

## 5.20 DRY UTILITIES

This section of the Draft Environmental Impact Report (EIR) describes the potential impacts to dry utilities from implementation of the Project.

### 5.20.1 INTRODUCTION

#### **Purpose**

Appendix G of the California Environmental Quality Act (CEQA) Guidelines requires that impacts to dry utilities be evaluated as part of the environmental documentation process. Appendix F of the CEQA Guidelines suggests analysis of energy use and conservation, including natural gas and petroleum. The impacts of the proposed development Project site are analyzed at a project level of detail. The direct and indirect impacts are addressed for each threshold criterion for both the on-site and off-site Project features.

This section addresses potential direct and indirect impacts to electricity (Southern California Edison), natural gas (Southern California Gas Company), petroleum (related to motor vehicle operation), telephone (AT&T), and cable (yet to be determined, possibly CalNeva Broadband) utility services that will result from implementation of the Project.

#### **Summary**

The Project will result in the development of a maximum of 19,333 residential units. The new residential units will result in an increase in demand for dry utility services and facilities, including electricity (Southern California Edison), fossil fuels (natural gas and petroleum), telephone (AT&T), and cable television (CATV)(CalNeva Broadband or other provider yet to be determined).

Direct and indirect impacts to dry utility services and facilities will be less than significant. Each affected utility has been consulted to determine whether there will be adequate energy supplies, communication services, and the infrastructure to serve the Project. In the case of cable television, since there is currently no provider, one local Cable Television company is willing and able to provide services to the Project site. With implementation of the planned energy efficiency features and with upgrades to utility infrastructure near and within the Project site (as determined by each provider), there will be adequate energy and communication services for the Project in addition to the existing demand for these services.

There will be less than significant impacts associated with off-site features related to installation of infrastructure for electricity, natural gas, petroleum, telephone, cable television, and internet services. Any necessary off-site utility upgrades will occur within lands (easements) already owned by these respective utilities. The connection of off-site utilities has been included in the Project description and analyzed throughout this Draft EIR in conjunction with Project-level impacts. Regarding cable television services, the provider of this service has not been identified and, therefore, the location and extent of any off-site utility upgrades is unknown. At the time of preparation of this EIR (i.e., 2016), while CalNeva Broadband has the nearest existing CATV facilities and has indicated that they have the

capability to serve the Project with implementation of necessary infrastructure, no CATV Provider has been confirmed for the Project site at this time. Due to the magnitude of the Project's CATV demand, any company wishing to provide service to the Project site would need to provide sufficient evidence regarding its ability to serve the Project before that service provider would be selected. Regardless, the upgrade and/or retrofitting of the off-site fiber optic connections and necessary extensions are typically the responsibility of the Service Provider and would occur within easements owned by the Service Provider. The only other cable television company in the vicinity is Time Warner Cable, whose facilities stop near Castaic; and "currently does not have any plans to expand facilities any further north" (BJ Palmer 2015).

The analysis in this section focuses on the projected demand for dry utility services and the facilities necessary to meet this demand. The physical environmental impacts related to the implementation of necessary utility infrastructure are addressed as part of the Project analysis provided throughout this EIR.

## Section Format

As described in Section 5.0, Environmental Setting, Impacts, and Mitigation, and in accordance with State CEQA Guidelines Article 9 (Contents of Environmental Impact Reports), each topical environmental analysis includes a description of the existing setting; identification of thresholds of significance; analysis of potential Project effects and identification of significant impacts; identification of mitigation measures, if required, to reduce significant impacts; and level of significance after mitigation. This information is presented in the following format (please refer to Section 2.0, Introduction, and Section 5.0, Environmental Setting, Impacts, and Mitigation, for descriptions of each of these topics):

- Introduction
  - Purpose
  - Summary
  - Section Format
  - References
- Electricity
  - Relevant Plans, Policies, and Regulations
  - Environmental Setting
  - Project Design Features
  - Threshold Criteria
  - Environmental Impacts—A separate analysis is provided for each of the following categories of potential impacts:
    - On-Site Impacts
    - Off-Site Impacts
  - Mitigation Measures
  - Level of Significance After Mitigation
- Fossil Fuels (Natural Gas and Petroleum)
  - Relevant Plans, Policies, and Regulations
  - Environmental Setting

- Project Design Features
- Threshold Criteria
- Environmental Impacts—A separate analysis is provided for each of the following categories of potential impacts:
  - On-Site Impacts
  - Off-Site Impacts
- Mitigation Measures
- Level of Significance After Mitigation
- Telephone Service
  - Relevant Plans, Policies, and Regulations
  - Environmental Setting
  - Project Design Features
  - Threshold Criteria
  - Environmental Impacts—A separate analysis is provided for each of the following categories of potential impacts:
    - On-Site Impacts
    - Off-Site Impacts
  - Mitigation Measures
  - Level of Significance After Mitigation
- Cable Television
  - Relevant Plans, Policies, and Regulations
  - Environmental Setting
  - Project Design Features
  - Threshold Criteria
  - Environmental Impacts—A separate analysis is provided for each of the following categories of potential impacts:
    - On-Site Impacts
    - Off-Site Impacts
  - Mitigation Measures
  - Level of Significance After Mitigation
- References

## References

Although all references cited for preparation of this analysis are listed in Section 5.20.6, the primary technical references for this section are listed below.

1. BJ Palmer & Associates, Inc. 2015 (August). *Dry Utility Analysis Centennial, Tejon Ranch Company* San Juan Capistrano, CA: BJ Palmer (Appendix 5.20-A).

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## 5.20.2 ELECTRICITY

### Relevant Plans, Policies, and Regulations

#### *Federal*

##### Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy (CAFE) standards for motor vehicles, the EISA includes other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs”.

#### *State*

##### Title 24 Energy Efficiency Standards

California’s Energy Efficiency Standards for Residential and Non-Residential Buildings were established in 1978 in response to a mandate to reduce the State’s energy consumption. These standards are promulgated under the *California Code of Regulations* (CCR) Title 24, Part 6, and are commonly referred to as “Title 24”. The Title 24 standards are periodically updated to reflect new or improved energy efficiency technologies and methods. The 2016 Title 24 standards have been adopted and was effective January 1, 2017. A new development project is required to incorporate the most recent Title 24 standards in effect at the time the building permit application is submitted.

##### Title 24 Green Building Standards

The 2016 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California (CBSC 2017b). The development of the CALGreen Code is intended to (1) cause a reduction in greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The

code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others.

Beyond the mandatory standards, voluntary Tier 1 status can be achieved by complying with additional measures for energy and water efficiency, material conservation, and other design features. Examples of Tier 1 requirements are 15 percent less energy use in residential construction than required by existing regulations and 12 percent less indoor water use in non-residential construction. Tier 2 status can be achieved by complying with additional voluntary measures; example requirements are 30 percent less energy use in residential construction and 20 percent less indoor water use in non-residential construction. The Project would commit to achieving Tier 1 status pursuant to the CALGreen Code.

#### Senate Bill 1368 (Greenhouse Gas [GHG] Emissions Standard for Baseload Generation)

Senate Bill (SB) 1368 imposes a GHG emission standard on baseload generation. The new standard prohibits any more long-term investments in power plants unless their air emissions are as low as, or lower than, emissions from clean and efficient natural gas power plants. The law will be implemented and enforced by the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) in conjunction with the California Air Resources Board (CARB).

#### ***County***

#### Countywide Energy and Environmental Policy (January 2007)

In January 2007, the Los Angeles County Board of Supervisors adopted the Countywide Energy and Environmental Policy, which provides guidelines for sustainability and green building design within County departments. The Policy states that the County will join the California Climate Action Registry (CCAR) to establish goals for reducing GHG emissions. In addition, the policy incorporates a sustainable building program into County capital improvement projects and seeks to integrate energy-efficient and sustainable designs into future County building plans.

#### Los Angeles County General Plan and Antelope Valley Area Plan

The *Los Angeles County General Plan* and the *Antelope Valley Area Plan (AVAP)*, part of the County General Plan, include goals and policies that address electricity issues in the unincorporated County.

The AVAP goals and policies applicable to the analysis of electricity with Project implementation are listed below. Section 5.8, Land Use, Entitlements, and Planning, presents a more in-depth analysis of the Project's consistency with relevant plans, policies and regulations.

**Goal ED 1:** A healthy and balanced economic base in the Antelope Valley that attracts a wide range of industries and businesses and provides high-paying jobs for local residents.

**Policy ED 1.14:** Promote appropriate types of residential development in the vicinity of existing communities and town centers that are in reach of existing infrastructure and utilities.

**Goal COS 14:** Energy infrastructure that is sensitive to the scenic qualities of the Antelope Valley and minimizes potential environmental impacts.

