization that fundraises, manages, and administers funds for Refuge projects.⁵ The Friends of the San Diego Wildlife Refuges would administer these funds to the Refuge, as needed, for the operation and maintenance of the managed water area and brine production area, or other uses as described in the CCP/EIS. Funding would be provided prior to operation of the Project, or as otherwise required by the Project approvals.

3 – ENVIRONMENTAL ANALYSIS

The Bayfront Enhancement Alternative would include essentially the same components as the Proposed Project, and would include the same off-site restoration activities that are planned to provide compensation for impacts associated with construction of the Proposed Project. Thus, the only difference in impacts between the Proposed Project and the Bayfront Enhancement Alternative would be associated with the enhancement projects, which include the approximately 700- to 1,000-foot duct bank extension and tower removal, and funding of the Center and Salt Works property management, as described in Section 2 – Description. The following subsections provide a preliminary impact assessment of identified enhancement projects, including the benefits associated with each potentially affected resource. As discussed in the following, the Bayfront Enhancement Alternative does not present any new significant impacts.

3.0 TOWER REMOVAL/UNDERGROUNDING 138 KV TRANSMISSION LINE

3.0.0 Aesthetics

The Bayfront Enhancement Alternative would provide all of the aesthetic benefits involved with the Proposed Project, including relocating the existing South Bay Substation to a site approximately 0.5 mile south and undergrounding approximately 3,800 feet of the existing overhead 138 kV transmission line located west of Bay Boulevard. In addition to the removal of existing structures and undergrounding of transmission lines that are included as part of the Proposed Project, the Bayfront Enhancement Alternative would provide further aesthetic improvements in the immediate area of the proposed new substation. Construction activities associated with the tower removal, undergrounding, and steel cable riser pole installation could add approximately four to eight weeks to the 138 kV extension schedule; however, these activities would be conducted concurrently with other scheduled Project construction work and would not increase the Project's overall construction schedule. Therefore, although the Bayfront Enhancement Alternative mould not increase the Project's as compared to the Proposed Project, these impacts would be temporary and short-term and would remain less than significant.

As described in Section 2.0.1 Implementation, construction of the Bayfront Enhancement Alternative would result in the removal of two approximately 110-foot steel lattice towers and would eliminate the need for steel cable riser pole 24, which was proposed to be installed on the west side of Bay Boulevard as part of the Proposed Project.

⁵ Additional information about the Friends of the San Diego Wildlife Refuges can be accessed through their website at <u>http://friendsofsdrefuges.org/</u>. August 2012 San Diego Gas & Electric Company

Figure 3: Proposed Project/Bayfront Enhancement Alternative Simulation: Proposed Air-Insulated Substation and Lattice Tower Removal (View from Bay Boulevard at Proposed Entrance Gate, Looking West) provides a depiction of the existing setting compared to a simulation of the Proposed Project and to the removal of Tower 1 (188701) that would result from implementation of the Bayfront Enhancement Alternative. Figure 4: Proposed Project/Bayfront Enhancement Alternative Simulation: Proposed Substation and Cable Pole Removal (View from Bay Boulevard North of Palomar Street, Looking Southwest) depicts the existing setting of the new Bay Boulevard Substation site compared to a simulation of the Proposed Project and to the removal of cable riser pole 24, which would be included as part of the Proposed Project, but eliminated by the Bayfront Enhancement Alternative design. As depicted, the removal of this tower and relocation of proposed cable riser pole 24 would result in a clearer view of the San Diego Bay than what currently exists or than that proposed for the Proposed Project.

Figure 5: Proposed Project/Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking North) provides a comparison of the existing setting along Bay Boulevard, facing north, compared to a simulation showing the west side of Bay Boulevard with the five towers that would be removed as part of the Proposed Project and Bayfront Enhancement Alternative. Figure 6: Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking South) depicts the existing view of the west side of Bay Boulevard, facing south, compared to a simulation of the removal of the three southernmost 138 kV towers along Bay Boulevard as part of the Bayfront Enhancement Alternative would provide significant aesthetic benefits along Bay Boulevard from the removal of 138 kV steel lattice structures. However, as shown in Figure 6: Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking South), the Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking South), the Bayfront Enhancement Alternative simulation: Bay Boulevard (View from Bay Boulevard, Looking South), the Bayfront Enhancement Alternative simulation: Bay Boulevard (View from Bay Boulevard, Looking South), the Bayfront Enhancement Alternative would result in the removal of six structures along the bayfront in addition to the elimination of cable riser pole 24. Thus, the Bayfront Enhancement Alternative is superior to the Proposed Project with respect to aesthetic benefits.

The removal of Tower 205 (188700), which is located in the parking lot east of Bay Boulevard, would require the installation of a new, approximately 165-foot tall cable riser pole for the 138 kV transmission line to transition back to an overhead configuration as it continues eastward within existing SDG&E ROW. Figure 7: Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking East) provides a depiction of the existing setting compared to a simulation of the removal of Tower 205 (188700) and installation of the new cable riser pole in the parking lot. Although the new cable riser pole would be taller than the existing tower, it would be located in the rear of a parking lot beside I-5, away from the Chula Vista Bayfront, rather than along the west side of Bay Boulevard, where it would be a more prominent fixture within the viewshed to the bay. Consequently, this increase in height would be an incremental change as compared to the existing tower. The increase in height, however, is offset by the removal of existing Tower 205 (188700), conductor, and two fewer structures immediately west side of the parking lot.

As a result of these activities, approximately 700 to 1,000 feet of existing overhead 138 kV transmission line would be reconfigured underground. Thus, following construction of the Bayfront Enhancement Alternative, fewer transmission structures and overhead lines would be

visible when viewing the bay, resulting in significant aesthetic improvements and restoration within a visually degraded area within the Chula Vista Bayfront. As a result, the Bayfront Enhancement Alternative would provide an overall net benefit compared to existing conditions or to the Proposed Project following the completion of construction activities.

3.0.1 Agriculture and Forestry Resources

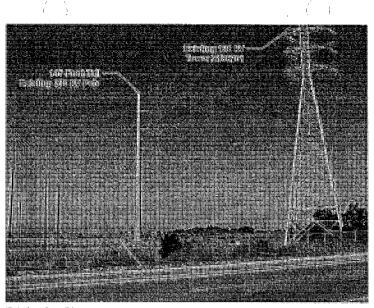
Similar to the Proposed Project, the Bayfront Enhancement Alternative would not be located on Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, land under Williamson Act Contract, forest land, timberland, or timberland zoned Timberland Production. As a result, the Bayfront Enhancement Alternative would not impact agricultural or forestry resources.

3.0.2 Air Quality

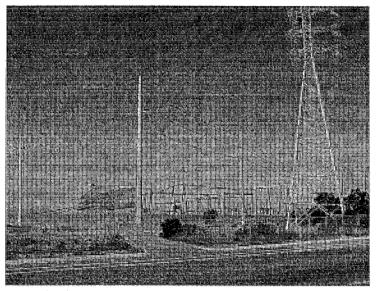
When compared to the Proposed Project, the Bayfront Enhancement Alternative would require the addition of approximately 700 to 1,000 feet of 138 kV underground duct bank and the removal of two additional 138 kV steel lattice towers. The installation/removal of these features would increase the amount of earthwork over that for the Proposed Project. As summarized in Table 2: Trench Excavation Summary, approximately 553 CY of native material would be excavated and removed from the Proposed Project site and an additional 277 CY of Select Fill would be imported to backfill the trench. The quantities of import and export materials for installation of new steel cable riser pole 206 in the parking lot east of Bay Boulevard is a net addition to these totals since cable riser pole 24 was analyzed as part of the Proposed Project analysis, but would be eliminated under the Bayfront Enhancement Alternative. Thus, pole location 24 would be relocated to location 206 and no additional export or import materials would result or be required.

The number of truck trips required for tower and foundation removal and extension of the 138 kV underground duct bank would increase from approximately 300 for the Proposed Project to approximately 375 for the Bayfront Enhancement Alternative. These activities could add approximately four to eight weeks to the 138 kV construction schedule, but would be conducted concurrently with other scheduled construction work and would not impact the overall Project schedule.

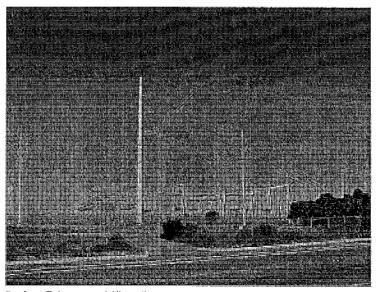
The additional construction equipment items described in Table 1: Construction Equipment Summary were incorporated into the emissions modeling prepared previously for the Proposed Project. Because the construction methods and equipment required to install the additional duct bank and remove the additional lattice structures are similar to those used during originally defined 138 kV extension and this new work would be conducted outside of the peak construction period (site development at the Bay Boulevard Substation) the peak daily construction emissions would not change when compared to the Proposed Project. The anticipated peak daily construction emissions are presented in and compared to the applicable threshold of significance in Table 3: Peak Daily Construction Emissions.



Existing Conditions



Proposed Project

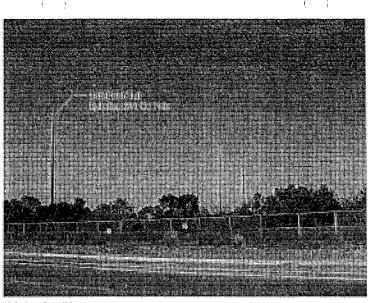


Bayfront Enhancement Alternative



Figure 3: Proposed Project/Bayfront Enhancement Alternative Simulation: Proposed Air-Insulated Substation and Lattice Tower Removal (View from Bay Boulevard at Proposed Entrance Gate, Looking West)

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Existing Conditions



Proposed Project

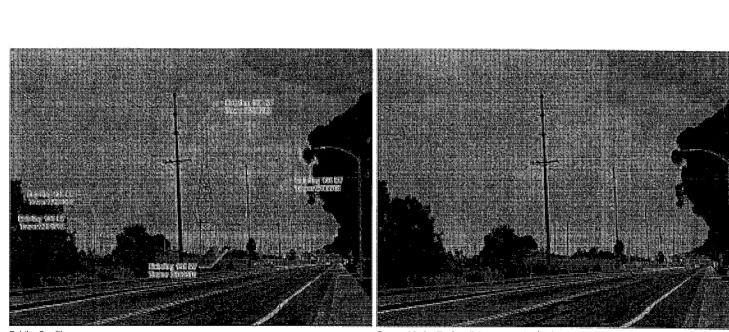


Bayfront Enhancement Alternative



Figure 4: Proposed Project/Bayfront Enhancement Alternative Simulation: Proposed Substation and Cable Pole Removal (View from Bay Boulevard North of Palomar Street, Looking Southwest) •

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Existing Conditions

Proposed Project/Bayfront Enhancement Alternative



Figure 5: Proposed Project/Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking North) • (•

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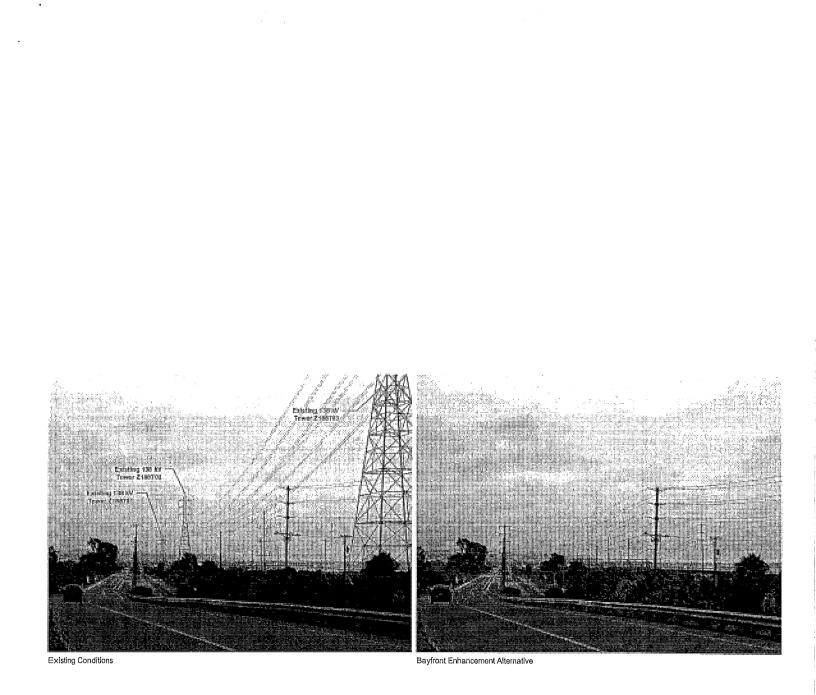
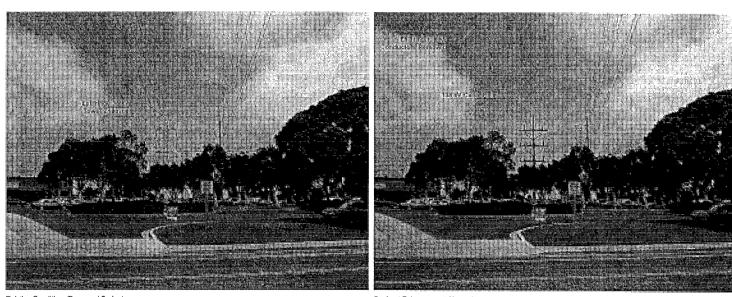


Figure 6: Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking South) •

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Existing Conditions/Proposed Project

Bayfront Enhancement Alternative

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Figure 7: Bayfront Enhancement Alternative Simulation: Bay Boulevard (View from Bay Boulevard, Looking East) • L L

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Metric	Approximate Quantity	Approximate Number of Required Truck Trips
Total Trench Length	830 feet	
Approximate Trench Width	3 feet	
Approximate Trench Depth	6 feet	
Approximate Excavation Volume	553 CY	
Approximate Volume of Excavated Material Used for Backfill	0 CY	
Approximate Volume of Excavated Material Transported Off Site	553 CY	37
Approximate Volume of Required Select Fill	277 CY	19
Approximate Volume of Required Concrete	277 CY	19
Total		75

 Table 2: Trench Excavation Summary⁶

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Thus, overall pollutant emissions from the Bayfront Enhancement Alternative would increase slightly due to the additional heavy equipment operation, on-road traffic, and earthwork from that identified for the Proposed Project. However, these changes would not affect the peak daily emissions, as shown in Table 3: Peak Daily Construction Emissions, and would remain at a less-than-significant level.

Pollutant	Simulated Emission Rate (pounds per day)	Significance Threshold (pounds per day)	Threshold Exceeded?
Particulate matter (PM) less than 10 microns in diameter	27.0	55	No
PM less than 10 microns in diameter	98.9	100	No
Nitrogen oxides	231.1	250	No
Sulfur oxides	2.2	250	No
Carbon monoxide	120.3	550	No
Volatile organic compounds	19.2	75	No

Source: South Coast Air Quality Management District. 1993. California Environmental Quality Act Air Quality Handbook.

⁶ The quantities provided in this table are based on a 1,000-foot-long 138 kV underground duct bank extension to assess the worst case for potential impacts to resources.

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3.0.3 Biological Resources

The area where removal of Tower 1 (188701) and extension of the 138 kV underground duct bank would occur under the Bayfront Enhancement Alternative consists of non-native grassland, which is not a vegetation community covered by SDG&E's Natural Communities Conservation Plan. The drainage ditch that is located parallel to Bay Boulevard also contains an emergent wetland. As provided in Chapter 3 - Project Description of the PEA, the majority of the transmission corridor may be temporarily disturbed during construction activities. Therefore, impacts to non-native grassland would not increase for removal of Tower 1 (188701) or installation of the 138 kV underground duct bank extension. Tower removal would potentially result in approximately 0.01 acre of additional impacts to the emergent wetland located within the drainage feature that runs parallel to Bay Boulevard. No impacts to vegetation communities would result from construction activities that occur under or within Bay Boulevard or the parking lot to the east, as the areas are paved. All of the impacts to vegetation communities associated with construction of the tower removals and underground duct bank extension would be temporary. Permanent impacts to non-native grassland associated with the Bayfront Enhancement Alternative would be reduced by approximately 0.001 acre from the Proposed Project total, as pole 24 would not be installed. As the impacts associated with these activities would be very small and temporary in nature, impacts to biological resources would remain less than significant.

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The tower removal, underground duct bank extension, and steel cable riser pole installation activities associated with the Bayfront Enhancement Alternative are not anticipated to result in any impacts to sensitive species. In addition, the removal of approximately 700 to 1,000 feet of overhead infrastructure would eliminate the potential for avian collision along this section of the line. As with the Proposed Project, construction of the proposed substation is anticipated to impact one decumbent goldenbush (*Isocoma menziesii* var. *decumbens*) individual, which was identified during the May 2011 rare plant survey for the proposed substation site. In addition, the off-site mitigation activities that would be implemented to compensate for Proposed Project impacts to wetlands and jurisdictional drainages would also occur as part of the Bayfront Enhancement Alternative since the same amount of wetlands and jurisdictional drainages would be permanently impacted by either Proposed Project or Bayfront Enhancement Alternative.

3.0.4 Cultural Resources

The Bayfront Enhancement Alternative would be located within the same area as the Proposed Project. Cultural sites have been recorded within the vicinity of the proposed South Bay Substation site, but have been previously determined as not significant. The construction area required for the Bayfront Enhancement Alternative would not impact any additional known cultural sites. However, the potential to impact unknown cultural resources remains. Implementation of the Mitigation Measures CUL-1 and CUL-2 described in the Draft EIR would reduce impacts to unknown cultural resources to less-than-significant levels.

3.0.5 Geology, Soils, and Mineral Resources

The Bayfront Enhancement Alternative would be located within the same area as the Proposed Project. SDG&E will incorporate applicant-proposed measure (APM-) GEO-1, which is described in the Draft EIR to avoid any hazard risk from ground shaking, ground movement and moderate ground deformation, and soil expansion to the aboveground riser pole. The potential

for liquefaction occurring at the site is considered low, and no impacts due to landslides, earth flows, or debris flows would be anticipated. In addition, dewatering-induced settling is not anticipated. As described for the Proposed Project, erosion potential associated with establishing level work areas and staging areas, as well as trenching activities associated with the underground cable installation would not be considered high because the slope lengths of exposed soils are short and much of the area is flat or covered with pavement. Implementation of Mitigation Measure HYDRO-1, as described in the Draft EIR, would reduce impacts from erosion. Therefore, impacts would be less than significant.

3.0.6 Hazards and Hazardous Materials

A portion of the 138 kV underground duct bank extension would be constructed within Bay Boulevard, a public roadway. Although temporary lane closures may be required for this activity, SDG&E would still maintain vehicle access in both directions. Therefore, emergency access would not be directly impacted during construction. In addition, in the event of an emergency requiring evacuation, SDG&E would ensure that all potential routes are open and accessible for public use. Thus, no impact would occur.

3.0.7 Hydrology and Water Quality

As previously described, construction of the Bayfront Enhancement Alternative would result in the same amount of permanent impacts to jurisdictional wetlands and water features as the Proposed Project. The 138 kV underground duct bank extension would avoid impacts to the drainage feature that contains an emergent wetland along the west side of Bay Boulevard by implementing the jack-and-bore construction method from the west side of the drainage feature to the parking lot located on the east side of Bay Boulevard. The removal of Tower 1 (188701) would result in approximately 0.01 acre of additional temporary impacts to the emergent wetland located within the drainage ditch that parallels Bay Boulevard. Following construction activities, the emergent wetland would be returned to near pre-construction conditions. As with the Proposed Project, the Bayfront Enhancement Alternative would include the construction of one water quality basin, which would be located along the western site boundary. Thus, potential impacts to hydrological resources would remain nearly identical to those anticipated for construction of the Proposed Project and would be less than significant.

3.0.8 Land Use and Planning

As described for the Proposed Project, construction activities would have the potential to disrupt land uses adjacent to the proposed Bay Boulevard Substation for short periods. The Bayfront Enhancement Alternative would temporarily impact the parking lot located east of Bay Boulevard during construction, which would result in the temporary loss of approximately 70 parking spaces for approximately four to eight weeks. However, because there is typically ample parking capacity along Bay Boulevard and these restrictions would be temporary, lasting approximately four to eight weeks, impacts would be less than significant.

The Bayfront Enhancement Alternative would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project. In fact, SDG&E developed the Bayfront Enhancement Alternative in close coordination with the City to advance local planning requirements and objectives. Further, although the Bayfront Enhancement Alternative would be exempt from local land use and zoning regulations and discretionary permitting, this

alternative would comply with and advance the policies provided by the California Coastal Act. Further, the tower removal and 138 kV underground extension components of the Bayfront Enhancement Alternative would provide additional coastal-related benefits as compared to the Proposed Project, particularly with regard to Section 30251 of the California Coastal Act, by restoring and enhancing the visual qualities of a currently degraded area within the Coastal Zone, as described in Section 3.0.0 Aesthetics.

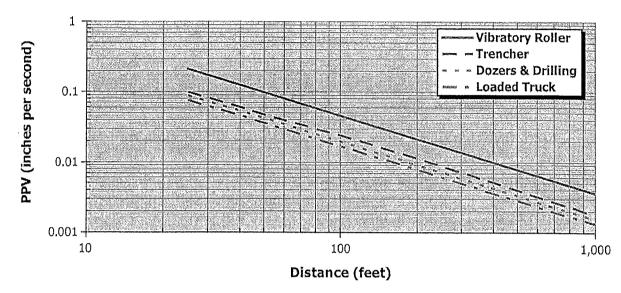
As described for the Proposed Project, the Bayfront Enhancement Alternative would also be consistent with the planned land uses established in the San Diego Port Master Plan amendment and the City's Local Coastal Program Land Use Plan and Bayfront Specific Plan amendments, which were certified by the California Coastal Commission on August 9, 2012. In addition, the Bayfront Enhancement Alternative would be consistent with the City's zoning designations. As described for the Proposed Project, lands surrounding the Bayfront Enhancement Alternative area are designated Developed Areas by the City of Chula Vista Multiple Species Conservation Program Subarea Plan; therefore, the Bayfront Enhancement Alternative would not conflict with any applicable habitat conservation plan or natural community conservation plan. Therefore, no adverse impact would occur. To the contrary, the Bayfront Enhancement Alternative would advance a number of California Coastal Act policies, including low-cost visitor-serving uses. public access, and enhancing visually degraded areas within the Coastal Zone. Attachment A: California Coastal Act Consistency Analysis provides further information related to the added benefits that the Bayfront Enhancement Alternative would provide with respect to these policies. Thus, the Bayfront Enhancement Alternative would result in net environment benefits to land use.

3.0.9 Noise

The construction equipment and methods used to install the additional duct bank and remove the lattice towers associated with the Bayfront Enhancement Alternative would be similar to those used during construction of the Proposed Project. As a result, the emission profile from these activities would also be similar. As described in the PEA, the closest receptors to the Proposed Project would be buildings located approximately 130 feet from construction activities. The closest receptors to the removal of Tower 205 (188700) and installation of Pole 206 would be located approximately 110 feet to the north. The installation of the additional 138 kV underground duct bank would also be located approximately 80 feet from a receptor. As a result, these buildings would experience greater levels of noise then under the Proposed Project. The construction equipment used during the installation of the underground duct banks, erection of the steel cable pole, and removal of the lattice structures would range between 80 and 85 A-weighted decibels (dBA) at a distance of 50 feet. As a result, a building located at approximately 80 feet would experience noise levels between approximately 76 and 81 dBA. The City of Chula Vista does not regulate noise levels from construction and due to their short-term nature, impacts would be less than significant.

As depicted in Figure 8: Construction Vibration Amplitudes, at a distance of approximately 80 feet construction equipment would generate vibrations with an amplitude of less than 0.03 inch per second. This is below the potentially significant level of 0.032 inch per second. As a result, impacts from vibration would be less than significant.

During normal operation, the corona noise generated by overhead transmission lines would be reduced slightly as approximately 700 to 1,000 feet of existing overhead lines would be reconfigured underground. Operational noise impacts resulting from the Bayfront Enhancement Alternative would be less than significant.





3.0.10 Population and Housing

Construction of the Bayfront Enhancement Alternative would employ the same number of personnel per day from the local area as the Proposed Project, but would require one additional month to complete. The additional four to eight weeks of construction required for removal of the two towers, construction of the underground duct bank, and installation of the new cable riser pole in the parking lot would occur during other activities and would not extend the overall construction schedule. Therefore, the additional construction activities would be temporary and short term and would not induce population growth.

The Bayfront Enhancement Alternative would not extend infrastructure to previously unserved areas. No housing or commercial facilities are related to the Bayfront Enhancement Alternative. In addition, the Bayfront Enhancement Alternative would not modify land use or zoning designations to permit new residential or commercial development and, therefore, would not foster growth, remove direct growth constraints, nor add a direct stimulus to growth.

As described for the Proposed Project, few, if any, construction workers are expected to permanently relocate to the area as a result of construction activities associated with the Bayfront Enhancement Alternative. As a result, there would be no new demand for housing. Temporary accommodations could be needed during construction, but with numerous hotels and motels in the area, impacts are expected to be less than significant.

There are currently no residences on the Bayfront Enhancement Alternative site; therefore, development of the Bayfront Enhancement Alternative would not displace any existing housing or residents. Additionally, tower removal and the underground duct bank extension would occur

Bayfront Enhancement Alternative Description and Preliminary Impact Analysis

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within existing SDG&E easements. No component of the Bayfront Enhancement Alternative would require the removal or relocation of any residential or business uses; therefore, no impact would occur.

