Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project (including planning, acquisition, development, and operation) be considered when evaluating a project's impact on the environment. Section 15126 also sets forth general content requirements for environmental impact reports (EIRs). This section identifies (1) significant irreversible environmental changes that would result from implementing the proposed Countywide Plan (CWP or Project); (2) growth-inducing impacts of the proposed Project; and (3) potential energy impacts of the proposed Project.

# 9.1 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

Section 15126.2(c) of the CEQA Guidelines requires that an EIR describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

In the case of the proposed Project, implementation would cause the following significant irreversible changes:

- Implementation of the proposed Project would include construction activities that would entail the commitment of nonrenewable and/or slowly renewable energy resources; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Future developments in accordance with the proposed Project would require the use of natural gas and electricity, fossil fuels, and water. The commitment of resources required for the construction and operation of the proposed Project would limit the availability of such resources for future generations or for other uses during the life of the Project.
- An increased commitment of social services and public maintenance services (e.g., police, fire, schools, libraries, and sewer and water services) would also be required. The energy and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.

- Population growth related to Project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips would continue to contribute to the South Coast Air Quality Management District and Mojave Desert Air Quality Management District nonattainment designations for ozone (O<sub>3</sub>) and particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) in their respective basins.
- Future development in accordance with the proposed CWP is a long-term irreversible commitment of vacant parcels of land or redevelopment of existing developed land in the unincorporated areas of the County.

Given the low likelihood that the land would revert to lower intensity uses or to its current form, the proposed Project would generally commit future generations to these environmental changes.

#### 9.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this Project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the Project area, or through changes in existing regulations pertaining to land development?
- Would this Project result in the need to expand one or more public services to maintain desired levels of service?
- Would this Project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this Project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this Project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this PEIR.

Page 9-2

PlaceWorks

Would this Project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the Project area, or through changes in existing regulations pertaining to land development?

Buildout of the proposed CWP would directly induce substantial growth in the unincorporated areas of the County through both major infrastructure improvements and changes in existing regulations.

#### **Construction or Extension of Major Infrastructure**

- Implementation of the CWP would allow for development of currently undeveloped parcels and alteration, intensification, and redistribution of existing land uses. This would indirectly induce construction of infrastructure extensions and improvements, such as roadways, storm drains, water pipes, solid waste collection systems, and energy/communication extensions toward areas of new or intensified development. In addition, the proposed Project would increase demand for electricity and natural gas that could require expansion of energy infrastructure. As infrastructure is extended throughout the unincorporated County, obstacles to growth would be removed. Impacts to existing utilities and service systems and potential needs for future improvements are discussed further in Section 5.18, Utilities and Service Systems.
- Buildout of the proposed Project may require additional firefighting and police personnel, and construction of new and/or expanded facilities to improve deployment and response times. Buildout may also require future construction of new and/or expanded schools in the various school districts serving the County and construction of new and/or expanded branch libraries within the County Library system. Impacts of the proposed Project on public services are discussed in detail in Section 5.14, Public Services.
- Buildout of roadways in the County per roadway classifications in the proposed CWP Built Environment Element (Transportation & Mobility section) would increase roadway capacity in some areas to maintain adequate levels of service and would also improve roadways with multimodal amenities and features to promote pedestrian, bicycle, and transit use. This would allow for more efficient multimodal transportation network throughout the County and would promote the development of land near these enhanced roadways. Proposed roadway classifications and their impacts are described in Section 5.16, Transportation and Traffic.

#### **Changes in Existing Regulations**

Predominant current land use districts in the unincorporated County include Resource Conservation, Rural Living, Agriculture, Single Residential, various Commercial and Industrial districts, Floodway, Institutional, and Special Development (see Table 3-1 in Chapter 3, *Project Description*). The County is proposing to transition to a two-map system that retains the current land use districts for zoning but introduces a broader set of general plan land use designations to streamline and simplify land use planning and regulation. These land use designations include Resource and Land Management, Open Space, Rural Living, Low Density Residential, Medium Density Residential, Commercial, Community Industrial, Regional Industrial, Public Facilities, and Special Development (see Table 3-2 in Chapter 3, *Project Description*).

