

## 1.0 Introduction

San Diego Gas & Electric Company (SDG&E, or the applicant) filed an application (No. A.12-05-020), including a proponent environmental assessment (PEA), with the California Public Utilities Commission (CPUC) on May 18, 2012, for a Certificate of Public Convenience and Necessity (CPCN) to construct the South Orange County Reliability Enhancement Project (proposed project). The CPUC is the lead agency for review of the proposed project pursuant to the California Environmental Quality Act (CEQA) and is preparing a Draft Environmental Impact Report (EIR).

The proposed project would serve customers within the applicant's South Orange County Service Area (Figure 1-1). The project would include a rebuilt 230/138/12-kilovolt (kV) substation (proposed San Juan Capistrano Substation) at the location of the existing 138/12-kV Capistrano Substation site in San Juan Capistrano, California; the construction of a new double-circuit 230-kV transmission line (approximately 7.8 miles long) from the proposed San Juan Capistrano Substation to the applicant's 230/138/69-kV Talega Substation within an existing transmission line corridor; the relocation of several transmission line segments (approximately 1.8 miles, total) adjacent to Talega and Capistrano substations to accommodate the proposed expansion of Capistrano Substation and new 230-kV line; and the relocation of several 12-kV distribution line segments (approximately 6 miles) into underground conduit and overhead on existing and new structures located between Capistrano Substation and Prima Deschecha Landfill. The applicant estimates that construction would take approximately 64 months; if the proposed project is approved and construction begins in 2015, the facility could be operational in 2020.

### 1.1 Background Information

SDG&E is a public utility that provides energy service to 3.4 million consumers through 1.4 million electric meters and more than 830,000 natural gas meters in San Diego County and the southern portion of Orange County.

#### 1.1.1 South Orange County 138-kV System

SDG&E's South Orange County service area is located at the northern end of SDG&E's service territory and has more than 129,000 electric customers. This service area represents approximately 10 percent of SDG&E's total customer load of approximately 5,000 megawatts (MW). All power that flows into SDG&E's South Orange County service area is transmitted through Talega Substation via three 230-kV transmission lines—Talega Substation is therefore described by SDG&E as the main source of power for South Orange County. The South Orange County 138-kV System includes seven 138/12-kV distribution substations, each of which receives its power from Talega Substation as shown in Figure 1-2. The applicant's 138-kV system is capable of handling 400 to 499 MW of power during normal conditions and 500 MW or more during temporary, peak load conditions (see Section 1.1.2). The rated capacity of the 138-kV system is approximately 580 MW.

The proposed project would reconfigure the South Orange County 138-kV System such that both the proposed San Juan Capistrano Substation and the modified Talega Substation would be capable of receiving power through 230-kV transmission lines, and each substation would be capable of providing power to the South Orange County 138-kV System during planned maintenance outages or emergency events that would cause operations at either substation to cease temporarily.