3.0.11 Public Services and Utilities

Impacts to public service and utilities would be similar to the Proposed Project. As described for the Proposed Project, construction crews would contact Underground Service Alert and manually probe for existing buried utilities in the construction areas prior to any powered-equipment drilling or excavation. An additional 63,000 gallons of water for the construction required for the Bayfront Enhancement Alternative may be required for fugitive dust suppression, soil compaction, and general construction purposes. Because the Bayfront Enhancement Alternative's additional water demand would be temporary and short-term during the construction phase of the project, and because Sweetwater has a sufficient water supply to meet the construction water supply demands of the Project, impacts would be less than significant. An additional approximately 553 CY of would be excavated for the Bayfront Enhancement Alternative; however, at these small relative amounts, Project area landfills would have sufficient capacity to accommodate disposal of debris generated during construction. Therefore, impacts to public services and utilities will be less than significant.

3.0.12 Recreation

As described for the Proposed Project, the Bayfront Enhancement Alternative is not proposed in an area that includes existing recreational facilities and, therefore, would not directly impact recreational facilities. As discussed in Section 3.0.10 Population and Housing, the construction of the Bayfront Enhancement Alternative is not expected to induce either short-term or long-term population growth, and it is unlikely to draw additional residents or recreationists to the area. However, relocating the substation from its current position would further the goals of the Memorandum of Understanding between SDG&E and the City and enable planned recreational activities to be realized through implementation of the Chula Vista Bayfront Master Plan. Therefore, the construction of the Bayfront Enhancement Alternative would not increase local need for recreational resources or disrupt the use of recreational activities, while providing added benefits. As a result, the Bayfront Enhancement Alternative would have a less-than-significant impact on the physical deterioration of recreational facilities due to increased use.

3.0.13 Transportation and Traffic

Construction of the Bayfront Enhancement Alternative would require approximately 75 additional truck trips than the Proposed Project, as previously described in Section 3.0.1 Air Quality. Thus, the number of additional truck trips required for tower removal and the 138 kV underground duct bank extension would result in less than a one-percent increase in total truck trips than that required for the Proposed Project. The impacts to traffic in the area associated with these activities would be temporary and could add approximately four to eight weeks to the 138 kV construction period, but would occur concurrently with other scheduled construction activities, and would not impact the overall construction schedule.

As provided in 2.0.1 Implementation, extension of the 138 kV underground duct bank would require jack-and-boring under Bay Boulevard. As a result of using the jack-and-bore construction method, lane closures to Bay Boulevard are not anticipated to be required for the

138 kV underground duct bank extension. However, traffic delays could occur during these construction activities due to slower vehicle traffic. However, any necessary road alterations would be temporary, short in duration (lasting approximately two to four weeks), and coordinated with the local regulatory agencies. As a result, extension of the 138 kV underground duct bank is not anticipated to significantly disrupt traffic flow due to road or lane closures. The increased traffic could have an adverse impact to the business entrances located along Bay Boulevard near the Project site. However, access to business and residential areas would be maintained at all times during construction activities. Further, SDG&E would coordinate with adjacent property owners to provide adequate advance notice of construction activities through the City's encroachment permit process, as well as coordinate parking lot access restriction to the extent practicable. SDG&E would also implement APM-TRA-1, which requires that construction traffic utilize alternative access and travel routes, such as J Street and Palomar Avenue, during the p.m. peak hours (between 4:00 p.m. and 6:00 p.m.). Thus, the impact would be less than significant.

Emergency access would not be directly impacted during construction because all streets would remain open to emergency vehicles at all times throughout construction. Increased vehicle traffic during construction and temporary lane closures during underground duct bank installation may occur. Although this can indirectly impact emergency access, the increase in traffic would be minor and would not be expected to significantly affect response times. Thus, impacts would be less than significant.

As previously described in Section 3.0.6 Hazards and Hazardous Materials, temporary road or lane closures may be required to provide safety to the public and workers during certain activities. Road closures and encroachment into public roadways could increase hazards if appropriate safety measures are not in place, such as proper signage, orange cones, and flaggers. However, SDG&E would obtain the required encroachment permits from the City and implement traffic control measures accordingly. Consequently, no impacts would result.

Parking of crew vehicles and equipment would typically occur within SDG&E's existing ROW and staging area limits. During the construction activities that would occur within the parking lot located east of Bay Boulevard, including the 138 kV underground duct bank extension, removal of Tower 205 (188700), and installation of cable riser pole 206, public access to the entire southern portion of the parking lot would be restricted. This would result in the temporary loss of approximately 70 parking spaces for approximately four to eight weeks. However, as viewed during previous visits to the Project site, ample parking capacity is typically available along the east side of Bay Boulevard and these restrictions would be temporary, lasting approximately four to eight weeks. As a result, impacts would be less than significant. As previously mentioned, SDG&E would notify property owners in advance of construction activities, as well as coordinate parking lot access restriction to the extent practicable.

Extension of the 138 kV transmission line across Bay Boulevard could result in temporary lane closures, including the bicycle lane that has been constructed along the west side Bay Boulevard. However, SDG&E would obtain encroachment permits to conduct work in the public ROW, and would ensure that access for motorists and bicyclists remains open during construction. In addition, where construction activities would result in bike route or bike path closures,

Bayfront Enhancement Alternative Description and Preliminary Impact Analysis

appropriate detours and signs would be provided, as specified in Mitigation Measure TRA-5 in the Draft EIR. Therefore, impacts to alternative transportation would be less than significant.

3.1 LIVING COAST DISCOVERY CENTER

As provided in Section 2.1.1 Implementation, the Center is an existing nature Center that provides a living-museum experience while promoting coastal resource conservation and environmental stewardship through education. Figure 2: Enhancement Projects Location Map depicts the location of the Center in relation to the Bayfront Enhancement Alternative site. Providing funding to assist with the continued operation of the Center would not result in any new impacts to resources because the funding provided by SDG&E will allow the Center to continue to operate at existing levels within an existing buildings and facilities. No expansion of the Center would be funded by SDG&E's endowment. Funding the continued operation of the Living Coast Discovery Center would offer the sustained low-cost visitor-serving benefits that are provided by the Center, including an opportunity for the public to access coastal marsh areas that would not otherwise be available, and exposure of the public and schoolchildren to the Bay's wetland and marsh habitats and wildlife for coastal recreation and educational opportunities. Contributing funding to the Center would comply with state and local policies, including complying and advancing the policies established in the California Coastal Act. In addition, as previously noted, this funding would help protect and encourage the continued benefits that the Center offers by providing a lower-cost visitor/recreational facility for the public, in furtherance of Section 30213 of the Coastal Act, resulting in a net benefit to recreation.

3.2 SALT WORKS PROPERTY MANAGEMENT

As described in Section 2.2.1 Implementation, SDG&E is proposing to provide funding to the Refuge to maintain aspects of the existing salt pond system, which supports brine invertebrates and provides food for nesting seabirds and other migratory birds in the San Diego Bay. Figure 2: Enhancement Projects Location Map depicts the location of the Salt Works property in relation to the Bayfront Enhancement Alternative site. Providing funding to assist with the continued operation of the Salt Works property and other activities identified in the approved CCP/EIS would not result in any new adverse impacts to resources. The operation and maintenance of the brine production area provides benefits to biological resources because it allows for the continued production of brine invertebrates, a food resource for many seabird and migratory bird species in the San Diego Bay. In addition, maintaining the brine production area provides benefits to biological resources by supporting the policies of the California Coastal Commission, including maintaining and protecting marine resources of special biological significance. Therefore, this activity complies with and advances state and local policies, including those established in the California Coastal Act. In addition, this funding would help maintain marine resources by protecting the use of the salt ponds system for piscivorous bird species within the San Diego Wildlife Refuge complex, in furtherance of Section 30230 of the Coastal Act. The operation and maintenance of the brine production area also provides recreational benefits because it promotes continued birding opportunities in the San Diego Bay.

Bayfront Enhancement Alternative Description and Preliminary Impact Analysis

4 – CONCLUSION

The Bayfront Enhancement Alternative would not result in any new significant environmental impacts or any substantial increase in the severity of an environmental impact within the meaning of the California Environmental Quality Act (CEQA). To the contrary, the Bayfront Enhancement Project would result in significant environmental benefits to the Chula Vista Bayfront that none of the other alternatives or the Proposed Project would deliver. The \$5 million of additional funding would benefit the Bayfront area by undergrounding approximately 700 to 1,000 feet of existing transmission line, removing two existing transmission structures. and providing funding to support existing or approved programs and activities at the Center and Salt Works property, including public access to coastal resources and continued management of habitat for birds in the coastal area. The Bayfront Enhancement Alternative would provide incremental net benefits to biological resources by removing two towers and approximately 700 to 1,000 feet of existing conductor. In addition, this alternative would provide significant benefits to land use by advancing California Coastal Act policies and furthering the Chula Vista Bayfront Master Plan, as well as aesthetic improvements to views of the Bay from Bay Boulevard. Only minor, short-term, less than significant environmental effects would result from implementation of the Bayfront Enhancement Alternative from the temporary construction activities associated with undergrounding an aboveground transmission line. These minimal impacts would be more than offset by the substantial benefits created by the proposed activities and funding. All other impacts from the Bayfront Enhancement Alternative would be the same as the Proposed Project. As a result, the Bayfront Enhancement Alternative is environmentally superior to the Proposed Project and any of the alternatives considered in the Draft EIR.

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B.4.1 Bay Boulevard Substation

The proposed Bay Boulevard Substation site would be located on a portion of the former LNG plant site and would encompass a 12.42-acre parcel, approximately 0.5 mile south of the existing SBPP site (see Figure B-3, Project Overview Map, and Figure B-3a). The enclosed portion of the proposed Bay Boulevard Substation would occupy approximately 9.7 acres (see Figure B-4).

Existing elevations on the proposed site range from approximately 7 feet to 17 feet above mean sea level (amsl). Site topography consists of a flat, previously



Existing Bay Boulevard Substation Site

disturbed pad with a mild slope to the west and north. Additionally, an on-site, man-made berm—ranging in elevation from approximately 14 feet to 16 feet amsl—is located along the southern and western ends of the property, adjacent to a fence that bounds the property (see Figure B-4). There is an additional man-made berm in the west-central portion of the site that ranges in elevation from approximately 21 to 23 feet amsl and served as the containment basin located around the former LNG site storage tanks, enclosing approximately 11 acres of the LNG site. The on-site vegetation consists of non-native grassland, coastal coyote brush scrub, eucalyptus woodland, and ornamental vegetation (see Photos 1 and 2 on Figure B-5). Work associated with the construction of the Bay Boulevard Substation would occur within the 12.42acre parcel and SDG&E's existing easements in the Proposed Project area.

The Proposed Project will include construction of one water quality basin along the western substation limits (see Figure B-4).

An engineered wetland is also proposed at the southwest corner of the site that will include an area of approximately 16,000 square feet and will be utilized to create wetland habitat on site to mitigate for any jurisdictional impacts (see Figure B-4 for proposed location and Figure B-5, Photo 4). Section D.5, Biology, provides a further discussion regarding wetland resources on site and proposed mitigation.

The project includes two potential arrangements for the Bay Boulevard Substation, the initial and ultimate arrangement. The initial arrangement does not include 12 kV distribution equipment and would be used to provide 69 kV transmission to the South Bay region. As part of the ultimate arrangement, distribution equipment would be included at the proposed Bay Boulevard Substation as local distribution loads develop in the South Bay region.

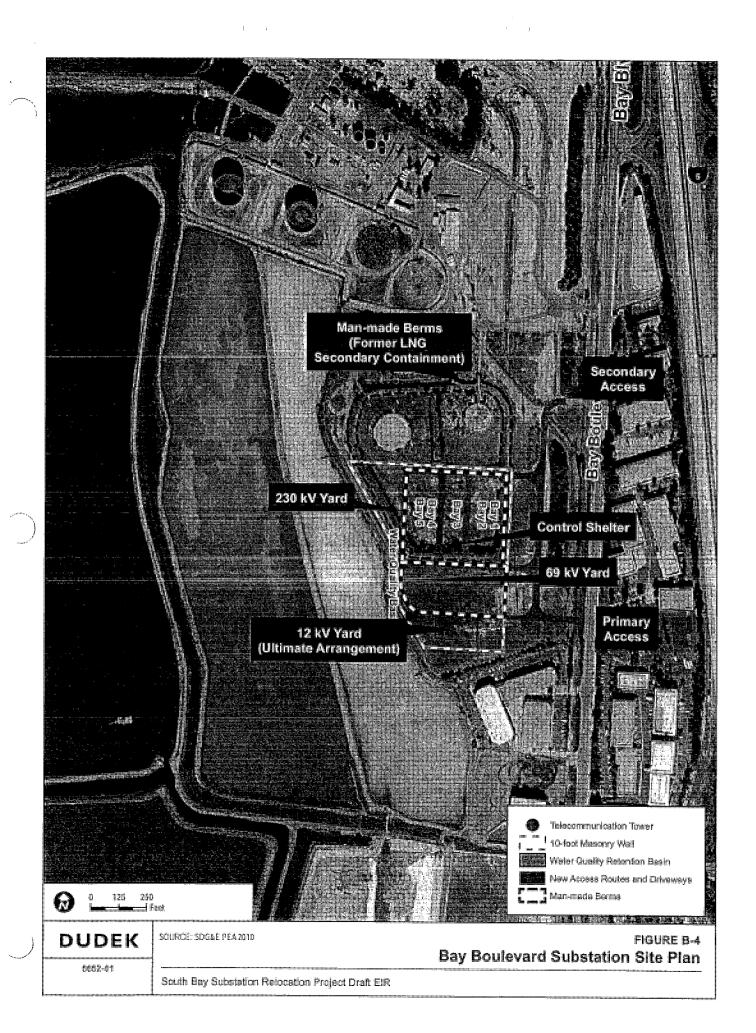
The initial arrangement would consist of the following components:

230 kV Transmission Components

- 230 kV Yard A five-bay, breaker-and-a-half, 230 kV yard will be located along the northern limits of the proposed Bay Boulevard Substation. The 230 kV yard will include double 230 kV buses and five breaker-and-a-half bays with up to three breakers per bay. The 230 kV transmission line and transformer dead-end structures at the 230 kV yard would be approximately 68 feet in height, which includes a 10-foot-high static mast (see Figure B-6).
- 230/69 kV Transformers The proposed Bay Boulevard Substation would include two 230/69 kV, 224 megavolt-ampere (MVA) transformers and associated circuit breakers, disconnects, and controls. The transformers will include a maximum of 20,000 gallons of oil for each transformer. An oil containment basin would be constructed around the perimeter of each transformer with a capacity that is 10% greater than the oil capacity of the transformer to ensure at least 6 inches of freeboard is maintained.
- 230 kV Transmission Lines Transmission lines from the OMPL alignment located to the east of the proposed substation will be terminated with associated circuit breakers, disconnects, and controls within Bay 5 using overhead connections and at Bay 1 using an underground duct bank.
- 230 kV Reactive-Components The 230 kV portion of the Bay-Boulevard Substation will have provisions for up to two switched 230 kV capacitor banks or a single small synchronous condenser. These reactive components will not be installed initially.

69 kV Transmission Components

- 69 kV Yard A 69 kV yard would be constructed along the southern limits of the proposed substation site that would include 14 double breaker bays in a quad bus configuration. The breaker bays would be constructed on steel structures that would be approximately 45 feet in height (see Figure B-6). Two station lights and power transformers and associated disconnects would be located on the 69 kV steel structures within the 69 kV yard.
- 69 kV Lines Six 69 kV lines would be constructed underground within a duct bank within the project limits to terminate the 69 kV transmission lines with the associated circuit breakers, disconnects, and controls located at the 69 kV yard.
- 69 kV Capacitors Two 69 kV capacitors' positions would be constructed to feed the two 69 kV capacitors and associated circuit breakers, disconnects, and controls.
- 69 kV Ground Transformers Two 69 kV grounding transformers and associated circuit breakers, disconnects, and controls will be installed for grounding purposes.



Communications Tower

• A communications tower is proposed along the southern edge of the substation limits to support a microwave telecommunication disc that would be used by SDG&E to monitor the substation operations remotely. The communication tower would include a 75-foot-tall lattice steel tower to support an 8-foot-diameter microwave telecommunications disc (see Figure B-6). An area measuring approximately 12 feet wide by 20 feet long and 12 feet tall would be located adjacent to the structure to house communication equipment.

Control House

• A transmission control house measuring approximately 32 feet wide by 50 feet long and 12 feet tall would be constructed within the central portion of the site between the 69 kV bays and 230 kV bays. The structure is required in order to house substation controls and protection and is typically constructed of masonry blocks.

As shown in Figure B-4, the ultimate arrangement would consist of all the components constructed as part of the initial arrangement with the addition of the following components:

230 kV Transmission Components

- 230 kV Transmission Lines Transmission lines from the OMPL alignment located east of the proposed substation will be terminated with associated circuit breakers, disconnects, and controls at Bays 1, 2, and 4 with underground duct banks and Bay 5 with overhead conductors. There will be a total of five new connections under the ultimate arrangement with two new overhead circuit connections at Bay 5, one underground connection each at Bays 1, 2, and 4.
- 230/69 kV Transformers The ultimate arrangement would include the addition of one 230/69 kV 224 MVA transformer and associated circuit breakers, disconnects, and controls for a total of three transformers on site. Each 230/69 kV transformer will require approximately 20,000 gallons of oil. An oil containment basin would be constructed around the perimeter of each transformer with a capacity that is 10% greater than the oil capacity of the transformer to ensure at least 6 inches of freeboard is maintained.
- 230 kV Reactive Components Two 230 kV capacitors or one 230 kV synchronous condenser installation would be constructed along with associated circuit breakers, disconnects, and controls.

69 kV Transmission Components

- 69 kV Lines Six underground transmission lines would be constructed in addition to those for the initial arrangement, along with associated circuit breakers, disconnects, and controls for a total of twelve 69 kV transmission lines.
- 69/12 kV Transformers The ultimate arrangement would include the addition of four 69/12 kV, 28 MVA transformers, associated switchgear, capacitor banks, and controls. An oil containment basin would be constructed around the perimeter of each transformer with a capacity that is 10% greater than the oil capacity of the transformer to ensure at least 6 inches of freeboard is maintained.

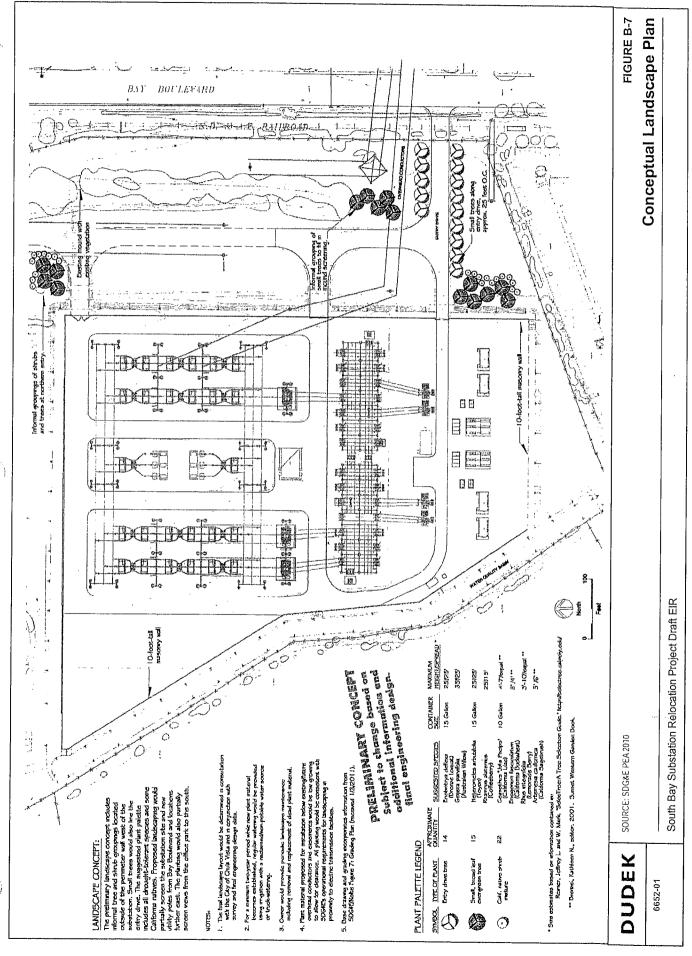
Control House

• A new distribution control house, in addition to the one that will be constructed under the initial arrangement, measuring approximately 20 feet wide by 40 feet long and 12 feet tall would be constructed to the south between the 69 kV bays and 12 kV distribution equipment. The structure is required to house substation controls and protection and is typically constructed of masonry blocks.

12 kV Distribution

- 12 kV Lines Sixteen 12 kV distribution lines would be installed using an underground duct bank beneath the southern access road to the Bay Boulevard site.
- 12 kV Capacitors Four 12 kV capacitors would be constructed along with associated circuit breakers, disconnects, and controls.

Lighting: The Bay Boulevard Substation would include approximately fifteen 175-watt tungsten-quartz lamps placed adjacent to substation equipment to allow inspections to be completed and provide for safe movement within the substation limits. Lighting on site would also include four 75-watt lights around each control shelter. Since maintenance activities are not anticipated to be completed during the evening hours, lights would only be turned on if needed. A 100-watt yellow floodlight would be mounted at both the southern and northern entrance gates to allow for safe entry and would remain lit during nighttime hours. All lights would be directed downward to minimize the potential for spillover to adjacent properties and habitat.



Date: 24 February 2014

To: Dr. Charles Lester, Executive Director, California Coastal Commission

From:

Voben Aabo

Subject:

Review of SDG&E Response to Inland Industries' City of Chula Vista South Bay Substation Relocation Project, dated January 27, 2014

Torben Aabo, President & Principal Engineer, Power Cable Consultants, Inc.

I am one of the authors of the Inland Industries report and the following is a discussion of sections of SDG&E's response in the areas where, over a 40-year period, I have developed expertise as an electrical engineer specializing in transmission cable systems.

In my professional career as an electrical engineer specializing in transmission cable engineering, I have participated in numerous transmission cable projects. Every project has its specific engineering issues. In undergrounding the 230 kV line at the proposed South Bay Substation, SDG&E in its response points to potential challenges they may encounter at the site. These challenges may be known and unknown underground obstacles, which could include sewer lines, communication cables, and other electrical cable circuits.

Given SDG&E does not specify the actual location of potential sewer lines, cables or other site specific conditions, it appears SDG&E has yet to prepare actual building and preliminary engineering plans for the proposed substation. If any existed, the co-location of the underground 230 kV lines with other existing or future facilities could be done to maintain the thermal rating of all of the cable circuits.

The design engineer retained by SDG&E for South Bay Substation will deal with issues such as colocating the additional 230 kV underground segment by various methods such as changing the cable configuration, placing the duct bank deeper, or use a nonstandard duct bank configuration just as SDG&E dealt with site specific design and constructability issues on the recent Sunrise Powerlink Project. Attached to this memorandum as Exhibit 1 is a submission by SDG&E in response to a data request from Inland Industries in the CPUC proceeding. It shows one section of SDG&E's Sunrise 230 kV XLPE transmission cable circuit. SDG&E's architect & engineering company, Black & Veatch, calculated the cable circuit ampacity at locations where cable configurations needed to be changed because of crossing the interstate highway, crossing a culvert, and crossing a storm sewer. At each of these locations, the design of the cable circuit was adjusted in order for the cable circuit to be able to carry the required load. The ampacity of all of the 35 locations listed in Exhibit 1 of the SDG&E submission meets and exceeds the load requirements.

The Inland Industries report shows that both the vertical and horizontal duct bank configuration will meet the load requirements and that both duct bank configurations recommended by me have been used by SDG&E when site specific conditions warrant. The table on Exhibit 1 shows how the depth of the circuit can vary from 3' feet to 13.5' and the spacing from other circuits can vary from 12' to 24' depending on site conditions. All of the designs maintain the required ampacity of the line. The

Power Cable Consultants

design firm retained by SDG&E for the South Bay Substation project will employ these and similar design solutions should the commission require an additional portion of the 230 kV line be placed underground. This was undoubtedly the case for the sections of Sunrise Powerlink that was constructed underground.

Exhibit 2 to this memorandum is a copy of an exhibit from SDG&E's submission for the substation EIR for the Bay Front Enhancement Alternative ("BFEA") SDG&E proposed. This shows the potential for the 230 kV cable circuit to cross some other cable circuits. It also shows the 138 kV circuit being constructed underground and under the MTS ROW and Bay Boulevard. Knowing this, the design engineers retained by SDG&E will be able to design both the 230 kV and the other cable circuits to be able to carry the required load taking into consideration circuit separation and heat transfers. Because SDG&E apparently has not prepared and provided design plans or load requirements, it was not possible to take these circuits into consideration for the ampacity study. If the data were available, the crossings would be designed with the appropriate spacing and depth in ways similar to what was done on the Sunrise Power Link Project so all of the circuits would be able to carry the required load. It may be that SDG&E does not at this point know the design or load requirements for the circuits in the vicinity of the 230 kV underground cable and therefore was not able to show them and include these requirements in its response to our report.

Crossing under the San Diego Metropolitan Transit System (MTS) abandoned rail tracks and Bay Boulevard can be performed using several different trenchless technologies, including Horizontal Directional Drilling, Micro Tunneling, or the Jack and Bore method mentioned by SDG&E. SDG&E on Exhibit 2 already shows this is feasible for the 138 kV line in the BFEA and any of these methods can be utilized in the same manner as the 138 kV such that the cable rating for the 230 kV line is also maintained. The thermal impact of having to install the cables deeper is not an issue at this site. As the cables are installed deeper, they will be below the water table at this site, with lower earth temperature and improved thermal parameters.

The width of the existing ROW is 250 feet, as seen in Exhibit 3. This is far wider than required for installing the 230 kV duct bank, even if the horizontal consideration was required. My ampacity calculations show the horizontal configuration will carry the required load. Because the horizontal duct bank configuration will carry the load, the horizontal configuration which requires a wider foot print would likely not be necessary. It appears that SDG&E favors the vertical duct bank configuration and my report shows that this configuration too will carry the required load.