**Policy COS 14.1:** Require that new transmission lines be placed underground whenever physically feasible.

**Policy COS 14.2:** If new transmission lines cannot feasibly be placed underground due to physical constraints, require that they be co-located with existing transmission lines, or along existing transmission corridors, whenever physically feasible.

**Policy COS 14.3:** If new transmission lines cannot feasibly be placed underground or feasibly collocated with existing transmission lines or along existing transmission corridors due to physical constraints, direct new transmission lines to locations where environmental and visual impacts will be minimized.

**Policy COS 14.4:** Discourage the placement of new transmission lines on undisturbed lands containing sensitive biotic communities.

**Policy COS 14.5:** Discourage the placement of new transmission lines through existing communities or through properties with existing residential uses.

**Policy COS 14.7:** Require that electrical power lines in new residential developments be placed underground.

## Environmental Setting

According to the U.S. Department of Energy, in 2012, California's total energy consumption—including for electricity generation—was 7,620.1 trillion British thermal units (Btu), representing approximately 7.7 percent of the United States' energy consumption. The major sources of consumed energy in California were petroleum (43.0 percent) and natural gas (32.0 percent). Other sources include coal, nuclear electric power, and renewable. Approximately 18 percent of this energy was consumed by residential users, 19 percent by commercial users, 24 percent by industrial users, and 39 percent by the transportation sector (USD OE 2016a). In 2014, California's major sources of electricity were natural gas (52.0 percent), nuclear (10.7 percent), hydroelectric (9.5 percent), coal (0.4 percent), and renewable sources (20.1 percent) (USD OE 2016b). In 2015, approximately 66.4 percent of

California's electricity was generated in state; approximately 12.2 percent came from the Pacific Northwest; and approximately 25.1 percent came from the Southwest (CEC 2016).

Electrical service to the Project site is provided by Southern California Edison (SCE). SCE uses different types of energy to produce electricity including coal, natural gas, hydroelectric plants, nuclear energy, and renewable resources. SCE is a regulated public utility that provides electricity to a business and residential population of approximately 15 million people within a 50,000-square-mile service area that covers Central, Coastal, and Southern California (SCE 2016). SCE is regulated by the CPUC, which is intended to protect consumers from overcharge and to promote energy efficiency, system reliability, and utility financial integrity. SCE is also required to provide service to existing and proposed future development in its service area.

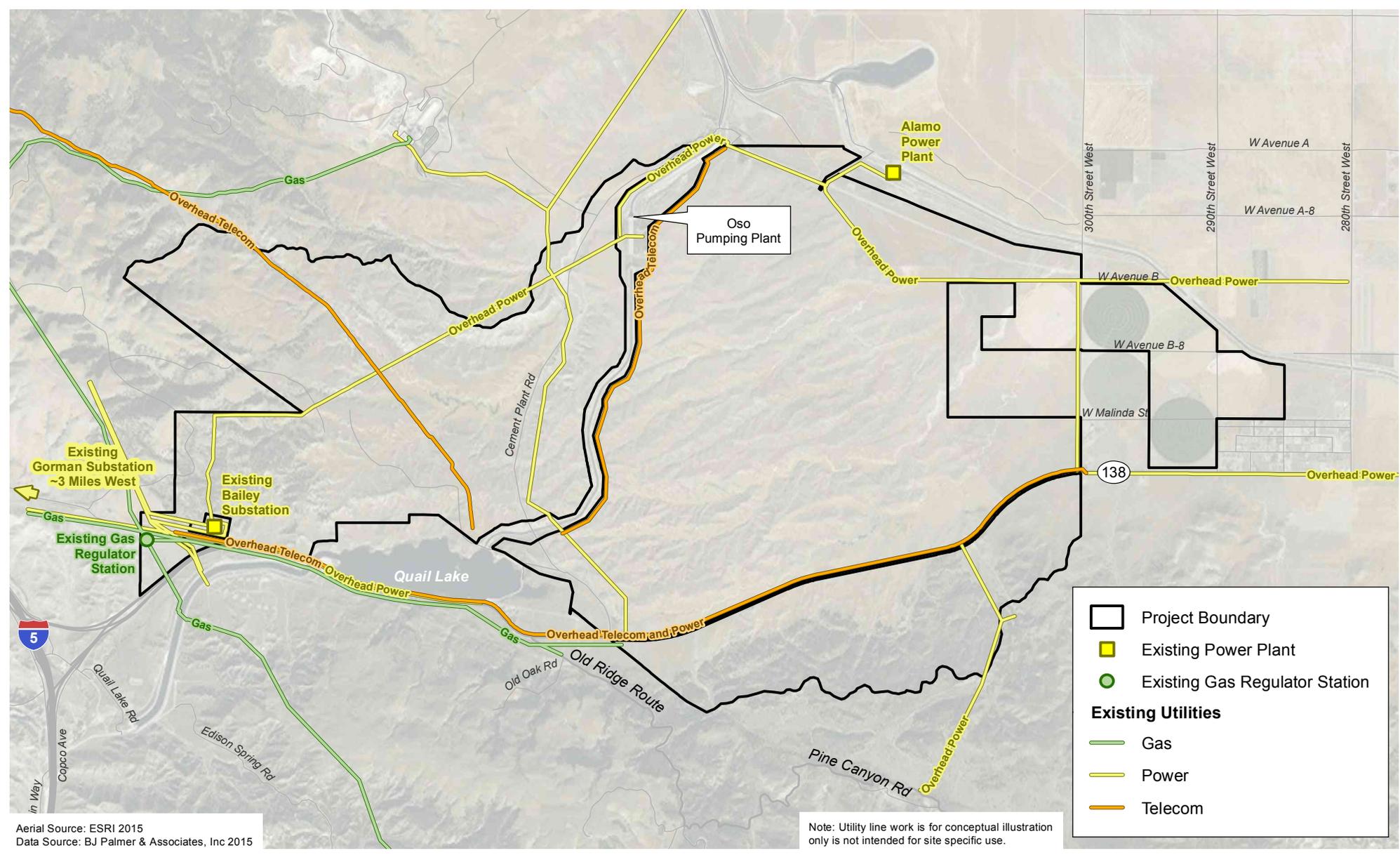
SCE has both transmission and distribution facilities located both within and near the Project site. Transmission facilities consist of 66-kilovolt (kV), 220-kV, and 500-kV transmission lines; distribution facilities consist of 12-kV and 6.9 kV distribution lines. Overhead 66-kV transmission lines and 12-kV distribution lines are parallel to the northern side of State Route (SR) 138. The Bailey Substation, located on an SCE-owned parcel in the southwestern corner of the Project site, currently serves as a transmission-only substation and is not equipped for distribution. The off-site Gorman Substation serves as the primary distribution facility in the area. Located approximately 3.6 miles northwest of the Project site along Gorman Post Road, the Gorman Substation does not have space to expand its capacity (Peterson 2007). Existing electrical lines are shown in Exhibit 5.20-1, Known Major Utilities in the Project Area, and Exhibit 5.20-2, Dry Utilities Improvements.

There are distribution lines that extend northeast from the existing Bailey Substation area to the Oso Pumping Plant and north from SR-138 along Cement Plant Road to the National Cement Plant. The existing lines to the Oso Pumping Plant run through the Open Space north of Oso Canyon (please refer to Exhibit 5.20-1).

In addition, in September 2016, the Los Angeles Department of Water and Power (LADWP) completed construction of the Barren Ridge Renewable Transmission Project (Barren Ridge Project) to tap into renewable energy sources in the Tehachapi Mountain and Mojave Desert areas of Southern California in the greater Project area (. The Barren Ridge Project utilizes existing and future renewable energy sources in this area. Barren Ridge will provide transmission access to approximately 1,000 megawatts (MW) of wind and solar power, which include 250 MW from Beacon, 60 MW from RE Cinco, 250 MW from Springbok 1 and 2, 143 MW from Pine Tree, as well as hundreds of megawatts from several of LADWP's hydroelectric plants from the north. The Barren Ridge Project spans a distance of 62 miles from the Barren Ridge Switching Station to the Haskell Canyon Switching Station (LADWP 2016). The entire route lies designated utility corridors and parallels existing transmission lines (LADWP 2015).

Existing land uses on the Project site are primarily ranching-related with other limited agricultural activities. The current demand for electricity is minimal and is accommodated by the existing facilities described above. These facilities not only serve the minimal on-site uses, but also nearby uses as the National Cement Plant and the Alamo Pumping Plant located

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Aerial Source: ESRI 2015  
Data Source: BJ Palmer & Associates, Inc 2015

Note: Utility line work is for conceptual illustration only is not intended for site specific use.