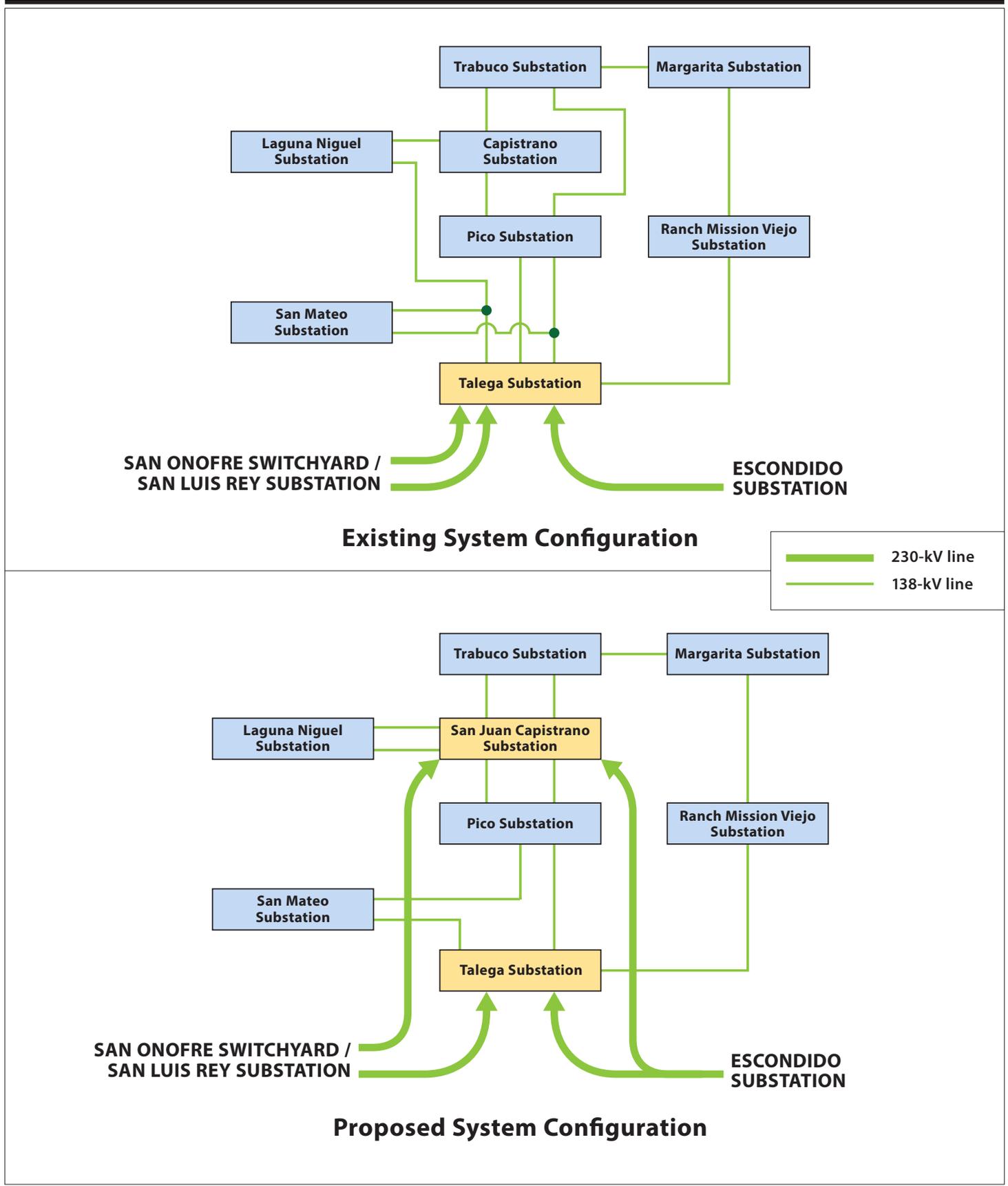


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Figure 1-1

**Project Vicinity**

South Orange County Reliability Enhancement Project



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Figure 1-2

**Existing and Proposed SDG&E South Orange County 138-kV System**

South Orange County Reliability Enhancement Project

## 1.1.2 Transmission and Electrical Demand Planning

The applicant's electrical demand planning processes help ensure that necessary system facilities are developed in time to meet projected electrical demand. The planning process begins with the development of a peak electrical demand forecast for each substation. Peak electrical demand forecasts are developed using historical and forecast population, urbanization, meteorological, and economic data. The applicant's forecasts are based on annual forecasts prepared by the California Energy Commission. Peak electrical demand forecasts account for residential, commercial, and industrial developments that are planned or under construction, as well as historical population growth trends.

The forecast data are compared against electrical system *operating limits*—the amount of electrical load that can be served by equipment. Operating limits are established by the applicant to ensure that capacity and system operational flexibility are maintained to safely and reliably meet projected peak electrical demands during periods of extreme heat, under both normal and abnormal conditions. For substations connected directly to a 138-kV or 230-kV transmission system, a 10-year forecast is developed annually that identifies peak electrical demand that may occur during a 1-in-10-year heat storm.

The following transmission planning terms are used in this section and subsequent sections of this EIR:

- *Load shedding* refers to the deliberate disconnection of electric current from specific lines. Load shedding (specifically, involuntary load shedding, where a utility such as SDG&E drops customer load without customer permission or notification) is used to maintain reliability when there is a system emergency, such as an unplanned outage of a transmission line or transformer, which forces operators to take action to reduce power flows. Load shedding is used sparingly by transmission system operators to prevent damage to equipment and to remain in compliance with regulatory requirements. It should not be confused with “dispatch-able demand” or “demand side management,” which calls upon customers to reduce power consumption and the customers, in return, receive compensation (SDG&E 2012). Where load shedding occurs or is planned for in compliance with all applicable transmission planning standards, it is commonly referred to as *non-consequential load shedding*, which indicates that it is allowable without regulatory approval.
- *Category B events* are contingencies that involve the loss of a single generation or transmission element, such as a substation transformer or a single circuit of an existing transmission line, of a bulk electric system (e.g., the electrical grid managed by the California Independent System Operator [CAISO]). This type of event is often referred to as an *N-1 contingency* by transmission planners. Load shedding is not allowed after Category B events (NERC 2005a, 2007; SDG&E 2014a).
- *Category C events* are contingencies that involve the loss of two or more generation or transmission elements of a bulk electric system. The failure of two generation or transmission elements is often referred to as an *N-2 contingency* by transmission planners. Load shedding, when planned for and controlled in compliance with all applicable transmission planning standards, is allowable after Category C events (NERC 2005b, 2007; SDG&E 2014a).
- *Category D events* are extreme contingency events (catastrophic failures) that involve the loss of two or more bulk electric system elements, e.g., an entire substation (NERC 2005c; SDG&E 2014a).
- An *N-1-1 contingency* is a type of Category C event that ensues when a Category B (N-1) event is followed by a system adjustment (e.g., load shedding) and then a subsequent generation or transmission element failure event prior to correcting the initial N-1 contingency. For

1 comparison, N-2 contingencies typically involve multiple failures that occur simultaneously or  
2 nearly simultaneously (rather than subsequently). Load shedding, in general, is allowable after a  
3 Category C, N-1-1 event depending on the amount of load to be shed and other system-specific  
4 factors (FERC 2013; NERC 2007; SDG&E 2014a).

- 5 • A *common mode failure* can be defined as the failure of multiple parts of a transmission system  
6 caused by a single fault, particularly a random fault due to environmental conditions (e.g., fire)  
7 or aging. The loss of a single tower that supports a double-circuit transmission line is an example  
8 of a common mode failure (and is also an example of an N-2 contingency). Within the South  
9 Orange County 138-kV System, a number of 138-kV lines share structures. One example is the  
10 double-circuit transmission line that supports both the Pico–Talega 138-kV Line (TL13836) and  
11 Pico–Talega–San Mateo 138-kV Line (TL13846).
- 12 • *Special Protection Systems* (also referred to as Remedial Action Schemes) are automatic  
13 protection systems designed to detect abnormal or predetermined system conditions (e.g., the  
14 outage of a specific transmission line segment) and implement corrective action to ensure that  
15 system reliability is maintained. Such action may include changes on the demand side, in power  
16 or reactive power generation, or in system configuration to maintain system stability, acceptable  
17 voltage, or power flows. Implementing Special Protection Systems is generally faster and less  
18 expensive than building new transmission facilities. As the number of Special Protection  
19 Systems in place increases, maintenance outages become more difficult to schedule, and it  
20 becomes difficult to assess the interdependency of these various protection schemes on system  
21 reliability (CAISO 2011a; NERC 2013a).
- 22 • *Peak electrical load* (or peak demand) generally refers to a single hour (or single 15-minute or  
23 half-hour period) that represents the period of highest customer consumption of electricity. On a  
24 daily basis, peak demand typically occurs about 5:30 p.m. when a high percentage of businesses  
25 and households demand electricity at the same time. On an annual basis, peak demand periods  
26 typically occur from June through September in South Orange County (Grigsby 2001; SDG&E  
27 2012).