At full buildout of the CWP, the proposed intensification of uses in the unincorporated County would introduce an additional 46,437 persons, 14,379 dwelling units, 19,397,900 square feet of nonresidential use, and 12,546 jobs. Additional buildout statistics by geographical planning region (i.e., Valley, Mountain, East Desert, and North Desert regions) are detailed in Table 3-3, *Projected Growth in San Bernardino County, 2016–2040,* in Chapter 3, *Project Description.* 

### Would this Project result in the need to expand one or more public services to maintain desired levels of service?

As stated above, proposed Project buildout may require additional fire and police services and school and library facilities to maintain desired levels of service. This would include expanding existing facilities; acquiring land to construct new fire and police stations, schools, and libraries; and adequately equipping and staffing new facilities. Section 5.14, *Public Services*, analyzes the impacts of the proposed Project on existing public services in more detail.

## Would this Project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Implementation of the proposed Project would not encourage or facilitate economic effects that could result in other activities that could significantly affect the environment. Buildout of the proposed CWP would increase employment in the unincorporated County by 12,546 jobs. Impacts of the increase in job-generating land uses and employment pursuant to the CWP are analyzed throughout Chapter 5 of this PEIR. No additional impacts would occur.

## Would approval of this Project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Cities and counties in California periodically update their general plans pursuant to California Government Code Sections 65300 et seq. Thus, approval of the proposed CWP would not set a precedent that could encourage and facilitate other activities that could significantly affect the environment.

#### 9.3 ENERGY IMPACTS OF THE PROPOSED PROJECT

Section 21100(b)(3) of CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy. Although impacts to energy are not addressed in Appendix G of the CEQA Guidelines, Appendix F of the CEQA Guidelines states that the goal of conserving energy implies the wise and efficient use of energy and that the means of achieving this goal include 1) decreasing overall per capita energy consumption; 2) decreasing reliance on fossil fuels such as coal, natural gas and oil; and 3) increasing reliance on renewable energy sources. To address this issue, Project-related energy impacts will be examined through analysis of the following questions:

Page 9-4

PlaceWorks

- Would this Project increase demand for energy that requires expanded supplies or the construction of new infrastructure or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Would this Project result in an inefficient, wasteful, and unnecessary consumption of energy?

The discussion of existing energy supplies and impacts of CWP buildout on supplies is summarized here from Section 5.18, *Utilities and Service Systems*, of this DEIR. Please see Section 5.18 for discussion of regulations and the listings of General Plan policies and Regulatory Requirements.

#### 9.3.1 Existing Conditions

#### **Electricity**

#### Southern California Edison

Southern California Edison (SCE) provides electricity to most of the County (CEC 2015a). Other electricity providers to portions of the County include the City of Needles Electric Department; City of Colton Electric Utility; Bear Valley Electric Service; and City of Victorville Municipal Utilities Services (see Figure 5.18-4, *Electricity Service Areas Map*). The Rancho Cucamonga Municipal Utility provides electricity to some portions of the southeast part of Rancho Cucamonga.

SCE's service area spans much of southern California from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north (CEC 2015a). Total electricity consumption in SCE's service area in 2015 was 106,140 gigawatt-hours (GWh) and is forecast to increase to 120,780 GWh in 2028 for the mid-demand scenario (CEC 2017a); one GWh is equivalent to one million kilowatt-hours.

#### Other Providers

Other electricity providers serve portions of the County, including:

#### Valley Region

- City of Colton Electric Department
- City of Rancho Cucamonga Electric Utility

#### ■ Mountain Region

 Bear Valley Electric Service (Bear Valley communities including City of Big Bear Lake, Big Bear City, Moonridge, Sugarloaf, Fawnskin)

#### ■ North Desert Region

- City of Needles Electric Department
- Victorville Municipal Utilities Services

Table 5.18-12 shows the 2014 demand for the SCE, Bear Valley Electric, and the City of Needles Electric. City of Colton Electric Department, the City of Rancho Cucamonga Electric Utility, and the Victorville Municipal

Utilities Services are small providers with small service areas (see Figure 5.18-4). The total energy demand for the unincorporated areas was estimated at 2,451 GWh/yr.