The CPUC General Order 128 requires certain separation requirements when circuits cross each other. These are normal criteria that the design engineer will take into consideration during the design and construction phases of the 230 kV circuit, as well as for the other proposed circuits associated with the substation. As previously noted, the required separation is typically met by placing the circuit deeper underground where necessary. Exhibit 1 shows that SDG&E did vary the depths of circuits on the Sunrise Project to meet the required load to accommodate site specific issues.

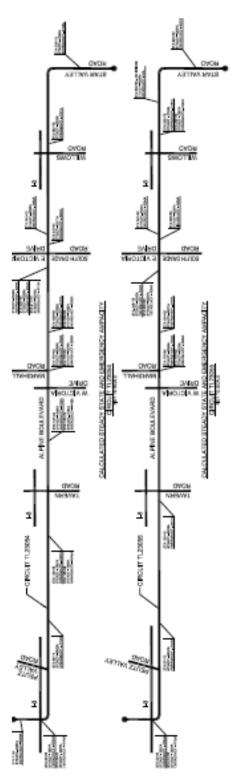
The reliability of underground transmission cable circuits has an excellent record as can be seen in the CIGRE Technical Brochure # 379, dated April 2009 (CIGRE is the international organization covering specifications for electrical equipment). The undergrounding of the additional 230 kV line is proposed to be in a duct bank and will not require splices. Therefore, this circuit will be installed in a manner with the highest reliability record. Further, the proposed substation at the north end will have the

exiting 230 kV line as an XLPE underground cable. Adding another 1000 feet of 230 kV transmission cable will not affect the overall reliability of the 230 kV transmission circuit. It is also significant to note that the current 230 kV line bypasses the existing substation and is currently undergrounded for almost the entire length of the Chula Vista Bayfront and has apparently not raised any reliability issues.

The estimated cost of the cable and accessories for the 230 kV XLPE circuit was based on costs obtained from cable manufacturers. The installation costs were developed based on information from cable system installation contractors. The items listed in the cost summary tables cover the scope of what is required to design and install a quality transmission cable circuit. This is the same procedure that was used to develop the cost estimates for the Chino Hills 500 kV XLPE cable circuit which I worked on and was approved by the CPUC. Undergrounding high voltage transmission lines has been a standard practice in the industry for many years and is widely accepted. None of the hypothetical issues raised by SDG&E in its response would preclude a well-qualified electrical design engineering firm from coming up with an underground alternative that will meet the ampacity requirements of the line.

Exhibit 1

SDG&E Response to Inland Industries data request, dated 9 November 2012, shows a summary from the engineering of SDG&E's Sunrise 230 kV XLPE transmission cable circuit.



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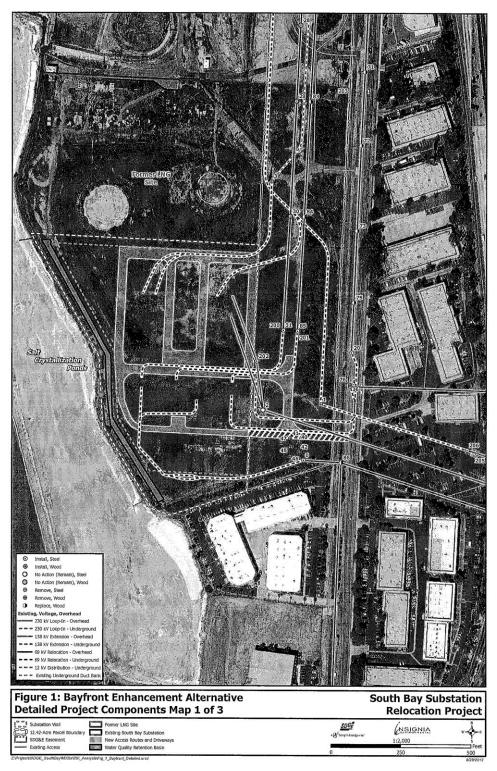
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Exhibit 2

Figure 1 from SDG&E's South Bay Substation Relocation Project Bayfront Enhancement Alterative Description and Preliminary Impact Statement, dated August 2012.



Date:	February 20, 2014	
To:	Dr. Charles Lester, Executive Director, California Coastal Commission	
From:	Jaleh Firooz, Advanced Energy Solution	
Subject:	Review of SDG&E Response to Inland Industries' City of Chula Vista South Bay Substation Relocation Project, dated January 27, 2014	

I am one of the Principals of Advanced Energy Solutions which provides consulting services to clients in the areas of power project development, regulatory policy, California Independent System Operator (CAISO) markets and transmission planning. For 24 years I worked for San Diego Gas & Electric (SDG&E) in the engineering, operations, transmission and resource planning, procurement and regulatory affairs areas. I have previously provided expert testimony and analysis in CPUC proceedings, participated in the CAISO's transmission planning process, and submitted comments in the EIR process on SDG&E's proposed South Bay Substation Relocation Project. A copy of my Experience Summary is attached.

I reviewed SDG&E's response to Inland Industries City of Chula Vista South Bay Substation Relocation Project report dated January 27, 2014. I was specifically asked to take a look at SDG&E's comments on page three (3) with respect to the transfer capability and load serving requirements that SDG&E claims are driving the need for the South Bay Substation Relocation Project (the new Bay Boulevard substation). These alleged requirements are squarely within my areas of expertise.

I also reviewed the testimony of SDG&E's witness Mr. Jontry given before the CPUC on November 27, 2012 referred to in the footnote to SDG&E's response. Subsequent to Mr. Jontry's testimony, the CAISO published its draft 2013-2014 transmission plan. For the ten-year planning horizon ending in year 2023, the CAISO plan identifies no reliability-based overload for the existing 230 kV Miguel-Silvergate transmission line. The CAISO plan also identifies no reliability-based overload for the 230 kV Miguel-Bay Boulevard transmission line that will exist after 2017 when the Bay Boulevard substation goes in-service.

Mr. Jontry's testimony is possibly relying on separate "deliverability" analyses; analyses that are referenced in the same CAISO's draft 2013-2014 transmission plan. The referenced deliverability analysis was conducted by the CAISO in connection with a large volume of generation interconnection requests submitted to the CAISO by prospective generation developers. The CAISO analyses show some overloads on the 230 kV Miguel-Bay Boulevard transmission line but none on the existing 230 kV Miguel- Silvergate line. The plan does not indicate the year or years in which these overloads may The CAISO's draft 2013-2014 transmission plan clearly indicates that the South Bay occur. Substation Relocation project will not be in-service until 2017. Therefore, one can only conclude that the deliverability overloads on the 230 kV Miguel-Bay Boulevard transmission line, referenced in the CAISO's draft 2013-2014 transmission plan, would not occur at least until year 2017, after the Bay Boulevard substation is projected by the CAISO to be placed in-service. Prior to year 2017 there would be no 230 kV Miguel-Bay Boulevard transmission line; obviously a line that does not exist could not be overloaded. The CAISO's analysis stands in contrast to Mr. Jontry's testimony that the Bay Boulevard substation could be needed as early as 2015/2016 to mitigate an overload of the 230 kV Miguel-Silvergate transmission line.

According to CAISO (Robert Sparks) testimony in CPUC proceeding Application 11-05-023, the large volume of generation seeking interconnection within the CAISO Balancing Authority could overload the 230 kV Miguel-Bay Boulevard transmission line under the deliverability study assumptions. From page 2 of the CAISO testimony it can be inferred that the deliverability study was performed by the CAISO for year 2021 and therefore the overload of 230 kV Miguel-Bay Boulevard line shown on page 10 of the CAISO's testimony occur in year 2021. The CAISO suggested that this overload could be mitigated by adding a second 230 kV Miguel-Bay Boulevard transmission circuit. This raises the possibility that another 230 kV line may indeed be part of the ultimate arrangement referred to in the EIR for the South Bay Substation Relocation Project at page B-23.

Importantly, what SDG&E and the CAISO have failed to clearly point out is that the majority of the developers seeking to interconnect generation within the CAISO Balancing Authority will not be successful; most of this proposed generation will never get built. There are simply far more generation proposals than there is need for new generation. The result of the CAISO's "deliverability" analyses needs to be viewed in this context.

Considering the limitations of the CAISO's "deliverability" analysis, and the fact that the CAISO's draft 2013-2014 transmission plan finds no reliability-based overloads on the existing and planned transmission system between Miguel and Silvergate substations, there is simply no compelling evidence that the existing transfer capability between the Miguel and Silvergate substations will be insufficient within the current ten-year planning horizon.



Date: 24 February 2014

To: Dr. Charles Lester, Executive Director, California Coastal Commission

From: Glenn Reddick, P.E.

Subject: Review of SDG&E Response to Inland Industries' City of Chula Vista South Bay Substation Relocation Project, dated January 27, 2014

I am a Registered Professional Electrical Engineer in California and one of the authors of the Inland Industries report. Over the course of 35 years consulting to the electric utility industry I have designed 230kV substations for utilities including breaker and one-half designs similar to the SDG&E proposed Bay Blvd Substation.

Every substation has its own unique foot print, design, environmental and aesthetic issues that the substation designer must address. It is unusual for any standard design to meet all the challenges posed by a specific site except in a rural environment. For this reason it is not unusual for a utility to have to modify and make adjustments to its "standard design" and employ designs that it may not use in other locations. SDG&E used GIS substation technology to expand the Miguel substation directly east of Bay Boulevard. SDG&E also used a non-standard design for its proposed conversion and upgrade of its existing Capistrano Substation in San Juan Capistrano from 138kV to 230kV in conjunction with its South Orange County Reliability Enhancement ("SOCRE") project. The photos and rendering below are from SDG&E's SOCRE Proponent's Environmental Assessment for the Capistrano substation (CPUC A.12-05-020) which, like the South Bay Substation, upgrades an old 138 kV substation to a 230 kV one.



EXISTING 138KV SUBSTATION



PROPOSED 230KV SUBSTATION



Comparing the dramatic contrast in the before and after renditions to what is proposed for the South Bay Substation on the scenic bay front shows what the undergrounding of lines combined with non-standard designs can achieve. It is not my intent to propose this specific design for Bay Blvd, it is to simply demonstrate what can be achieved if SDG&E sees the need for an innovative design. Lowering the profile of any substation



Professional *×* Services

typically produces dramatic improvements in visual aesthetics and SDG&E has shown, as is the case with the San Juan Capistrano project, it can and will deviate from its standard design.

SDG&E has not, to my knowledge, presented even a 30% design for the Bay Blvd Substation and yet has consistently asserted that suggestions to lower the profile of the substation with underground cable and low profile designs are not possible. All that SDG&E has presented to support their claims that other designs are infeasible are figures in the Project EIR that are insufficient to rely on for design purposes, and in some instances plain wrong. Exhibit 1 prepared by SDG&E and included in a submission to the CPUC shows a 138kV cable (TL13815) coming into what other Figures clearly show is a 230kV section. Such a connection is not possible. Exhibit 1 also shows the two 230kV underground cables going north to Silver Gate Substation being split and occupying two bays. This is not standard practice in the industry. Absent some actual design detail from SDG&E to review, the statements in their response are simply assertions with no technical backup. What SDG&E dismisses as not possible for this project has been done on other projects.

SDG&E has raised seismic issues with proposed alternate designs. A review of the Bay Blvd geotechnical report shows expected ½ inch settlements during a seismic event. I am presently working on a design for an 115kV substation in a high seismic area where the expectation is for 2 inches of settlement during a seismic event. Having to deal with these issues during design is common in California. As an example, SDG&E contends that the underground and bus supports suggested in the Inland report cannot be used due to seismic concerns. Exhibit 2 is a photo from an existing Pacific Gas and Electric's 230kV Jefferson substation near Red Wood. It is located in a high seismic zone and it uses the same bus support I suggested to remove eight (8) A-frames.

SDG&E states a low profile substation would require more land. It is true, that like a lump of clay, if you press down the height the clay spreads. Yet SDG&E provides insufficient detail to support the contention that space is not available. The EIR shows SDG&E has a 12.42 acre parcel yet it is enclosing only 9.75 acres. Exhibit 1A shows the 69kV section (bottom) extending toward Bay Blvd. Given SDG&E's uses of this space for proposed infrastructure east of 69 kV section, the 230kV section could be similarly expanded as shown on Exhibit 1A. SDG&E has proposed that at some future point synchronous condensers or capacitors are planned for the site. Given that this is a future addition for which the need may not occur, has SDG&E looked at locating the condenser equipment in the triangular unused northwest portion of the substation site. This would free up the considerable space shown on Exhibit 1A as Bay 3. Bay 3 which, lacking any actual design detail, appears to be the location where SDG&E intends to place the condensers. With this additional space SDG&E could replace the 68 ft. tall transformer connection A-frames with 34 ft. rigid pipe bus parallel to the existing buses and make the connections to the 25-30 feet tall transformers. Removing the tall 68 foot steel A frames saves considerable costs. They are large, heavy structures with sizable footing. These savings could potentially off set the entire modification.



The 34 ft. rigid pipe bus I described in my original report is not shown on the simulation provided by Inland. SDG&E made the original simulation which was then modified, not to be shown as a different proposed design but to demonstrate the reduction in visual impact of a low profile substation when the profile was lowered to below 45 feet.

With respect to the visual simulation prepared by SDG&E which they attach to their response as attachment F and also appears on the cover of Inland's Report, this SDG&E simulation does not depict the ultimate arrangement which SDG&E may be building on the Bay front based on the project description in the EIR. The ultimate arrangement which is described on page B-23 states there will be an additional 230 kV transmission line from the OMPL alignment located east of the proposed substation. This is a direct reference to adding a new transmission line from the San Miguel substation which under the ultimate arrangement would also be brought in to the substation. SDG&E's visual simulation shows only the initial arrangement with the three conductors (wires) of the existing 230 kV lines. The ultimate arrangement described in the EIR will bring three new conductors (wires) into the substation to connect to two new overhead circuit connections. Given the angle depicted in SDG&E's simulation of the line going into the substation, the actual engineered second transmission set of conductors may well require a second pole to accommodate the angle into the substation. Because SDG&E has not submitted sufficient design detail that shows the ultimate arrangement, no actual assessment of the visual and aesthetic impacts on the coast can be made. SDG&E has not shown in any visual simulation this ultimate arrangement.

CONCLUSION

SD&E and their consultants can produce a design to substantially lower the overall profile of the substation. But they require a reason to deviate from their standard design like the lack of space at Miguel substation resulted in GIS equipment or for whatever reason at SOCRE. In short, none of the objections voiced by SDG&E would appear to preclude SDG&E and their consultants from producing a low profile design with all elements under 45 ft. similar to that shown in Exhibit 3.

Glenn Reddick

B. M. Reddiel



EXHIBIT 1

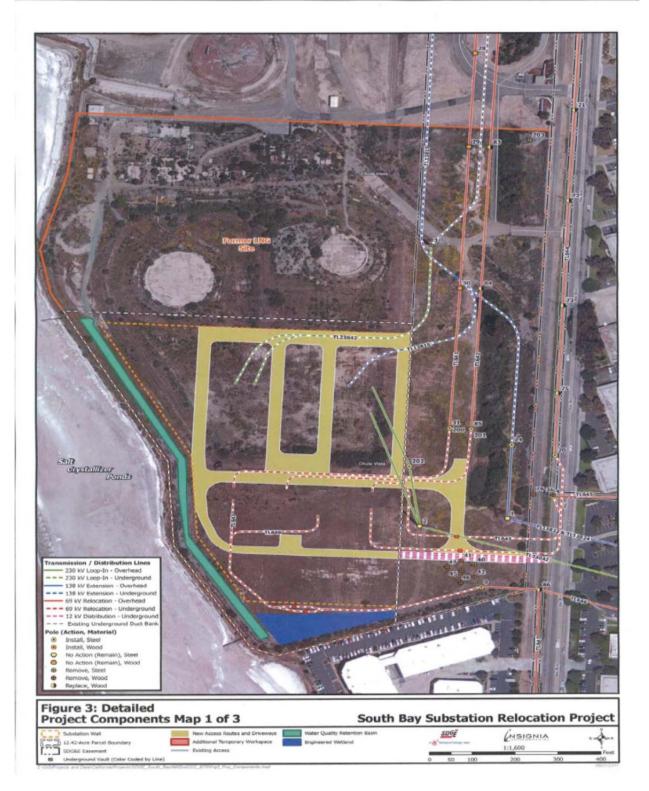




EXHIBIT 1A

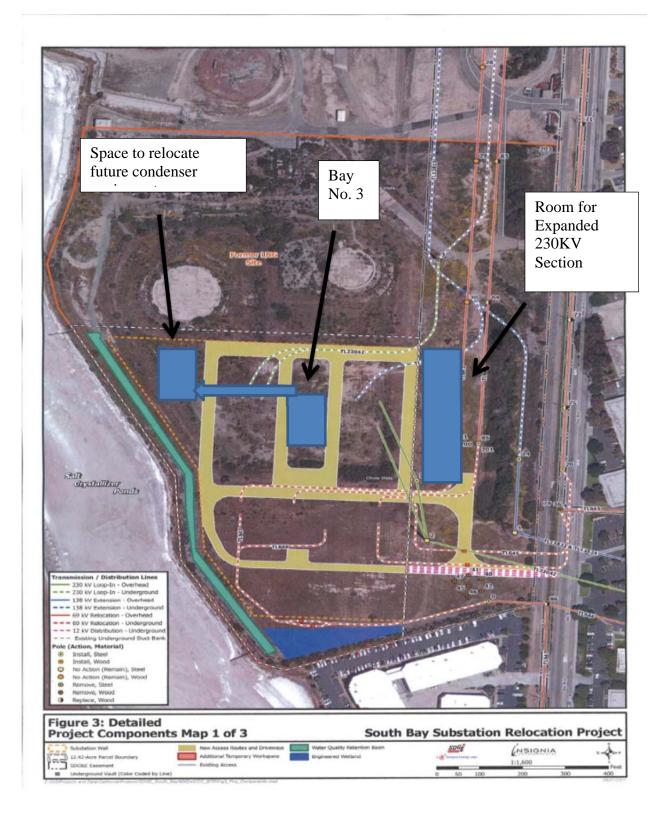




Exhibit 2





Exhibit 3



Visual Simulation

EXHIBIT 26



To: Alison Dettmer; Kate Huckelbridge -- California Coastal Commission

From: Jonathan Woldemariam, SDG&E Director of Electric Transmission and Distribution Engineering

Date: December 20, 2013

Re: SDG&E's South Bay Substation Relocation Project: Technical Feasibility Review of Inland Industries' Proposed Modifications to Project

Executive Summary

On October 17, 2013, after a protracted, three-year-plus public review process, the California Public Utilities Commission (CPUC) approved San Diego Gas & Electric Company's (SDG&E) South Bay Substation Relocation Project (Project). The Project includes the replacement of the existing South Bay Substation with a new, upgraded substation to be relocated outside of the Chula Vista Bayfront Master Plan boundary. The Project also includes more than \$23 million of associated undergrounding, including removal of existing overhead transmission facilities. In fact, the Project is the latest effort by SDG&E to collaborate with the City of Chula Vista to accomplish extensive undergrounding along the Chula Vista Bayfront of existing and proposed facilities.

A neighboring landowner, Inland Industries Group (Inland), has made several claims regarding the Project. Inland was an active party to the formal regulatory proceedings at the CPUC to evaluate the Project. Inland has provided voluminous input throughout the CPUC proceeding. The proceding included evidentiary hearings, briefings, testimony, data requests, and a technical workshop. During the CPUC proceedings, Inland claimed that SDG&E should underground a 300 foot segment of the existing 230kV transmission line that will be reconfigured to "loop-in" the proposed new substation. More recently, Inland claimed that the existing 230kV line should be undergrounded for approximately 1,000 feet from Inland's parking lot into the proposed new substation. In addition, Inland claims that the substation can be drastically redesigned to have a lower profile and fewer overhead structures. Inland has prepared a PowerPoint presentation which includes visual renditions of these ideas.

SDG&E's substation and transmission engineers have reviewed Inland's renditions, as well as Inland's sworn testimony before the CPUC and statements made on the record to the City of Chula Vista City Council. <u>In short, the Project modifications depicted in Inland's renditions</u>

are not feasible and should not be considered reasonable alternatives or modifications to

the Project. To SDG&E's engineering team, which is responsible for safely and reliably designing, operating and maintaining SDG&E's transmission and distribution system, it appears the Inland renditions are simply air-brushed representations developed for the purpose of advancing Inland's interests. This memo explains why Inland's ideas are not possible, reasonable or prudent from a technical perspective, and therefore not "feasible" as defined under the California Coastal Act.

Technical Feasibility Review

Inland claims that the Project can be redesigned to have fewer visual impacts to its industriallyzoned property, which is located across the street from the Project site (a former LNG site that is also industrially-zoned). Inland developed renditions to illustrate its claims.

Based on SDG&E's independent technical review, the Project modifications depicted in Inland's renditions are not feasible and should not be considered reasonable alternatives or modifications to the Project. To SDG&E's engineering team, which is responsible for safely and reliably designing, operating and maintaining SDG&E's transmission and distribution system, it appears the Inland renditions are simply air-brushed representations developed for the purpose of advancing Inland's interests.

Project Design and Engineering Considerations

The Project is a 230kV/69kV/12kV substation that will serve as the bulk power source in the absence of the South Bay Power Plant, which was demolished earlier this year. SDG&E is solely responsible for the safety and reliability of its bulk power and transmission system. SDG&E relies on its professional engineers and its qualified contractorsto design major bulk power substation and transmission line facilities. SDG&E designs its facilities based upon specific site constraints (including parcel size, geologic conditions, environmental resources) consistent with SDG&E and CPUC design requirements as well as generally acceptable industry wide practices. Inland's renditions do not account for site constraints or these design requirements.

Inland's renditions were developed without any review and/or input by SDG&E. SDG&E is unaware whether Inland has retained any qualified engineers familiar with SDG&E engineering and design standards or operational and reliability performance requirements. SDG&E is unaware whether Inland has taken into consideration CPUC General Orders in their renditions.

The renditions are not supported by any preliminary or detailed engineering. In fact, Inland's consultant, Glen Reddick, admitted during the CPUC evidentiary hearings that he has not done any detailed engineering and instead relied on "back-of-the-envelope" calculations. More recently, another consultant retained by Inland, Torbin Aabo, claimed to the City of Chula Vista that "SDG&E, they have an engineering staff that could come up with a proposed system" that

meets SDG&E's requirements and looks like Inland's simulations (T. Aabo, 10/01/2013 City Meeting Transcript, page 131, lines 23-24). SDG&E engineering staff has now reviewed Inland's renditions and concludes that the Project cannot be redesigned as advocated by Inland. To simply generate a rednering and say "that is what it's going to look like" (T. Aabo, 10/01/2013 City Meeting Transcript, page 133, line 9) is not an acceptable way to design a bulk power source substation -- or any substation, for that matter.

System Reliability and Operational Considerations

Inland's rendition erroneously assumes that the substation structures previously engineered by SDG&E and approved by CPUC can simply be erased or lowered. The 230kV substation structures are arranged to allow for each transmission line and transformer to interconnect to allow for reliable operation. This arrangement must be in a reliable configuration and allow for maintenance access during operation. SDG&E's design for the approved substation follows its standard design for a bulk power 230kV substation which was developed with these considerations in mind.

SDG&E's standard bulk power 230kV transmission substation design balances operational flexibility and system reliability with cost and environmental impacts. Based on these considerations, SDG&E's 230kV substation design standard calls for a "standard profile" that is uniform throughout SDG&E's service territory. In fact SDG&E's "standard profile" design has been optimized over the years, which means the new substation will have a lower profile (approximately 65 feet tall) than the existing South Bay Substation, which is approximately 73 feet tall. SDG&E utilizes a breaker-and-a-half double-bus design as the standard on its 230kV system for operational flexibility and reliability. A "low profile" substation by SDG&E's definition would require the bus sections to be installed close to ground level and would not allow for access or mainenace vehicles to drive underneath the structures. Therefore the connections required to maintain operational flexibility and reliability and reliability would be spread out horizontally in order to maintain vehicle access.

Additional Land Requirements and Costs

Even if a "low profile" bulk power 230kV transmission substation was currently in SDG&E's design standards (which it is not) the Project site, which SDG&E will acquire as part of a land exchange approved by the Port District of San Diego and the California State Lands Commission, lacks significant sufficient space to construct Inland's idea of what the Project could look like. If the substation structures were lowered per Inland's rendition, then additional space would be required horizontally to allow for maintenance access. The space needed for the "low profile" 230kV substation proposed by Inland would need to be approximately twice as large as the standard profile substation designed by SDG&E and approved by CPUC. More specifically, the "low profile" substation proposed by Inland, if feasible, would require an additional 6-10 acres of land, which far exceeds the approximately 12 acres of land that SDG&E

will own after the land exchange with the Port District and State Lands is effectuated. SDG&E does not have the reasonable ability to acquire an additional 6-10 acres adjacent to the Project site in order to lower and spread out the necessary substation facilities horizontally.

The land adjacent to the Project site is either owned by the Port or privately-owned and already developed with other uses. In order for SDG&E to acquire additional Port-owned land adjacent to the Project site, SDG&E would need to enter into negotiations with the Port to secure the land and then go back to the State Lands Commission for approval. In addition, the Port would likely need to amend its Port Master Plan to include substation facilities within the Chula Vista Bayfront Master Plan. In order for SDG&E to acquire additional privately-owned land that is adjacent to the Project site, SDG&E would have to either negotiate with the landowner or condemn the existing businesses and land through formal proceedings. Inland has not accounted for the additional time required to acquire the 6-10 acres of land necessary to install a "low profile" substation, which cannot be successfully accomplished within a reasonable period of time and therefore is not feasible. Nor have they accounted for the potential economic impacts, which include land costs and economic losses of displacing existing industrial business uses.