### 28 29 **1.1.2.1 CAISO Review of the Proposed Project**

30  
31 The CAISO manages the flow of electricity across the high-voltage, long-distance power lines that make  
32 up 80 percent of California’s and a small part of Nevada’s bulk-electric power grid. Transmission  
33 projects that would connect to the bulk-electric power grid managed by the CAISO are proposed by  
34 investor-owned utilities such as SDG&E for inclusion in the CAISO’s annual transmission planning  
35 process. If a project is approved by the CAISO, the applicant then submits the project for subsequent  
36 review and approval by the CPUC, if CPUC approval is required. CPUC approval is required for the  
37 proposed project because it meets the requirements specified in General Order 131-D for a CPCN (CPUC  
38 1995).

39 In 2011, the CAISO determined that the proposed project is needed for the following three reasons:

- 40 1. To ensure that, by 2020, fewer than 40 Category C events occur that could require load shedding  
41 on the applicant’s 138-kV facilities in southern Orange County (CAISO 2011a, 2014a, 2014b).  
42 The CAISO also determined, however, that load shedding could occur if needed and that  
43 compliance with NERC, Western Electricity Coordinating Council (WECC), and CAISO  
44 standards would be maintained (CAISO 2011a).
- 45 2. To ensure that Special Protection Systems, which were already in place in 2011, are not used to  
46 address more than six contingencies that could cause more than four elements to overload; this is

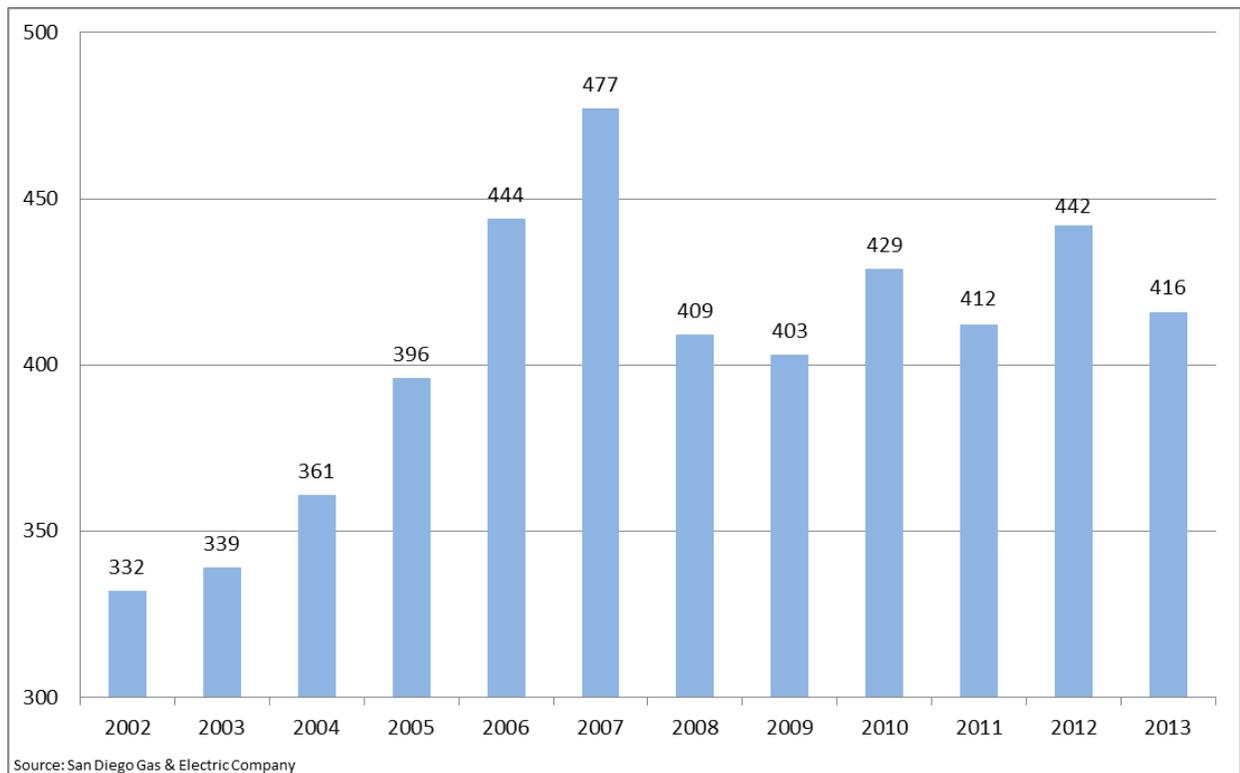
1 a concern because the large number of potential Category C events identified exceeds this  
2 amount (CAISO 2011a,b).

