# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Reforms and Refinements, and Establish Forward Resource Adequacy Procurement Obligations.

Rulemaking 23-10-011

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION DRAFT 2025 LOCAL CAPACITY TECHNICAL REPORT

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Dated: April 4, 2024

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The California Independent System Operator Corporation (CAISO) hereby provides its draft 2025 Local Capacity Technical Report. The CAISO is providing the draft local capacity report as requested in the December 18, 2023 Assigned Commissioner's Amended Scoping Memo and Ruling (Scoping Memo). The final results are subject to change based on feedback received in the CAISO's stakeholder processes and the CAISO's own internal review. The CAISO held a stakeholder meeting to discuss the draft results for 2025 on March 6, 2024, followed by a stakeholder comment period. The CAISO will hold a stakeholder meeting to discuss proposed final results for 2025 on April 11, 2024, followed by another stakeholder comment opportunity. The CAISO will provide the final 2025 Local Capacity Technical Report and final 2025 Flexible Capacity Needs Assessment in May 2024, as provided in the Scoping Memo. The draft 2025 Local Capacity Technical Report is included herewith as Attachment A and can be found at: http://www.caiso.com/InitiativeDocuments/Draft2025LocalCapacityTechnicalReport.pdf

Respectfully submitted

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# **ATTACHMENT A**



## **2025 LOCAL CAPACITY TECHNICAL STUDY**

# DRAFT REPORT AND STUDY RESULTS



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## **Executive Summary**

This Report documents the results and recommendations of the 2025 Local Capacity Technical (LCT) Study. The LCT Study assumptions, processes, and criteria were discussed and recommended through the 2025 Local Capacity Technical Study Criteria, Methodology and Assumptions Stakeholder Meeting held on October 30, 2023. On balance, the assumptions, and processes used for the 2025 LCT Study mirror those used in the 2007-2024 LCT Studies.

Overall, the capacity needed for LCR has increased by about 1376 MW or about 6.2% from 2024 to 2025.

The LCR needs have decreased in the following areas: North Coast/North Bay and San Diego/Imperial Valley due to load forecast decrease, Kern due to small increase in rating for the limiting component.

The LCR needs have increased in the following areas: Humboldt, Bay Area, Sierra, Stockton, Fresno and Big Creek/Ventura due to load forecast increase, LA Basin due to delay in transmission project implementation.

The 2025 LCT study results are provided to the CPUC for consideration in its 2025 resource adequacy requirements program. These results will also be used by the CAISO as "Local Capacity Requirements" or "LCR" (minimum quantity of local capacity necessary to meet the LCR criteria) and for assisting in the allocation of costs of any CAISO procurement of capacity needed to achieve the Reliability Standards notwithstanding the resource adequacy procurement of Load Serving Entities (LSEs).<sup>1</sup>

The load forecast used in this study is based on the final adopted California Energy Demand 2023-2040 Forecast developed by the CEC; namely the CED 2023 Local Reliability LSE and BAA tables: <a href="https://efiling.energy.ca.gov/GetDocument.aspx?tn=254424">https://efiling.energy.ca.gov/GetDocument.aspx?tn=254424</a>.

To aide procurement, this LCT study provides load profiles and transmission capacity information that shows the effectiveness of local resources in meeting temporal local reliability needs.

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<sup>&</sup>lt;sup>1</sup> For information regarding the conditions under which the CAISO may engage in procurement of local capacity and the allocation of the costs of such procurement, please see Sections 41 and 43 of the current CAISO Tariff, at: <a href="http://www.caiso.com/238a/238acd24167f0.html">http://www.caiso.com/238a/238acd24167f0.html</a>.



The studied results for 2025 are provided below and 2029 LCR needs are provided for comparison:

#### **2025 Local Capacity Needs**

August Qualifying Capacity				acity	Capacity Available at Peak	2025 LCR Need
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	175	0	175	175	164
North Coast/ North Bay	136	849	0	985	985	967
Sierra	1221	704	0	1925	1925	1532*
Stockton	125	608	7	740	733	735*
Greater Bay	604	7781	4	8389	8385	7441*
Greater Fresno	229	2839	199	3267	3068	2532*
Kern	9	397	43	449	406	434
Big Creek/ Ventura	399	3702	249	4350	4350	2145
LA Basin	1157	9129	10	10296	10296	4797
San Diego/ Imperial Valley	3	5297	169	5469	5469	2709
Total	3883	31481	681	36045	35792	23456