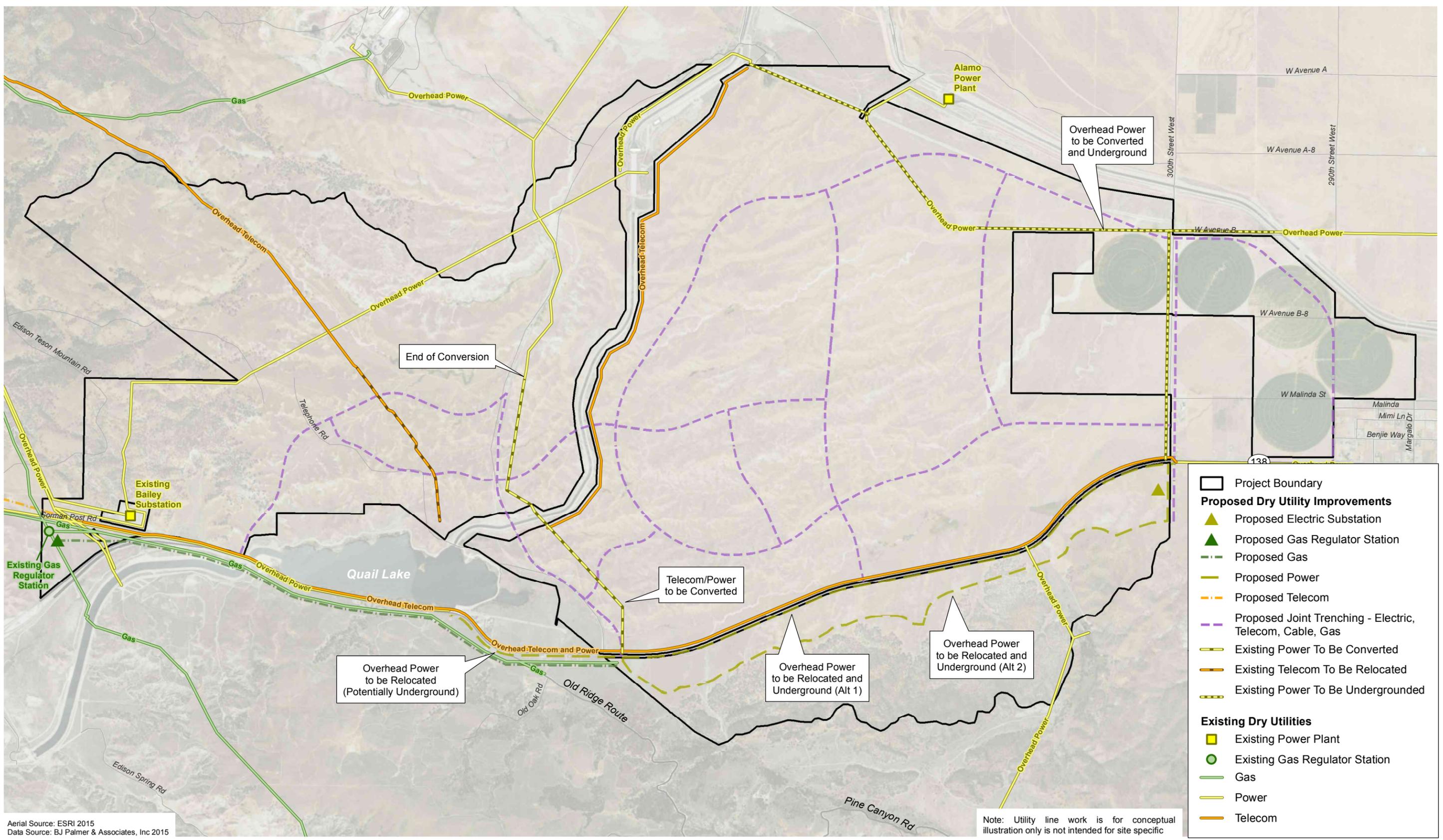
	Project Boundary
	Existing Power Plant
	Existing Gas Regulator Station
<b>Existing Utilities</b>	
	Gas
	Power
	Telecom

# Known Major Utilities in Project Area

# Exhibit 5.20-1

Centennial Project





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Aerial Source: ESRI 2015  
Data Source: BJ Palmer & Associates, Inc 2015

### Dry Utility Improvements

Centennial Project



### Exhibit 5.20-2

Note: Utility line work is for conceptual illustration only is not intended for site specific

to the north of the Project site. Currently, approximately 300 dwelling units could be served by the existing overhead facilities associated with the Gorman Substation before a utility upgrade would be required (BJ Palmer 2015).

## Project Design Features

See the *Centennial Specific Plan's* Appendix 1-B, Green Development Program, and summary of corresponding Project Design Features in Section 5.21, Climate Change.

## Threshold Criteria

The following criterion from the County of Los Angeles Environmental Checklist is used to establish the threshold in order to determine the potential for significance. The Project would result in a significant impact to electrical facilities and services if it would:

**Threshold 20-1** Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## Environmental Impacts

**Threshold 20-1** **Would the project create electrical system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

### *On-Site Impacts*

The Project would place new demands on electrical service provided by SCE. Specifically, the Project would result in an increase in the amount of electricity consumed on the site for lighting and other uses, and it will create a need for new delivery infrastructure. The physical environmental impacts related to the implementation of necessary utility infrastructure are addressed as part of the Project analyzed throughout this EIR.

### Electrical Demand

Project construction would involve limited electricity demands for equipment such as temporary lighting fixtures and tools.

During operations, SCE estimates that buildout of all proposed land uses in the Project over a 20-year horizon would generate a peak increase in electricity demand of approximately 165 MW<sup>1</sup> at buildout (as shown in Table 5.20-1, Southern California Edison Estimate of the Centennial Peak Electrical Demand). The peak demand, rather than the total annual demand, is based on the type and quantity of land uses on the Project site which SCE determined would collectively generate the highest demand (i.e., peak) for electricity at one time (rather than the average demand of all types and quantities of the proposed land uses). The purpose

<sup>1</sup> A megawatt (MW) is one million watts

of the peak demand calculation is to provide a more conservative estimate as the basis of supply and infrastructure planning.

**TABLE 5.20-1  
SCE ESTIMATE OF  
CENTENNIAL PEAK ELECTRICAL DEMAND**

<b>Land Use Type<sup>a</sup></b>	<b>Quantity and Units<sup>a</sup></b>	<b>Demand Factor (watts per unit)</b>	<b>Peak Electrical Demand (MW)</b>
Single Family Residential	14,119 du	6,955	98
Condos/Townhomes	4,914 du	3,870	19
Multi-Family (Apartments)	300 du	5,000	2
Commercial	2.6 million sf	15	39
Schools	10 schools	700,000	7
<b>Total</b>			<b>165</b>
SCE: Southern California Edison; MW: megawatts; du: dwelling units; sf: square feet			
<sup>a</sup> Land use types and proportions were provided by SCE to reflect peak demand (i.e., collectively produce the maximum electrical demand at one time). The peak demand does not include all land uses as it represents the combination of land uses that would generate the highest demand at one time.			
Demand factors derived from usage letter submitted by SCE in 2007 based on project design at that time (SCE 2007b).			

It should be noted that this estimate of peak electrical demand is based on SCE's general-use demand factors and does not take into account the current code requirements and additional measures that would be implemented to increase energy efficiency (see Green Development Program). The Project would comply with all State Energy Efficiency Standards for Residential and Non-residential Buildings (Title 24; 24 CCR 6) and California Green Building Standards Code (CALGreen Code; 24 CCR Part 11) requirements in effect at the time building permit applications are submitted. These standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-saving appliances, conditioning systems, water heating, and lighting, among other issues. The CALGreen Code covers the use of water and energy, among other issues, and requires building commissioning to verify building systems are functioning and maximum efficiency.

SCE would serve the Project's demand for electrical service through the existing distribution facilities on the Project site and the utility improvements that are proposed as part of the Project, which are described below. SCE has indicated that, with implementation of required infrastructure improvements, there would be adequate electrical supplies to serve the Project (SCE 2007b). However, the realistic peak electric demand with planned energy efficiency features would be lower than the more conservative estimate of peak demand (i.e., 141 MW).

### Electrical Line Relocation

According to the Dry Utility Report (Appendix 5.20-A), Project implementation would necessitate the relocation and/or removal of existing SCE facilities along portions of SR-138 and Gorman Post Road, as well as within the Project site (BJ Palmer 2015). Exhibit 5.20-2, Centennial Project – Dry Utilities Improvements, shows the location of both existing and proposed newly upgraded and relocated electrical lines and illustrates the extent of anticipated line relocations. The existing 66-kV lines that extend from the Bailey Substation and run northwest through the Project site may be relocated or may be placed underground. Where relocated electricity lines would remain aboveground, all poles would be placed within the proposed SCE easement, and the specific type and spacing of any new poles would be determined by SCE. Continued coordination between the Project Applicant/Developer and SCE during site development, as required by Mitigation Measure (MM) 20.2-1 below, would prevent prolonged service disruptions that could be experienced by the surrounding electricity users, facilities along SR-138, and the Gorman Substation.