Table 5.18.12 2014 Energy Demand in Unincorporated San Bernardino County

Туре	Unit	Energy Demand					
Southern California Edison							
Residential Electricity	kWh	705,669,564					
Commercial Electricity	kWh	327,700,763					
Agriculture Electrical	kWh	120,030,573					
Industrial Electricity	kWh	1,116,789,238					
Transmission & distribution losses	kWh	120,072,502					
Total	kWh	2,390,262,640					
Bear Valley Electric							
Residential Electricity	kWh	44,093,676					
Commercial Electricity	kWh	12,087,852					
Industrial Electricity	kWh	74,375					
Transmission & distribution losses	kWh	2,694,658					
Total	kWh	58,950,561					
City of Needles Electric							
Residential Electricity	kWh	337,500					
Commercial Electricity	kWh	1,611,720					
Transmission & distribution losses	kWh	93,368					
Total	kWh	2,042,588					
Total for All Providers		2,451,255,789					
Source: ICF 2017.	·						

#### **Natural Gas**

#### Southern California Gas Company

The Southern California Gas Company (SCGC) provides natural gas to most of the County (see Figure 5.18-5, *Natural Gas Service Areas Map*). SCGC's service area spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest to part of Fresno County on the north to Riverside County and most of the County on the east (CEC 2015b). Total natural gas supplies available to SCGC are forecast to be 3,775 million cubic feet per day (MMcf/d) from 2020 through 2035. Total natural gas consumption in SCGC's service area for average temperature years was 2,518 MMcf/d in 2017 and is forecast to be 2,313 MMcf/d in 2035 (CGEU 2018).

#### Southwest Gas

Southwest Gas Corporation serves the Big Bear Lake area in the Mountain Region, and the Victorville and Lucerne Valley areas in the North Desert Region (see Figure 5.18-5). Southwest Gas is wholesale utility customer of SCGC.

Page 9-6 PlaceWorks

Table 5.18-12 shows the 2014 demand for SCGC and Southwest Gas. The total natural gas demand for the unincorporated areas was estimated at 45,007,722 therms.<sup>1</sup>

#### Renewable Energy

There are several forms of renewable energy: solar, wind, biomass, small hydroelectric ( $\leq$ 30 MW), geothermal, and municipal solid waste conversion. Ocean and tidal renewable energy generation are omitted here due to the county's inland location. Municipal solid waste conversion is a two-step process where solid waste is first converted to a gaseous or liquid fuel, then the fuel is burned to generate electricity (CEC 2017b). The number and types of renewable energy generating facilities in the County are shown in Table 5.18-14.

Table 5.18-14 Renewable Energy Generating Facilities in San Bernardino County (Operating and Permitted)

	Operating	g Facilities	Have Environmental Permits but Not Built					
Туре	Number of Facilities	Capacity, Total (MW)	Number of Facilities	Capacity, Total (MW)				
Southern California Edison								
Wind	4	7	0	0				
Solar	98	1,652	12	391				
Biomass	1	0.25	1	3				
Landfill Gas	1	2.6	0	0				
Hydroelectric	14	71.6	0	0				
Total	118	1,733	13	394				

Sources: CEC 2018a; CEC 2017b.

Renewable energy facilities are also classified in three categories by size:

■ Utility-scale: 20 MW or larger

■ Distributed: Smaller than 20 MW or smaller.

Self-generation: Distributed facilities at a utility customer's home or business (CEC 2017b).