#### **2029 Local Capacity Needs**

	August Qualifying Capacity				Capacity Available at Peak	2029 LCR Need
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	175	0	175	175	173
North Coast/ North Bay	136	849	0	985	985	650
Sierra	1221	704	0	1925	1925	1885*
Stockton	101	655	7	763	756	763*
Greater Bay	604	7781	4	8389	8385	6259
Greater Fresno	229	2839	199	3267	3068	2512*
Kern	9	397	43	449	406	241
Big Creek/ Ventura	399	3702	249	4350	4350	1329
LA Basin	1157	9129	10	10296	10296	5076
San Diego/ Imperial Valley	3	5637	169	5809	5809	3121
Total	3859	31868	681	36408	36155	22009

<sup>\*</sup> Details about magnitude of deficiencies can be found in the applicable section below. Resource deficient areas and sub-area implies that in order to comply with the criteria, at summer peak, load may be shed immediately after the first contingency.



The estimated results for years 2026 and 2027 LCR needs are provided below:

#### 2026 Estimated Local Capacity Needs (No technical studies conducted)

	August Qualifying Capacity				Capacity Available at Peak	2026 LCR Need
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	175	0	175	175	166
North Coast/ North Bay	136	849	0	985	985	836
Sierra	1221	704	0	1925	1925	1620*
Stockton	125	608	7	740	733	736*
Greater Bay	604	7781	4	8389	8385	7441*
Greater Fresno	229	2839	199	3267	3068	2527*
Kern	9	397	43	449	406	422*
Big Creek/ Ventura	399	3702	249	4350	4350	2172
LA Basin	1157	9129	10	10296	10296	4361
San Diego/ Imperial Valley	3	5547	169	5719	5719	2812
Total	3883	31731	681	36295	36042	23093

#### **2027 Estimated Local Capacity Needs (No technical studies conducted)**

	А	ugust Qual	ifying Capa	Capacity Available at Peak	2027 LCR Need	
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	175	0	175	175	169
North Coast/ North Bay	136	849	0	985	985	844
Sierra	1221	704	0	1925	1925	1709*
Stockton	125	655	7	787	780	737*
Greater Bay	604	7781	4	8389	8389	7441*
Greater Fresno	229	2839	199	3267	3068	2522*
Kern	9	397	43	449	406	410*
Big Creek/ Ventura	399	3702	249	4350	4350	2200
LA Basin	1157	9129	10	10296	10296	4600
San Diego/ Imperial Valley	3	5637	169	5809	5809	2915
Total	3883	31868	681	36432	36183	23547

<sup>\*</sup> Details about magnitude of deficiencies can be found in the applicable section below. Resource deficient areas and sub-area implies that in order to comply with the criteria, at summer peak, load may be shed immediately after the first contingency.



The studied results for year 2024 LCR needs are provided below for comparison:

#### **2024 Local Capacity Needs**

	August Qualifying Capacity				Capacity Available at Peak	2024 LCR Need
Local Area Name	QF/ Muni (MW)	Non-Solar (MW)	Solar (MW)	Total (MW)	Total (MW)	Capacity Needed
Humboldt	0	176	0	176	176	133
North Coast/ North Bay	137	852	0	989	989	983
Sierra	1197	686	0	1883	1883	1212*
Stockton	130	613	7	750	743	750*
Greater Bay	617	7327	4	7948	7944	7329*
Greater Fresno	206	2740	181	3127	2946	2028*
Kern	10	374	43	427	384	427*
Big Creek/ Ventura	406	3446	265	4117	4117	1971
LA Basin	1179	7164	10	8353	8353	4413
San Diego/ Imperial Valley	2	5204	182	5388	5206	2834
Total	3884	28582	692	33158	32741	22080

<sup>\*</sup> Details about magnitude of deficiencies can be found in the applicable section below. Resource deficient areas and sub-area implies that in order to comply with the criteria, at summer peak, load may be shed immediately after the first contingency.

The narrative for each Local Capacity Area lists important new projects included in the base cases as well as a description of the reason for changes between the 2024 and 2025 LCT study results.