### SCE Easements

SCE has an existing right-of-way easement for their facilities within and surrounding the Project development area. Existing SCE electrical easements along SR-138 and Gorman Post Road will be affected by Project development. Some of these easements contain active facilities, while others do not. Upon development of the Project site and after coordination with and approval by SCE, those easements through the Project development area that do not contain active facilities would be quit-claimed to the Project Applicant/Developer. The location of new easements would be determined in coordination with SCE, as required by MM 20.2-1. The development of the Project area would dictate that existing facilities be removed or relocated as the Project progresses. New easements would be developed for those facilities relocated to a new location, consistent with Project improvements. As above, those improvements to be constructed along SR-138 and Gorman Post Road would not create any physical impacts beyond those addressed elsewhere in this document as part of Project development.

### SCE Infrastructure

SCE has also determined that full Project buildout would require a new substation, currently named the “Centennial Substation”. The Centennial Substation would be located in the vicinity of 300<sup>th</sup> to 310<sup>th</sup> Street West either north or south of SR-138. This necessary infrastructure would also be ensured via MM 20.2-2. Approximately 4.5 acres would be required for this substation site. The substation would convert the 66 kV voltage to 12 kV/9.5 kV for distribution to the various uses within this portion of the Project site. A detailed description of the proposed substation can be found in Section 4.5.10, Dry Utilities, of the Project Description (Section 4.0).

SCE has indicated that buildout of the western portion of the Project site would require additional capacity beyond the initial approximate 300-dwelling-unit existing capacity of the Gorman Substation. The Gorman Substation, located approximately 3.6 miles northwest of the site, is currently configured for distribution voltage. However, this substation would require the addition of one or more additional transformers within the footprint of the SCE-

owned parcel and reconstruction of the existing overhead power lines along Gorman Post Road within the SCE-owned easement from the substation to the Project site. Potential infrastructure improvements necessary to serve the western portion of the Project site are required by MM 20.2-2. In any event, the improvements implemented to serve the western portion of the Project site would occur entirely on lands owned by SCE, and therefore would not be on the Project site.

In addition to the expansion or upgrade of existing facilities and construction of a future substation for Project buildout, an electrical distribution system would be developed on the Project site to supplement and, in some cases, sell power back to the regional electrical grid. This distribution system would be included within the main utility corridors for dry utilities as shown on Exhibit 5.20-2, Centennial Project – Dry Utilities Improvements. The timing for construction of these facilities, as well as the specific facilities' locations and sizing, would be coordinated with SCE. The necessary facilities would be constructed in advance of the land uses that require the facilities in order to ensure that the Project's electrical needs are met as the site develops. The main utility corridors for dry utilities would be located underground within Parkways or Secondary Highways, as discussed in the Project's Mobility Plan (Section 3.2 of EIR Appendix 4.0-A).

All new and upgraded on-site facilities and infrastructure would be ensured via MM 20.2-2 and would be implemented as part of the Project within the public road system right-of-way. Those improvements to be constructed within the development area would not create any additional physical impacts beyond those addressed elsewhere in this EIR as part of the Project because implementation of electrical facilities would be concurrent with Project development.

As stated above, connection to these existing facilities and development of a new on-site electrical distribution system will occur as part of the Project. The only other existing off-site facilities that would require upgrades or retrofitting to provide adequate electrical service to the Project would be those discussed herein (i.e., the Gorman Substation and associated overhead lines and/or the Bailey Substation and other off-site electrical lines).

Continuing coordination between the Project Applicant/Developer and SCE, as required by MM 20.2-1, would ensure that the new system would accommodate the Project's requirements, including construction timing of these facilities and the specific facilities' locations and sizing.

#### Energy Conservation in the Project

The Project would be subject to Title 24 and CALGreen Code energy efficiency standards. However, as discussed in Section 5.21, Climate Change, the Project has committed to compliance with CALGreen voluntary measure A4.203.1.2.1 for low-rise residential buildings, resulting in buildings that would exceed 2013 Title 24 requirements by 15 percent (see PDF 11-3 in Section 5.11, Air Resources), and with CALGreen voluntary measure A5.203.1.2.1 for non-residential buildings and residential buildings taller than four stories, resulting in buildings that would exceed 2013 Title 24 requirements by 10 percent (PDF 11-2). Renewable energy produced on the Project site will be primarily rooftop solar, and at minimum 50 percent of the Project's anticipated electricity demand will be satisfied

from on-site renewable energy generation (PDF 21-3). The GHG emissions associated with energy use (electricity and natural gas) were estimated based on these assumptions. For the reasons discussed above, implementation of the Project would result in a less than significant impact to electrical services or facilities during construction or operation.

Through coordination with SCE, two options were developed for bringing the additional electrical capacity: (1) upgrading the existing Bailey Substation located on an SCE-owned parcel within the southwestern corner of the Project site (Exhibit 5.20-2, Centennial Project – Dry Utility Improvements) and/or (2) upgrading the Gorman Substation and retrofitting the associated existing overhead transmission lines between the Gorman Substation and the Project site to handle the higher load. Upgrade of the Bailey Substation is considered the more likely solution; however, both options would continue to remain open until later stages of the site development process. The timing of the upgrade to the Gorman Substation and associated overhead lines or the Bailey Substation would be determined through ongoing coordination between SCE and the Project Applicant/Developer. In either event, these improvements would occur entirely on lands and/or easements owned by SCE, and therefore would not be on the Project site. The option to upgrade the Bailey Substation (option 1) or Gorman Substation and overhead lines (option 2) to provide additional electrical capacity to the initial development of the entire Project is described in further detail below.

The Bailey Substation is a transmission relay substation, and is currently not configured for the distribution of voltage facilities that would be required to serve the Project. The site of the Bailey Substation is large enough (1.5 acres) to accommodate the required upgrade and it could be configured to serve the Project. The Bailey Substation upgrade would include the installation of a distribution transformer to carry sufficient load to the Project. Distribution voltage would then be extended to the Project on the existing overhead pole line along SR-138 or routed northerly overhead or underground around Quail Lake within the Project limits for the initial phases of development, then placed underground throughout the Project. This location, if upgraded as described, would provide sufficient electrical capacity to serve initial Project site development. The update of the Bailey Substation would not require retrofitting of any overhead lines. The upgrade of the Gorman Substation would require retrofitting of overhead lines as described further below.

The Gorman Substation, located approximately 3.6 miles northwest of the site, is currently configured for distribution voltage. However, this substation would require the addition of one or more additional transformers and the reconstruction of existing overhead power lines along Gorman Post Road from the substation to the Project. At a point just west of the Project boundary, the overhead facilities would take either direction along SR-138 or the northerly route around Quail Lake. It should be noted that, if the Bailey Substation upgrade were implemented, no upgrades to the Gorman Substation and its associated overhead lines or other off-site substation and overhead facilities would be necessary to serve any portion of the Project.

### ***Off-Site Impacts***

To provide adequate electricity for the Project, two options were developed for bringing the additional capacity to serve the western portion of the Project site: (1) upgrading the existing

Bailey Substation located on an SCE-owned parcel within the southwestern corner of, but not part of, the Project site or (2) upgrading the Gorman Substation and retrofitting existing overhead transmission lines to handle the higher load. At this time, upgrading the Bailey Substation is considered the more likely solution; however, both options will continue to remain viable until later stages of the site development process subsequent to the CEQA process. If the Bailey Substation is upgraded, no upgrades to the Gorman Substation or other off-site facilities will be necessary to serve the first phase of Project implementation.

Improvements to SCE facilities (including upgrading the existing Gorman Substation and associated overhead lines or upgrading the Bailey Substation) would occur entirely on SCE-owned lands and within existing development footprints. The inclusion of these electricity upgrades were included in the Project description and were included throughout the Project analysis. There would be a less than significant impact related to SCE (i.e., off-site) facilities and services.

Each of the proposed off-site well locations would be served by electricity to power the well pump and to control and monitor equipment. Electricity would be delivered to each well location through an underground or aboveground tie-in to the nearest electrical line from each well location. These lines would be near the proposed well locations, as CEW-3, CEW-4, and CEW-5 are located proximate to the existing Tejon Water Bank, all of which are, or will be, served by electricity. Collectively, the off-site wells would demand a minimal amount of electricity, particularly compared with the anticipated peak demand for buildout of the Project, which can adequately be served by SCE. Therefore, based on SCE's review and commitment to serve the Project, they would be able to serve the proposed off-site wells with electrical service without adversely affecting existing or planned service. There would be a less than significant impact and no mitigation is required.

***Impact Summary:*** The Project would result in less than significant impacts to electrical service and facilities with implementation of the Green Development Program as well as MM 20.2-1 and MM 20.2-2.

