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## CHAPTER 4 – ENVIRONMENTAL IMPACT ASSESSMENT

### 4.15 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Measures	Less-Than-Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities (the construction of which could cause significant environmental effects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities (the construction of which could cause significant environmental effects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available from existing entitlements and resources to serve the project from existing entitlements and resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 4.15.0 Introduction

This section describes local utility services and infrastructure, including cable television and telephone, water treatment, sewer, and electricity services, in the vicinity of the San Diego Gas & Electric Company (SDG&E) South Bay Substation Relocation Project (Proposed Project). The Proposed Project would not require the use of public utilities during construction, operation,

or maintenance activities. No impacts to utilities and service systems would result from the Proposed Project, with the exception of a less-than-significant impact to landfill capacity.

#### **4.15.1 Methodology**

Information regarding local utilities was obtained from the City of Chula Vista General Plan. Internet searches were also conducted to gather information regarding utility service providers in the vicinity of the Proposed Project.

#### **4.15.2 Existing Conditions**

##### **Potable Water**

As a highly urbanized area, water service within the City of Chula Vista (the City) is provided by municipal supplies. The Proposed Project area is located within the service boundaries of the Sweetwater Authority. The Sweetwater Authority is a publicly-owned water agency that manages and provides water to municipalities for public distribution and consumption. The Sweetwater Authority provides water service to approximately 186,900 people in National City, Bonita, and the western and central portions of the City of Chula Vista. The Sweetwater Authority owns and operates Loveland Reservoir, Sweetwater Reservoir, a brackish groundwater desalination facility, and deep freshwater wells. Water obtained in each of these areas is influenced by the 230-square-mile Sweetwater River Watershed, which stretches from the Cleveland National Forest to San Diego Bay.

##### **Water Drainage Facilities**

A man-made detention basin is located in the northern portion of the Proposed Project area. The detention basin was designed to serve as an industrial stormwater and spill impoundment facility to protect waters from potential discharge of contaminated runoff. The clay lining of the detention basin, which currently contains wetlands, would be removed as a result of the Proposed Project activities. For a detailed discussion on the detention basin, refer to Section 4.4 Biological Resources.

##### **Electricity**

Electricity in the City of Chula Vista is provided by SDG&E.

##### **Cable and Telephone**

Telephone, wireless phone, video/cable, DSL, and broadband & satellite services are available from AT&T for residents within the Proposed Project area. Cox Communications also provides cable, broadband, and phone services, while Nex Horizon/Chula Vista Cable provides additional cable and Internet services.

##### **Sewer**

The City currently provides sewer services to Chula Vista residents utilizing over 430 miles of sewer pipes and 12 sewer pump stations. Collection facilities convey wastewater generated within eight distinct drainage basins, and conveys these flows to regional facilities located along San Diego Bay to the west, and the Sweetwater River to the north. These regional facilities then transport Chula Vista's wastewater to the Point Loma Wastewater Treatment Plant, which is

located approximately 10 miles northwest of the South Bay Substation at 1902 Gatchell Road, San Diego, CA 92106. The Point Loma Wastewater Treatment Plant is owned and operated by the City of San Diego Metropolitan Wastewater Department.

### **Solid Waste**

Solid waste disposal in San Diego County is accommodated through the operation of five landfills and 14 rural bin sites and transfer stations. The nearest landfill to the Proposed Project is the Otay Landfill in Chula Vista (located at 1700 Maxwell Road, approximately 5.1 miles to the east). As of 2009, Otay Landfill had approximately 27,993,389 cubic yards of remaining capacity, or approximately 46 percent of its total capacity remaining. The Otay Landfill is expected to reach capacity by the year 2028. The Otay Landfill is owned and operated by Allied Waste Industries Incorporated, which provides solid waste curbside pick-up service within the City of Chula Vista. Allied Waste Services in Chula Vista is located at 881 Energy Way.