#### Solar

There are two forms of solar generating technology: photovoltaic, which converts solar energy directly to electric current; and solar thermal, where solar energy is focused to heat a fluid which in turn is used to generate electricity. Solar thermal electric generating facilities either use parabolic mirrors that focus solar energy on a tube in front of the mirror, or numerous mirrors focusing solar energy on a fluid in a central tower.

There are 99 operating solar facilities in the County: 87 photovoltaic (PV) and 11 solar thermal, with total capacity of 1,652 MW. There are an additional 12 planned solar facilities that have received environmental permits but have not yet been built, with total capacity of 391 MW (CEC 2018b). Applications for 9 additional solar facilities, with total capacity of 1,664 MW, were under review by the County Land Use Services Department as of March 26, 2018 (San Bernardino County 2018).

June 2019 Page 9-7

-

<sup>&</sup>lt;sup>1</sup> 1 therm is equivalent to 100,000 BTUs.

The five largest PV solar facilities in the county are:

- Adelanto 1, Adelanto: 20 MW
- Alamo Solar, San Bernardino: 20 MW
- Lone Valley Solar Park 2, Lucerne Valley, 20 MW
- Cascade Solar PV, Joshua Tree, 18.5 MW
- RE Victor Phelan Solar One, Adelanto, 17.5 MW (CEC 2018b)

All but one of the 12 operating solar thermal facilities in California are in the County. The Ivanpah I, II, and III facilities are near Nipton; the Mojave Solar Project is in Hinkley; and the SEGS I-IX facilities are in Hinkley, Boron, and Daggett. The SEGS facilities are being evaluated for conversion to PV. One conversion has already been completed (CEC 2018b).<sup>2</sup>

#### Distributed Facilities

There are over 40,000 distributed renewable energy facilities—such as rooftop solar—in the County, with total capacity of over 273 MW (CEC 2017b).

#### Wind Energy

The four wind energy facilities in the County are in Victorville, Apple Valley, and Rancho Cucamonga, with a total capacity of 7 MW.

#### Biomass and Landfill Gas

There is one biomass facility in the county, Western Rock Products in Newberry Springs, with a capacity of 0.25 MW.

There is one landfill gas facility in the County, MN Mid Valley Genco LLC in Fontana, with a capacity of 2.6 MW.

#### Hydroelectric

There are 14 hydroelectric facilities in the county considered to be renewable energy (that is, 30 MW or smaller), with total capacity of about 71.6 MW. Thirteen of the facilities are in the Valley Region or in the part of the Mountain region near the Valley Region, and one is in the North Desert Region.

Page 9-8

PlaceWorks

<sup>&</sup>lt;sup>2</sup> The Victorville 2 Hybrid Power Project, approved in 2008, would consist of a 50 MW solar thermal facility and a 513-MW natural-gas-fired facility; the project is on hold (CEC 2018b).

#### 9.3.2 Impact Analysis

Would this Project increase demand for energy that requires expanded supplies or the construction of new infrastructure or expansion of existing facilities, the construction of which could cause significant environmental effects?

#### **Electricity**

The proposed general plan area would be served by existing SCE, Bear Valley Electric Service, and City of Needles Electric Department distribution systems. The proposed unincorporated growth would require electrical services totaling an estimated 3,367 GWh/yr (refer to Table 5.18-15). The total increase in energy demand from 2014 until full buildout in 2040 is 916 GWh/yr.

The average annual growth rates for SCE for the years 2015 to 2028 is 1 percent (CEC 2017a). Using this growth rate, the estimated demand for SCE for 2040 is 167,750 GWh/yr. The total increase in energy demand from 2015 until 20140 is 61,610 GWH/yr. The increase in energy demand related to unincorporated growth is modest compared to overall growth for the SCE service area and will not cause a significant impact.