## **Mitigation Measures**

**MM 20.2-1** The Project Applicant/Developer shall coordinate with Southern California Edison (SCE) to ensure that there are no prolonged disruptions to the existing transmission lines that extend through the Project study area and to coordinate in the design and implementation of future electrical service and facilities (e.g., transmission lines, access road) in the Project study area. This will ensure that (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of electrical system improvements are in accordance with all SCE requirements; and (3) the improvements are adequate to serve the proposed land uses and are available for the first occupied land uses.

**MM 20.2-2** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate a future substation shall be constructed in the eastern half of the Project site to serve Project development in the easterly

portion of the Project site. To provide adequate capacity for electrical services for the Project, SCE would select one of the following two options to implement: (1) reconfigure the Bailey Substation or (2) upgrade the Gorman Substation and retrofit the existing overhead power lines. An electrical generation and distribution system shall be constructed as part of the main utility corridors for dry utilities. The timing of construction, as well as specific facility location and sizing, shall be coordinated with SCE.

## **Level of Significance After Mitigation**

Impacts related to electrical services and facilities would be less than significant with implementation of the Green Development Program, MM 20.2-1 and MM 20.2-2.

### **5.20.3 FOSSIL FUELS (NATURAL GAS AND PETROLEUM)**

#### **Relevant Plans, Policies, and Regulations**

##### ***Federal***

##### Energy Independence and Security Act of 2007

See summary under Section 5.20.2, Electricity.

##### Corporate Average Fuel Efficiency Standards

In response to the U.S. Supreme Court ruling, the Bush Administration issued an Executive Order on May 14, 2007, directing the U.S. Environmental Protection Agency (USEPA), the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law, which requires an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020. The EISA requires establishment of interim standards (from 2011 to 2020) that will be the “maximum feasible average fuel economy” for each fleet. On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analyzing proposed interim standards for passenger cars and light trucks in model years 2011 through 2015. The NHTSA issued a final rule for model year 2011 on March 23, 2009.

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the U.S. auto industry. In September 2009, the DOT and the USEPA issued a proposed rule setting federal standards that apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles built in model years 2012 through 2016. On April 1, 2010, the DOT and the USEPA jointly established these new rules, which establish more stringent CAFE standards and impose GHG emission standards.

On June 30, 2009, the USEPA granted the waiver for California, discussed in more detail below, for its greenhouse gas emission standards for motor vehicles.

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**State****Title 24 Energy Efficiency Standards**

See summary under Section 5.20.2, Electricity.

**Title 24 Green Building Standards**

See summary under Section 5.20.2, Electricity.

**Senate Bill 1368 (GHG Emissions Standard for Baseload Generation)**

See summary under Section 5.20.2, Electricity.

**Assembly Bill 1493 (Mobile Source Reductions)**

Assembly Bill (AB) 1493 required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks with a model year of 2009 and later. The bill required the CCAR to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill also authorized CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of the enforcement of regulations, using model year 2000 as the baseline for reduction.

In 2004, CARB applied to the USEPA for a waiver under the Federal Clean Air Act to authorize implementation of these regulations. The waiver request was formally denied by the USEPA in December 2007. In January 2008, the State Attorney General filed a lawsuit against the USEPA challenging the denial of California's request for a waiver to regulate and limit GHG emissions from these vehicles. In January 2009, President Barack Obama issued a directive to the USEPA to reconsider California's request for a waiver, which the USEPA granted on June 30, 2009. As part of this waiver, the USEPA specified that CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by the manufacturer for the 2009 model year.

**County****Countywide Energy and Environmental Policy (January 2007)**

See summary under Section 5.20.2, Electricity.

**Los Angeles County General Plan and Antelope Valley Area Plan**

The *Los Angeles County General Plan* and the *Antelope Valley Area Plan (AVAP)*, part of the County General Plan, include goals and policies that address fossil fuel issues in the unincorporated County.

The AVAP goal and policy applicable to the analysis of fossil fuels with Project implementation are listed below. Section 5.8, Land Use, Entitlements, and Planning, presents a more in-depth analysis of the Project's consistency with relevant plans, policies and regulations.

**Goal ED 1:** A healthy and balanced economic base in the Antelope Valley that attracts a wide range of industries and businesses and provides high-paying jobs for local residents.

**Policy ED 1.14:** Promote appropriate types of residential development in the vicinity of existing communities and town centers that are in reach of existing infrastructure and utilities.

## Environmental Setting

As noted above, natural gas represents the largest source of electricity in California, and is the second-largest type of consumed fuel. Petroleum is the most-consumed source of energy in the state; the transportation sector consumes approximately 39 percent of the state's energy (USDOE 2016a). The state's natural gas comes from a variety of places, and approximately 90 percent of the natural gas supply is imported (CEC 2017). The crude oil consumed in California comes from both in-state and out-of-state sources. In 2014, approximately 37.8 percent came from California, 10.6 percent from Alaska, and 51.6 percent from foreign countries (CEC 2015b).

While residential natural gas consumption has increased, the average annual natural gas consumption per household has decreased, largely as a result of energy efficiency improvements. For example, although absolute consumption of natural gas has increased between 1970 and 2007, natural gas consumption per household dropped 36 percent. (CEC 2009). Similarly, the CEC projects that demand for gasoline may drop as a result of new energy efficiency requirements; regulations at the state and local levels; rising fuel prices; and increased popularity of fuel-efficient vehicles such as hybrid and light-duty diesel vehicles (CEC 2010).

The Southern California Gas Company (SoCalGas), also known as The Gas Company, provides natural gas service to much of the Southern California region, including the Project site. According to the SoCalGas website, the company has a service area of approximately 20,000 square miles and provides service to 21.4 million customers throughout Central and Southern California, from Visalia to the Mexican border (SoCalGas 2015). SoCalGas is regulated by the CPUC, and is required to provide service to existing and proposed future development in its service area.

There are existing SoCalGas gas lines within and near the Project site. There is one high-pressure gas main in the vicinity, and it is a 33-inch diameter, north-south-running gas transmission line (Line 225) within an SoCalGas-owned easement that originates at SR-138 just east of the Golden State Freeway (Interstate [I] 5). A six-inch high-pressure distribution line branches from Line 225 and travels east to serve the National Cement Plant north of the Project boundary. There is a medium-pressure gas distribution main in SR-138, which branches from Line 225 and travels east to the Quail Lake area (SoCalGas 2006). These facilities are shown on Exhibit 5.20-2, Centennial Project – Dry Utilities Improvements. Additional, various-sized, medium-pressure gas-distribution mains are located in and around SR-138 in the Project vicinity.

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## Project Design Features

See the *Centennial Specific Plan's* Appendix 1-B, Green Development Program, and summary of corresponding Project Design Features in Section 5.21, Climate Change.

## Threshold Criteria

The following criterion from the County of Los Angeles Environmental Checklist is used to establish a threshold to determine the potential for significance. The Project would result in a significant impact to natural gas facilities and services if it would:

**Threshold 20-2** Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## Environmental Impacts

**Threshold 20-2** **Would the project create natural gas system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

### *On-Site Impacts*

The Project will increase demand for the SoCalGas-provided natural gas services and facilities.

The Project will also result in consumption of petroleum, primarily for transportation energy (i.e., gasoline and diesel). Natural gas and petroleum will be consumed throughout construction and operations of the Project. Energy will be required during construction for the transportation of building materials and construction of buildings and infrastructure. Natural gas consumption during construction will be minimal; gasoline and diesel use account for the vast majority of construction-period energy needs.

During operations, energy will be consumed for various purposes including, but not limited to, building heating and cooling, use of consumer products, lighting, stationary source operation, and motor vehicle use. Although motor vehicle use accounts for the majority of petroleum consumption associated with the Project, other Project activities that could result in petroleum consumption include propane used for barbeques, asphalt paving and industrial uses. The physical environmental impacts related to the implementation of necessary utility infrastructure are addressed as part of the entire Project analyzed throughout this EIR.

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## Natural Gas

### *Natural Gas Demand*

To determine the estimated natural gas demand from operation of the Project site, the SoCalGas Engineering Department was consulted to determine the appropriate “rule of thumb” load estimates for the various land uses on the Project site. Using these factors, it is estimated that Centennial would demand approximately 30 million cubic feet (cf) per month of natural gas, as shown in Table 5.20-2, SoCalGas Estimate of Centennial’s Monthly Natural Gas Demand. This represents the total estimated demand per month from all types and quantities of proposed land uses that would utilize natural gas, rather than peak demand, which is used by SoCalGas as the basis of gas supply and infrastructure planning.

It should be noted that this estimate of natural gas demand is based on SoCalGas’ general-use demand factors and does not take into account the current code requirements and additional measures that would be implemented to increase energy efficiency (Green Development Program).