- 3 3. To address reliability issues associated with supplying the entire South Orange County electrical  
4 system from a single 230-kV substation (Talega Substation).  
5

6 Peak electrical load on the South Orange County 138-kV System was, at that time, forecast by the  
7 applicant to increase to 523 MW by 2020. The recorded peak load in 2010 was 429 MW (SDG&E  
8 2014a). For further information about the CAISO’s review of the proposed project, refer to Appendix B,  
9 “Alternatives Screening Report.”  
10

### 11 1.1.3 Historical and Projected South Orange County System Demand

12  
13 According to the historical load data provided to the CPUC, the recorded peak load on the South Orange  
14 County 138-kV System increased substantially from 2002 through 2007 but declined in 2008 and  
15 remained lower than 2006 levels through 2013 (Figure 1-3). The applicant’s May 2014 load forecast  
16 indicates that peak loads may reach 474 MW by 2020 (Table 1-1). The applicant’s current load forecast  
17 indicates that system loads may not exceed 500 MW until after 2024 (SDG&E 2014b) and may not reach  
18 523 MW until 2029, assuming a steady growth rate of approximately 5.7 MW per year.  
19



20  
21 **Figure 1-3 South Orange County 138-kV System Recorded Peak Load (2002–**  
22 **2013) in Megawatts**  
23

**Table 1-1 South Orange County 138-kV System Forecast Peak Loads and Peak Loads by Substation for 2014 through 2024 in Megawatts**

Substation	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Trabuco	87.5	87.9	88.3	88.8	89.2	89.6	90.0	90.5	90.9	91.3	91.7
Margarita	107.3	107.8	108.4	109.0	109.6	110.2	110.8	111.4	112.0	112.6	113.2
Rancho Mission Viejo	14.7	17.0	20.4	23.8	27.2	30.6	34.0	37.5	40.9	41.1	41.3
Pico	42.2	42.8	43.3	43.8	44.3	44.8	45.4	45.9	46.4	46.9	47.4
San Mateo	35.2	37.0	37.7	38.5	38.9	39.3	39.7	40.0	40.4	40.8	41.2
Laguna Niguel	96.9	96.5	97.0	97.5	98.0	98.4	98.8	99.2	99.6	100.0	100.4
Capistrano	52.0	52.5	53.1	53.6	54.1	54.6	55.2	55.7	56.2	56.7	57.2
<b>Total<sup>1</sup></b>	<b>435.8</b>	<b>441.5</b>	<b>448.2</b>	<b>455.0</b>	<b>461.3</b>	<b>467.5</b>	<b>473.9</b>	<b>480.2</b>	<b>486.4</b>	<b>489.4</b>	<b>492.4</b>

Source: SDG&E 2014b

Note:

<sup>1</sup> The projections presented in this table are for non-coincident peak loads during a 1-in-10-year heat storm.

1  
2 SDG&E forecasts that load could grow by about 1 percent per year in the next 10 years, for a total of  
3 about 10 percent (Table 1-1). This forecast assumes that continued development of the Rancho Mission  
4 Viejo residential complex could add more than 10,000 homes in the vicinity of Rancho Mission Viejo  
5 Substation during the next 10 to 20 years (San Juan Capistrano Patch 2013; SDG&E 2012, 2014a,b).<sup>1</sup>  
6 The applicant does not forecast that any of the 138/12-kV substations within its South Orange County  
7 138-kV System would exceed their operating capacity through 2024 (Table 1-2).  
8

**Table 1-2 South Orange County 138/12-kV Substation Peak Loads and Percent Capacity Forecasts for 2024**

Substation	Substation Capacity	2024 Peak Load Forecast <sup>1</sup>	2024 Percent Capacity Forecast
Trabuco	120 MW	91.7 MW	76.4%
Margarita	120 MW	113.2 MW	94.3%
Rancho Mission Viejo	60 MW	41.3 MW	68.8%
Pico	60 MW	47.4 MW	79.0%
San Mateo	44 MW	41.2 MW	93.6%
Laguna Niguel	120 MW	100.4 MW	83.7%
Capistrano	60 MW	57.2 MW	95.3%
<b>Totals</b>	<b>584 MW</b>	<b>492.4 MW</b>	<b>84.0%</b>

Source: SDG&E 2014b

Key:

kV = kilovolts

MW = megawatts

Note:

<sup>1</sup> The projections presented in this table are for non-coincident peak loads during a 1-in-10-year heat storm.

9

<sup>1</sup> In response to a request for further information from the CPUC, the applicant indicated that from 2001 through 2013, the South Orange County 138-kV System load center steadily migrated further east from Capistrano Substation toward the Rancho Mission Viejo residential area and Rancho Mission Viejo Substation. The applicant's 2014 load forecast projects that the load center will continue to migrate further east from Capistrano Substation through 2024.

1 The CPUC’s review of the applicant’s power flow data and latest load forecast data (SDG&E 2014b)  
2 indicated that no Category B (N-1) events that could require load shedding would occur within the 10-  
3 year planning horizon. The CPUC verified that Category C events that could require load shedding may  
4 occur within the 10-year planning horizon but also that SDG&E would remain in compliance with  
5 mandatory NERC, WECC, and CAISO standards even if load shedding was required (see Appendix B).  
6 Among the Category C events that could occur is an overload of the Talega Tap–Laguna Niguel 138-kV  
7 Line (TL13835) because of the loss of 138-kV lines between Pico and Capistrano substations (TL13816)  
8 and Pico and Trabuco substations (TL13833) (SDG&E 2012, 2014b).<sup>2</sup>  
9

### 10 **1.1.3.1 Applicability of Transmission Planning Standards**

11  
12 Components of the applicant’s South Orange County transmission system that connect to the regional  
13 electrical grid managed by the CAISO must be constructed and maintained in compliance with  
14 mandatory NERC, WECC, and CAISO standards.<sup>3</sup> In addition, the applicant designs its transmission  
15 systems in accordance with additional standards and guidelines established by NERC, WECC, and the  
16 CAISO that are not mandatory but are recommended as industry best practices. To date, operation of the  
17 applicant’s South Orange County transmission system and planning for future system conditions has not  
18 violated NERC, WECC, or CAISO standards.  
19

## 20 **1.2 Purpose and Objectives of the Proposed Project**

21  
22 The purpose of the proposed project is to increase reliability of the applicant’s South Orange County  
23 138-kV System by reducing the risk of instances that could result in the loss of power to customers  
24 through the 10-year planning horizon.  
25