Table 5.18-15 2040 Projected Energy Demand in Unincorporated San Bernardino County

Туре	Unit	Projected Energy Demand <sup>1</sup>				
Southern California Edison	-					
Residential Electricity	kWh	785,578,737				
Commercial Electricity	kWh	525,764,395				
Agriculture Electrical	kWh	120,030,573				
Industrial Electricity	kWh	1,791,781,052				
Transmission & distribution losses	kWh	140,790,592				
Total	kWh	3,363,945,349				
Bear Valley Electric	-					
Residential Electricity	kWh	49,086,791				
Commercial Electricity	kWh	19,393,797				
Industrial Electricity	kWh	87,208				
Transmission & distribution losses	kWh	3,159,612				
Total	kWh	71,727,408				
City of Needles Electric						
Residential Electricity	kWh	375,718				
Commercial Electricity	kWh	2,585,850				
Transmission & distribution losses	kWh	109,478				
Total	kWh	3,071,046				
Total for All Providers		3,367,016,395				

Source: ICF 2017.

In addition, the Project would be required to comply with energy efficiency standards set forth by Title 24 of the California Administrative Code, appliance efficiency regulations set forth by Title 20 of the California

<sup>1.</sup> PEIR Appendix B includes the methodology and calculations associated with calculating 2040 demands

Administrative Code, CALGreen, and policies of the Countywide Plan. Countywide buildout will also be provided with additional sources of electricity from Bear Valley Electric, City of Needles Electric, and renewable energy sources.

#### Renewable Energy

#### Forecast Renewable Energy Development

The Desert Renewable Energy Conservation Plan (DRECP) includes a forecast of renewable energy capacity in the DRECP Plan Area in 2040. Forecast capacity in ecoregion subunits in and overlapping the County are shown in Table 5.18-16. As shown in the table, BLM forecast that in those subunits, 3,887 MW of renewable energy capacity would be developed, requiring 59,445 acres. Approximately 67 percent of the generation capacity would be large solar facilities, 25 percent large wind facilities, and the remainder distributed generation (solar facilities 20 MW or smaller and supplying power directly to a consumer).

BLM uses the following factors for acreage required per MW of renewable energy facilities: 7.1 acres per MW for solar thermal and solar PV; 40 acres per MW for wind; 5 acres per MW for geothermal; and 7.1 acres per MW for distributed generation. Approximately 65 percent of the acreage required would be for wind facilities.

Table 5.18-16 Estimated Renewable Generating Capacity, 2040

Faaranian		Solar T	hermal	Sola	ar PV	w	ind		ibuted ration	To	otal
Ecoregion Subarea	Subunits	MW	Acres <sup>1</sup>	MW	Acres	MW	Acres	MW	Acres	MW	Acres
Ecoregion Sub	Ecoregion Subunits Entirely Within San Bernardino County										
West Mojave and Eastern Slopes	3, 5, 6	169	1,200	635	4,509	254	10,160	166	1,179	1,224	17,047
Mojave and Silurian Valley <sup>2</sup>	1, 2	76	540	287	2,038	0	0	46	327	409	2,904
Pinto Lucerne Valley and Eastern Slopes	1	186	1,321	702	4,984	714	28,560	66	469	1,668	35,333
Cadiz Valley and Chocolate Mountains	1	0	0	0	0	0	0	0	0	0	0
Providence and Bullion Mountains	1, 2	30	213	112	795	0	0	25	178	167	1,186
Piute Valley and Sacramento Mountains	1	0	0	0	0	0	0	0	0	0	0
Subtotal	Not applicable	461	3,273	1,736	12,326	968	38,720	303	2,151	3,468	56,470

Page 9-10 PlaceWorks

Table 5.18-16 Estimated Renewable Generating Capacity, 2040

Ecoregion		Solar 1	hermal	Sola	ar PV		ind		ibuted eration	Te	otal
Subarea	Subunits	MW	Acres <sup>1</sup>	MW	Acres	MW	Acres	MW	Acres	MW	Acres
Ecoregion Sub	Ecoregion Subunits Overlapping San Bernardino County <sup>3</sup>										
Pinto Lucerne Valley and Eastern Slopes	2	0	0	0	0	0	0	0	0	0	0
Kingston and Funeral Mountains	1	88	625	331	2,350	0	0	0	0	419	2,975
Panamint Death Valley	1	0	0	0	0	0	0	0	0	0	0
Subtotal	Not applicable	88	625	331	2,350	0	0	0	0	419	2,975
Total											
Total	Not applicable	549	3,898	2,067	14,676	968	38,720	303	2,151	3,887	59,445

Sources: BLM 2014; BLM 2016.