As part of their planning process, SoCalGas forecasts future demand inclusive of the Project and continues to provide the necessary energy resources for existing demands. Therefore, SoCalGas has indicated that current supplies of monthly natural gas are sufficient to supply the Project based on SoCalGas’ estimate of natural gas demand (SoCalGas 2006). However, the realistic natural gas demand with planned energy efficiency features would be lower than the appropriately conservative estimate prepared by SoCalGas as the basis of supply and infrastructure planning. The extension of the additional main from the 33-inch transmission main would parallel the existing medium-pressure main that exists within the right-of-way of Gorman Post Road and SR-138. This tap would require an additional pressure regulation station on an easement space (75 feet by 30 feet).

**TABLE 5.20-2  
SOCALGAS ESTIMATE OF CENTENNIAL'S MONTHLY NATURAL GAS DEMAND**

<b>Land Use Type</b>	<b>Land use Size</b>	<b>Demand Factor</b>	<b>Usage (cf/month)</b>
Single Family	14,600 du	6,665.0 cf/du/month	97,309,000
Multi-Family	4,800 du	4,011.5 cf/du/month	19,255,200
Commercial	4,138,200 sf	2.9 cf/sf/month	12,000,780
Employment	30,753,360 sf	2.0 cf/sf/month	61,506,720
School <sup>b</sup>	6,446,880 sf	2.0 cf/sf/month	12,893,760
Park <sup>a,b</sup>	7,100,280 sf	0.0 cf/sf/month	0
Commercial Recreation <sup>b</sup>	3,267,000 sf	2.0 cf/sf/month	6,534,000
Open Space <sup>a,b</sup>	257,308,920 sf	0.0 cf/sf/month	0
Utility <sup>b</sup>	8,319,960 sf	2.0 cf/sf/month	16,639,920
<b>Total</b>			<b>226,139,380</b>
<b>Total (in millions)</b>			<b>226</b>
SoCalGas: Southern California Gas Company; cf: cubic foot/feet; du: dwelling unit; sf: square foot/feet			
<sup>a</sup> Assumes that "Park" and "Open Space" land use types would not use natural gas. While some parks may contain scattered, small-scale, built facilities that may use natural gas and electricity, the extent of these facilities is unknown at this time. Regardless, the level of natural gas demand from such facilities would be nominal compared to the estimate of demand for the remainder of built land uses, which are based on conservative demand factors that do not account for the additional energy conservation features planned for the Project. Open space also includes greenways and landscape lots.			
<sup>b</sup> To utilize the SoCalGas-provided demand factors, the number of units was derived by converting the gross acres for each land use, except residential units, as presented in Centennial Project Statistical Table (Table 4-2 in Section 4.0, Project Description), to square feet (1 acre = 43,560 sf). Therefore, these numbers are greater than the actual land area that would be covered with structures for each land use, such as school buildings.			
Source of demand factors: SoCalGas 2008.			

### *Natural Gas Distribution Line Relocation*

SoCalGas' high-pressure natural gas facilities along the westerly boundary of the Project site may be affected by Project-related roadway improvements. Portions of the utilities within these easements may require adjustment or relocation. As with the electrical lines, there are approximately 29,000 feet of natural gas facilities along the SR-138 and along Gorman Post Road.

To prevent problems with providing other utility services, ongoing coordination between the Project Applicant/Developer and SoCalGas, as required by MM 20.3-1, would ensure that the new facilities would accommodate the Project's requirements. Coordination is typical between a project applicant and a utility provider to avoid any prolonged service disruptions during extension, relocation, and upgrade of services and facilities. This routine coordination ensures that the nature, design, and timing of natural gas system improvements are adequate to serve the Project. The timing for construction, as well as location and sizing, of these facilities will be coordinated with SoCalGas.

### *SoCalGas Infrastructure*

SoCalGas anticipates that either additional feeds from the existing distribution system in the Project vicinity or a new system would be necessary to serve the Project's projected demand. This will be determined in the future as part of the Project planning and implementation process. Regardless, MM 20.3-2 requires that the Project Applicant/Developer install, bond for, or otherwise provide on-site natural gas facilities in coordination with SoCalGas. To provide natural gas service to the Project, a series of transmission and distribution gas mains would be installed in the proposed roadways. An underground extension of gas facilities will need to be constructed east along Gorman Post Road from the proposed regulator station to the Project's westerly entrance, where it would follow the route along with electricity and telephone lines through the Project site around the north side of Quail Lake. The main could also be extended along the SR-138 roadway, just outside the road right-of-way, easterly to the initial construction phases of the Project. Due to gas line installation requirements, transmission main extensions would be in separate trenches within proposed roadways. Distribution main extensions would be installed in utility corridors (shown on Exhibit 5.20-2, Centennial Project – Dry Utility Improvements). Some of these transmission and distribution mains may parallel each other in the same roadway. It may be necessary to extend a high pressure line to and within the Project site for the placement of a series of future regulator stations. The initial distribution gas source is proposed to come from connecting, or “tapping” into an existing high pressure main west of the southwest corner of the site near Gorman Post Road, placing a regulator station (potential easement space needed of approximately 75 feet by 30 feet), and running distribution medium pressure and/or transmission high pressure to and through the Project site. Gas distribution efficiency and operating integrity require that the gas mains are looped. As the Project develops, the mains may be tied to each other for pressure stabilization. MM 20.3-3 requires that an additional regulator station be constructed in the future to loop the distribution system for increased reliability.

As discussed above, SoCalGas has stated that, with appropriate expansion of infrastructure, there are adequate natural gas supplies to serve the Project (SoCalGas 2006). All new and upgraded on-site facilities and infrastructure, including regulators and distribution facilities, would be implemented as part of site development and would be constructed within public rights-of-way. Therefore, these improvements would not create additional physical impacts beyond those addressed elsewhere in this EIR because natural gas facilities would be implemented within the footprint of the overall development Project.

### *Energy Conservation in the Project*

The Project would be subject to Title 24 and mandatory CALGreen Code energy efficiency standards. However, as discussed in the Green Development Program, the Project has committed to achieving CALGreen's voluntary Tier 1 status, including exceeding Title 24 requirements by 15 percent for low-rise buildings and by 10 percent for nonresidential, hotel, and high-rise residential buildings (PDFs 11-5 and 11-6, from Section 5.11, Air Resources). Also, a minimum of 50 percent of the Project's anticipated electrical energy demand would be satisfied from on-site renewable energy generation (PDF 21-3 from Section 5.21, Climate Change). The GHG emissions associated with energy use (electricity and natural gas) were estimated based on these assumptions. A description of the ways the

Project will satisfy CALGreen Tier 1 energy efficiency measures is provided in the Green Development Program, and summarized in PDF 21-3 in Section 5.21, Climate Change.

For the reasons discussed above, implementation of the Project would result in a less than significant impact to natural gas services or facilities during construction or operation.

### Petroleum

#### *Petroleum Demand*

Project construction and operations would result in consumption of petroleum. The majority of fuel consumption resulting from the Project would involve the use of motor vehicles. Petroleum fuel consumption associated with the Project is a function of the vehicle miles traveled (VMT) as a result of Project construction and operations. As discussed in Sections 5.10 (Traffic, Access, and Circulation), 5.11 (Air Resources) and 5.21 (Climate Change), the Project would result in an increase in VMT which, in turn, could result in additional fuel consumption and energy use associated with transportation.

It should, however, be noted that, as discussed above, as a result of anticipated fuel efficiency improvements, additional VMT will not necessarily result in a proportional increase in fuel consumption. Moreover, as discussed below, the Project incorporates a variety of features intended to reduce VMT associated with the Project.

#### *Transportation Facilities*

The Green Development Program summarized in Section 5.21, Climate Change, describes the Project features that would reduce petroleum consumption both through energy-efficient site planning and building design as well as transportation improvements and vehicle trip reductions. As discussed further in Section 5.10, Traffic, Access and Circulation, the Project will construct and/or provide funding for necessary traffic and transit improvements to ensure there are less than significant traffic impacts. Without these improvements, the Project-generated trips would otherwise result in increased gasoline usage and less efficient gasoline consumption due to traffic congestion. The Project also includes a Mobility Plan that addresses vehicle circulation and alternative transportation infrastructure, including local transit and pedestrian and bicycle routes. Finally, the Project proposes compact and efficient siting of residential and mixed-use neighborhoods as well as office and commercial space to maximize the use of existing infrastructure while providing for the Project's internal circulation needs.

#### *Vehicle Trip Reductions in the Centennial Project*

As discussed previously, the Project incorporates a number of ways to reduce energy use from motor vehicle use. These include the multi-modal circulation systems, efficient site planning and building design, transportation improvements, and other vehicle trip reducing design features such as the provision of internet infrastructure, which supports telecommuting as well as online shopping and research. For the reasons discussed above, transportation energy impacts from implementation of the Project would be less than significant.