### **4.15.3 Impacts**

#### **Significance Criteria**

Potential impacts to public utilities and service systems were determined in accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Significant adverse impacts to public utilities and service systems would only occur if the Proposed Project:

- Exceeds wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB)
- Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities
- Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities
- Results in the need for a new or expanded water supply
- Results in a determination by the wastewater treatment provider that it has inadequate capacity to serve the Proposed Project's projected demand
- Results in inadequate access to a landfill with sufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs
- Causes a breach of published national, state, or local standards relating to solid waste

In addition to the guidelines specified in Appendix G, the Proposed Project would have significant adverse impacts to public utilities and service systems if it would result in the disruption of existing utility systems.

### **Question 4.15a – Wastewater Treatment Requirement Exceedances**

#### ***Construction – No Impact***

Construction of the Proposed Project would not generate wastewater. Portable toilets would be provided for on-site use by construction workers and would be maintained by a licensed sanitation contractor. Portable toilets would be used in accordance with applicable sanitation regulations established by the Occupational Safety and Health Administration (OSHA), which generally requires one portable toilet for every 10 workers. The licensed contractor would dispose of the waste at an off-site location and in compliance with standards established by the RWCQB.

During excavation activities, dewatering may be necessary. The water would be discharged upland or to a community sanitary sewer system in accordance with the City of Chula Vista and San Diego Regional Water Quality Control Board requirements, as discussed further in Section 4.8 Hydrology and Water Quality. As a result, it would not require treatment at a wastewater facility.

#### ***Operation and Maintenance – No Impact***

Long-term operation and maintenance of the Bay Boulevard Substation would not generate wastewater. The substation would be unmanned and no sanitary facilities that require waste treatment would be constructed on site. Thus, no impact would result.

### **Question 4.15b – Water and Wastewater Treatment Facility Expansion**

#### ***Construction – No Impact***

Water would be used on a regular basis during construction of all Proposed Project components to control dust on access roads and in work areas. Because this water would be dispersed on site and would either evaporate or be absorbed into the ground, no wastewater is anticipated. In addition, during excavation activities, dewatering may be necessary. The water would be discharged in accordance with the City of Chula Vista and San Diego Regional Water Quality Control Board requirements, as discussed further in Section 4.8 Hydrology and Water Quality. Therefore, no impact would occur.

#### ***Operation and Maintenance – No Impact***

Wastewater would not be generated by long-term operation and maintenance of the Proposed Project. Water use would be limited to irrigation of any on-site landscaping associated with the facilities (i.e., revegetative groundcover or landscape screening). No sanitation facilities would be located on site. Therefore, no impact would occur.

### **Question 4.15c – Water Drainage Facility Expansion**

#### ***Construction – No Impact***

The Bay Boulevard Substation site is relatively flat with less than two-percent average slope. A low man-made berm exists along the southerly and westerly existing perimeter fence. The effect of this berm is to generally direct the site runoff northerly to an existing concrete-lined drainage channel at the northwest corner of the Liquefied Natural Gas property. This drainage channel

connects to a concrete-lined drainage ditch on the south end of the South Bay Power Plant property, through which it eventually discharges directly into the San Diego Bay. There is also a defined discharge point to the salt crystallizer ponds at the far southwest corner of the property; however, discharge of the typical rain events is impeded at this point by the man-made perimeter berm. It is likely that during larger rainfall events, a portion of the sheet flow discharges from this southwest corner via a breach in the perimeter berm. Localized depressions in the site topography appear to retain some runoff, particularly near the perimeter berm along the southerly and westerly existing perimeter fence. Additionally, a portion of the Proposed Project site is surrounded by a man-made containment berm and impounds that portion of the site runoff that falls within this containment area after storm events. There are no other direct discharge points evident at the Proposed Project site. Bio-retention basins, vegetated swales, and detention basins or a combination of these would be constructed along the north, east, west, and south perimeters of the proposed site to collect and convey the site runoff. Runoff discharge from the site would follow the existing drainage pattern to the northwesterly corner, and potentially to the southwesterly corner. Minor grading may be required north of the northwesterly property corner to facilitate drainage flow to the existing concrete drainage channel. The expansion of existing drainage facilities would not be required to accommodate flows from the substation site and existing drainage patterns would not be significantly altered. The other Proposed Project components would not require changes to existing drainage facilities or result in a change to storm water flows. Therefore, significant impacts to drainage facilities would not result.