Additional and Unknown Site Constraints

Expanding the proposed substation by 6-10 acres also increases the technical and environmental challenges of the Project. Site development is of particular concern at this site because of the relatively high level of groundwater and existing soil conditions. These challenges will require SDG&E to rework approximately 94,000 cubic yards of existing onsite soil during construction and import approximately 140,000 cubic yards of structural fill and Class-2 aggregate base material necessary to raise the substation site to the final design elevations of the Project. This is necessary due to drainage concerns, maintaining the majority of foundations, electrical vaults and electrical duct packages above groundwater, and to mitigate risk of rising sea level. Expanding the site would potentially result in 70,000 cubic yards or more of additional fill material. If, for example, expansion would occur to the north, the site has not been evaluated for drainage impacts, water retention, water-quality control issues, and the requirement to demolish and remove the former LNG facilities and foundations. There have been no environmental studies performed for this area, and there is potential significant environmental impact with contamination and/or jurisdictional water issues. It is unclear whether Inland has considered the significant cost impacts of expanding the Project site by 6-10 acres.

Transmission Systsem Requirements

In addition, Inland's simulation does not appear to reflect the Project's minimum requirements as approved by the CAISO to address the needs of the transmission system, and it is unknown if the Inland simulation considers the future expansion capabilities that are designed into the ultimate arrangement of the Project (*e.g.*, the 12kV distribution component to be built in the future). Without room for expansion as planned in the Project, SDG&E would be forced to acquire one

or more additional sites within the immediate area in the future to support projected future transmission and distribution needs in the area. These components of the Project enable the Chula Vista Bayfront Master Plan to be built out as projected and approved by the Port District, the City of Chula Vista and the California Coastal Commission.

Substation and Transmission System Reliability and Integrity

Inland's proposal to install underground a 300 foot segment of the 230kV transmission loop-in into the substation is particularly problematic from a technical perspective. The bulk power source for the substation is a nearly 10-mile 230kV line coming in from the east. This existing line runs overhead from Miguel substation before transitioning underground and running north along the Bayfront underground. A primary purpose of the Project is to construct a 230kV substation for this line to "loop-in", thereby providing a 230kV source to the area. Although another approximately 300 foot portion of the existing 230kV line (the segment coming out of the Project and heading north) is being undergrounded, the engineering justification for that undergrounding is that this segment will connect to the longer segment of existing 230kV line that is already located underground. By contrast, Inland's proposal would take a very short segment (anywhere from 300 feet to 1,000 feet) of the nearly 10-mile long overhead 230kV transmission line coming into the substation from the east and place it underground immediately before it enters the substation. This transition adds an unnecessary complication to a critical line.

Placing underground a short segment of the 230kV transmission lines that enters the substation as advocated by Inland is not a prudent or efficient way to operate the system. This line serves as the bulk power source going into the substation and therefore its integrity cannot be compromised. Inland's proposal to place the current overhead transmission line connection to the east of the Project in an underground position raises capacity rating issues, reliability issues, costs, and visual impacts. The Project is designed to leave the existing 230kV transmission line going into the eastern side of the substation overhead, thereby achieving the existing thermal rating for the 230kV line from Miguel Substation to the proposed new substation. As SDG&E stated in sworn testimony before the CPUC, undergrounding any portion of this line going into the new substation negatively impacts the thermal rating of the line and effectively introduces a bottleneck into the primary source for the new substation. From an electrical engineering and reliability perspective, this is not a reasonable or prudent constraint to introduce for any substation, let alone a substation that serves as the bulk source of power for the region.

There are other critical operational reasons for keeping the primary energy source into the region overhead. This source is the eastern 230kV feed into the new substation. Outage restoration times for 230kV underground cable can be 10-20 times longer than restoration of overhead facilities due to difficulties in locating faults, removing and replacing underground cable segments, and splicing the new segment into place (on the order of months vs. days). For that reason, SDG&E designed the substation to maintain an overhead feed into the substation from

this critical energy source. Placing this segment of the 230kV line underground is an unnecessary complication that will do nothing to improve system reliability.

Missing Technical Components

Inland's rendition purports to depict the eastern 230kV feed coming into the substation underground. Inland's rendition, however, does not reflect a true and accurate representation of the cable poles that are required to transition underground facilities to overhead facilities and is therefore not feasible from an engineering perspective. Inland's rendition depicts a 230kV transition structure that does not include the 230kV cable, cable terminations, or surge arrestors - all of which are necessary components of a 230kV transition structure. In addition, a second cable pole would be required and both structures would be significantly higher than shown in the rendition because of these additional facilities. The initial installation would require three sets of cable terminations between two cable poles to maintain the existing thermal rating for the 230kV line from Miguel Substation to the proposed new substation. Inland's rendition does not show any of these necessary facilities and is therefore not feasible from a technological perspective.

Additional Costs

As noted above, Inland originally proposed during the CPUC proceedings that SDG&E be required to underground a 300 foot segment of the 230kV transmission line going into the substation from the east. SDG&E estimated that the installation of 300 feet of underground 230kV as first suggested by Inland would cost approximately \$9 million (approximately \$8 million more expensive than installing the lines overhead into the substation). CPUC rejected these additional costs as unnecessary under CEQA or any "community values" theory and in fact states in the Final Decision that: "...if the Proposed Project's impact on community values renders it infeasible, the remedy under CEQA is to select another alternative. As discussed previously, the Proposed Project's visual and aesthetic impacts are less than significant; they do not give cause under CEQA to either reject the Proposed Project or to condition it on measures to mitigate them." One of the alternatives that CPUC carefully considered was rebuilding at the existing substation site.

More recently, Inland has revised its request to require SDG&E to underground approximately 1,000 feet of existing 230kV transmission line facilities. Inland has stated that this can be accomplished by moving the two cable poles (which are required in order not to de-rate the 230kV transmission line) to a location further east, within Inland's parking lot (east of Bay Blvd). Adding approximately 700 feet of additional undergrounding of existing 230kV facilities (for a total of approximately 1,000 feet of undergrounding of existing 230kV lines) will result in substantial additional construction and other costs. The associated costs include Jack-n-Bore trenchless technique to install conduits underneath the existing railway, open trenching to install the remaining conduit system across Bay Blvd and through the parking lot, and significantly more traffic control for Bay Blvd and Interstate 5. None of the potential environmental impacts

or logistical constraints have been analyzed in any detail. The two new cable poles that Inland proposes to locate in its parking lot under this scenario would be approximately 165 feet in height and 8 feet in diameter. They would require fencing and cameras for security purposes, and would eliminate multiple stalls in Inland's parking lot to accommodate the poles and associated fencing. Additional Right-of-Way (ROW) may also be required to accommodate all of the transmission lines that would occupy the ROW east of the substation. The southernmost 69kV line in the ROW may need to be relocated to accommodate the spacing requirements of the new cable poles, which takes into account the total width of each structure, the electrical clearance required between each structure, and the working space clearance for equipment such as large boom trucks. Acquiring this necessary ROW would take additional time and incur additional costs (beyond the construction costs).

Additional Social and Economic Factors

The minimum potential economic impact of the design modifications advocated by Inland – including the additional costs required to change underlying facts and make Inland's simulated ideas accurate and technically feasible from an engineering perspective – would cost ratepayers millions of dollars. Inland has repeatedly taken the position that the economic impacts of its proposals are feasible because they can be socialized among ratepayers. It is not feasible from a social perspective for a project opponent to argue that ratepayers should fund millions of dollars in costs (by either Inland's or SDG&E's estimates) to underground existing facilities within an industrial area for the sole benefit of one landowner and without any real benefit from a visual perspective.

Additional Time Delays

A major consideration that cannot be ignored in determining the feasibility of Inland's proposals is the potential delay associated with obtaining CPUC approval of any design changes to the previously-approved Project. Under CPUC General Order 131-D, construction of substation or transmission facilities by a public utility falls within the jurisdiction of the CPUC. Under the CPUC's Final Decision approving the Permit to Construct the Project, modifications to the approved project require CPUC approval. In order to construct the Project to look like Inland's rendition, if it could be made feasible, the Permit to Construct would need to be modified to allow SDG&E to deviate from its standard design, to allow an underground configuration for the 230kV loop-in, to evaluate other design changes, and to evaluate the environmental impacts of these modifications. The CPUC would likely reopen the prior Permit to Construct proceeding, which took more than three years to complete. During the original proceeding, CPUC embarked on a comprehensive evaluation of the Project's environmental impacts, technical specifications, need and costs, and evaluated a number of alternatives, including rebuilding the substation at its existing location, which would conflict with the Chula Vista Bayfront Master Plan. It is not possible to predict how long the CPUC approval process would take (nor what the scope of the

issues/testimony/briefing/etc. would include), but it can be safely assumed that CPUC review and approval would add months, if not a year or more, to the Project schedule.

In order to ensure the transmission system continues to operate safely and reliably, SDG&E must undertake costly temporary solutions, such as generation redispatch, reliance on short-term emergency ratings, and continued maintenance of aging and obsolete infrastructure that is slated for decommissioning. Thus, project delays translate into additional economic impacts to ratepayers. Due in large part to the controversy generated by Inland, the original in-service date of 2012 has long passed, and ratepayers will foot the bill for temporary solutions to ensure continuing service reliability. The existing substation currently sits on prime Bayfront land, blocking the planned future RV park and park uses, and the Project now faces the risk that the land exchange agreement will expire by its own terms before the Project is completed. The ISO, which has the ultimate authority for maintaining reliability of the bulk power system and determining the required ratings for transmission facilities, originally requested that this bulk power transmission substation be in service to accommodate regional energy needs subsequent to the retirement of the South Bay Power Plant. The costs of the substation have escalated and further delays will only increase the cost to ratepayers. From a timing perspective, CPUC approval of any changes to the approved project design cannot be successfully accomplished within a reasonable period of time and therefore are infeasible.

Conclusion

The Project will provide the bulk source of power for the South Bay region subsequent to the retirement of the South Bay Power Plant. The ISO and CPUC have approved the Project, which balances SDG&E's operational, reliability, and system needs with community values and environmental considerations. The Project will demolish the existing South Bay Substation and replace it with a new, upgraded substation consistent with the Chula Vista Bayfront Master Plan. The Project includes approximately \$23 million of undergrounding, including removal and undergrounding of existing electric transmission facilities. The approved substation design was based on SDG&E's standards, reasonable and prudent electrical engineering practices, specific site constraints, and the requirements of CEQA and the Coastal Act.

Inland Industries has been successful in causing significant delays to the Project. Most recently, Inland has argued that the Project can be modified to reduce the visual impacts to its industrial properties across the street from the Project site. Inland has generated visual simulations of its ideas for additional undergrounding. These ideas can not be feasibly incorporated into the Project for many reasons. Inland's simulation appears to simply be an airbrushed rendition that does not accurately depict the necessary components of the Project. The "low profile" substation and elimination of overhead structures depicted by Inland's renditions are based on assumptions and circumstances that do not exist in reality. Altering reality and the circumstances of the Project in a manner that could accomplish more undergrounding cannot be successfully accomplished within a reasonable period of time, if at all.

For all of these reasons, Inland's renditions do not depict a feasible or reasonable alternative or modification to the Project.

EXHIBIT 27

SDG&E RESPONSE TO INLAND INDUSTRIES' "CITY OF CHULA VISTA SOUTH BAY SUBSTATION RELOCATION PROJECT" REPORT January 27, 2014

INTRODUCTION

SDG&E has had the opportunity to review Inland Industries' January 20, 2014 report entitled "City of Chula Vista South Bay Substation Relocation Project" prepared by Inland Industries' consultants, Torben Aabo, Mark Fulmer and Glenn Reddick (Report). Inland Industries relies on the Report to request that the California Coastal Commission require SDG&E to underground a segment of the existing 230kV transmission line that will be reconfigured to "loop-in" to the proposed substation.¹

In short, the Report is misleading and does not provide technical support for Inland Industries' request. Starting with the title (which references the City of Chula Vista and could be misread as a report that has been endorsed or prepared by the City), the Report wholly misconstrues the context and potential benefits of Inland Industries' request. Without any explanation or technical support, Inland Industries incorrectly asserts that the Proposed Project is inconsistent with Chapter 3 of the Coastal Act and the LCP, unless the Project is revised to include additional undergrounding. Inland has not demonstrated that the additional undergrounding is required under the Coastal Act or the LCP, or that there is any legal nexus to require it as a condition of the coastal development permit. Inland Industries argues that the project will create "adverse impacts" on "future land use and development potential", but fails to mention that the Coastal Act does not protect Inland Industries' future land use and development potential", but fails to mention its industrially-zoned land.

As discussed below, the Report: exaggerates the potential visual benefits associated with Inland Industries' request, overstates the potential impacts associated with the Proposed Project, and fails to support Inland Industries' conclusion that it is technically feasible to lower the profile of the substation.

Inland Industries' Report does not refute any of the information previously submitted by SDG&E, which as the public utility electric service provider has an affirmative duty to operate its system in a safe and reliable manner. Inland Industries has no such duty, and has no experience or liability with respect to the safe and reliable operation of SDG&E's system. Ultimately, SDG&E is responsible for providing safe and reliable electric service, and SDG&E has determined that Inland Industries' request will compromise its ability to provide safe and reliable service. Contrary to claims made by Inland Industries, the Proposed Project <u>does</u> comply with the Coastal Act, <u>is</u> consistent with the LCP, and in fact advances key regional planning objectives enshrined in the Bayfront Master Plan that has been certified by the Coastal Commission and endorsed by the City of Chula Vista, the Port of San Diego, community stakeholders and local residents.

¹ Inland Industries' request for more undergrounding is not new. Inland Industries previously requested this additional undergrounding during the California Public Utilities Commission (CPUC) proceedings, but the CPUC rejected Inland Industries' request.

SECTION-BY-SECTION RESPONSE TO INLAND INDUSTRIES' REPORT

The "Introduction" Section

The *"Introduction"* section (at page 1 of Inland Industries' Report) misconstrues the context and potential implications of Inland Industries' request. For example, the Report falsely claims that the proposed project "would produce significant and unavoidable impacts to visual and scenic resources". However, Inland Industries is well aware that the Final Environmental Impact Report prepared by the CPUC for the South Bay Substation Relocation Project concluded that there are **no significant and unavoidable impacts** to any resources, let alone visual and scenic resources. The Report provides no evidence in support of Inland Industries' claim that constructing the Proposed Substation in an industrial zone at the site of a former LNG facility will result in "significant and unavoidable impacts to visual and scenic resources".

The Report also mischaracterizes the environmental sensitivity of the site and exaggerates the benefits of undergrounding a segment of the 230kV line. Attachment A depicts the existing conditions at the project site. The existing industrial viewshed, which includes an electric transmission corridor and a railroad right-of-way, includes extensive overhead electric infrastructure. The Report does not explain how undergrounding a short segment of these lines will materially enhance or restore the viewshed, particularly once it includes a new substation.

The Report also intentionally uses the term "high profile" to describe SDG&E's Proposed Project and "low profile" to describe its request. The Commission should be aware that the terms "high profile" and "low profile" are not industry defined technical terms. As SDG&E has previously explained to Commission staff, per SDG&E terminology, distribution substations (138/12kV or 69/12kV substations) can be constructed in either a "standard profile" or "low profile" design when sufficient land is available. These "low profile" SDG&E designs are not applicable to transmission substations, such as this project, where land is limited, grid reliability is of concern, and the substation design and configuration play a critical role in regional bulk power transmission. Although Inland Industries has repeatedly claimed that the Proposed Project is not "state-of-the-art" and that SDG&E would construct a lower profile substation if the project were located in a wealthier neighborhood, these claims are false and misleading. SDG&E's standard design for 230kV substations is uniform throughout its service territory and accounts for safety requirements², system reliability,³ and system maintainability⁴.

The "Technical Review" Section

The *"Technical Review"* section (at page 3 of Inland Industries' Report) does not provide any technical information. This section is a summary of Inland Industries' argument without any facts in support of its position.

² For example, SDG&E must maintain required clearances and separation between high voltage equipment.

³ For example, SDG&E must provide operational flexibility through redundant system configurations and ensure that problems can be isolated with minimal impact to the grid.

⁴ For example, SDG&E must provide adequate access to individual substation components to facilitate operations and maintenance).

The "South Bay Substation Relocation Project System Capacity and Load Requirements" Section

The "South Bay Substation Relocation Project System Capacity and Load Requirements" at page 3 of Inland Industries' Report does not properly characterize the timing of the need for the upgraded rating on the 230kV line (TL23042). On page 3, Inland Industries states, "SDG&E claims that the 230 kV tie lines must have this ampacity rating in order to eliminate a potential overload that the California Independent System Operator (CAISO) forecast may otherwise occur between SDG&E's Miguel Substation and its proposed new Bay Boulevard Substation under certain potential contingency conditions in 2022." This statement ignores testimony from SDG&E that the upgraded rating of the line may be required much earlier, as early as 2015 or 2016⁵, and obscures the risk that additional delays in the project caused by Inland Industries may put the bulk power system and ratepayers at risk.

The "Potential Capacity of Underground Cable Configurations" Section

The *"Potential Capacity of Underground Cable Configurations"* section at page 3 of Inland Industries' Report oversimplifies the relevant technical considerations and ignores relevant factors that must be considered in designing a project. In fact, the Report fails to discuss any of the engineering considerations relevant to undergrounding a segment of the 230kV line and does not demonstrate that the additional requested undergrounding is technically feasible. As a result, the Report's conclusions are flawed. As discussed in SDG&E's December 20, 2013 Technical Feasibility Review, Inland Industries' proposed additional undergrounding is not feasible.

The Report claims that the thermal rating can be met with a bundled (2 cables per phase) cable system through increased conductor separation and horizontal duct orientation methods. It is important to note that Inland has not provided any engineered drawings depicting this design based on known site conditions. The Report merely argues that this configuration is feasible without any support for this conclusion.

In addition, the Report ignores various external factors and basic engineering considerations that pose significant constructability and design challenges. The Report contains **no discussion** of other underground obstructions (including other utilities and electric facilities that will be located underground as part of the project), new/additional land rights to accommodate the necessary trench width, potential interference with electric and other utilities (such as gas, water, sewer, telecommunications, oil or other infrastructure), and construction methods (which can translate into additional environmental impacts and costs). More specifically, the Report fails to point out that Inland Industries' proposed horizontal configuration would require a total trench width that is at least three times as wide as the vertical configuration that was reasonably assumed by SDG&E. This additional land area would be required within the substation property, where SDG&E is already planning to include other infrastructure below ground, and where the water table is known to be high. The Report does not highlight the fact that the trench would need to be located deeper if any obstructions (including other

 ⁵ Testimony of SDG&E witness Jontry before the California Public Utility Commission, Application 10-06-007, Nov.
 27, 2012. See transcript at pg. 57 line 19 through pg. 59 line 8.

electric lines and utilities) are encountered, and that deeper placement of the conductors would further lower the rating of the 230kV line. To accomplish the Report's proposed horizontal duct bank configuration, at a minimum, the 230kV underground alignment would have to cross and parallel several 12kV and 69kV underground lines that will be installed underground as part of the Proposed Project. The Report does not explain or include any plans that illustrate how the horizontal duct bank configuration can be accommodated in light of other facilities that exist or are proposed to be located underground, nor does it appear that Inland Industries has confirmed that no underground obstructions exist. In addition, the Report does not address how co-locating a segment of 230kV and other facilities would limit the thermal rating of the cable due to lack of circuit separation, heat transfer and induction from other nearby circuits as well as required construction for deeper trenches to facilitate crossings and maintain General Order clearances. Thus, the Report does not acknowledge that any "gain" in ampacity through orientation configurations of the duct bank as proposed by the Report would likely be negated by external heating, electrical and physical effects of the nearby 69kV and 138kV lines within the getaway corridor area as described.

In addition, the Final EIR identifies several jack-and-bore construction techniques to facilitate crossings under the San Diego Metropolitan Transit System (MTS) railroad right-of-way (ROW) and certain environmentally sensitive areas. Inland Industries' Report on page 6 proposes additional 230kV underground from the east to the proposed substation site within the existing ROW, which would require the 230kV duct package to traverse across the MTS ROW. This in turn would require an additional jack-and-bore technique (a trenchless construction technique where a large steel pipe is placed underneath the crossing so as to minimize surface disruptions, and the conduits are placed inside in a circular pattern) to cross the MTS ROW thus precluding the horizontal duct configuration and conductor spacing necessary to meet the ampacity as proposed by Inland. In addition, the depth required to facilitate the railroad crossing and maintain compliance with AREMA standards will also have a significant negative effect on the cable thermal rating. Due to these multiple external factors, SDG&E maintains that a tri-bundle (3 cables per phase) cable system would be necessary to meet the required rating and avoid some of the potential site constraints. For these reasons, SDG&E's design is the basis of all cost estimates and visual simulations provided during the CPUC review and approval process.

By contrast, the Report appears to focus only on the 230kV underground duct package configuration that would be necessary to achieve the required rating without any consideration of external factors and constructability challenges. Consequently, the design assumptions in the Report are grossly over-simplified, resulting in a flawed conclusion.

The "Feasibility & Benefits of Undergrounding 230 kV Transmission Circuits" Section

The *"Feasibility & Benefits of Undergrounding 230 kV Transmission Circuits"* section at page 6 of Inland Industries' Report overstates the benefits of undergrounding the 230kV transmission circuits and includes misleading figures.

The text of the Report creates the false impression that the 230kV transmission line is a dominant and obtrusive visual element and that reconfiguring the line to loop-in to the new substation will somehow

exacerbate these conditions. To be clear, the 300'-1,000' segment of 230 kV line that Inland Industries wants undergrounded: 1) involves an existing 230kV line that is being reconfigured to loop-in to the new substation, not a new line that is being introduced into the viewshed; 2) is located in an industrial area that is already visually degraded; and 3) is proposed to be reconfigured to "loop-in" to the substation in a manner that would in fact **consolidate** the above ground 230kV facilities along Bay Boulevard (outside of the Chula Vista Bayfront Master Plan) and would **not result in any net new structures.**

Attachments B and C provide an overview of the existing and proposed 230kV facilities. Attachment B shows the existing 230kV facilities along the substation property. These existing facilities include two pole structures (Structures 2 and 3) and approximately 813' of overhead 230kV lines. Attachment C shows how this segment of the 230kV line will be modified to loop-in to the substation: the existing pole to the south (Structure 2) will remain in place; the existing 165' cable pole to the north (Structure 3) will be removed; a new 110' structure (approximately 55' *shorter* than the existing 165' cable pole) will be installed closer to Structure 2; and approximately 425' of overhead 230kV lines will be reconfigured to loop-in to the substation. In sum, the project will **consolidate** the existing overhead 230kV facilities such that they will remain overhead along a *shorter* distance along Bay Boulevard and one structure will be replaced with a *shorter* structure. The project will eliminate overhead 230kV facilities north of the substation property, adjacent to the Bayfront Master Plan.

The consolidation of 230kV facilities is depicted in Attachment D, which shows existing 230kV and other facilities. Text boxes highlight the existing 230kV facilities, including the northernmost 165' cable pole, which will be removed as discussed above. The location of the new 110' pole (closer to the existing pole to remain) is also identified. In light of the extensive overhead facilities currently within the viewshed and the fact that the proposed reconfiguration of the existing 230kV line will result in **removal and consolidation** of existing overhead facilities, the Report overstates the benefits of Inland Industries' proposal.

In addition, Figure 5 of the Report is inaccurate and misleading. Without any explanation or justification, the Report arbitrarily eliminates two 69kV transition structures and associated wires that are included in the Proposed Project, falsely claims that the depicted steel pole has been changed to a 230kV "transition structure" (refer to Attachment E for a typical 230kV transition structure), and omits several components of the substation (as discussed below in "The *Design Impact of Undergrounding the 230 kV Line* Section").

The "Estimated Costs for Undergrounding 230 kV Line" Section

As discussed throughout response to the Report, the *"Estimated Costs for Undergrounding 230 kV Line"* section at page 10 of Inland Industries' Report is based on a fictitious scope of work based on flawed assumptions, rather than an engineered design. SDG&E stands by its prior cost estimates, which are based on its experience undergrounding the 230kV line immediately north of the project site and other recent projects.

The "Economic Impacts" Section

The *"Economic Impacts"* section at page 13 of Inland Industries' Report fails to acknowledge or reconcile prior sworn testimony by SDG&E and Inland Industries before the CPUC on the rate impacts of project alternatives. The Report also creates the misimpression that the Coastal Commission is in a position to evaluate whether additional impacts to ratepayers are appropriate. In fact, the question of how much more ratepayers should pay to relocate and rebuild the substation is a question for the CPUC, and the CPUC has already denied Inland Industries' request to underground a segment of the 230kV line. Even if it were appropriate for ratepayer impacts to be revisited at this late stage, SDG&E does not believe it is appropriate for ratepayers to pay any amount, no matter how small, for undergrounding existing facilities, particularly when the requested undergrounding: would benefit just one landowner, does not mitigate a significant impact, does not result in any measurable environmental benefit, introduces unnecessary complications and could compromise system reliability, and deviates from SDG&E's standards.

The "Design Impact of Undergrounding the 230 kV Line" Section

The *"Design Impact of Undergrounding the 230 kV Line"* section at page 11 of Inland Industries' Report fails to support Inland Industries' conclusion that the profile of the substation can be lowered. The visual simulations contained in the Report are misleading in that they overstate the aesthetic benefits and are inconsistent with the Report's few stated design assumptions. The Report's design assumptions are also inconsistent with SDG&E's reliability standards, particularly with regards to seismic concerns.

This section of the Report includes simulations and figures that Inland Industries claims to depict design changes that would result in a lower profile substation if the 230kV transmission line is placed underground from the east. The Report, however, fails to provide technical support for how the overall height of the substation would be lowered. To illustrate, the Proposed Bay Boulevard substation includes 65 foot tall A-frame supported structures. The Report makes no attempt to describe how to connect the transformers, which are 25-30 feet tall, without these structures; it simply says "Removal of the A-Frame and overhead conductor to the 230/69kV transformer requires minor modifications to the substation". The cost implications of these modifications, which do not appear to be "minor", have not been addressed and are excluded from the Report's Estimated Costs in Tables 3 and 5.