## ***Off-Site Impacts***

### Natural Gas

To provide adequate natural gas for the Project, improvements to SoCalGas facilities would occur outside the Project site on lands owned by SoCalGas. Potential off-site impacts resulting from connections to the existing high-pressure main near the southwestern corner of the Project site and the construction of a gas regulator station at this location would be confined to existing SoCalGas easements and within the existing development footprint. The inclusion of these natural gas line upgrades was included in the Project description and throughout the Project analysis. There would be a less than significant impact related to SoCalGas facilities and services.

The proposed off-site wells would not include natural gas service. Therefore, there would be no impact to SoCalGas supplies or services, and no mitigation is required.

### Petroleum

VMT associated with off-site Project features is addressed in Section 5.10, Traffic, Access, and Circulation. Construction of off-site Project features would generate only minimal trips. As discussed in Section 5.10, long-term operation of the proposed off-site Project features would not result in substantive new vehicle trips, longer driving distances, or traffic congestion such that petroleum consumption could be significantly increased. The proposed utility improvements would not generate trips, and there would be no impact related to transportation energy.

As discussed in Section 5.10, Traffic, Access, and Circulation, the proposed off-site wells would cause essentially no increase in traffic. It is anticipated that one daily visit to each well location would be necessary for maintenance and monitoring purposes; however, this level of traffic would be nominal, particularly in comparison to the anticipated daily trips associated with the Centennial Project. Therefore, transportation energy impacts from implementation of the proposed off-site wells would be less than significant.

***Impact Summary:*** The Project would result in less than significant impacts to natural gas service and facilities and petroleum consumption with implementation of the Green Development Program, and MMs 20.3-1 through 20.3-3.

## **Mitigation Measures**

**MM 20.3-1** The Project Applicant/Developer shall coordinate with the Southern California Gas Company (SoCalGas) in the design and implementation of future natural gas service and facilities in the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrade of these services would arise; (2) the nature, design, and timing of natural gas system improvements are in accordance with SoCalGas requirements; and (3) the improvements are adequate to serve the Project, to be in place for the first occupied land uses.

- MM 20.3-2** The Project Applicant/Developer shall install, bond for, or otherwise provide on-site natural gas facilities in coordination with SoCalGas.
- MM 20.3-3** An additional regulator station shall be constructed by SoCalGas to loop the distribution system for increased reliability. The timing for development of this station shall be determined by SoCalGas through an assessment of the system's operational needs. The timing for construction of this facility, as well as the specific location and sizing, shall be coordinated with SoCalGas.

### **Level of Significance After Mitigation**

Impacts related to natural gas services and facilities and petroleum consumption would be less than significant with implementation of the Green Development Program, and MMs 20.3-1 through 20.3-3.

### **5.20.4 TELEPHONE SERVICE**

#### **Relevant Plans, Policies, and Regulations**

No pertinent federal, State, or local plans, policies, or regulations related to telephone service have been identified.

#### **Environmental Setting**

AT&T (formerly known as SBC)<sup>2</sup> is a national provider of voice and data telecommunications services, serving millions of customers. AT&T is regulated by the CPUC, whose focus is to develop and implement policies and procedures to facilitate competition in all telecommunications markets; to ensure reasonably priced essential services; and to provide consumer protection against abusive practices (AT&T 2015). Several other communications companies (such as MCI World Com, Rapid Cable, and Quest Communications) operate existing underground fiber optic systems adjacent to I-5 for regional services.

The AT&T Central Office responsible for providing service to the Project area is located north of the Project site in Lebec. Underground and overhead fiber optic (fiber) and twisted pair (copper) distribution facilities are located within the Project site. A Litespan 2000 unit is located on Gorman Post Road. This structure's usage is based on digital and Y2K compliance needs of the National Cement Plant and was installed in anticipation of future growth in the area (BJ Palmer 2015).

#### **Project Design Features**

- PDF 20.4-1** The telephone line extension that would be implemented for the Project would retrofit and/or replace the current overhead system.

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<sup>2</sup> As of November 18, 2005, SBC was renamed AT&T.

## Threshold Criteria

The following criterion from the County of Los Angeles Environmental Checklist is used to establish a threshold to determine the potential for significance. The Project would result in a significant impact to telephone facilities and services if it would:

**Threshold 20-3** Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## Environmental Impacts

**Threshold 20-3** **Would the project create telephone service system capacity problems, or result in the construction of new facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

### *On-Site Impacts*

#### Telephone Service Demand

The Project would result in an increased demand for the number of telephone lines and would create the need for new telephone service infrastructure provided by AT&T. The physical environmental impacts related to the implementation of necessary utility infrastructure are addressed as part of the Project analyzed in this EIR.

AT&T currently designates two lines per customer for a typical single-family home. Using this assumption, the Project will require 38,666 telephone lines for residential uses. Telephone line sizes for commercial areas are planned for and sized based on the Project Applicant/Developer's proposed demand. AT&T has stated that the Project's demand for telephone service would be adequately served on a demand basis (Matthews 2006). This means that, as demand increases, service to the Project site and associated facilities would be improved or expanded to accommodate the demand. No impacts related to AT&T's ability to provide telephone service would occur; however, AT&T has stated that upgrading the Central Office in Lebec would be necessary and would involve internal upgrades to distribution facilities, which would expand the Central Office's service capacity and meet the overall Project demand. The upgrade would be performed in stages, based on the level of demand, as the Project progresses.

To extend telephone service to the Project, telephone fiber or cabling would be provided in the proposed utility corridors. The initial extension (overhead and/or underground) of telephone facilities will be constructed along Gorman Post Road in the current franchise area entering the Project site at the most westerly entrance, or continuing overhead along the pole line along SR-138 (PDF 20.4-1).

The Project would be developed as a "full fiber" project, with the extension of fiber lines (as opposed to cable lines) to all homes on the site. AT&T would plan for a substructure system

that would allow for this service. To support the development of the Project as “full fiber”, additional fiber from existing AT&T facilities would either be placed overhead on the existing pole line along SR-138 or on a temporary overhead/underground location within the Project limits line along the north side of Quail Lake, along with electrical facilities, to service the initial phases of development. Several telephone fiber pedestals would be placed throughout the Project site, allowing for a complete fiber system to be constructed to allow fiber to the home, including high speed service capabilities. These new fiber facilities would be in addition to existing copper/fiber facilities currently in place (BJ Palmer 2015). The determination of whether these additional facilities are needed, as well as the locations of the telephone fiber pedestals or other AT&T facilities, would be determined in the future as part of Project planning and implementation. However, these facilities, both aboveground and underground, would be within the Project boundaries and, therefore, any potential physical impacts from these facilities are addressed as part of the analysis provided throughout this EIR.

The cost associated with new facilities and the existing system retrofit would be the responsibility of AT&T. Extension of these facilities would be conducted by AT&T as well. New business telephone extensions within 200 feet of the Project boundary and within the Project site are also AT&T’s responsibility. Each year, AT&T budgets for capital improvements such as these for the upcoming year. AT&T manages the allocation of their funds based on a project’s estimated needs. Construction and activation of the improvements are then based on application and demand. Timeframes would be consistent with the Project’s progress. Once AT&T installs telephone lines, line extension fees would apply to individual homeowners. With additional cabinets, the existing AT&T Litespan 2000 unit would have sufficient capacity to serve the Project site (BJ Palmer 2015).

In addition, future Centennial residents would be expected to use cell phones with coverage provided by a variety of different providers. Construction of cell phone towers is managed by each individual provider as deemed necessary to support demand, and such a project would require preparation of its own CEQA documentation. As the location(s) of future cell phone towers, if deemed necessary, is unknown, consideration of the environmental impacts of these facilities would be speculative. Therefore, the environmental impacts of potential future cell phone towers are not addressed as part of the Project analysis within this EIR but, as stated above, would be addressed through the separate CEQA documentation to be required for each project by the individual cell phone service providers. However, the Project would also accommodate wireless communication facilities, including antennas (mounted on buildings or stand-alone structures) and equipment shelters. These facilities would be designed to blend with the surrounding environment. Using “stealth design” techniques, antennas can be mounted on buildings; placed within tall architectural features (such as a clock tower, steeple, or entry signage); or strategically placed among a cluster of trees of similar height to render them invisible to the casual observer. Standards for wireless equipment are outlined in Section 2.2.8(Q) of the *Centennial Specific Plan*, which is Appendix 4.0-A of this EIR. The environmental impacts of these facilities located within the Project’s development area are addressed as part of the Project analysis provided throughout this EIR.

### Disruption of Other Utility Services

Existing AT&T facilities within the Project site may be affected through Project development (Exhibit 5.20-2, Centennial Project – Dry Utility Improvements). Approximately 48,000 linear feet of phone lines run throughout the Project site, and access roads to these lines within the Project site would be within future development areas. As a result, these facilities could require relocation or removal. Project development may also necessitate the relocation and/or removal of existing off-site AT&T facilities. Approximately 29,000 linear feet of existing telephone trunk and distribution lines along SR-138 and Gorman Post Road could require relocation or removal. Relocation or conversion of these facilities would be the Project Applicant/Developer's responsibility. As part of coordination between the Project Applicant/Developer and AT&T, and as required by MM 20.4-1 described below, the alternative locations for these relocated/removed telephone lines would be planned to avoid service disruptions and to avoid Project-related impacts to these facilities.