### 26 **1.2.1 Objectives of the Proposed Project (Developed by the CPUC)**

27  
28 The objectives of the proposed project defined by the CPUC for CEQA review reflect the purpose of the  
29 proposed project as described in the PEA and applicant responses to CPUC requests for information  
30 (SDG&E 2012). The following three objectives were developed with consideration of the project  
31 objectives presented in the PEA (see Section 1.2.2, below) and the outcome of CAISO and CPUC  
32 reviews of the proposed project. The objectives, as defined by the CPUC, were used as a basis for the  
33 development of a reasonable range of alternatives as required by CEQA (see Chapter 3, “Description of  
34 Alternatives”). The basic objectives of the proposed project are to:  
35

- 36 1. Reduce the risk of instances that could result in the loss of power to customers served by the  
37 South Orange County 138-kV System through the 10-year planning horizon;
- 38 2. Replace inadequate equipment at Capistrano Substation; and
- 39 3. Redistribute power flow of the applicant’s South Orange County 138-kV System such that  
40 operational flexibility is increased.

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<sup>2</sup> According to the applicant’s latest load forecast through 2024 for the South Orange County 138-kV System (Table 2), loads are no longer anticipated to increase such that the common mode failure scenarios previously identified would occur within the 10-year planning horizon.

<sup>3</sup> As of June 18, 2007, the Federal Energy Regulatory Commission granted NERC the legal authority to enforce Reliability Standards with all users, owners, and operators of the bulk power system in the United States and made compliance with those standards mandatory and enforceable (NERC 2013b). WECC is one of the eight regional electric reliability councils under NERC. Both WECC and CAISO transmission planning standards are based on and in compliance with NERC transmission planning standards (CAISO 2011b; WECC 2003).

1  
2 **1.2.1.1 Reduce the Risk of Instances that Could Result in the Loss of Power to**  
3 **Customers through the 10-year Planning Horizon**  
4

5 This objective was developed with consideration of the applicant’s Objectives I and IV as presented in  
6 the PEA (see Section 1.2.2, below). Loss of power to customers could result from the loss of a  
7 transmission line, transformer, power generation facility, or combination of multiple generation or  
8 transmission facilities. The loss of one or more generation or transmission facilities could be caused by  
9 weather, vehicle accident, or any of a number of natural or human-caused events. The loss of one or more  
10 facilities could also be caused by an overload event due to high customer demand. This objective  
11 combines elements of the applicant’s Objectives I and IV because both objectives describe scenarios that  
12 could result in the loss of power to customers.  
13

14 In drafting this objective, the CPUC first considered the risk of noncompliance with an adopted NERC,  
15 WECC, or CAISO transmission planning standard within the 10-year planning horizon. Reviews by both  
16 the CAISO and CPUC indicated that the applicant is not at risk for noncompliance with adopted NERC,  
17 WECC, or CAISO standards within the 10-year planning horizon (through 2024; see Section 1.1.2). The  
18 CPUC then considered other reliability concerns. The reliability issues identified by the CAISO are  
19 based on the relatively high number of potential Category C events that would require load shedding and  
20 a general concern about the single 230-kV source to the South Orange County 138-kV system (CAISO  
21 2011a, 2014a,b). For the purpose of CEQA review, the CPUC drafted a general objective to reduce  
22 instances that could result in the loss of power to customers through the 10-year planning horizon that  
23 included elements of the applicant’s Objectives I and IV.  
24

25 For a discussion of the applicability of mandatory NERC, WECC, and CAISO transmission planning  
26 standards to the objectives of the proposed project, refer to the Alternatives Screening Report provided in  
27 Appendix B.  
28

29 **1.2.1.2 Replace Inadequate Equipment at Capistrano Substation**  
30

31 This objective was developed with consideration of the applicant’s Objective II as presented in the PEA  
32 (see Section 1.2.2, below). The applicant’s Capistrano Substation is approximately 60 years old. To help  
33 ensure reliability of electrical service in the San Juan Capistrano area, the applicant proposes to replace  
34 aging equipment at Capistrano Substation and modernize the substation’s structural design. The CPUC  
35 does not have sufficient data from the applicant to demonstrate which substation equipment is likely to  
36 fail within the 10-year planning horizon, and this objective more generally addresses the replacement of  
37 substation equipment that can be proven to be inadequate to support the proposed project or one of the  
38 project alternatives (if approved for construction).  
39

40 The replacement of equipment (e.g., transformers) is expected to increase the electrical distribution  
41 capacity of Capistrano Substation as well as help ensure the substation’s reliability. It would also allow  
42 for the connection of three additional 138-kV transmission lines to the substation.  
43

44 **1.2.1.3 Redistribute Power Flow of the Applicant’s South Orange County 138-kV**  
45 **System Such that Operational Flexibility Is Increased**  
46

47 This objective was developed with consideration of the applicant’s Objectives I and III as presented in  
48 the PEA (see Section 1.2.2, below). If a failure were to occur at Talega Substation, power flow could be  
49 interrupted to the applicant’s South Orange County service area. Currently, Talega Substation is the only  
50 substation in South Orange County that is capable of stepping down 230-kV power to 138-kV power,  
51

1 which is required for each of the applicant’s 138-kV substations to distribute power to customers in  
2 southern Orange County. With the installation of 230/138-kV transformers at Capistrano Substation (i.e.,  
3 with construction of the proposed San Juan Capistrano Substation) and connection of a new double-  
4 circuit 230-kV transmission line, both Capistrano Substation and Talega Substation would be capable of  
5 providing power to the entire South Orange County 138-kV System during maintenance or emergency  
6 events or to relieve other operational issues with one of the substations. This would increase system  
7 reliability and operational flexibility. The connection of two 230-kV source lines to Capistrano  
8 Substation and resultant redistribution of power flow within the South Orange County’s 138-kV System  
9 is illustrated by Figure 1-2.