In addition, the visual simulations purporting to depict the potential benefits ignore the Report's design specifications and are therefore misleading. Figures 10 and 11 are the only substation design considerations included in the Report. Figures 10 and 11 indicate that Inland Industries' suggested bus design would be 34 feet tall. The corresponding visual simulation, Figure 12, however, does not appear to depict *any* bus structures. The figures also erase key elements of the substation without providing any technical justification or explanation. The simulations do not depict any modifications that would enable the 65 foot tall structures for transformer connections to be eliminated, nor do they depict the 25-30 foot tall transformers. Attachment F identifies the various required substation components of the CPUC-approved project, many of which have simply vanished from the Report's visual simulations, without any explanation. By omitting key substation components, the visual simulations prepared by

Inland Industries (Figures 12, 5 and 7) overstate the aesthetic benefits and appear to not even conform to the Report's few design assumptions.

In addition, the Report's design assumptions do not conform to SDG&E's seismic and other reliability requirements. For example, Figures 10 and 11 fail to include 230kV surge arrestors, which are an integral part of the electrical system that protect sensitive equipment, such as 230kV cable, from voltage spikes and surges. In addition, although typical in other parts of the US, the bus design depicted in Figures 10 and 11 (but not shown in the visual simulation) compromises the structural integrity of the bus supports by relying on an inverted "V" on top of a rigid bay. SDG&E does not rely on this type of design due to seismic concerns. Instead, SDG&E's 230kV standard is a flexible bus which is supported between multiple A-Frames that are 39 feet in height.

For these reasons, the Report fails to support Inland Industries' claims that it is technically feasible to lower the profile of the substation. The visual simulations contained in the Report overstate the aesthetic benefits and misrepresent even the Report's few stated design assumptions, and, the Report's design assumptions are inconsistent with SDG&E's reliability standards. Inland Industries has not demonstrated that the profile of the substation can be lowered.

CONCLUSION

Prepared by Inland Industries' consultants, the "City of Chula Vista South Bay Substation Relocation Project" Report does not provide technical support for requiring SDG&E to underground an additional 300' to 1,000' of 230kV line as part of the South Bay Substation Relocation Project. The Report overstates the potential benefits associated with Inland Industries' request, misconstrues the context of the project, and fails to explain how the requested undergrounding is technologically feasible or would result in a lower profile substation. Inland Industries' request to underground a segment of the 230kV line should be rejected as unnecessary and infeasible for all of the reasons discussed in SDG&E's December 20, 2013 Technical Report.

Attachment A

Existing Conditions: Overhead Facilities

View West from Bay Boulevard towards Bay Boulevard Substation Site

Attachment A

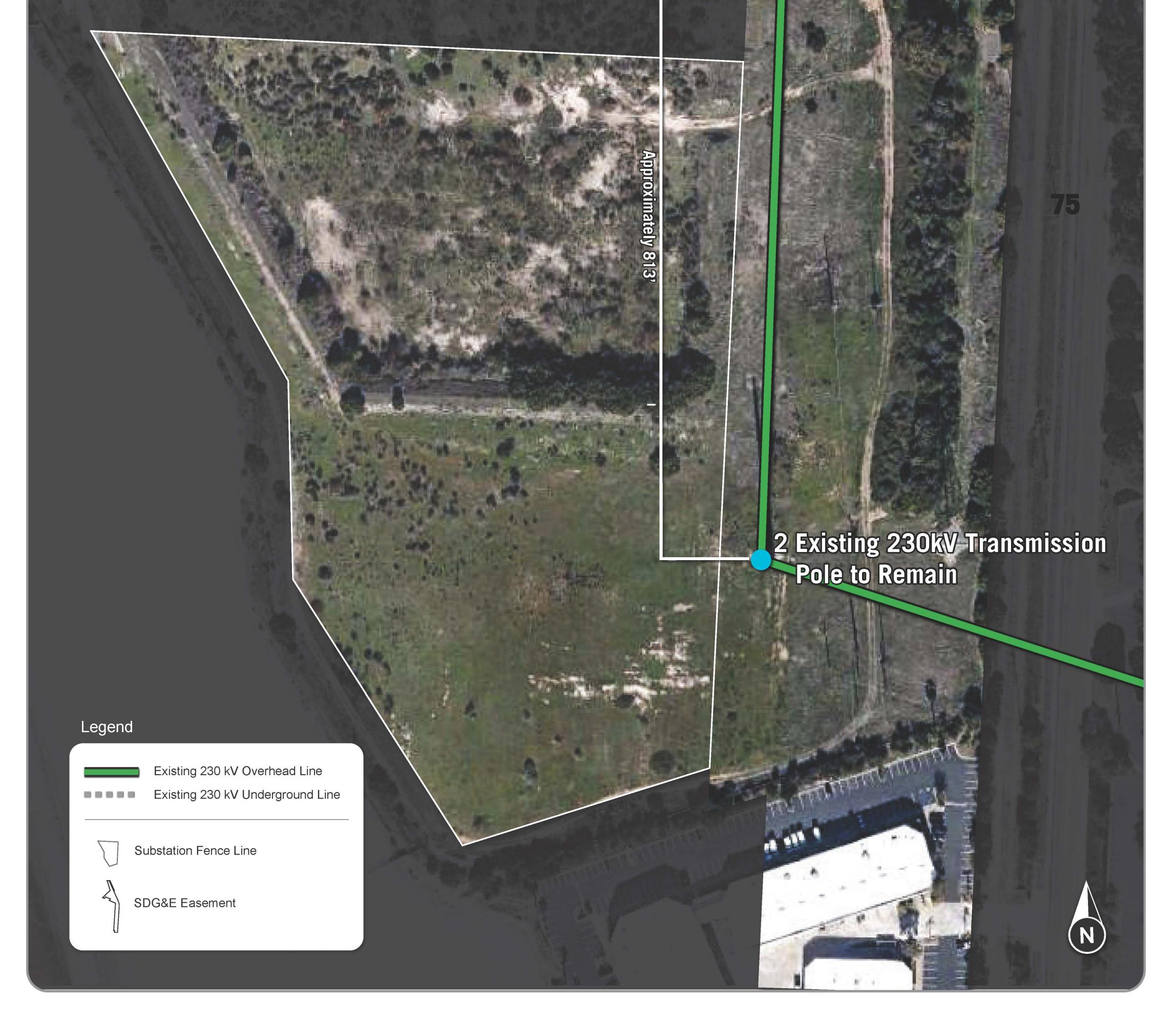
Existing Conditions: Overhead Facilities

View Northwest from Bay Boulevard towards Transmission Facilities

Attachment B

3 Existing 230kV Transition Pole to be Removed

12



South Bay Substation Relocation Project





Attachment C

3 Existing 230kV Transition Pole to be Removed

72

202 Proposed new 230kV Transmission Pole

Approximately 250'

2 Existing 230kV Transmission Pole to Remain

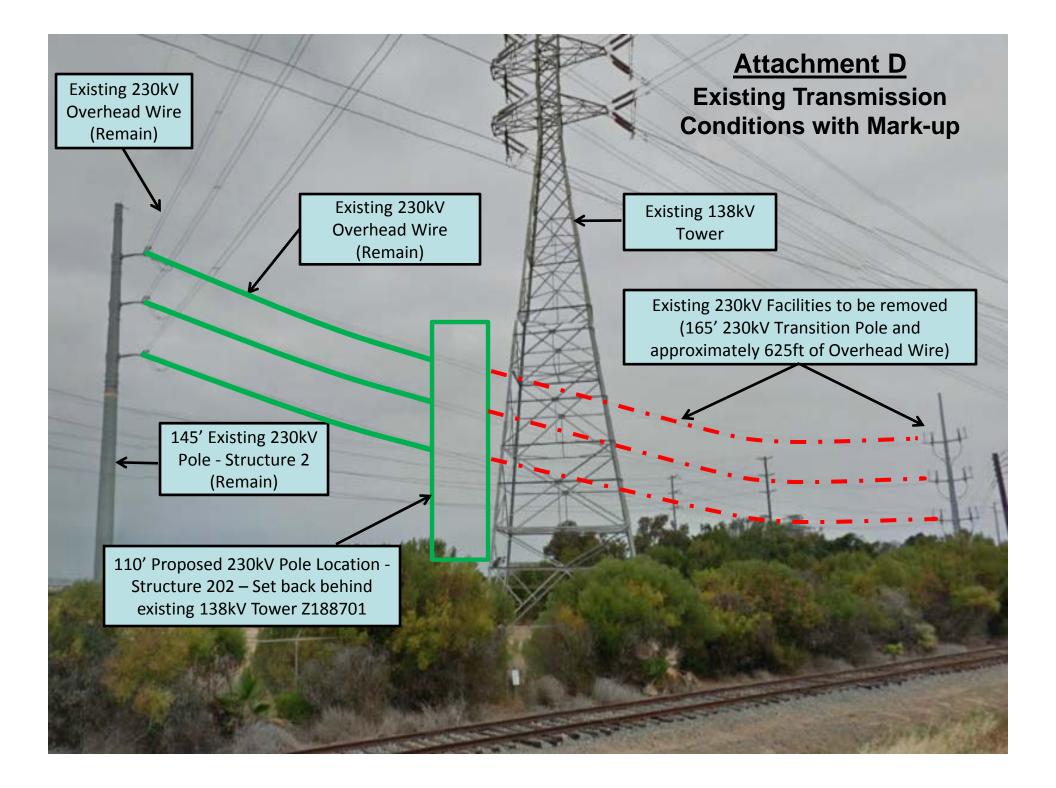


Approximately 175'

South Bay Substation Relocation Project







Attachment E Typical SDG&E 230kV Transition Pole 119482

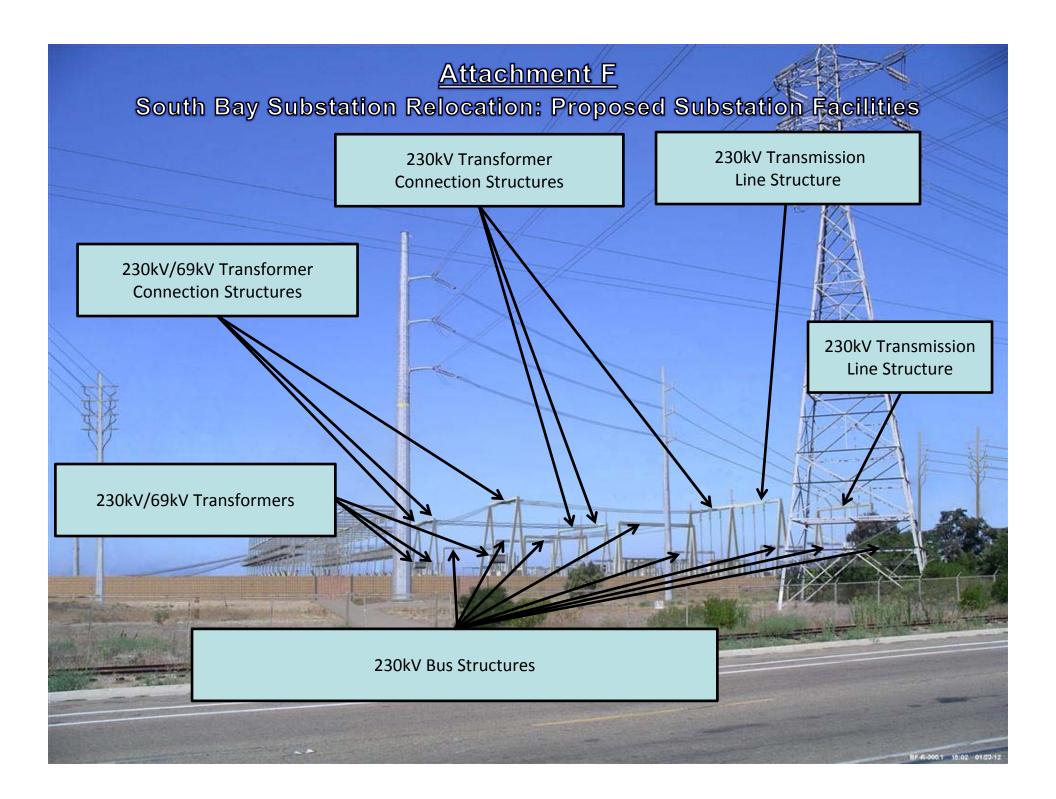


EXHIBIT 28

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February 25, 2014

Alison Dettmer Kate Huckelbridge California Coastal Commission 45 Fremont Street Suite 2000 San Francisco, CA 94105

Re: Application No. E-11-010: SDG&E South Bay Substation Relocation Project (Item Th 11b.)

Dear Ms. Dettmer and Ms. Huckelbridge:

San Diego Gas & Electric Co. (SDG&E) appreciates your on-going review of Coastal Development Permit Application No. E-11-010 for the South Bay Substation Relocation Project (Project). We thank you for all of your time and effort – since our earliest discussions in 2011 – to understand this complicated electric transmission substation relocation proposal and to provide guidance to SDG&E as appropriate. We look forward to presenting the Project to the full Commission next month.

As you are aware, the Project opponent, Inland Industries, has claimed that the Project is not consistent with the Coastal Act or City of Chula Vista Local Coastal Program (LCP) due to alleged impacts to visual resources. On February 11, 2014, the City of Chula Vista (City) passed a resolution reaffirming the City's "strong support" of substation relocation, but also requesting that the Coastal Commission consider requiring the Project to include *additional* undergrounding.¹

Consistent with Coastal Act Section 30251, the Project has been specifically sited and designed not only to protect views to and along the Chula Vista Bayfront, but to create new views and significantly restore and enhance the visual quality in the visually degraded, industrial setting of the Project. SDG&E urges Commission staff to fully consider the existing visual setting of the Project and all of the visual enhancements that have been incorporated into the Project and approved by the California Public Utilities Commission (CPUC) before evaluating whether any additional undergrounding would have the requisite nexus or rough proportionality to the impacts.

The degraded visual setting and visual benefits associated with the Project have been thoroughly documented. In June 2010, a visual assessment submitted as part of SDG&E's original application to the CPUC confirmed that the visual impacts associated with the demolition of the substation and removal of existing aboveground facilities would create unobstructed views of the Bay and therefore would be considered *beneficial*, while the impacts of constructing the new substation in an area zoned for and developed with industrial uses would be *less than significant*. The CPUC's independent environmental analysis in the Final Environmental Impact Report (FEIR) certified in October 2013 confirmed these

¹ The Project already includes extensive undergrounding that the City previously agreed to fund.

findings.² SDG&E's consultant, Insignia Environmental, has updated these prior analyses to assist Coastal Commission staff in its review. (See Attachment A: Updated Visual Impact Assessment for the South Bay Substation Relocation Project.) As discussed in this supplemental visual analysis, the visual benefits of demolishing an existing 138/69kV substation, five existing steel lattice towers along Bay Boulevard and other existing overhead facilities will significantly enhance and restore visual resources along the Bayfront, including specifically along Bay Boulevard and within "View" and "Major Gateway" locations designated in Figure 10 of the LCP. Meanwhile, construction of the new substation at the relocation site will **not** significantly impact existing visual resources along the Bayfront. As explained in Attachment A, the Project as approved by the CPUC in October 2013 is fully consistent with the Coastal Act and LCP.

As you evaluate whether additional undergrounding is feasible or legally required under the Coastal Act or LCP, particularly the Coastal Act and LCP sections specifically referenced in the City's February 11, 2014 resolution, SDG&E would like to highlight the following considerations.

With respect to whether additional undergrounding is feasible:

- The Coastal Act defines the term "feasible". Under Section 30108 of the Coastal Act, "Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Thus, if the Project cannot be accomplished successfully "within a reasonable period of time", it is not feasible. Prior submittals by SDG&E document the technological and other infeasibility of undergrounding the aboveground segment of the 230kV loop-in.
- The Project is time-critical and necessary to meet the region's energy. The Project was originally identified as a key component in the long term reliable energy supply to the region in light of the retirement of the South Bay Power Plant. In fact, the original in-service date for the Project was June 2012, which would have preceded the decommissioning of the South Bay Power Plant. CPUC approval to relocate the substation, however, took more than three years to obtain. Since the Project was originally identified, the San Onofre Nuclear Generating Station has permanently ceased operating, making the Project more critical. The California Independent System Operator (CAISO) has recently confirmed that the Project "has become even more critical with the passage of time, and failure to complete this project in a timely fashion may have the risk of significant negative impacts for the transmission system and ratepayers." (See Attachment B: Letter from CAISO to the CCC dated January 16, 2014.) The CAISO also cautioned the Coastal Commission against any unnecessary modifications to the project design at this late stage, noting that "it is not reasonable to revisit the approved design of the substation absent a compelling reason that justifies the increased reliability risks and costs to ratepayers." Simply put, the time for Inland Industries and the City to redesign the project has passed. As noted below, the LCP applies to the Project as guidance, and therefore as a matter of law is not a "compelling reason" to justify reliability risks and costs to ratepayers.

² SDG&E's application to the CPUC and the CPUC's Final EIR are available on the CPUC's website at http://www.cpuc.ca.gov/environment/info/dudek/sbsrp/SouthBaySub.htm and are hereby incorporated by reference.

> The CPUC has already rejected Inland Industries' and the City's requests for additional undergrounding. On October 17, 2013, the CPUC approved SDG&E's application for a Permit to Construct (PTC) the South Bay Substation Relocation Project. The CPUC's Final Decision approving the Project rejected Inland Industries' and the City's requests for additional undergrounding, concluding that "the Proposed Project would have no impact or a less than significant impact on aesthetics..."³ Consequently, SDG&E does not have the legal authority to underground any additional facilities, even if the Coastal Commission requires it. In order to underground any additional facilities, SDG&E would need to seek and obtain authority from the CPUC for work that CPUC previously rejected.

With respect to whether additional undergrounding is legally required, particularly under Coastal Act section 30251 and the LCP:

- The standard of review for the Project is Chapter 3 of the Coastal Act, not the LCP. Under Section 30601.3(b) of the Coastal Act, "the standard of review for a consolidated coastal development permit application... shall follow Chapter 3 (commencing with Section 30200), with the appropriate local coastal program used as guidance." The City, the Commission, and SDG&E have consented to consolidated review pursuant to Section 30601.3(a). Thus, the legal relevance of the LCP to the Project is limited, and the LCP is not legally compelling.
- The Project was carefully sited and designed to enhance and restore visual resources in full compliance with the Coastal Act. The Project will demolish the existing South Bay Substation and construct a new substation outside of the boundaries of the Chula Vista Bayfront Master Plan (CVBMP), allowing Community Park and RV Park uses to take its place. The location for the Project was originally identified by the City and the Unified Port District of San Diego (Port) and subsequently approved by the Port and California State Lands Commission after several years of discussions and regulatory approvals. In addition to removing the existing 138/69kV substation from the CVBMP boundaries, the Project includes extensive undergrounding of existing and proposed facilities, including facilities that the City previously agreed to pay to underground:

230kV Line (which will loop-in to the new substation):

- Approximately 1,000 feet of underground interconnection;
- Reduction of approximately 500 feet of existing overhead line;
- Replacement of 1 cable pole (165' tall) with 1 new, shorter pole (121' tall);
- Net-zero change in number of poles.

138kV Line (which will not loop-in to the new substation):

- Approximately 3,800 feet of underground;
- Reduction of over 3,200 feet of overhead line;
- Remove 5 existing steel lattice towers;
- Remove 1 riser structure (3 wood cable poles)
- Install 1 new cable pole

³ The CPUC's Final Decision is available on the CPUC's website at

http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M079/K731/79731323.PDF and is hereby incorporated by reference.

Net reduction of 5 structures

69kV Lines (which will tie-in to new substation):

- Approximately 4,100 feet of underground;
- Reduction of over 2,500 feet of overhead line;
- Net reduction of 6 poles.

By moving the substation south and out of the CVBMP area, designing the new substation to underground as many of the loop-in and tie-in facilities as possible and undergrounding existing 138kV facilities located between the existing and proposed (even though they will by-pass the new substation), the Project will result in a consolidation of aboveground facilities located along Bay Boulevard. (See Attachment C: Figures and Simulations. See also Attachment A.)⁴

- Street-level photographs of existing conditions and photo simulations demonstrate that demolition of the existing substation and removal of five existing steel lattice towers and other existing overhead facilities will significantly enhance and restore visual resources along the Bayfront. Specifically, visual resources along Bay Boulevard and within "View" and "Major Gateway" locations designated in Figure 10 of the LCP will be significantly enhanced and restored. (See Attachment A.)
- Street-level photographs⁵ of existing conditions at the relocation site confirm that construction of the new substation will not significantly impact visual resources along the Bayfront. Views of the Bay through the relocation site are either completely blocked or marginal, and the City's preferred and designated relocation site is not visible from any "View" or "Major Gateway" location. (See Attachment A.) Along the Project site, the Bay is located approximately 750-1,100 feet from Bay Boulevard– on the other side of a 300' wide utility corridor and the Project site. Although the LCP includes policies that protect views along Bay Boulevard, recent street-level photographs taken along the frontage of the relocation site do not reveal any significant public view corridors to the Bay. The few partial views of the Bay from street-level are industrial in nature and include electric transmission and power line structures, fencing, and landscaping. Marginal views of the Bay will be maintained due to the nature of the Project (substation racks and other equipment that allow views through the site versus a solid building that blocks all views), depending on the ultimate landscaping and other screening requirements that will be developed in consultation with the City. In addition, the fact that the substation is setback approximately 300 feet from Bay Boulevard will prevent any "walling off" of the Bay. As for

⁴ In addition, the proposed new substation facilities will be consolidated within a *smaller* land area than that of the existing substation.

⁵ Staff should note that photographs previously submitted by Inland Industries' attorney are false and misleading. (*See, e.g.,* Figure 1.3 in Inland Industries' January 28, 2014 letter to Dr. Charles Lester, which is taken at an elevation higher than the chain link fence and top of a street lamp in order to enhance existing views of the Bay and exaggerate the Project's impacts. *See also* Figure 6.3, which falsely claims to show "how the current and, unless mitigated, the new substation will impact views to and along the coast". Figure 6.3 is an outdated photograph of the existing substation adjacent to the now demolished South Bay Power Plant. As Inland Industries knows, the Power Plant was demolished more than a year ago, therefore the photograph is not "current", and SDG&E does *not* propose to build *a power plant* at this site, therefore the photograph does not depict how the new substation "will impact views". The outdated photograph and false caption are inappropriate and misleading.)

impacts of the new substation on "View" or "Major Gateway" locations, photographs of existing conditions demonstrate that the relocation site is either completely obstructed or not readily visible from any LCP "View" or "Major Gateway" location, therefore no impacts to designated Views or Major Gateway locations will result from the construction of the new substation. (See Attachment A.)

The Project is consistent with the Coastal Act and consistent with the LCP (even though the LCP applies only as "guidance"). Attachment A includes an analysis of the Project's consistency with Coastal Act section 30251 and the LCP's visual resource provisions. In addition, the City and Inland Industries have referenced the LCP provision that "Utilities serving the bayfront shall be undergrounded" (as well as previous language that was deleted from the certified LCP) in an attempt to require that a segment of the 230kV line be undergrounded. The CPUC has addressed these provisions in response to Inland Industries' comments by confirming that the 230kV line is not new.⁶ In addition, the 230kV lines do not exclusively serve the bayfront load in the Chula Vista area. The cost of the 230 kV work associated with the Project, will be assigned to all CAISO customers because 230 kV bulk power facilities are built for the purpose of serving *the California grid*, not just the Chula Vista Bayfront.

Despite numerous challenges, SDG&E has not wavered from the basic purpose of the Project: to facilitate the City of Chula Vista and Unified Port District of San Diego's redevelopment plans for the Chula Vista Bayfront and to meet the long term, reliable energy needs of the region. SDG&E has attempted to balance the critical need for the Project with the strong regional and community desire to redevelop the Chula Vista Bayfront. Since entering into the Memorandum of Understanding (MOU) with the City in 2004, SDG&E has made every effort to relocate the substation to the City's preferred site in furtherance of the CVBMP and to deliver the numerous coastal resource benefits and enhancements, including the significant visual resource benefits, associated with the Project. In the process, SDG&E has had to overcome numerous challenges over the last decade, including securing the necessary land exchanges for the relocation, managing aggressive attempts by Inland Industries to delay or block the Project, and addressing significant concerns by CPUC staff about whether relocation is necessary and appropriate. SDG&E is proud to have worked successfully with the State Lands Commission, Port, and most recently the CPUC to secure numerous necessary approvals to date. SDG&E looks forward to presenting the Project to the full Commission on March 13, 2014 and reaching the next major milestone towards substation relocation.

Sincerely Estela de Llanos

Senior Environmental Counsel

⁶ See FEIR Volume 2, Responses to Comments, page 3-98: "As indicated in Section D.10 (see the Chula Vista Local Coastal Program – Land Use Plan discussion in Table D.10-3), the Proposed Project does not propose the installation of new transmission lines. Rather, the project would relocate transmission lines and structures to interconnect with the proposed Bay Boulevard Substation (as opposed to the existing South Bay Substation). Portions of the project transmission line improvements, including an existing 230 kV line, would be placed belowground."