Solar thermal: 7.1 acres/MW

Solar PV: 7.1 Wind: 40.0

Distributed Generation: 7.1

The development of renewable energy projects would proceed in line with the DRECP and CWP policies as detailed in the Renewable Energy and Conservation Element. This element calls for the implementation of the San Bernardino County Transportation Authority's Greenhouse Gas Emissions Reduction Plan and supports solar energy generation, solar water heating, wind energy, and bioenergy systems that are consistent with the orientation, siting, and environmental compatibility policies of the CWP. The policies prioritize programs that support cost-effective and universal access to renewable energy and facilitate, and encourage onsite accessory renewable energy generation to serve the unincorporated County, with a primary focus on rooftop and parking lot solar energy generation. Additionally, the plan applies standards to the design, siting, and operation of all renewable energy facilities to protect the environment, including sensitive biological resources, air quality, water supply and quality, cultural, archaeological, paleontological, and scenic resources.

#### **Natural Gas**

The proposed Project would be served by existing SCGC and Southwest Gas distribution systems. Countywide buildout would require natural gas service up to 56,292,862 therms/yr (refer to Table 5.18-17). The total increase in natural gas demand from 2014 until full buildout is 11,285,140 therms/yr, or 1,128 MMcf/d.<sup>3</sup>

June 2019 Page 9-11

\_

<sup>1.</sup> Acreage requirements per MW of generation capacity used:

<sup>&</sup>lt;sup>2.</sup> A minor part of Mojave and Silurian Valley Subunit 2 is in Kern County

<sup>3.</sup> One subunit is omitted here: West Mojave and Eastern Slopes 1, as only a small part of it is in San Bernardino County.

<sup>&</sup>lt;sup>3</sup> One therm is equivalent to 99.9761 cubic feet of natural gas.

As previously stated, total natural gas supplies available to SCGC are forecast to remain constant at 3,775 million cubic feet per day (MMcf/d) from 2020 through 2035. Total natural gas consumption in SCGC's service area for average temperature years is forecast to be 2,313 MMcf/d in 2035 (CGEU 2018). SCGS will have a residual supply of 1,462 MMcf/d in 2035. Assuming gas supply remains constant to 2040, and seeing that gas consumption is projected to continually decrease from 2018 to 2035, SCGC would have enough residual supply in 2040 to accommodate Countywide buildout. Furthermore, James Chuang, Senior Environmental Specialist at SCGC, confirmed that in order to meet gas demands in the Valley and East Desert regions at CWP buildout, SCGC would not require additional gas supplies or additional transmission lines (SCGC 2018).

Table 5.18-17 2040 Projected Natural Gas Demand in Unincorporated San Bernardino County

Туре	Unit	Projected Natural Gas Demand <sup>1</sup>
Southern California Gas Company		
Residential Natural Gas	therms	28,250,346
Commercial Natural Gas	therms	14,190,619
Industrial Natural Gas	therms	3,820,760
Total	therms	46,261,725
Southwest Gas		
Residential Natural Gas	therms	6,755,645
Commercial Natural Gas	therms	1,522,010
Industrial Natural Gas	therms	469,526
Water Pumping	therms	169
Electricity Generation	therms	534,001
Other	therms	749,786
Total	therms	10,031,137
Total for All Providers		56,292,862
10001101701110110013		45,007,722

Source: ICF 2017.

PEIR Appendix B includes the methodology and calculations associated with calculating 2040 demands.