#### ***Operation and Maintenance – No Impact***

Activities associated with operation and maintenance of the Proposed Project would be conducted on existing roads and disturbed areas. As discussed in Section 4.8 Hydrology and Water Quality, on-site drainage patterns established during construction would generally remain unchanged with long-term operation and maintenance of the Bay Boulevard Substation. No impacts to drainage facilities would result from this work.

#### **Question 4.15d – Water Supply Availability**

##### ***Construction – No Impact***

Water is anticipated to be the primary means for dust control during construction. Water would be brought to the site in trucks specially equipped to allow for the dispersal of water onto disturbed areas where grading or routine movement of construction vehicles occurs. Water would be used to wet the disturbed soils to reduce the potential for dust particles to enter the air. Approximately 2,800,000 gallons of water would be required for these activities. Water for the trucks would be obtained from municipal water sources. The Sweetwater Authority currently has 40 million gallons of water in their distribution system; therefore, a sufficient water supply is available to meet water demands for construction needs. The demand for water would be temporary and short-term, and would only be generated during the construction phase. Therefore, no impact is anticipated.

##### ***Operation and Maintenance – No Impact***

Water use would be limited to irrigation of any on-site landscaping associated with the facilities (i.e., revegetative groundcover or landscape screening) and the annual washing of porcelain insulators. The water would be obtained from municipal sources. The small volume of water

required for maintenance would not change the existing water supply. In addition, the water would be applied to the soil for landscaping purposes and would therefore be reabsorbed into the ground, contributing to the replenishment of area groundwater supplies. As a result, no impact is anticipated.

**Question 4.15e – Wastewater Treatment Capacity – *No Impact***

As previously addressed under the responses to Questions 4.15a and 4.15b, construction of the Proposed Project would not generate wastewater. As previously discussed under the responses to Questions 4.15a and 4.15b, operation and maintenance of the Proposed Project would not generate wastewater. Therefore, no impact would occur.

**Question 4.15f – Landfill Capacity**

***Construction – Less-than-Significant Impact***

Imported fill material would be required to develop an elevated site for the Bay Boulevard Substation. Excess fill material after completion of grading is not anticipated. Construction of the Proposed Project is anticipated to generate waste materials, such as packaging (i.e., wooden skids, cardboard boxes, plastic wrapping, or trash from consumables), empty conductor spools, and excess conductor. It is anticipated that these materials would either be recycled or retained by SDG&E for use on other similar projects. As part of the Proposed Project, the existing South Bay Substation would be demolished once the Bay Boulevard Substation is energized and the transmission lines are cut over. Demolition would involve the removal of the control house, steel support structures, and electrical substation equipment, all of which would be recycled or disposed of at the Otay Landfill. The existing foundations would be removed to a depth of approximately six feet.

The 230 kilovolt (kV) loop-in would require the removal of one approximately 165-foot-tall steel cable riser pole; the 69 kV relocation would require the removal of approximately two wood distribution poles and four stub wood poles; and the 138 kV extension would require the removal of approximately one steel cable riser pole and four steel lattice structures. The poles and lattice structures would be removed from the site by a crane and flatbed trucks and then recycled for future use or disposed of at an appropriate facility. All recyclable construction materials would be transported to Sanco Resource Recovery, which is located approximately 9.3 miles northeast of the Proposed Project site at 6750 Federal Boulevard in the City of Lemon Grove.

All solid waste generated would be collected at a designated location within the Bay Boulevard Substation site, and temporarily stored on site in receptacles or otherwise covered until disposal occurs. All waste would ultimately be transported to the Otay Landfill and disposed of properly. The Otay Landfill has sufficient capacity to accommodate the amount of waste anticipated to be generated during construction. Therefore, impacts would be less than significant.