ATTACHMENT A:

Updated Visual Impact Assessment for the South Bay Substation Relocation Project



Updated Visual Impact Assessment for the South Bay Substation Relocation Project

MEMO

To: San Diego Gas & Electric Company (SDG&E)

From: Insignia Environmental (Insignia)

- Date: February 25, 2014
- Re: Updated Visual Impact Assessment for the South Bay Substation Relocation Project (Project)

Introduction:

SDG&E proposes to construct the South Bay Substation Relocation Project (Project) within the California Coastal Zone. Prior assessments of the Project's potential impacts on visual resources include an analysis prepared by Insignia in June 2010 and the Final Environmental Impact Report certified by the California Public Utilities Commission (CPUC) in October 2013.¹ SDG&E has requested that Insignia update and supplement the visual impacts analysis related to the Project to include current photographs of public views and to determine whether the Project is consistent with the visual resource policies and objectives contained in the California Coastal Act (CCA) and the City of Chula Vista's (City's) Local Coastal Program (LCP). This memorandum is intended to assist the California Coastal Commission (CCC) in determining whether to approve a Coastal Development Permit for the Project.²

Summary of Findings: This memorandum confirms that the Project is consistent with the visual resource policies and objectives contained in both the CCA and LCP. Specifically, the Project is consistent with the CCA because it has been sited and designed to protect views to and along the Chula Vista Bayfront, will not alter natural land forms, is visually compatible with the character of surrounding areas, and restores and enhances visual quality in a visually degraded industrial area to the extent feasible. In addition, the Project includes demolition and removal of an existing electrical substation and removal of existing aboveground facilities, which will significantly restore and enhance views along the Chula Vista Bayfront, in particular views from designated "View" and "Major Gateway" locations identified in the LCP. By contrast, the new substation will be constructed in a location that does not currently

¹ These prior analyses are incorporated by reference.

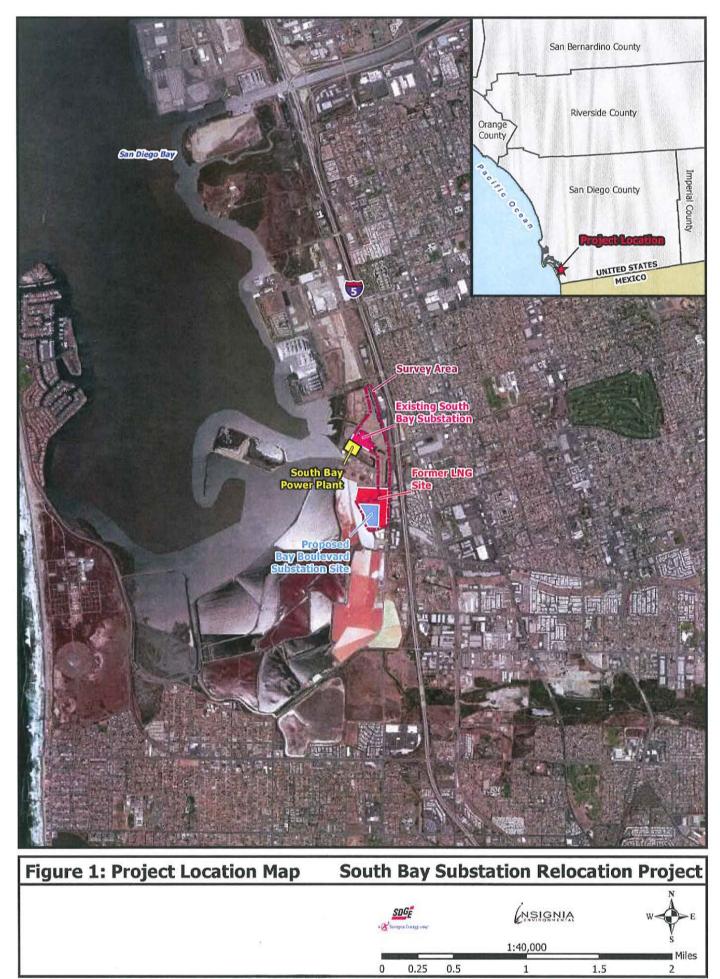
² Per CCA 30601.3(b), the applicable standard of review is Chapter 3 of the Coastal Act. The LCP is used as guidance.

contain any significant public views and is not readily visible from designated "View" or "Major Gateway" locations.

Project Description:

The Project is located in the southwestern portion of San Diego County in the City of Chula Vista (City), approximately two miles south of the City of National City, approximately five miles northeast of the City of Imperial Beach, and approximately seven miles southeast of downtown San Diego. Proposed Project activities would take place in three general locations-at the new 230/69/12kV Bay Boulevard Substation site, where the proposed substation would be located; at the existing 138/69kV South Bay Substation site, which would be demolished following energization of the Bay Boulevard Substation and completion of the transmission line cutovers; and in the existing Transmission Corridor, which parallels the west side of Bay Boulevard. The entire Project is located in the Coastal Zone. Portions of the Project are located within the boundaries of the City's LCP. Although the existing South Bay Substation is located within the boundaries of the Chula Vista Bayfront Master Plan (CVBMP), the new Bay Boulevard Substation will be constructed outside of the CVBMP boundaries. Figure 1: Project Location Map provides an overview showing the general Project location.

In addition to demolition of the existing South Bay Substation, the Project includes the removal of other existing aboveground facilities (including approximately 2,500 feet of overhead 69kV lines and a net reduction of six 69kV poles, approximately 3,200 feet of overhead 138kV lines and removal of five existing 138kV steel lattice towers, and approximately 500 feet of overhead 230kV lines).



Z:VProjects\SDGE_SouthBay/MXDs\RarePlantSurvey\2013_RarePlant_Surveys\Fig1_Project_Vicinity.mxd

CCA Section 30251:

Section 30251: Scenic and Visual Qualities of Chapter 3 of the CCA addresses views within coastal areas. This section reads:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

LCP-Designated Views and Major Gateways:

The City's LCP identifies several "Views" and "Major Gateway" locations that are important to visually connect people to the Bay. The Views and Major Gateways generally correspond to the intersections of major streets in the planning area, and are shown in Exhibit 10 of the LCP. These include the following:

- Palomar Street east of Bay Boulevard, looking northwest and southwest (View)
- L Street and Bay Boulevard, looking northwest and southwest (View)
- J Street and Bay Boulevard (Major Gateway)
- Marina Parkway at the southwest curve, looking northwest and southwest (View)
- H Street and Bay Boulevard (Major Gateway)
- Marina Parkway at H Street, looking northwest and southwest (View)
- Marina Parkway at G Street, looking northwest and southwest (View)
- E Street extension, south of F Street, looking north and west (View)
- E Street at the north end of E Street extension (Major Gateway)
- View to Sweetwater Marsh, approximately from bay end of E Street, looking west-northwest and north-northeast (View)
- West terminus of D Street, looking northwest and southwest (View)

From this list, the most relevant views of the proposed Bay Boulevard Substation site are from the southern-most Views and Major Gateways in the LCP, and specifically Palomar Street and L Street. From J Street and Marina Parkway, which are located approximately one mile away from the proposed site, views of the site are difficult to see at best and the site is not visible north of these areas. Therefore, the three Views— Palomar Street and Bay Boulevard, L Street and Bay Boulevard, and Marina Parkway curve—and one Major Gateway—J Street and Bay Boulevard—are the focus of this memorandum. Views Along Bay Boulevard:

This memorandum also addresses views of the Bay and Project site, particularly between Palomar Street and L Street.

Existing Conditions Photographs:

To demonstrate the impact of the Project on existing views, several photographs of the existing public views were taken from the four relevant LCP "Views" and "Major Gateway" locations, as well as from several locations along Bay Boulevard. The photographs are taken from street level within the public right-of-way to portray the public views, not views from private locations. The location and direction of the photographs are depicted in Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways". Photographs 1 through 4 are taken from the four closest LCP View and Major Gateway locations.

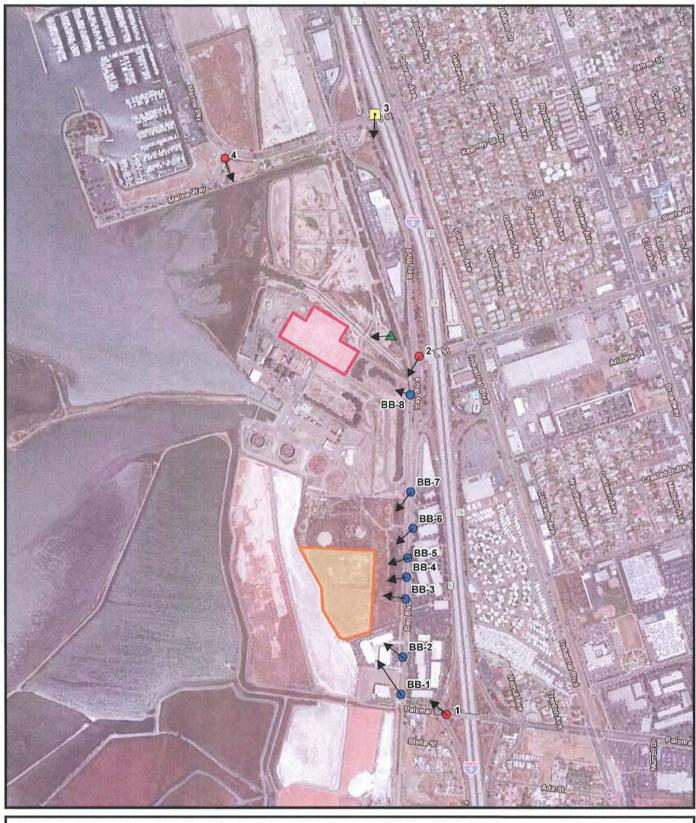
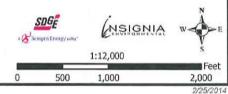


Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways

South Bay Substation Relocation Project

- Photos from Bay Boulevard (BB)
- Photos from LCP Major Gateway
- Photos from LCP View
- Simulated View of Existing Substation Site
- Existin

Proposed Bay Boulevard Substation Site Existing South Bay Substation



Photograph 1: Existing conditions from LCP "View" location on Palomar Street looking northwest toward the proposed substation site. (Note: Views of the relocation site and Bay are currently obstructed by industrial development; therefore the Project will not impact this View location.)



Photograph 2: Existing conditions from LCP "View" location on L Street and Bay Boulevard looking southwest toward the proposed substation. (Note: Views of the Bay will be improved with removal of lattice towers. The relocation site is not visible from this View location.).



Photograph 3: Existing conditions from LCP "Major Gateway" location on J Street and Bay Boulevard looking southwest toward the existing and proposed substation sites. (Note: Views of the Bay will be improved with demolition of the existing substation and removal of lattice towers. The relocation site is not visible from this Major Gateway).



Photograph 4: Existing conditions from LCP "View" location on Marina Parkway looking southwest toward the existing and proposed substation sites. (Note: Views of the Bay will be improved with demolition of the existing substation and removal of lattice towers. The relocation site is not visible from this View location.)



As documented previously, views from the southernmost "View" locations (Palomar Street east of Bay Boulevard and L Street and Bay Boulevard) have the highest potential to have a view of the proposed relocation site. Photographs 3 and 4 show the views from J Street and Bay Boulevard and from Marina Parkway; these views are heavily obstructed by vegetation and obscured by distance.

Photographs BB-1 through BB-7 depict the views toward the proposed site from Bay Boulevard at seven locations from south to north. These photographs demonstrate how views to the site are mostly obstructed by vegetation and structures.

Consistency with CCA Section 30251:

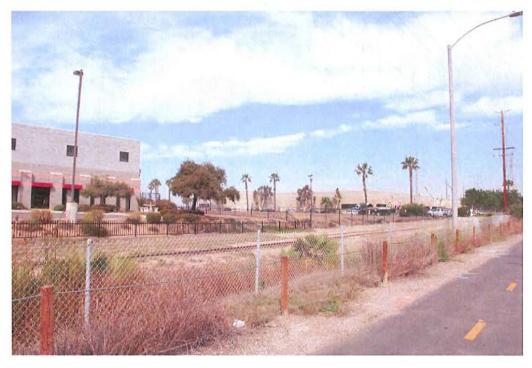
The Project has been sited and designed to protect views to and along the Bayfront. SDG&E proposes to demolish an existing substation that is located within the boundaries of the CVBMP and rebuild it within an industrially zoned parcel originally identified by the Unified Port District of San Diego (Port) and the City, and subsequently approved by the Port and California State Lands Commission. Both the existing and proposed substation sites are located along the Chula Vista Bayfront, along an existing electric transmission corridor located within an area that is currently visually degraded and zoned as General Industrial. The existing substation is immediately adjacent to the former site of the South Bay Power Plant. Neither site has been accessible to the public for decades. Per the CVBMP, the existing substation site will be redeveloped to include Park and RV Park uses, thereby creating public views where none exist today. In addition, the Project includes the removal of five existing steel lattice towers; existing overhead 230kV, 138kV, and 69kV lines; and other existing aboveground facilities along the Bayfront. Photograph BB-8 shows one of five existing steel lattice towers to be removed along Bay Boulevard. Therefore, demolition of the existing substation will restore and enhance public views.

Both the demolition and relocation sites are located on previously filled areas within the Port District, and the Project does not involve the alteration of any natural land forms.

Both the demolition and relocation sites are surrounded by industrial uses; however the areas including and surrounding the demolition site are located within the CVBMP and will be redeveloped to include Park, RV Park and other uses. Demolition of the existing substation will facilitate restoration and redevelopment within this area that is consistent with the certified LCP. Thus, demolition is visually compatible with the character of surrounding areas, and will significantly restore and enhance visual quality in a visually degraded industrial area. The relocation site is zoned and surrounded by industrial uses; therefore the Project is consistent and compatible with surrounding uses.

Current public views of the substation relocation site are illustrated by Photographs 1 through 4 and BB-1 through BB-7. These photographs show that views toward the new substation site are partially or completely obstructed by existing vegetation, structures and by existing industrial buildings located to the south of the site. Public views of the Bay through the relocation site are currently marginal and degraded. Nonetheless, public views in the area of the new substation would be minimally impacted by the new substation.

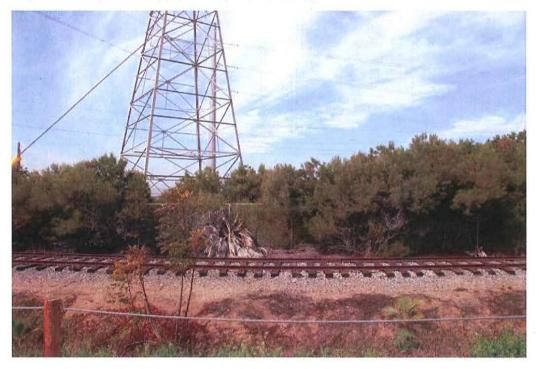
Photograph BB-1: Existing view toward the proposed substation site looking northwest from the west side of Bay Boulevard (north of Palomar Street).



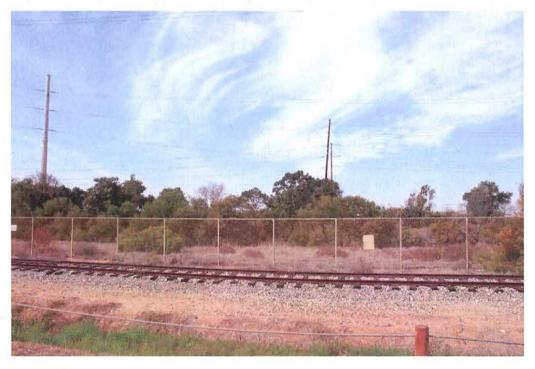
Photograph BB-2: Existing view toward the proposed substation site looking north-northwest from the west side of Bay Boulevard and the bike path (north of Palomar Street)



Photograph BB-3: Existing view toward the proposed substation site looking west from the west side of Bay Boulevard (south of approximately Naples Street).



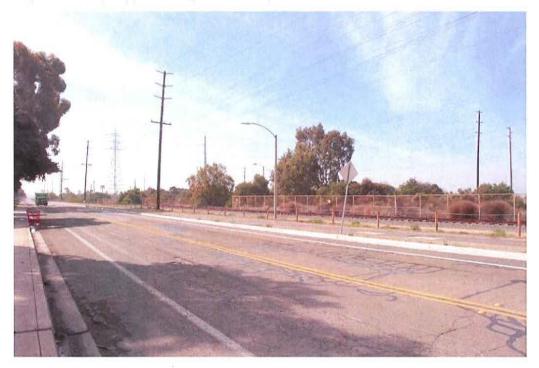
Photograph BB-4: Existing view toward the proposed substation site looking west from the west side of Bay Boulevard (north of approximately Naples Street).



Photograph BB-5: Existing view of the proposed substation site looking west from the west side of Bay Boulevard (south of approximately Crested Butte Street).

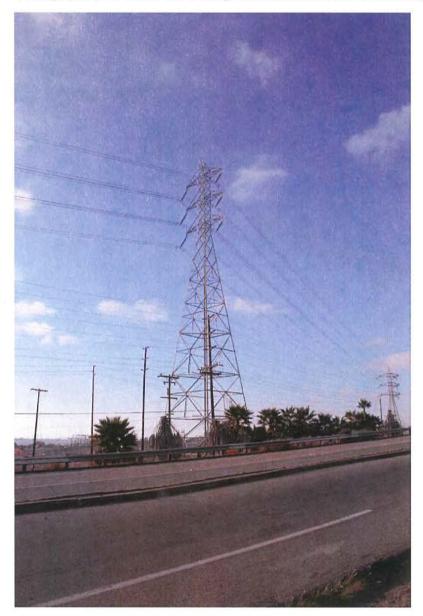


Photograph BB-6: Existing view of the proposed substation site looking southwest from the east side of Bay Boulevard (at approximately Moss Street).



Photograph BB-7: Existing view of the proposed substation site looking southwest from the west side of Bay Boulevard at the bike path (south of the power plant entrance).





Photograph BB-8: One of five existing steel lattice towers to be removed along Bay Boulevard.

Consistency with Chula Vista LCP

Table 1: Consistency with Chula Vista LCP Views Objectives and Policies lists the visual resource objectives and policies contained in the LCP and describes the Project's consistency with each objective and policy.

Table 1: Consistency with Chula Vista LCP Visual Resource Objectives and Policies

the Chula Vista Bayfront by providing opportunities for the enhancement of areas in the South Bay Substation would facilitate the redevelopment of the Chula Vista Bayfront by that are important to the bayfront area. The proposed substation site is within possible viewing distance of the four southernmost LCP View and Major Gateways locations, related infrastructure facilities within an existing industrially zoned parcel outside of the CVBMP. Relocation of the South Bay Substation would facilitate the redevelopment of approximately 3,800 feet of existing overhead 138 kV lines, and removal of an existing undergrounding activities included in the Project will substantially restore and enhance undergrounding of existing aboveground electric facilities located between the existing within the boundaries of the CVBMP and construction of a new electric substation and approximately 165-foot, 230 kV steel cable pole. Figure 3: Simulation of the Removal To implement this objective, the LCP establishes Major Gateways and View locations (Photographs 3 and 4). The proposed new construction will not adversely impact any existing vegetation and buildings (Photographs 1 and 2) or obscured due to distance which are shown in Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways". The views toward the substation, however, are obstructed by The Project would also include the removal and undergrounding of existing aboveground electric facilities located between the existing and proposed substation within an existing industrially zoned parcel outside of the CVBMP. Relocation of the existing substation site and by relocating the substation outside of the CVBMP area. and proposed substation sites. This would result in a net reduction of approximately visual simulation is depicted in Figure 2: Photo Locations From Bay Boulevard and of the Existing South Bay Substation shows some of the visual improvements that LCP "Views" and "Major Gateways". Undergrounding of existing transmission lines degraded, such as the former South Bay Power Plant (SBPP) and LNG sites. The eight 69 kV wood poles, removal of three 138 kV wood poles (one existing 3-wood within the boundaries of the CVBMP and construction of a new electric substation The Project involves demolition of an existing electric substation currently located would be achieved with the Project. The location of the photograph taken for this The Project involves demolition of an existing electric substation currently located cable pole structure), removal of five steel lattice towers, the undergrounding of would contribute to the restoration and enhancement of visual quality along the View or Major Gateways identified in the LCP. By contrast, the demolition and Project would also include the removal of existing aboveground structures and providing opportunities for the enhancement of areas that are currently visually views from Major Gateway and View locations and along Bay Boulevard. Analysis Chula Vista LCP Visual Resource Objectives/Policies bayfront. Consistent? Yes Yes Policy VW.1.A: Public views shall be protected and provided Views from the Freeway and Major Entry. Development shall provide an attractive view onto the site and establish a visual provision of important views to, from, and within the project relationship with San Diego Bay, marshes, and bay-related **Objective VW.1:** Plan and develop the Bayfront to ensure from freeways, major roads, Bayfront perimeter. Policies regarding each of these categories are provided below. **Objective/Policy** area.

Chula Vis	sta LCP Visual	Chula Vista LCP Visual Resource Objectives/Policies
Objective/Policy	Consistent?	Analysis
development. High-rise structures shall be oriented to minimize view obstruction. <u>Views from Roadways within the Site</u> (particularly from Bay Boulevard and Marina Parkway to the marshlands, San Diego Bay, parks, and other bay-related development.) Development and activity sites shall preserve a sense of proximity to the bay and marshlands. <u>Views from the Perimeters of the Bayfront Outward</u> . This view is primarily a pedestrian-oriented stationary view and more sustainable. These views will be experienced from various parts of open space and pathway system locations and will enable persons to renew visual contact at close range with San Diego Bay and marshlands. Some close-range pedestrian views may be blocked to protect sensitive species in the National Wildlife Refuge. High-rise Development Vistas. The limited high-rise development with in the LCP Planning Area shall maximize the panoramic view opportunities created with increased height.		sites. This would result in a net reduction of approximately sight 69 kV wood poles, removal of three 138 kV wood poles (one existing 3-wood cable pole structure), removal of three steel lattice towers, the undergrounding of approximately 165-foot, 230 kV steel cable pole. Although some new facilities would need to be constructed— including one new approximately 121-foot, 230 kV steel cable pole and one new approximately 165-foot, 138 kV isseel cable pole—the re-routing and undergrounding of existing facilities would result in a net reduction of towerhead facilities within SDG&E's electric transmission corridor west of Bay Boulevard. Figure 3: Simulation of the improvements that would be achieved with the Project. The location of the photograph improvements that would be achieved with the Project. The location of the photograph improvements that would be achieved with the Project would remove existing and undergrounding of electric transmission corridor. Views. and "Major Gateways. Because these existing and improvements that would be achieved with the Project would remove existing aboueward and LCP -Views. and "Major Gateways. Because these existing and improvements that would be achieved with the Project would remove existing aboueward and LCP -Views. and "Major Gateways. Because these existing and enhancing visual quality and the Project would remove existing aboverhead facilities are visually compatible with the components of these existing overhead facilities. The Project would remove existing aboveground electric infrastructure and open up views toward the Day. Thereby improving the area's visual character, particular, the Project would remove existing aboveground electric infrastructure and open up views toward the protograph BB-1, is potential views from major public roadways toward the new substation from this Major Gateway is obscured by vegetation and distance, as shown in Photograph BB-1, is obstructed by existing vestore and enhance whead the intersection of Palomar Street and Ba
Policy VW.1.B : Public views to the shoreline as well as to other scenic resources from major public viewpoints, as identified in Exhibit 10 shall be protected. Development that may affect an existing or potential public view shall be designed and sited in a manner so as to preserve or enhance designated view	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. As part of the Project, relocation of the South Bay Substation would facilitate the redevelopment of the Chula Vista bayfront by providing opportunities for the enhancement of areas that are currently visually degraded, such as the former SBPP and LNG sites.