## 10 **1.2.2 Applicant’s Stated Objectives**

11  
12 The applicant identified the following five objectives of the proposed project in the PEA:

- 13  
14 I. Provide transmission system reliability:
- 15 a. Reduce the risk of an uncontrolled outage of all South Orange County load;
  - 16 b. Reduce the risk of a controlled interruption of a portion of the South Orange County load;
  - 17 c. Comply with mandatory North American Electric Reliability Corporation, WECC and  
18 CAISO transmission planning and operations standards;
- 19 II. Rebuild Capistrano Substation to replace aging equipment and increase capacity;
- 20 III. Improve transmission and distribution operating flexibility;
- 21 IV. Accommodate customer load growth in the South Orange County area; and
- 22 V. Locate proposed facilities within existing transmission corridors, SDG&E right-of-way (ROW),  
23 and utility-owned property (SDG&E 2012).

24  
25 Elements of applicant Objectives I through IV were integrated into the objectives of the proposed project  
26 defined by the CPUC for CEQA review purposes as described in Section 1.2.1. Applicant Objective V  
27 was not included in the CPUC’s list of objectives. An objective of locating proposed facilities within  
28 existing transmission corridors, applicant ROW, and utility-owned property does not identify a specific  
29 need for the proposed project and is not applicable as a criterion for comparing the proposed project to  
30 alternatives.

## 31 **1.3 CPUC Process and Intended Uses of the EIR**

### 32 **1.3.1 CPUC Process**

33  
34 The application for the proposed project is for a CPCN. Pursuant to CPUC General Order 131-D, utilities  
35 file CPCN applications for facilities proposed to operate at 200 kV and above and Permit to Construct  
36 applications for facilities proposed to operate between 50 and 200 kV. The CPUC conducts two parallel  
37 processes when considering CPCN applications: (1) a General Proceedings process similar to a court  
38 proceeding that considers whether a proposed project is needed and in the public interest; and (2) an  
39 Environmental Review process pursuant to CEQA.

40  
41 An assigned CPUC Commissioner (one of the CPUC’s five appointed commission members) and an  
42 Administrative Law Judge supervise the General Proceeding process, which includes steps such as a pre-  
43 hearing conference, evidentiary hearings, and public participation hearings. CPUC Energy Division staff  
44  
45

1 carry out the Environmental Review process, which includes steps such as the preparation of an  
2 environmental document pursuant to CEQA, consultation with other public agencies, and public  
3 comment.  
4

5 The Administrative Law Judge will prepare a Proposed Decision for consideration by the five CPUC  
6 Commissioners when the General Proceeding and Environmental Review processes are complete. The  
7 Administrative Law Judge bases the Proposed Decision on evidence gathered during the General  
8 Proceeding, Environmental Review findings, and public comments received. Each Commissioner may  
9 draft an alternative proposed decision for CPUC review. All five Commissioners will then vote on the  
10 proposed decision and any alternates at a meeting of the full commission.  
11

### 12 **1.3.2 Intended Uses of this EIR**

13  
14 The CPUC is the lead agency for CEQA compliance in evaluation of the proposed project. Pursuant to  
15 Article XII of the Constitution of the State of California, the CPUC is charged with the regulation of  
16 investor-owned public utilities and directed the preparation of this EIR. It provides an assessment of the  
17 environmental impacts associated with the proposed project and alternatives based on the level of  
18 engineering design performed to date for each project component.  
19

20 Project components that would be implemented by the applicant are based on preliminary engineering  
21 data and are subject to change based on final engineering. Per CEQA Guidelines Section 15004, design  
22 of the proposed project and the CEQA review process occur concurrently, not consecutively. These  
23 concurrent processes allow the applicant to incorporate environmental considerations into project  
24 conceptualization, design, and planning at the earliest feasible time. Additional environmental analysis  
25 may be required in instances where, as a result of refined engineering design, construction activities  
26 would vary from those described in this EIR, or construction or operation would take place in areas not  
27 identified in this EIR. If this EIR is certified and changes to the proposed project are proposed after  
28 certification, these changes would be reviewed with consideration given, where appropriate, to CEQA  
29 Guidelines Sections 15162 through 15164, which describe the requirements for subsequent and  
30 supplemental EIRs and addendums to EIRs.  
31

32 As lead agency, the CPUC must determine through the CEQA process whether the proposed project  
33 would result in significant impacts on the environment and whether those impacts could be avoided,  
34 eliminated, compensated for, or reduced to less than significant levels. This EIR will be used by the  
35 CPUC in conjunction with other information developed in the CPUC's formal record to act on the  
36 application for construction and operation of the proposed project. Under CEQA requirements, the  
37 CPUC will determine the adequacy of the final EIR and, if it is found to be adequate, will certify the  
38 document as complying with CEQA. If the CPUC approves a project with significant environmental  
39 impacts that cannot be mitigated to less than significant levels, it must state why in a Statement of  
40 Overriding Considerations, which would be included in the CPUC's decision on the application.  
41

### 42 **1.3.3 Other Public Agencies**

43  
44 State, regional, and local agencies in addition to the CPUC—such as the California Department of  
45 Transportation, California Department of Fish and Wildlife, Air Quality Management District, Regional  
46 Water Quality Control Board, and Historic Preservation Office—may be involved in reviewing and/or  
47 permitting the proposed project. At the federal level, agencies with potential reviewing and/or permitting  
48 authority include the United States Army Corps of Engineers and United States Fish and Wildlife

1 Service. The agencies will rely on the information presented in this EIR to inform their decision  
2 regarding the issuance of permits related to construction or operation of the proposed project.  
3