Level of Significance before Mitigation: With implementation of RR USS-15 through RR USS-18, and Countywide Plan policies H-1.5, D/H-1.4, IU-5.1, RC-1.9, RE-1.1 through RE-1.4, RE-2.1 through RE-2.6, RE-3.1 through RE-3.7, RE-4.1through RE-4.9, RE-5.1 through RE-5.8, and RE-6.1 through RE-6.7, Impact 5.18-8 would be less than significant. The regulatory requirements (RR) and Countywide Plan policies identified here are all set forth in Section 5.18, Utilities and Service Systems, of this PEIR.

#### 9.3.2.1 CUMULATIVE IMPACTS

The area considered for cumulative impacts to electricity and natural gas supplies and facilities is SCE and SGCG's service areas. Forecast total electricity and natural gas supplies for the service areas are identified above. Incorporated growth would increase electricity and natural gas demands.

The forecasts provided by the CEC are used in several applications, including the California Public Utility Commission's resource planning. The Commission has identified the Integrated Energy Policy Report process as the appropriate venue for considering issues of load forecasting, resource assessment, and scenario analyses,

Page 9-12 PlaceWorks

to determine the appropriate level and ranges of resource needs for load serving entities in California. The final forecasts will also be an input to the California Independent System Operator Transmission Planning Process as well as controlled grid studies and to electricity supply-demand assessments (resource adequacy) (CEC 2017a).

It is anticipated that electricity and natural gas demands by most incorporated growth would be accounted for in the above-referenced demand forecasts. Other projects would be subject to independent CEQA review including analysis of impacts to electricity and natural gas supplies. Implementation of all feasible mitigation measures would be required for any significant impacts identified. Cumulative impacts would be less than significant, and CWP impacts would not be cumulatively considerable.

#### 9.3.2.2 MITIGATION MEASURES

No mitigation is required.

#### 9.3.2.3 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

#### 9.3.3 References

Bureau of Land Management (BLM). 2014, August. Megawatt Hours and Solar Technology Distribution. Appendix F2 of Draft DRECP and EIR/EIS. https://www.drecp.org/draftdrecp/files/Appendix\_F \_Megawatt\_Distribution/Appendix\_F2\_MW-MWh\_Technology\_Distribution.pdf. . 2016, September. Land Use Plan Amendment (LUPA): Desert Renewable Energy Conservation Plan. https://eplanning.blm.gov/epl-front-office/projects/lup/66459/133474/163144 /DRECP\_BLM\_LUPA.pdf. California Energy Commission (CEC). 2015a, February 24. California Energy Utility Service Areas. http://www.energy.ca.gov/maps/serviceareas/Electric\_Service\_Areas\_Detail.pdf. . 2015b, February 24. California Natural Gas Utility Service Areas Map. http://www.energy.ca.gov/maps/serviceareas/naturalgas\_service\_areas.html. -. 2017a, August. California Energy Demand Updated Forecast, 2018-2028. https://efiling.energy.ca.gov/getdocument.aspx?tn=220615. . 2017b, December. California Energy Commission: Tracking Progress. http://www.energy.ca.gov/renewables/tracking\_progress/documents/renewable.pdf. -. 2018a, May 15. Database of California Power Plants. http://www.energy.ca.gov/almanac/power\_plant\_data/Power\_Plants.xlsx. - 2018b, May 21. Solar Energy Projects in California. http://www.energy.ca.gov/sitingcases/solar/. California Gas and Electric Utilities (CGEU). 2018. 2018 California Gas Report. https://www.socalgas.com/regulatory/documents/cgr/2018\_California\_Gas\_Report.pdf.

ICF. 2017, October. San Bernardino County Community and Municipal Greenhouse Gas Inventory.

San Bernardino County Land Use Services Department. 2018, March 26. Renewable Energy Projects as of March 26, 2018.

http://cms.sbcounty.gov/Portals/5/Planning/Renewable%20Energy/SolarProjectList.pdf.

Southern California Gas Company (SCGC). 2018, July 24. Correspondence from James Chuang, Senior Environmental Specialist, to PlaceWorks Associate Michael Milroy.

Page 9-14 PlaceWorks