Objective/Policy Con opportunities. Street trees and vegetation shall be chosen and sited so as not to block views upon maturity. Example to block views upon maturity.		
opportunities. Street trees and vegetation shall be chosen and sited so as not to block views upon maturity.	Consistent?	<u>Analysis</u>
1		Therefore, new public views will be created where none currently exist. Furthermore, the Project would include the removal and undergrounding of existing aboveground electric facilities, which would result in a net reduction of approximately eight 69 kV wood poles. removal of three 138 kV wood poles (one existing 3-wood cable pole
		structure), removal of five steel lattice towers, the undergrounding of approximately 3,800 feet of existing overhead 138 kV lines, and removal of an existing approximately
		165-foot, 230 kV steel cable pole. Although some new facilities would need to be constructed—including one new approximately 121-foot, 230 kV steel pole and one new approximately 165-foot 138 kV steel cable pole—the re-routing and
	ų	undergrounding of existing transmission facilities would result in a net reduction of overhead facilities within SDG&E's electric transmission corridor west of Bay
		Boulevard. Figure 3: Simulation of the Removal of the Existing South Bay Substation shows some of the visual improvements that would be achieved with the Project. The
		location of the photograph taken for this visual simulation is depicted in Figure Z: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways". Because theory original domination and LCP university and "Major Gateways".
Ŷ		trese existing electrical facilities are located within an existing SDGGE substation and transmission corridor, and within an industrially zoned parcel, these facilities are visually compatible with the character of surrounding areas. Nonetheless the Project
		would remove extensive components of these existing overhead facilities, thereby substantially restoring and enhancing visual quality in these visually degraded
		industrial areas. As shown in Photographs 1 through 4, due to the presence of existing
		vegeration and subctitues, as well as a rotation nearly a mile north the nearly atomic the near subctitues is not visible from designated View locations or Major Catemore in Evelish 10 which is also designated in Figure 3: Photo I ocatione From Bay
		Cateways in Exhibit 10, which is and depreted in 1 gard 2.1 more boarding 1 roll and Boulevard and LCP "Kews" and "Major Gateways". By contrast, the demolition and indomention periodicities included in the Disciplet will exhetned in restore and enhance
		vincergrounding advices included in the right will substantianty restore and emission views from Major Gateway and View locations and along Bay Boulevard.
	Å	The Project incorporates landscaping, as described in APM-AES-01, which would partially screen views of the new facility and help integrate its appearance with the
		bayshore setting. In addition, the color of the wall surrounding the Bay Boulevard Substation would be chosen to blend with existing site features (i.e., a dull grey, light
		brown, or dull green), as described in APM-AES-02 in the Final EIR. The removal of the existing substation would open in views toward the have and result in improving the
		ure existing substantion would open up views toward ure bag and result in improving one area's visual character. This particular improvement would be somewhat visible from Marina Darkwaw a Chity-destinated screenic roadway. I andecaning is also included as
		mainter automoty, a ony dealgrated accurate because because a management of the Project. The landscape plan would provide partially screened views of the substation site and nonserving nodes the project accurate set of the project.
	Ŧ	The landscaping would also partially screen views from the office park located south of the pronosed site. I andscaping would include informal clusters of shrins and these
		that would be installed outside of the eastern wall of the proposed substation and along

	sta LCP Visual	Chula Vista LCP Visual Resource Objectives/Policies
Objective/Policy	Consistent?	Analysis
		the entry driveway in order to provide screening. Small native trees would also be used to extend plantings at the southern end of the mound to the east of the facility. Small trees would also line the entry drive, as shown in Figure 12: Preliminary Landscape Concept in Attachment B: Figures of the Coastal Development Permit application package that was submitted to the CCC.
Policy VW.1.C: The impacts of proposed development on existing public views of scenic resources shall be assessed by the Port or City prior to approval of proposed development or redevelopment to preserve the existing character of the area.	Yes	The CPUC has exclusive jurisdiction over the siting, design, and construction of the Project, the Port has agreed to exchange land in order to relocate the substation as proposed, and the City has consented to consolidated review by the CCC of the coastal development permit for the Project, which includes an assessment of the Project's consistency with Chapter 3 of the Coastal Act. The Project's consistency with the City's LCP, which is assessed within this memorandum and other application materials, is under consideration by the CCC to the extent the LCP applies as "guidance". The impact of the proposed development on existing public views of scenic resources would be that the proposed demolition and removal of existing facilities will create public views of scenic resources where none exist. At the new substation site, existing public views of scenic resources are non-existent or marginal at best. Moreover, the appearance of the Project would be consistent, which includes existing industrial development.
Policy VW.1.D: Buildings and structures shall be sited to provide unobstructed public view corridors from the nearest scenic highway or public view corridor road. These criteria may be modified when necessary to mitigate other overriding environmental considerations such as protection of habitat or wildlife corridors.	Se Xe	SR-75 along Silver Strand Boulevard—the closest designated State Scenic Highway— is located approximately 1.7 miles to the west of the Project site across San Diego Bay. Eastward views from SR-75 toward the Project are long and sporadic, thereby making the Project not clearly visible. Nonetheless, the Project is on the other side of the Bay from this scenic highway and would not obstruct or otherwise affect scenic resources from within this or any other State Scenic Highway. The City's General Plan designates Marina Parkway north of the existing substation as a scenic roadway. Although the southern edge of Marina Parkway, located west of L5, is extensively landscaped with shrubs and mature trees, views from the roadway currently include glimpses of industrial facilities, such as the existing South Bay currently include glimpses of industrial facilities, such as the existing South Bay sand result in a beneficial impact. The Project would not obstruct or otherwise affect public view corridors from Marina Parkway.

Chula Vista LCP Visual Resource Objectives/Policies	<u>Σ</u> Consistent? <u>Analysis</u>	The proposed relocation site does not contain any unobstructed public view corridors to the Bay. Current photographs show that views through the substation relocation site are partially or completely obstructed by existing vegetation, structures and by existing industrial buildings located to the south of the site. Public views of the Bay through the relocation site are currently marginal and degraded. Nonetheless, public views in the area of the new substation would be minimally impacted by the new substation.	Policy VW.1.E: Public views of the Bay and access along the view of the CVBMP and construction of a new electric substation and within the boundaries of the CVBMP and construction are electric substation and related infrastructure facilities within an existing industrially zoned parcel. One of SDG&E's fundamental objectives of the Project is to relocate the South Bay Substation to facilitate the nedevelopment, greater opportunities for the enhancement of areas that are currently visually degraded, such as the existing substation site, would result along the boundation is the two districts and enabling visually degraded, such as the existing substation site, would result along the bould stricts and enabling visually degraded, such as the existing substation show some of the Existing Substation show some of the Sumation is depicted in Figure 2. Photo Locations to the protein the Bay and more is proposed to be access along the wordistricts and enabling visual contact at close range with the Bay and marshlands.	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. The demolition site would be redeveloped to create public viewing areas. The substation relocation site would be redeveloped to create public viewing areas. The substation relocation site would be redeveloped to create public viewing areas. The substation relocation major public views of scenic resources or views of other public viewing areas. The Project would perimeter of the entire would be redeveloped to create public views of scenic resources or views of other public viewing areas. The Project would perimeter of the entire would be an approximately 10-foot-tall major public views of scenic resources or views of other public views of scenic resources or views of other public views of scenic resources or views of other public views of scenic resources or views of other public views of scenic resources or views of the new relating areas. The Project would be negative an approximately 10-foot-tall major public views of scenic resources or views of the new relating areas. The Project would be negative and the negative and the negative and the negative and result in the surrounding industrial setting. The removal of the existing substation and other existing aboveground facilities would open up views toward the bay and result in improving the area's visual character. This particular improvement would be somewhat visible from Marina Parkway, a City-designated scenic roadway, as well as from View
	Objective/Policy		Policy VW.1.E: Public views of t waterfront shall be provided via a promenade. This pedestrian pat Signature Park, and the pathway District, ultimately linking the two to experience visual contact at cl marshlands	Policy VW.1.F. Fences, walls, at major public views of scenic reso viewing areas.

Chula V	ista LCP Visual	Chula Vista LCP Visual Resource Objectives/Policies
<u>Objective/Policy</u>	Consistent?	Analysis
Policy VW.1.6: The entry to the Bayfront from "F" Street shall emphasize the view down "F" Street to the bay as this shall be a major pedestrian access point to the "F & G" Street Marsh.	NA	The Project would not affect the views of F and G Streets or the Bayfront entry.
Policy VW.1.H: Firm architectural edges shall be used to emphasize various view corridors along "H" Street, "J" Street, and Marina Parkway. Firm edges are identified by an abrupt and usually linear change from building mass to open area. These edges shall help to define an urban environment	NA	The Project is not located along or adjacent to H Street, J Street, or Marina Parkway and, therefore, the use of firm edges would not be applicable.
Policy VW.1.1: The panoramic view of the bay shall be emphasized at the "E" Street gateway.	NA	The Project would not affect the panoramic view of the bay at the E Street gateway, as it is located over two miles away and would not be visible from the E Street gateway.
Policy VW.1.J. A dense canopy of trees on both sides of the "E" Street Entry from east of I-5 shall be provided to focus views on the immediate landscape westerly along the street toward the water's edge. The street trees shall be closely spaced and in a regular pattern to achieve this objective. However, plant species and spacing shall be selected and designed to protect and enhance public views to the bay. Immediately west of the freeway, future buildings on the north side should be sited and designed to reinforce the sense of entry created by the street trees and existing building mass of the restaurant on the south side.	NA	The Project would not affect the planting requirements for the E Street entry.
Policy VW.1.K: Building setbacks and coordinated signage shall be provided along Marina Parkway (a scenic roadway; City General Plan).	NA	The Project is not located on Marina Parkway.
Policy VW.1.L: Landscaping shall be planted along Marina Parkway to frame and enhance this scenic corridor, as well as on "E" Street and Bay Boulevard, adjacent to the project site.	NA	The Project is not located on Marina Parkway.
Policy VW.1.M: Public views of the Bay from "D" Street, "E" Street, "F" Street, "L" Street, and Palomar Street corridors shall be preserved and public views of the Bay would be created from the "H" Street corridor.	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. Views from D Street, E Street, and F Street would not be affected by the Project. There is no potential to impact views from L Street and Palomar Street due to the presence of existing vegetation and buildings that currently block views of the Bay from these locations, as shown in Photographs 1 and 2. The Project includes the undergrounding of existing and vegorund facilities located between the existing and proposed substation of existing subject would result in a net reduction of overhead facilities within SDG&F's

Chula Vista LCP Visual Resource Objectives/Policies	Consistent?	electric transmission corridor west of Bay Boulevard. Because the Project would remove extensive components of these existing overhead facilities, it would enhance the visual quality in these currently visually degraded industrial areas. In addition, by relocating the existing South Bay Substation to facilitate redevelopment along the bayfront, greater opportunities for the enhancement of areas that are currently visually degraded, such as the former SBPP and LNG sites, would result along the bayfront. Figure 3: Simulation of the Removal of the Existing South Bay Substation shows some of the visual improvements that would be achieved with the Project. The location of the photograph taken for this visual simulation is depicted in Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways".	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. The Project will not impact views from E street and F Street due to distance from the proposed site. Views from Bay Boulevard between Palomar Street and L Street are shown in Photographs BB-1 through BB-7. As shown in the photographs, views from Bay Boulevard along the Project site are currently non-existent or marginal and would not be significantly altered by the new substation because of the presence of existing vegetation, structures and buildings along the west side of Bay Boulevard, as well as the setback of approximately 300 feet from Bay Boulevard. One of SDG&E's fundamental objectives of the Project is to relocate the South Bay Substation to facilitate the redevelopment of the Chula Vista Bayfront. By facilitating this redevelopment, greater opportunities for the enhancement of areas that are currently visually degraded and not publically accessible, such as the existing substation site and former SBPP and LNG sites, would result along the bayfront. In addition, the Project includes the removal of extensive aboveground facilities visible along Bay Boulevard, including five existing steel lattice towers. By removing these facilities, the Project will restore and enhance views along Bay Boulevard and create opportunities for the relevelopment is proposed in these locations.	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. Siting of the Project took into account the proposed site's proximity to the existing transmission line ves connections. Transmission lines in the area were built with the existing South Bay Substation as a hub, and the proposed site is located adjacent to SDG&E's transmission lines. By constructing the proposed substation near the existing South Bay transmission lines. SDG&E would continue to meet projected load in a costeffictive manner. One of SDG&E's fundamental objectives of the Project is to relocate
Chula Vist	<u>Objective/Policy</u>		Policy VW.1.N : There are existing public bay views from Bay Boulevard between "E" Street and "F" Street, and between "L" Street and Palomar Street. At the time development is proposed in these locations, the City shall identify public view corridors that will ensure public views of the bay from Bay Boulevard are protected and preserved. The City shall coordinate with the Port District to protect public views from development on parcels within the Port District's jurisdiction.	 Objective VW.2: Locate buildings in a manner that enhances views. The following view types have been identified. Panoramic views - Typically views in the far distance (bay views). Framed views- Views between landscape elements, natural forms, or architectural elements; usually characterized as a view corridors. Axial Views- Views on axis sometimes with a focal element, usually architectural and vertically oriented.

Chula V	ista LCP Visual	Chula Vista LCP Visual Resource Objectives/Policies
Objective/Policy	Consistent?	Analysis
		the South Bay Substation to facilitate the redevelopment of the Chula Vista Bayfront. By facilitating this redevelopment, greater opportunities for the enhancement of areas that are currently visually degraded, such as the existing substation site, would result along the bayfront. In addition, the Project includes the undergrounding of existing aboveground electric facilities located between the existing and proposed substation sites. The Project would result in a net reduction of overhead facilities within SDG&E's electric transmission corridor west of Bay Boulevard. Therefore, the Project would remove extensive components of these existing overhead facilities, thereby substantially restoring and enhancing visual quality in these industrial areas. Figure 3: Simulation of the Removal of the Existing South Bay Substation shows some of the visual improvements that would be achieved with the Project. The location of the photograph taken for this visual simulation is depicted in Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways".
		Close-up views toward the proposed substation site from bay bourevard, shown in Photographs BB-1 through BB-7, are largely obstructed by existing vegetation and buildings. Panoramic views from the LCP's identified Views and Major Gateways, as shown in Figure 2: Photo Locations From Bay Boulevard and LCP "Views" and "Major Gateways", including the Major Gateway at J Street and Bay Boulevard and Marina Parkway, would not be adversely impacted by the new substation due to the distance from these points and existing vegetation that is present. To the contrary, demolition of the existing substation and aboveground facilities will restore and enhance panoramic views from these View and Major Gateway locations.
Objective VW.3: Locate buildings in a manner which enhances views and minimizes impacts to adjacent wildlife habitat area.	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel that would be visually compatible with the character of the surrounding area. By relocating the existing South Bay Substation to the proposed Bay Boulevard Substation site, the substation would be located approximately 0.5 mile farther south from the Sweetwater Marsh National Wildlife Refuge.
Policy VW.3.A: Views shall be locally focused within the urban areas to enhance the sense of arrival at the center of urban activity. Special attention should be given to plazas, architectural elements, plantings, and other landscape features to reinforce the area as a focal point.	AN	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation within an existing industrially zoned parcel outside of the boundaries of the CVBMP. The Project would allow the existing substation site, which is within the boundaries of the CVBMP and located closer to the center of urban activity, to be redeveloped for other uses including park and RV park uses. Views will be created at this location where none currently exist. Construction of the new substation would not affect the reinforcement of focal points within urban areas, as the new substation would be located outside of the boundaries of the CVBMP at the southern end of the bayfront, away from the center of urban activity.

Chula V	/ista LCP Visual	Chula Vista LCP Visual Resource Objectives/Policies
Objective/Policy	Consistent?	Analysis
Policy VW.3.B : Panoramic public views across park and open space areas to San Diego Bay shall be protected and provided. Major massing of trees shall be avoided along this portion of the shoreline to protect the view. Plant species and spacing shall be selected and designed to protect and enhance public views.	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. Key views identified in the LCP would not be affected by the new substation, as shown in Photographs 1 through 4, due to existing vegetation and buildings as well as distance to the proposed substation site. As shown on Exhibit 8 of the LUP Map, no parks or open space areas are located within the immediate vicinity of the Project. However, the removal of the existing substation would create park and RV park uses where no public access currently exists. In addition, the Project would remove existing aboveground electric infrastructure and open up views toward the bay, thereby improving the area's visual character, particularly the westward-facing views from the L
Objective VW.4: Signs should be sensitively placed throughout the plan area to ensure the protection of the visual resources.	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. As part of the Project, warning signs would be posted along the masonry wall and at gated entrances in accordance with federal, state, and local safety regulations. However, the substation site would not be publicly accessible and the signs would not affect visual resources in the surrounding industrial area.
Policy VW.4.A: Signs shall be designed and located to minimize impacts to visual resources. Signs approved as part of commercial development shall be incorporated into the design of the project. Permitted monument signs shall not exceed eight feet in height. Free-standing pole or roof signs are prohibited.	Yes	The Project involves demolition of an existing electric substation currently located within the boundaries of the CVBMP and construction of a new electric substation and related infrastructure facilities within an existing industrially zoned parcel. As part of the Project, warning signs would be posted along the masonry wall and at gated entrances in accordance with federal, state, and local safety regulations. However, the substation site would not be publicly accessible and the signs would not affect visual resources in the surrounding industrial area.
Policy VW.4.B: Placement of signs other than traffic or public safety signs that obstruct views to the Bay, parks, or other scenic areas from public viewing areas, and scenic roads shall be prohibited.	Yes	The substation site would not be publicly accessible and all Project-related signs would be within the perimeter of the substation wall and would not obstruct views of the bay, parks, or other scenic areas.

Figure 3: Simulation of the Removal of the Existing South Bay Substation



Existing South Bay Substation



Visual Simulation after Demolition and Removal

Conclusion:

The Project is consistent with the CCA and the LCP. The Project is compatible and consistent with the existing character of the area, which is dominated by industrial uses, existing utility facilities, and major transportation facilities. As the City and the Port plan for the future of the Bayfront area through the implementation of the LCP, uses would slowly transition from the existing to the mixed use and recreationally oriented development envisioned by the LCP. The relocation of the Utility lines and removal of poles and towers, would help to accommodate the vision and redevelopment in the area. Furthermore, the demolition of the existing substation and removal of existing facilities will significantly restore and enhance visual resources, including views from LCP-designated "View" and "Major Gateway" locations, as well as from Bay Boulevard, the major roadway in the area.

The construction of the proposed new substation will not offset the benefits associated with the demolition and undergrounding included in the Project. Due to the existing vegetation and industrial buildings in the vicinity of the proposed site for the new substation, the new substation would not obscure existing views of the Bay. Furthermore, Views and Major Gateways established by the City's LCP would not be visually affected by the Project. Similarly, views from Bay Boulevard, the major public roadway in the area, are blocked by existing vegetation and buildings; therefore, they would be negligibly affected. As such, the Project is consistent with the CCA and City's LCP.

ATTACHMENT B:

Letter from CAISO to the CCC dated January 16, 2014

California Independent System Operato: Corporation



Via e-mail

January 16, 2014

Ms. Alison Dettmer Deputy Director California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 942015-2219

adettmer@coastal.ca.gov

Re: Need for the Bay Boulevard 230/69 kV Substation Project

Dear Ms. Dettmer:

This letter is to express the California Independent System Operator's (ISO) support for the Bay Boulevard 230/69kV substation project in the City of Chula Vista and to reiterate the urgent need for this project. This project was approved by the ISO Board of Governors in February, 2010, based on a recommendation from the ISO's technical staff (see the attached memo from ISO staff dated February 3, 2010).

The ISO has the responsibility for ensuring the safe, reliable, and economic operation of the bulk power system serving California. In the ISO's view, the basic reliability need for this project has not changed. In fact, this project has become even more critical with the passage of time, and failure to complete this project in a timely fashion may have the risk significant negative impacts for the transmission system and ratepayers. These potential impacts fall into several categories:

Reliability – The South Bay Power Plant (SBPP), retired at the end of 2010, provided not just a significant amount of megawatts (MW) to the South Bay region, but also provided significant voltage and reactive power (MVAR) support to the 69 kV and 138 kV systems serving the region. This new Bay Boulevard 230/69kV substation project was a key component in the long term reliable supply to the area with the retirement of the South Bay Power plant, and we are well past the targeted in-service date of June, 2012.

Ms. Alison Dettmer January 16, 2014 Page 2

California Independent System Operator Corporation

Economics – As discussed extensively by SDG&E's technical staff in testimony before the California Public Utilities Commission, this project is a critical component of upgrading the 230 kV bulk power system in and around San Diego to accommodate new efficient conventional generation as well as new wind and solar generation. Without the Bay Boulevard substation, we are facing increased risk of uneconomic redispatch of thermal generation in the San Diego area and the possible reduction in allowable dispatch of renewable generation in the Imperial Valley.

Policy – The Bay Boulevard substation helps address several policy goals. As stated above, it is a critical component of accommodating renewable generation, for the purposes of meeting the 33% Renewable Portfolio Standard (RPS) goal by 2020.

The ISO understands that the Coastal Commission is considering whether the substation design can be revisited. As any material design changes would require CPUC approval, we strongly discourage any changes to the project design at this late stage, which would unduly delay the project. In light of the delays experienced in securing CPUC approval of the Bay Boulevard substation project, it is not reasonable to revisit the approved design of the substation absent a compelling reason that justifies the increased reliability risks and costs to ratepayers.

Please consider this a request for your support to accommodate the construction of the Bay Boulevard substation as soon as possible and as approved by the CPUC.

Sincerely,

Neil Millar Executive Director, Infrastructure Development

cc: Will Speer (WSpeer@semprautilities.com) John Jontry (jjontry@semprautilities.com)

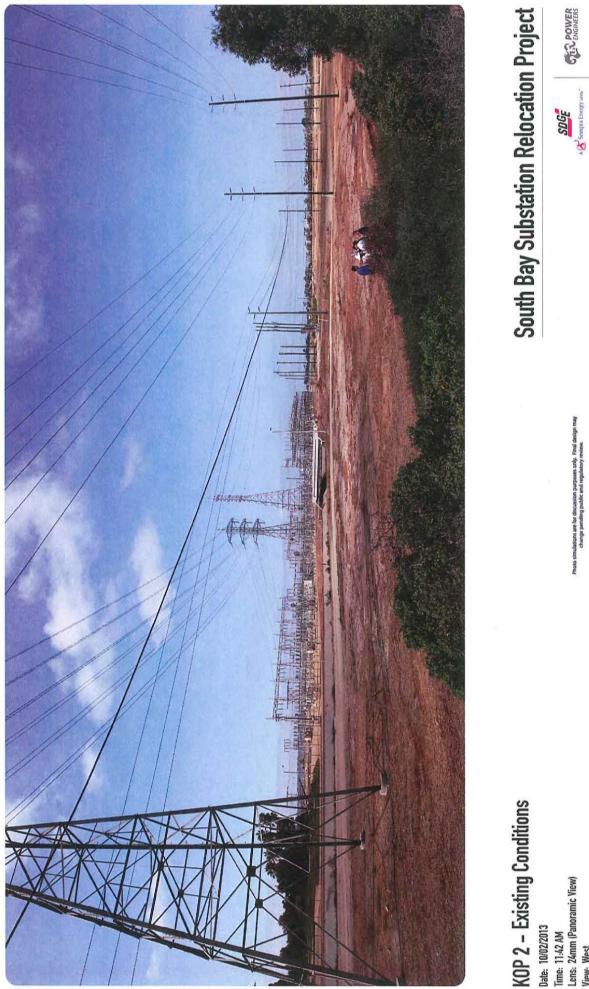
Attachments:



www.caiso.com

ATTACHMENT C:

Figures and Simulations



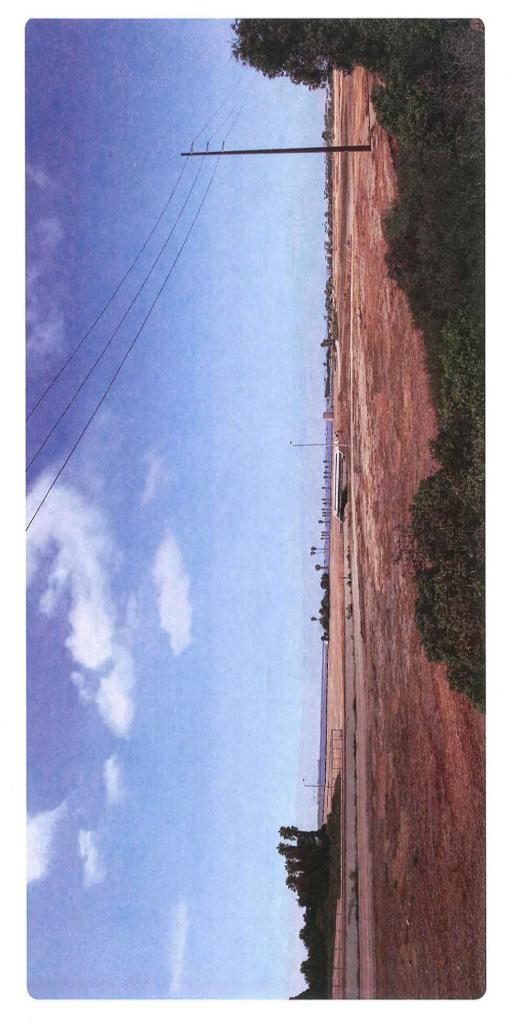
Date: 10/02/2013 Time: 11:42 AM Lens: 24mm (Panoramic View) View: West

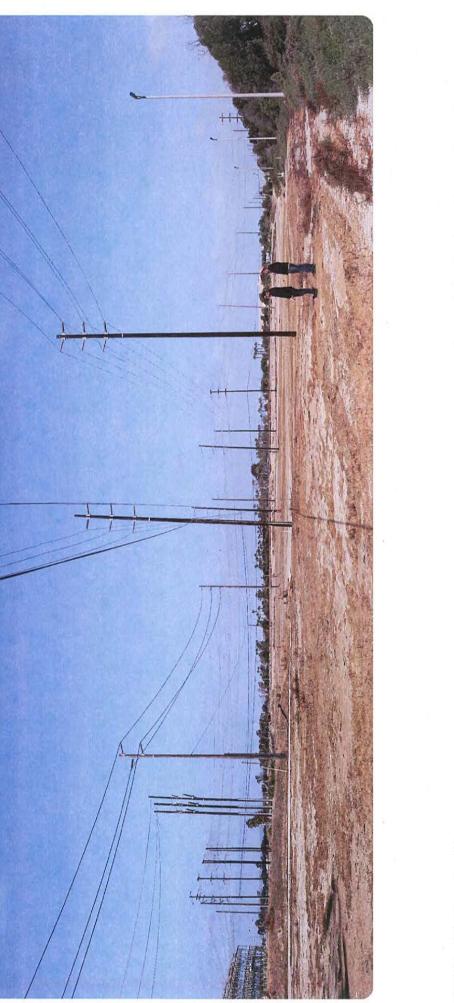
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Photo stimulations are for discussion purposes only. Find design may change pending public and regulatory review.