4 Article XII, Section 8 of the California Constitution states in pertinent part, “A city, county, or other  
5 public body may not regulate matters over which the Legislature grants regulatory power to the [CPUC].”  
6 “Thus under the Constitution, as to matters over which the [C]PUC has been granted regulatory power,  
7 the [C]PUC’s jurisdiction is exclusive.”<sup>4</sup> To the extent that the exercise of local ordinances or permit  
8 requirements would frustrate the CPUC’s regulation of matters of statewide importance affecting the  
9 proposed project, such as the safe operation of electric utility facilities, this EIR addresses the  
10 environmental impacts addressed by such local ordinances and requirements, as well as the impacts that  
11 might be caused by the CPUC’s preemption. The CPUC considers local ordinances and requirements in  
12 this EIR with the intent of ensuring that the proposed project complies with all local ordinances and  
13 requirements to the extent feasible and reasonable. The applicant would be required to obtain from local  
14 jurisdictions all building, encroachment, and other ministerial (administrative) permits that do not  
15 conflict with or interfere with the CPUC’s regulation of public utilities.  
16

17 General Order 131-D directs the CPUC to contact and coordinate with local planning agencies regarding  
18 land use concerns that may be associated with the proposed project. The CPUC consulted with other  
19 affected agencies and jurisdictions to gather information related to the possible environmental effects of  
20 the proposed project: this included making early contact and opening a line of communication with key  
21 public agencies that would be directly affected by the proposed project, and, as part of this process,  
22 obtaining insight and information for this EIR. Public agency representatives provided background  
23 information on the local setting, permitting requirements, regulatory requirements, land use information,  
24 and local environmental concerns. Chapter 7, “List of Preparers, Agencies, and Persons Contacted,” lists  
25 all agencies consulted during the preparation of this EIR. The mitigation measures presented in this EIR  
26 reflect the adopted plans, policies, and requirements of local public agencies that would otherwise be  
27 required of the applicant but for the CPUC’s exclusive jurisdiction and preemption. With the adoption of  
28 mitigation measures reflecting such local requirements, impacts that would otherwise be significant  
29 would be reduced to less than significant levels.  
30

31 The CPUC’s authority does not preempt special districts, such as Air Quality Management Districts,  
32 other state agencies, or the federal government. The applicant would obtain permits, approvals, and  
33 licenses as needed and would participate in reviews and consultations as needed with federal, state, and  
34 local agencies (Section 2.7, “Permitting, Consultation, and Approval Requirements”).  
35

### 36 **1.3.24 Public Scoping**

37

38 On January 9, 2013, the CPUC published and distributed a Notice of Preparation (NOP) to the State  
39 Clearinghouse (No. 2013011011), responsible and trustee agencies, and other interested parties to notify  
40 them that an EIR would be prepared for the proposed project.<sup>5</sup> The NOP was distributed to more than  
41 800 individuals, including property owners within 300 feet of proposed project components.

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<sup>4</sup> *Southern California Gas Co. v. City of Vernon* 41 Cal. App. 4<sup>th</sup> 209, 215 (1995).

<sup>5</sup> Projects or actions undertaken by the lead agency, in this case the CPUC, may require subsequent oversight, approvals, or permits from other public agencies. Other such agencies are referred to as *responsible agencies* and *trustee agencies*. Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, as amended, a responsible agency is a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR. For the purpose of CEQA, the term *responsible agency* refers to all public agencies other than the lead agency that have discretionary approval power over the project. A *trustee agency* is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.

1 Additionally, the CPUC placed notices in the following newspapers: the *Orange County Register*  
2 (English), the *North County Times* (English), and *La Opinión* (Spanish). On February 8, 2013, the CPUC  
3 extended the scoping period by 14 days, allowing the public and agencies an opportunity to provide  
4 comments through February 22, 2013. The CPUC mailed a Notice of Extension to the NOP distribution  
5 list, and on February 21, 2013, the CPUC placed a notice announcing the extension of the public scoping  
6 period in the *Capistrano Dispatch* and *San Clemente Times* (English).

7  
8 The CPUC conducted public scoping meetings on January 23, 2013, at the San Juan Capistrano  
9 Community Hall in San Juan Capistrano, California and January 24, 2013, at Bella Collina Towne and  
10 Golf Club in San Clemente, California. Fifty-five people attended and signed in for the public scoping  
11 meetings, and 29 individuals provided oral comments during the meeting. Sixty written comments were  
12 received during the comment period. The Public Scoping Summary Report prepared for the proposed  
13 project is provided in Appendix A.

### 14 **1.3.35 Screening of Alternatives to the Proposed Project**

15  
16  
17 Alternatives to the proposed project were presented by the applicant in the PEA, and additional  
18 alternatives were developed by the CPUC in consultation with the applicant and based on public  
19 comments received during scoping. An alternatives screening process was carried out to determine which  
20 alternatives could feasibly accomplish the purpose of the proposed project (Section 1.2) and attain most  
21 of its basic objectives (Section 1.2.1) but would avoid or substantially lessen potentially significant  
22 effects pursuant to CEQA Guidelines Section 15126.6. Chapter 3, “Description of Alternatives,” lists the  
23 alternatives considered in the Alternatives Screening Report. Alternatives retained for analysis in this  
24 EIR are further described in Chapter 3 and compared to the proposed project in Chapter 5, “Comparison  
25 of Alternatives.” The Alternatives Screening Report for the proposed project is provided in Appendix B.