***Operation and Maintenance – Less-than-Significant Impact***

The operation and maintenance of the Proposed Project would generate a limited amount of solid waste. The Proposed Substation, 230 kV loop-in, 69 kV relocation, and 138 kV extension would not require staff and would not produce waste. The only waste generated would be associated with operational equipment maintenance, crew lunches, and packaging material associated with



replacement parts. Excess material or waste resulting from the repair or replacement of a structure or equipment (e.g., replacement of an insulator) would be taken to an existing SDG&E maintenance yard and either disposed of in accordance with federal, state, and local statutes and regulations, reused, or recycled. Any remaining waste would be minimal and would be properly disposed of at an approved landfill. Therefore, impacts would be less than significant.

#### **Question 4.15g – Solid Waste Statutes and Regulations**

##### ***Construction – No Impact***

Construction of the Proposed Project is not anticipated to generate a substantial amount of solid waste. As previously discussed under the response to Question 4.15f, solid waste produced during construction would be disposed of at a nearby licensed landfill. Management and disposal of solid waste would comply with all applicable federal, state, and local statutes and regulations.

Similarly, waste generated by the demolition of the South Bay Substation would be properly disposed of in accordance with all applicable federal, state, and local statutes and regulations, with particular regard for the management and disposal of any hazardous materials. All treated wooden poles removed from the site would be properly handled, transported, and disposed of at a licensed landfill, consistent with federal, state, and local statutes and regulations and SDG&E protocols. Thus, the Proposed Project would not violate any solid waste statutes or regulations.

##### ***Operation and Maintenance – No Impact***

Handling and disposal of all waste products associated with operation and maintenance activities would comply with all applicable statutes and regulations. Therefore, no impact would occur.

#### **Disruption of Existing Utility Systems**

##### ***Construction – Less-than-Significant Impact***

Construction of the Proposed Project would involve excavation and grading for the installation of transmission structures and construction of the Bay Boulevard Substation. These activities have the potential to unintentionally impact existing underground utilities, particularly in the SDG&E right-of-way (ROW), which may result in the disruption of service. To minimize the risk of impacting these lines, SDG&E or their contractor would notify Underground Service Alert, in accordance with state law, to ensure that existing utilities are appropriately marked in the field so that they can be avoided.

In addition, the proposed substation would be constructed adjacent to overhead transmission and distribution lines within the existing SDG&E ROW. Portions of the 69 kV relocation, the 138 kV extension, and the 230 kV loop-in, would be constructed both aboveground and underground, within the SDG&E ROW. SDG&E would provide sufficient distance to ensure that existing utilities would not be directly contacted or otherwise disrupted during construction of the Proposed Project.

SDG&E would also work in coordination with the California Independent Systems Operator to obtain clearances to take the existing transmission lines associated with the Proposed Project out of service for a period of time during the cutover work. The length of these outages would be

minimized in accordance with California Independent System Operator requirements, and SDG&E would provide power to the areas served by these lines through other substations. As a result, no customers would be without service. Therefore, impacts associated with the disruption of existing utility systems would be less than significant.

#### ***Operation and Maintenance – No Impact***

Operation and maintenance activities for the Proposed Project may occasionally involve excavation or other ground-disturbing activities. These activities would be conducted in pre-disturbed areas and standard precautionary measures, such as notifying Underground Service Alert, would be implemented to ensure that existing underground utility lines would not be impacted. The 69 kV relocation, 138 kV extension, and 230 kV loop-in would be located in the existing SDG&E ROW. Maintenance and operation activities would occur in the same manner as they did prior to the Proposed Project. Additionally, implementation of the Proposed Project benefits the electrical service system by increasing system reliability to the area. As a result, there would be no impact.

#### **4.15.4 Applicant-Proposed Measures**

Because no potentially significant impacts relative to utilities and service systems would result from the Proposed Project, no applicant-proposed measures are provided.

#### **4.15.5 References**

California Integrated Waste Management Board. Online.

<http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=33&FACID=37-AA-0010>. Site visited March 12, 2010.

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