KOP 2 – Proposed Project Date: 10/02/2013 Time: 11:42 AM Lens: 24mm (Panoramic View) View: West





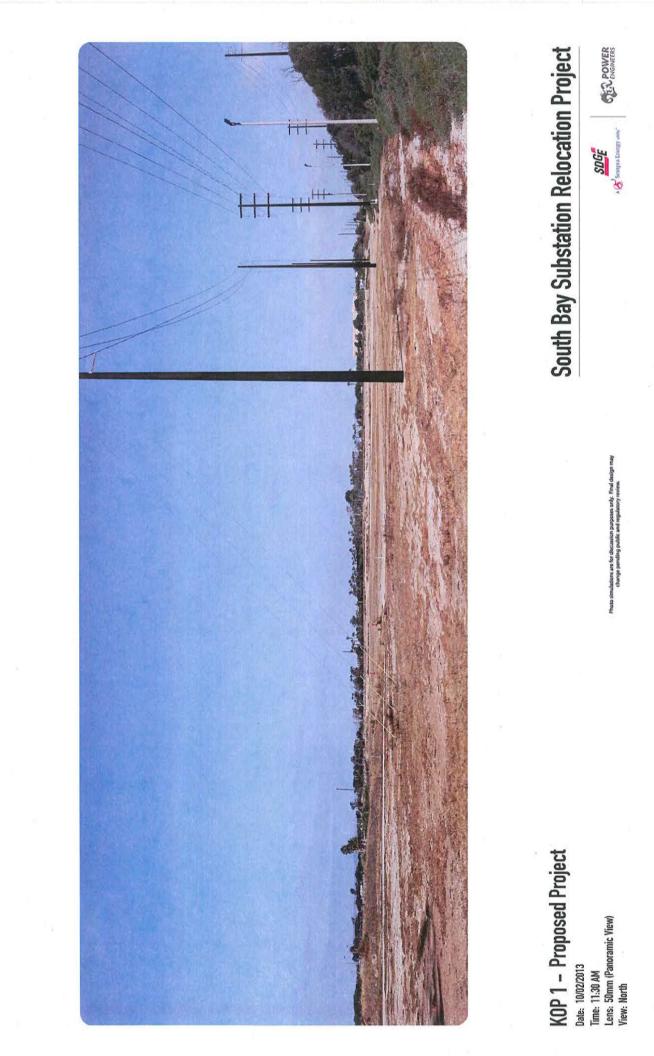
KOP 1 – Existing Conditions Date: 10/02/2013 Time: 11:30 AM Lens: 50mm (Panoramic View) View: North

Photo simulations are for discussion purposes anly. Final design may change pending public and regulatory review.

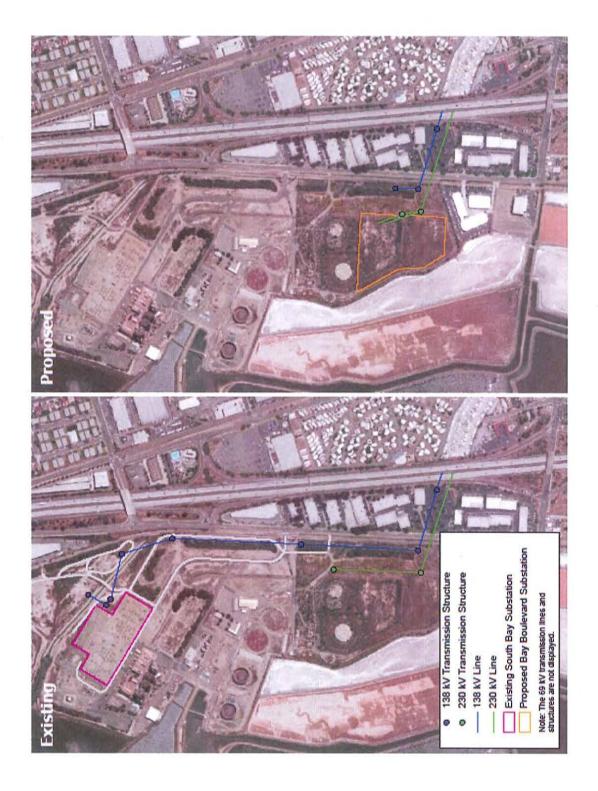
South Bay Substation Relocation Project

CALL ENGINEERS

SDGF A Sempra Energy =



230kV and 138kV Lines





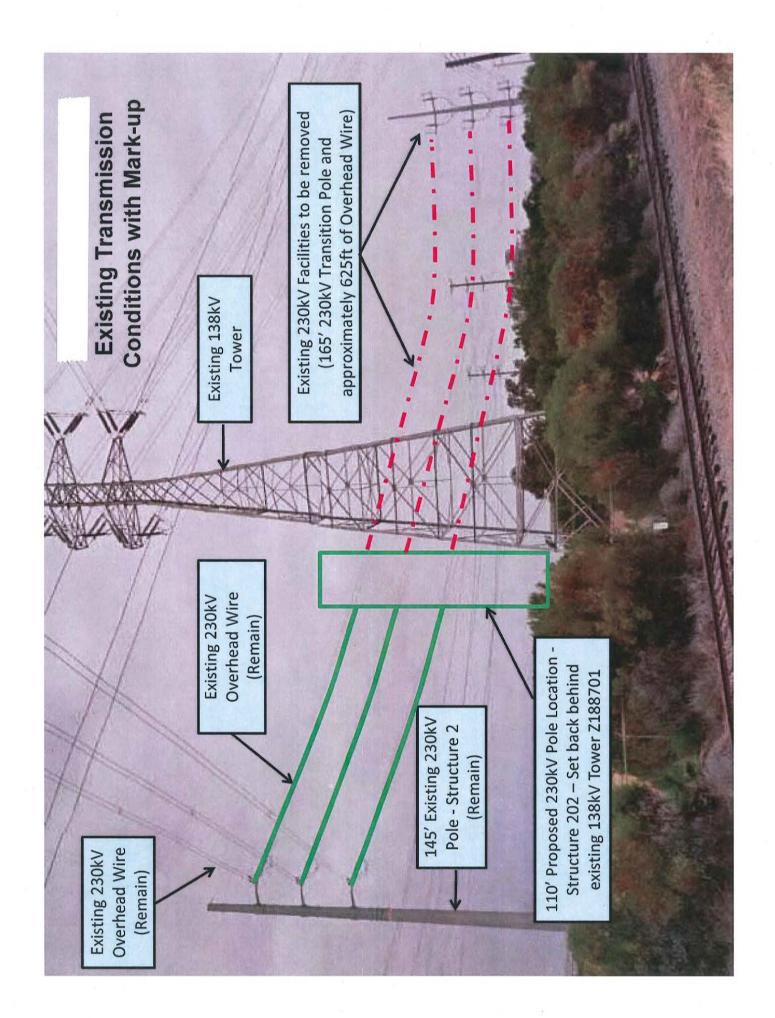
South Bay Substation Relocation Project

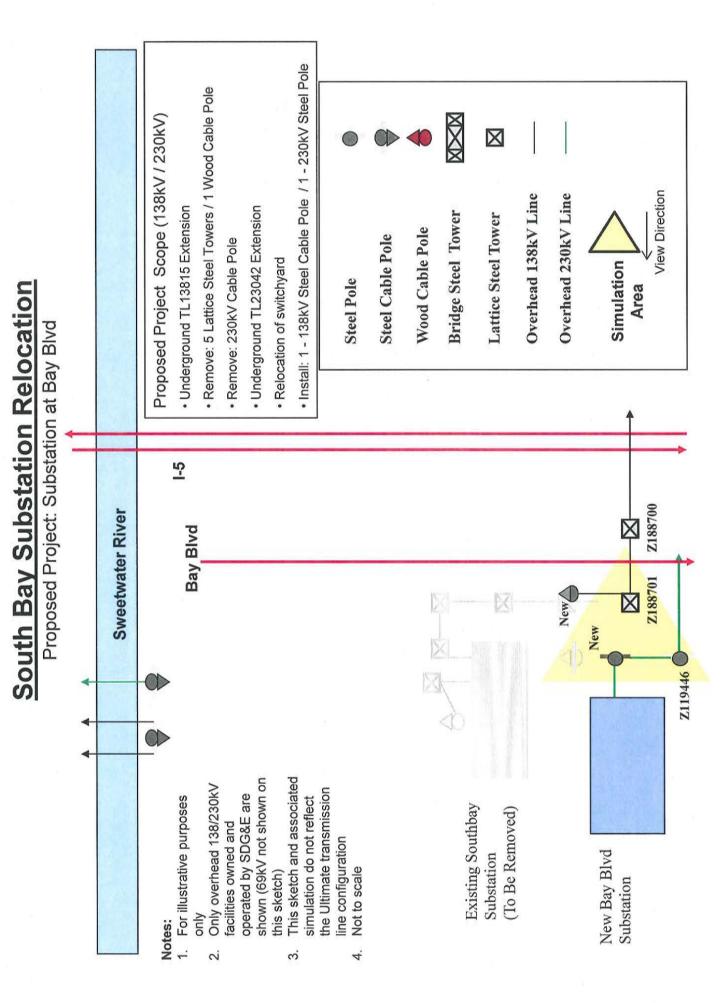




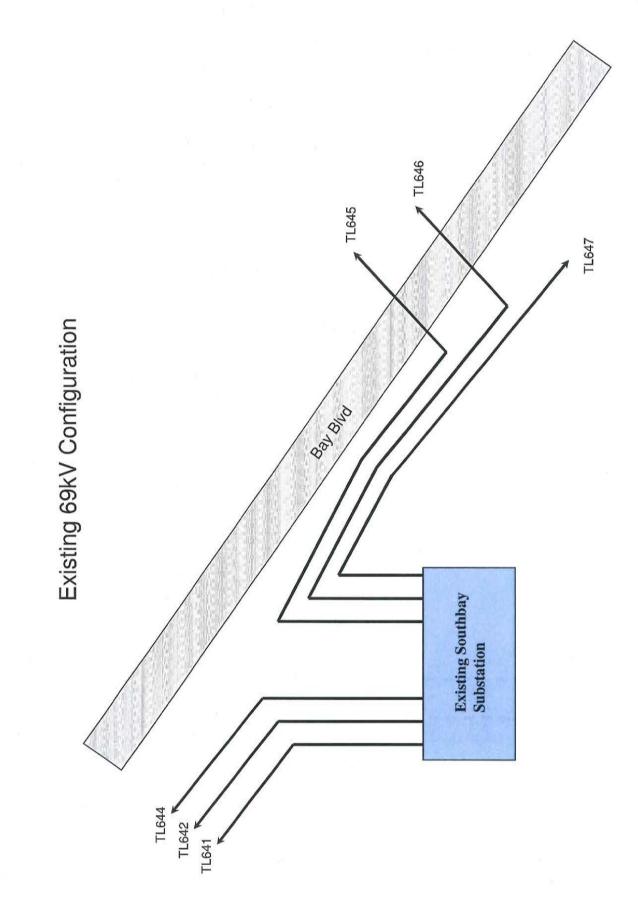
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South Bay Substation Relocation Project

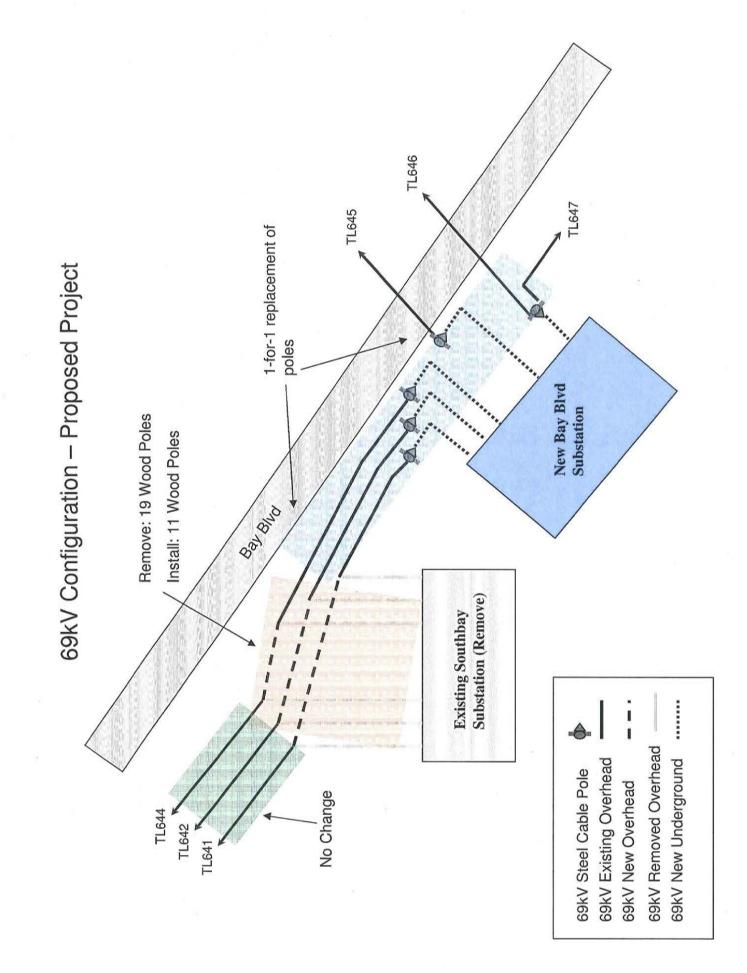




69kV Lines



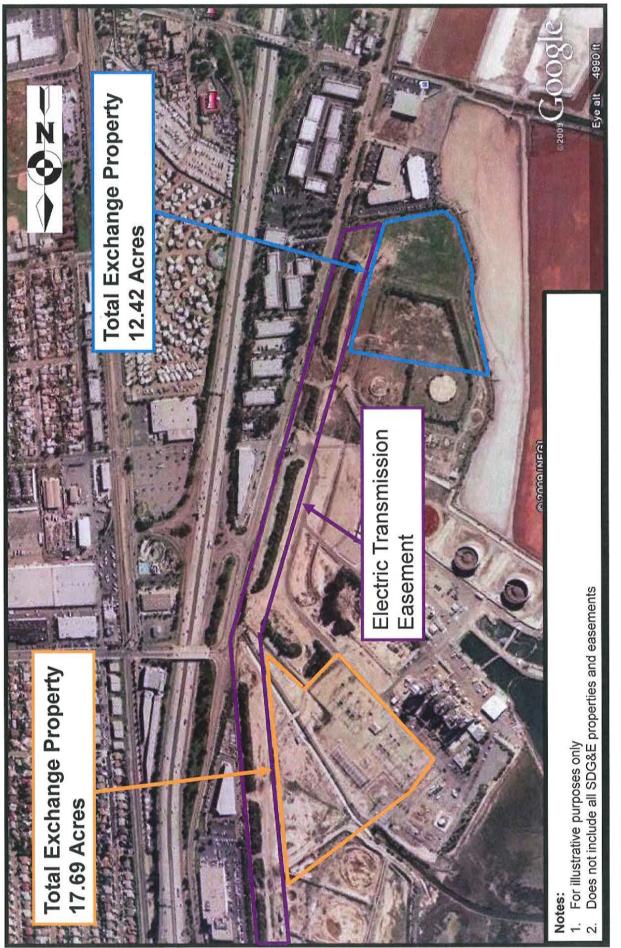
69kV Existing Overhead



Land Area Comparison:

Existing Site: 17.69 acres

Relocation Site: 12.42 acres



RESOLUTION NO. 2014-024

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA IN SUPPORT OF THE RELOCATION OF THE SDG&E BAYFRONT SUBSTATION INCLUDING THE BAYFRONT ENHANCEMENT FUND ALTERNATIVE AND CONSIDERATION OF ADDITIONAL UNDERGROUNDING OF UTILITY LINES AND OTHER MEASURES TO ADDRESS VISUAL IMPACTS CONSISTENT WITH THE CITY'S CERTIFIED LOCAL COASTAL PROGRAM AND THE COASTAL ACT

WHEREAS, on October 12, 2004, the City of Chula Vista ("City") entered into a Memorandum of Understanding ("MOU") with San Diego Gas & Electric ("SDG&E") to facilitate, among other things, the relocation of the existing SDG&E Bayfront 138kV substation ("Substation"), and the undergrounding of existing and future utility transmission and distribution lines and towers along the Bayfront; and

WHEREAS on April 25, 2006, the City of Chula Vista ("City") created an undergrounding district within the Chula Vista Bayfront to underground the 138 kV electrical transmission lines and supporting structures including Tower 188701 consistent with its Bayfront Master Plan efforts and the "MOU" entered into with San Diego Gas & Electric ("SDG&E"); and

WHEREAS, on January 6, 2010, SDG&E and the San Diego Unified Port District ("Port District") entered into that certain Real Estate and Exchange Agreement to facilitate the exchange of properties encumbered by SDG&E and the Port District to allow for the relocation of the existing Substation; and

WHEREAS, on August 9, 2012, as the result of an effort of over ten years of collaborative planning and community outreach on the part of the City and the Port District the California Coastal Commission ("CCC") certified the Chula Vista Local Coastal Program Amendment (the "LCPA" or "LCP") and the San Diego Port District Port Master Plan Amendment/Chula Vista Bayfront Master Plan ("CVBMP"); and

WHEREAS, the Certified LCP's policies and regulations envision the relocation of the existing Substation to a site on Bay Boulevard near Palomar Street located approximately one-half mile south from its current location (the "Relocation Site"); and contain specific land use policies stating that utilities serving the bayfront shall be placed underground (LUP Objective GD.2); and further it is the City's stated position that such certified language is an expansion upon prior approved draft language which stated high voltage (230 kV) transmission lines shall be placed underground; and

WHEREAS, the CVBMP designates the site currently occupied by the Substation for the development of a Community Park, RV Park, and Industrial Park; and

Resolution No. 2014-024 Page 2

WHEREAS, said development would not be implemented without the relocation of the Substation to the Relocation Site; and

WHEREAS, without the relocation of the Substation from its current site the City's LCP and CVBMP's vision, objectives, and policies would not be implemented; and

WHEREAS, on October 17, 2013, the California Public Utilities Commission ("CPUC") granted a Permit to Construct the Substation at the Relocation Site, but without all of City's desired Project elements to address visual impacts; and

WHEREAS, the CCC will consider the issuance of a Coastal Development Permit, pursuant to the Coastal Act, for the construction of the Substation at the Relocation Site; and

WHEREAS, the City has consistently advocated for the relocation of the Substation before the CPUC and the CCC, including the Project alternative commonly known as the Bayfront Enhancement Fund Alternative; and

WHEREAS, the City desires to reaffirm its previous support for the relocation, including Bayfront Enhancement Fund Alternative, and the consideration of additional undergrounding of utility lines and other measures to address visual impacts consistent with the City's certified LCP, the California Coastal Act, the implementation of the Chula Vista Bayfront Master Plan and their vision and policies.

NOW, THEREFORE, the City Council of the City of Chula Vista does hereby resolve as follows:

1. The City Council reaffirms its strong support and requests Coastal Commission approval of the following:

a. The relocation of the SDG&E Substation (the "Project") from its existing site within the CVBMP, now designated for redevelopment into a Community Park, RV Park and Industrial Park, to the 12-acre Relocation Site to the south of the existing site, currently designated and zoned for industrial use.

b. The upgrade of the existing SDG&E Substation at the Relocation Site to a 230/69kVsubstation designed to meet the long term, reliable energy supply needs of the region.

c. The version of the Project commonly known as the "Bayfront Enhancement Fund Alternative," which has been identified by SDG&E in its application with the CCC as its "preferred least environmentally damaging feasible alternative," particularly those elements that remove Transmission Tower 188701, replace Transmission Tower 188700 with a steel pole and underground the related 138kV lines, and including the provision for funding of the Living Coast Discovery Center and other projects coordinated with the U.S. Fish & Wildlife Service.

d. Request that the CCC condition the permit to include landscaped berms and/or vegetative screening selected or maintained to provide year round screening and architectural features such as screen walls to address the adverse Visual effects of the proposed project.

2. Prior to any final action, the City Council also requests that the Coastal Commission independently complete the feasibility analysis and consider the benefits of requiring the undergrounding of any and all additional transmission lines proposed as part of the Project to the extent such undergrounding enhances compliance with the Coastal Act and LCP policies and creates a net positive improvement in visual impacts caused by the Project, minimizing visual blight.

3. The City Council desires that the Project be developed consistent with (i) its MOU with SDG&E; (ii) its Certified LCP approved by the City Council on September 25, 2012; (iii) the Coastal Act; (iv) best practices for the development of such facilities in environmentally sensitive areas; and (v) the energy needs of the region. Towards this end, the City Council requests that the CCC take particular notice of and be guided by the following:

a. Section 1.7 of the MOU which provides for the removal of Tower 188701 and related undergrounding as part of the Project (attached hereto as Exhibit A).

b. LCP, LUP Objective GD.2 which provides for the undergrounding of utilities serving the Bayfront, and LUP Policy VW.1.A and Specific Plan Section 19.85.006 which provide for development ensuring views that preserve a sense of proximity to the Bay (attached hereto as ... Exhibit B).

c. Coastal Act Section 30251 which provides for consideration and protection of visual qualities of coastal areas as a resource of public importance (attached hereto as Exhibit C).

d. Such other relevant documents and submittals consistent with City objectives for the Project.

Presented by

Gary Halber

Assistant City Manager

Approved as to form by

Glen R. Googins City Attorney

Resolution No. 2014-024 Page 4

PASSED, APPROVED, and ADOPTED by the City Council of the City of Chula Vista, California, this 11th day of February 2014 by the following vote:

AYES: Councilmembers: Aguilar, Ramirez and Salas

Councilmembers: Bensoussan and Cox

None

ABSENT:

· NAYS:

Councilmembers:

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)

)

Cheryl Cox/Mayor

ATTEST:

Donna R. Norris, CMC, City Clerk

STATE OF CALIFORNIA COUNTY OF SAN DIEGO CITY OF CHULA VISTA

I, Donna R. Norris, City Clerk of Chula Vista, California, do hereby certify that the foregoing Resolution No. 2014-024 was duly passed, approved, and adopted by the City Council at a regular meeting of the Chula Vista City Council held on the 11th day of February 2014.

Executed this 11th day of February 2014.

Donna R. Norris, CMC, City Clerk

EXHIBIT A

EXTRACT FROM

MEMORANDUM OF UNDERSTANDING BETWEEN SAN DIEGO GAS & ELECTRIC COMPANY AND THE CITY OF CHULA VISTA

SECTION

1.7 Switchvard: In the event the Project has been constructed, the Main-Street Substation has been Upgraded to 230 kV, and the South Bay Power Plant can be and is retired, replaced, or relocated such that the facility cannot be returned to service without new authorization from any and all required authorities, and all necessary SDG&E Board and FERC, CPUC and California Independent System Operator (CalISO) approvals acceptable to SDG&E are acquired for the relocation of the switchvard, SDG&E will relocate the switchvard at no cost to the City provided that the City provides, at no cost to SDG&E, adequate land for the new switchward in an acceptable location and land rights as defined below to SDG&E to interconnect with its electric system. The approvals acquired for the relocation of the switchyard shall be deemed acceptable to SDG&E provided that it is not materially different from the switch yard relocation application (submitted and as may be revised by SDG&E), not materially detrimental to SDG&E, and the cost of said relocation will be fully collected in rates. SDG&E will consider the following factors in determining an acceptable location: (I) The new location must have permanent easement and the same entitlements as are current! y held by SDG& E for the existing switchyard or an alternative acceptable to SDG&E. (2) Such a new Switchyard would be located at an alternative location on Chula Vista's Bayfront, west ofl-5, adjacent to existing right of way and on land that is environmentally clean and seismically acceptable, or, if circumstances warrant, at such location as the parties may mutually select. (3) The footprint for a new Switchyard would be at least 450 x 650 feet depending on the connections. The cost to SDG&E is currently estimated to be approximately \$50 million. Upon relocation of the Switchyard and pursuant to sections 1.4A and IAC, the 138 kV circuit located from Tower 281763 to approximately Tower 188701 will be undergrounded once the City has designated the 20A funds or other alternative funding the City may have (with Tower 188700 remaining above ground). SDG&E will work with the City to minimize overhead structures once the location of the new Switchyard is determined. SDG&E will include the removal of the other 138 kV circuit and the Supporting Structures, including Tower 188701, with its application for the relocation of the Switchyard. This removal of said 138 kV, Supporting Structures, and Tower 188701 will be done and paid for by SDG&E consistent with its rules and regulations. The City will timely process all necessary City permits and support SDG&E in its applications to accomplish this construction, consistent with all laws and regulations applicable to SDG&E and the City.

End of Document

Resolution No. 2014-024 Page 6

<u>EXHIBIT B</u>

EXTRACT FROM

CHULA VISTA LOCAL COASTAL PROGRAM

LAND USE PLAN (LUP) AND SPECIFIC PLAN (SP)

LUP OBJECTIVE GD.2

Objective GD.2 Utilities serving the bayfront shall be undergrounded.

LUP POLICY VW.1.A

Policy VW.1.A Public views shall be protected and provided from freeways, major roads, Bayfront perimeter Policies regarding each of these categories are provided below.

Views from the Freeway and Major Entry. Development shall provide an attractive view onto the site and establish a visual relationship with San Diego Bay, marshes, and bay-related development. High-rise structures shall be oriented to minimize view obstruction.

Views from Roadways within the Site (particularly from Bay Boulevard and Marina Parkway to the marshlands, San Diego Bay, parks, and other bay-related development.) Development and activity sites shall preserve a sense of proximity to the bay and marshlands.

Views from the Perimeters of the Bayfront Outward This view is primarily a pedestrian-onented stationary view and more sustainable. These views will be experienced from various parts of open space and pathway system locations and will enable persons to renew visual contact at close range with San Diego Bay and marshlands. Some close-range pedestrian views may be blocked to protect sensitive species in the National Wildlife Refuge.

High-rise Development Vistas. The limited high-rise development within the LCP Planning Area shall maximize the panoramic view opportunities created with increased height.

SP SECTION 19.85.006

19.85.06 Form and appearance.

- A. Form and Appearance Objectives. The following objectives shall serve as guidelines for use of land and water resources to preserve a sound natural environment.
 - 1. Preserve existing wetlands in a healthy state to ensure the aesthetic enjoyment of marshes and the wildlife that inhabits them.
 - 2. Change the existing industrial image of the Bayfront and develop a new identity consonant with its future prominent public and commercial recreational role.
 - 3 Improve the visual quality of the shoreline by promoting public and private uses that provide proper restoration, landscaping, and maintenance of shoreline areas.

 Remove, or mitigate by landscaping, structures or conditions that have a blighting influence on the area.

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5. Eliminate or reduce barriers to linking the Bayfront to the rest of western Chula Vista and establish a memorable relationship between the Bayfront (and the areas and elements that comprise it) and adjoining areas of Chula Vista, the freeway, and arterial approaches to the Bayfront (see Exhibit 6, Form and Appearance Map). ł

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EXHIBIT C

CALIFORNIA COASTAL ACT SECTION 30251

CALIFORNIA PUBLIC RESOURCES CODE

<u>30251.</u>

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The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

End of Document

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