### 26 **1.3.46 Public Comment on the Draft EIR**

27  
28  
29 The Draft EIR ~~is~~was circulated to local and state agencies and interested individuals who ~~may~~wished to  
30 review and comment on the report. Written comments ~~may be~~were submitted to the CPUC during the  
31 45-day public review period (February 23, 2015 through April 10, 2015) for the Draft EIR. Written  
32 comments on the Draft EIR ~~will be~~were accepted via regular mail, fax, and e-mail. Verbal and written  
33 comments ~~will be~~were accepted at ~~two public meetings to be noticed under separate cover~~. The  
34 meetings were held at: 1) the San Clemente Community Center, located at 100 N. Calle Seville, San  
35 Clemente, California, from 1:00 to 3:00 pm, and 2) the San Juan Capistrano Community Hall, located at  
36 25925 Camino Del Avion, San Juan Capistrano, California, from 6:00 to 8:00 pm.

37  
38 In response to public comments on the Draft EIR, a new alternative was identified. A Recirculated Draft  
39 EIR was prepared to evaluate this new alternative—Alternative J - SCE 230-kV Loop-in to Trabuco  
40 Substation—and additional significant impacts on biological resources, cultural resources, and land use  
41 and planning from construction and operation of the proposed project that were not previously disclosed  
42 in the Draft EIR. The Recirculated Draft EIR was circulated to local and state agencies and interested  
43 individuals who wished to review and comment on the report. Written comments were submitted to the  
44 CPUC during the 45-day public review period (August 10, 2015 through September 24, 2015) for the  
45 Recirculated Draft EIR. Written comments on the Recirculated Draft EIR were accepted via regular mail,  
46 fax, and e-mail.

1 **1.3.57 Final EIR**

2  
3 Written and oral comments on the Draft EIR and Recirculated Draft EIR ~~will be~~ addressed in a  
4 Response to Comments document that, together with the Draft EIR, will constitute the Final EIR. The  
5 Final EIR will be reviewed during the CPUC’s General Proceeding as described in Section 1.3, “CPUC  
6 Process and Intended Uses of the EIR.” Public agencies other than the CPUC will rely on the information  
7 presented in the Final EIR to inform decision making regarding the issuance of permits related to  
8 construction or operation of the proposed project as described in Section 1.3.3, “Other Public Agencies.”  
9

10 **1.3.68 Organization of the EIR**

11 The EIR is organized as follows:

12  
13  
14 **Executive Summary.** Presents a summary of the environmental impacts of the proposed project and  
15 mitigation measures identified to reduce or eliminate significant impacts. The Executive Summary also  
16 presents a summary of alternatives to the proposed project.  
17

18 **Chapter 1: Introduction.** Provides a discussion of the background and objectives of the proposed  
19 project. A summary of the public scoping process, other public agencies, and other planned uses of the  
20 EIR are explained.  
21

22 **Chapter 2: Project Description.** Provides a detailed description of the proposed project, lists Applicant  
23 Proposed Measures that are incorporated into the design of the proposed project to minimize  
24 environmental impacts, and provides a summary of permits and consultations that may be required.  
25

26 **Chapter 3: Description of Alternatives.** Provides a description of the alternatives evaluation process  
27 and or the alternatives considered in this EIR.  
28

29 **Chapter 4: Environmental Analysis.** Provides a comprehensive analysis and assessment of impacts and  
30 mitigation measures for the proposed project. This chapter is divided into sections based on the resource  
31 areas identified in CEQA Guidelines Appendix G (e.g., Aesthetics, Agriculture and Forestry Resources,  
32 Air Quality, and Biological Resources). The environmental and regulatory settings for each section  
33 describes the environmental baseline conditions at the time the NOP for the proposed project’s EIR was  
34 circulated on January 9, 2013 (Section 1.3.2).  
35

36 **Chapter 5: Comparison of Alternatives.** Provides a discussion of the relative advantages and  
37 disadvantages of the proposed project and alternatives and identifies the CEQA Environmentally  
38 Superior Alternative.  
39

40 **Chapter 6: Cumulative Analysis and Other CEQA Consideration.** Identifies and evaluates past,  
41 present, and reasonably foreseeable future projects within the cumulative study area that may be  
42 constructed or commence operation during the timeframe of activity associated with the proposed  
43 project. The purpose of the cumulative impacts analysis is to identify impacts from the proposed project  
44 that might not be significant when considered alone but may contribute to significant impacts when  
45 considered in conjunction with impacts from past, present, and reasonably foreseeable future projects.  
46 Provides a discussion of growth-inducing impacts, mandatory findings of significance, significant  
47 irreversible environmental changes, and significant and unavoidable environment effects.  
48

1 **Chapter 7: List of Preparers, Agencies, and Persons Contacted.** Identifies the primary authors of this  
2 EIR and a list of agencies and persons consulted during the preparation of this report.

3  
4 **Chapter 8: Mitigation Monitoring, Compliance, and Reporting Program.** A single Mitigation  
5 Monitoring, Compliance, and Reporting Program (MMCRP) ~~will be~~was prepared for publication ~~in~~of the  
6 Final EIR. Changes to the proposed project and mitigation measures that ~~may be made as a result of~~  
7 from public review of the Draft EIR and Recirculated Draft EIR and further consideration of the  
8 proposed project by the CPUC ~~will be~~are reflected in the MMCRP. For a complete list of impacts and  
9 mitigation measures (full text) ~~included in the Draft EIR~~, refer to Table 8-1.4-1 in the Final EIR.

10  
11 **Chapter 9: References.** Provides a list of reference use throughout the document and organized by  
12 section.

13  
14 **Appendices:** Appendix A presents the Public Scoping Summary Report for the proposed project which  
15 includes copies of the NOP and comments received during the public comment period following release  
16 of the NOP. Appendix B presents the Alternatives Screening Report. Air quality and greenhouse gas  
17 data, biological surveys, additional project design information, and other technical reports for the  
18 proposed project are also included as appendices. For a complete list of appendices, refer to Table of  
19 Contents for this EIR.

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