As discussed above, development of the Project could also impact off-site fiber connections to the Litespan 2000 cabinet and require an upgrade of the existing Central Office facility in Lebec. AT&T's implementation of necessary expansion and upgrades that would support the Project would not create significant physical impacts since all such improvements would occur within existing facility structures.

Additionally, it may be necessary to construct temporary overhead and/or underground facilities to provide sources; change the direction of "feed" to accommodate improvement requirements; or remove other facilities (BJ Palmer 2015). The temporary facilities are constructed solely to facilitate installation of the permanent facilities and would be removed with installation of permanent facilities. The location and extent of these facilities is unknown at this time, and would be determined during installation of necessary AT&T infrastructure. However, such temporary AT&T facilities improvements would be constructed entirely within the development area and would therefore not create any physical impacts beyond those addressed elsewhere in this EIR as part of the Project.

AT&T has current easements, franchise rights, and/or prescriptive claims that cover all their existing facilities. AT&T would extend the facilities/lines within existing or proposed road right-of-way areas whenever possible. When not possible, easements would be obtained for facilities placed on private property within the Project site. Any permits or authorizations required for the extension of telephone service to the Project site would be the responsibility of AT&T.

With implementation of MM 20.4-1, there would be less than significant impacts to telephone services and facilities during construction or operation.

### ***Off-Site Impacts***

To provide adequate telephone service for the Project, improvements to AT&T's facilities would occur outside the Project site on lands owned by AT&T (PDF 20.4-1). Potential off-site impacts resulting from upgrades of the Central Office in Lebec would be confined to existing AT&T property within the existing development footprint. The inclusion of these telephone line upgrades were included in the Project description and were included throughout the

Project analysis. As discussed above, ongoing coordination between AT&T and the Project Applicant/Developer, via MM 20.4-1, would help ensure there are no prolonged service disruptions for existing telephone and data users and that relocation or improvement of AT&T facilities is performed in compliance with all AT&T requirements. Therefore, there would be a less than significant impact related to AT&T facilities and services.

The proposed off-site wells may utilize telephone lines. However, the Supervisory Control and Data Acquisition (SCADA) system may also be operated via radio or dedicated telemetry lines. Regardless, this negligible level of additional demand on AT&T services would not affect the ability to serve existing or future telephone demand. Therefore, there would be a less than significant impact to AT&T services, and no mitigation is required.

***Impact Summary:*** The Project would result in less than significant impacts to telephone service and facilities with implementation of PDF 20.4-1 and MM 20.4-1.

## **Mitigation Measures**

**MM 20.4-1** The Project Applicant/Developer shall coordinate with AT&T in the design and implementation of future telecommunications service and facilities within the Project study area to ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of telecommunications system improvements are in accordance with AT&T requirements; and (3) the improvements are adequate to serve the proposed land uses.

## **Level of Significance After Mitigation**

Impacts related to telephone service and facilities would be less than significant with implementation of PDF 20.4-1 and MM 20.4-1.

## **5.20.5 CABLE TELEVISION**

### **Relevant Plans, Policies, and Regulations**

No pertinent federal, State, or local plans or policies related to cable television (CATV) service have been identified.

### **Environmental Setting**

CATV service is a free-enterprise system and is open to competition. Local service providers in the vicinity of the Project site include CalNeva Broadband (formerly Rapid Cable) and Time Warner Cable. CalNeva Broadband is a national CATV provider that serves customers in California and throughout the country. CalNeva Broadband currently provides cable television to the Gorman area northwest of the Project site and has indicated a willingness to expand services onto the Project site (BJ Palmer 2015). Time Warner Cable's closest facility is in Castaic, and the company does not currently plan on extending service further

to the north. At this time, the cable provider may be CalNeva Broadband or some other provider.

There are no existing CalNeva Broadband or other CATV facilities located on the Project site. The closest existing trunk and/or distribution facilities are CalNeva Broadband facilities and are located in Gorman, approximately four miles northwest of the Project site. CalNeva Broadband's plant is located north of the Project site in Frazier Park, located approximately eight miles west-northwest of the western boundary of the Project site. CalNeva Broadband has stated they have the capability and capacity to serve the entire Project area and future proposed surrounding developments with video and high speed internet access. However, a Cable Provider has not yet been confirmed.

## Project Design Features

**PDF 20.5-1** According to the Project, cabling for Cable Television (CATV) services would be provided as part of the on-site main utility corridors for dry utilities. The extension of CATV lines would proceed from the nearest location of service from whichever provider is chosen.

## Threshold Criteria

The following criterion from the County of Los Angeles Environmental Checklist is used to establish a threshold to determine the potential for significance. The Project would result in a significant impact to CATV facilities and services if it would:

**Threshold 20-4** Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## Environmental Impacts

**Threshold 20-4** **Would the project create cable services system capacity problems, or result in the construction of new facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

### *On-Site Impacts*

CATV service is not available in the immediate vicinity of the Project site. As such, the Project would place new demands on CATV service and require extension of facilities. Specifically, implementation of the Project would result in an increased demand for both the number of CATV lines and the need for new CATV service infrastructure. As described in PDF 20.5-1, cabling for CATV services would be provided as part of the on-site main utility corridors for dry utilities. The extension of CATV lines would proceed from the nearest location of service from whichever provider is chosen. As part of Project development, CATV service connections would be stubbed to each property line (MM 20.5-1). The physical

environmental impacts related to the implementation of necessary utility infrastructure are addressed as part of the entire Project analyzed in this EIR.

As discussed above, while CalNeva Broadband has the nearest CATV facilities to the Project site, no CATV Provider has been confirmed at this time. CalNeva Broadband has indicated that they have the capability to serve the Project with implementation of necessary infrastructure, including a fiber trunk system along Gorman Post Road in the current road right-of-way to the Project site (BJ Palmer 2015). Extension to the site would follow the route along with the electrical and telephone lines within the Project limits around the north side of Quail Lake. The facilities could also be extended along the SR-138 roadway overhead on the existing pole line, easterly to the initial construction phases of the Project. However, all options are being explored regarding potential CATV providers. Due to the magnitude of the Project's CATV demand, any company wishing to provide service to the Project site would need to provide sufficient evidence regarding their ability to serve the Project before that service provider would be selected. The CATV provider would need to extend fiber facilities providing phone, video, data, and high speed internet access. As a result, the Provider chosen will inherently be able to provide sufficient service and would be a less than significant impact to CATV service.

Coordination is typical between a Project Applicant/Developer and a Utility Provider (MM 20.5-1) in order to avoid any prolonged service disruptions during extension, relocation, and upgrade of services and facilities. This coordination also ensures that the nature, design, and timing of CATV system improvements are adequate to serve the Project's requirements. The construction timing, location, and sizing of these facilities would be coordinated with the CATV Provider, when selected.

There are no existing right-of-way conflicts because there are no CATV lines within the Project site. CATV lines would be extended within existing or proposed road right-of-way areas as part of the on-site main utility corridors for dry utilities, whenever possible, or within franchise areas. Any permits or authorizations required for the extension to the Project site would be applied for and obtained by the CATV Provider. Therefore, there would be less than significant impacts related to the provision of CATV services and facilities.

### ***Off-Site Impacts***

Development of the Project could impact off-site CATV lines near the Service Provider's plant or distribution facilities and may require an upgrade of existing facilities. The cost associated with any upgrade and/or retrofitting of the off-site fiber optic connections is typically the responsibility of the Service Provider, and extension of these facilities to the Project site would also be conducted by the Service Provider. Coordination between the Project Applicant/Developer and the Service Provider, in accordance with MM 20.5-1, and adherence to PDF 20.5-1 described above, would ensure that any impacts related to off-site Project features for CATV services and facilities would be less than significant.

The proposed off-site wells would not include CATV service. Therefore, there would be no impact to CATV services, and no mitigation is required.

**Impact Summary:** The Project would result in less than significant impacts to CATV service and facilities with implementation of PDF 20.5-1 and MM 20.5-1.

## Mitigation Measures

**MM 20.5-1** The Project Applicant/Developer shall coordinate with the Cable Television Service Provider in the design and implementation of future communication service and facilities within the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of cable system improvements are in accordance with the Cable Service Provider's requirements; and (3) the improvements are adequate to serve the proposed land uses. The cable service connections shall be available at the property lines.

## Level of Significance After Mitigation

Impacts related to cable television service and facilities would be less than significant with implementation of PDF 20.5-1 and MM 20.5-1.

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