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## Table of Contents

Execut 1.		oryof the Study: Inputs, Outputs and Options	
	1.1	Objectives	9
	1.2 1.2.1	Key Study Assumptions	
	1.3	Grid Reliability	11
	1.4	Application of N-1, N-1-1, and N-2 Criteria	11
2.	1.5 1.5.1 1.5.2 Assumptio	Performance Criteria  Performance Criteria  CAISO Statutory Obligation Regarding Safe Operation  n Details: How the Study was Conducted	12 13
	2.1	System Planning Criteria	
	2.1.1	Power Flow Assessment:	
	2.1.2 2.1.3	Post Transient Load Flow Assessment: Stability Assessment:	
	2.1.4	Engineering Estimate for Intermediate Years:	
	2.2	Load Forecast	23
	2.2.1	System Forecast	
	2.2.2	Base Case Load Development Method	
	2.3	Power Flow Program Used in the LCR analysis	
3.	2.4 Locational	Estimate of Battery Storage Needs due to Charging Constraints	
	3.1	Summary of Study Results	27
	3.2	Summary of Zonal Needs	30
	3.3	Summary of Results by Local Area	31
	3.3.1	Humboldt Area	
	3.3.2 3.3.3	North Coast / North Bay AreaSierra Area	
	3.3.4	Stockton Area	
	3.3.5	Greater Bay Area	
	3.3.6 3.3.7	Greater Fresno Area Kern Area	
	3.3.8	Big Creek/Ventura Area	
	3.3.9	LA Basin Area	
	3.3.10 3.3.11	San Diego-Imperial Valley AreaValley Electric Area	
4.	3.4	Summary of Engineering Estimates for Intermediate Years by Local Area . orage Assessment as Part of LCR Study	138
	4.1	Introduction	145
	4.2	Energy Storage Assessment Approach	145
	4.2.1	Load Data	146
	4.2.2	Load Serving Capabilities	146



400	Catingsting Engrave Charage Addition	4 4 7
4.2.3	Estimating Energy Storage Addition	
4.2.4	1-to-1 Replacement with 4-hour Storage	147
Attachment A - List of	physical resources accounted for in the 2024 and 2028 Local Capacity	
Technical stud	dies	148
Attachment B - Effect	tiveness factors for procurement guidance	149



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## 1. Overview of the Study: Inputs, Outputs and Options

### 1.1 Objectives

The intent of the 2025 LCT Study is to identify specific areas within the CAISO Balancing Authority Area that have limited import capability and determine the minimum generation capacity (MW) necessary to mitigate the local reliability problems in those areas, as was the objective of all previous Local Capacity Technical Studies.

To aid procurement, this LCT study provides load profiles and transmission capacity information that shows the effectiveness of local resources in meeting temporal local reliability needs.

#### 1.2 Key Study Assumptions

#### 1.2.1 Inputs, Assumptions and Methodology

The inputs, assumptions and methodology were discussed and agreed to by stakeholders at the 2025 LCT Study Criteria, Methodology and Assumptions Stakeholder Meeting held on October 30, 2023. Except for Study Criteria all other Methodology and Assumptions are similar to those used and incorporated in previous LCT studies. The following table sets forth a summary of the approved inputs and methodology that have been used in this 2025 LCT Study:

Table 1.2-1 Summary Table of Inputs and Methodology Used in this LCT Study:

Issue	How Incorporated into this LCT Study:
Input Assumptions:	
Transmission System Configuration	The existing transmission system has been modeled, including all projects operational on or before June 1, of the study year and all other feasible operational solutions brought forth by the PTOs and as agreed to by the CAISO.
Generation Modeled	The existing generation resources has been modeled and also includes all projects that will be on-line and commercial on or before June 1, of the study year
Load Forecast	Uses a 1-in-10 year summer peak load forecast
Methodology:	



Maximize Import Capability	Import capability into the load pocket has been maximized, thus minimizing the generation required in the load pocket to meet applicable reliability requirements.
QF/Nuclear/State/Federal Units	Regulatory Must-take and similarly situated units like QF/Nuclear/State/Federal resources have been modeled on-line at qualifying capacity output values for purposes of this LCT Study.
Maintaining Path Flows	Path flows have been maintained below all established path ratings into the load pockets, including the 500 kV. For clarification, given the existing transmission system configuration, the only 500 kV path that flows directly into a load pocket and will, therefore, be considered in this LCT Study is the South of Lugo transfer path flowing into the LA Basin.
Performance Criteria:	
All Performance Levels, including incorporation of PTO operational solutions	This LCT Study is being published based on the most stringent of all mandatory reliability standards. In addition, the CAISO will incorporate all new projects and other feasible and CAISO-approved operational solutions brought forth by the PTOs that can be operational on or before June 1, of the study year. Any such solutions that can reduce the need for procurement to meet the mandatory standards will be incorporated into the LCT Study.
Load Pocket:	
Fixed Boundary, including limited reference to published effectiveness factors	This LCT Study has been produced based on load pockets defined by a fixed boundary. The CAISO only publishes effectiveness factors where they are useful in facilitating procurement where excess capacity exists within a load pocket.

Further details regarding the 2025 LCT Study methodology and assumptions are provided in Section III, below.



#### 1.3 Grid Reliability

Service reliability builds from grid reliability because grid reliability is reflected in the Reliability Standards of the North American Electric Reliability Council (NERC) and the Western Electricity Coordinating Council ("WECC") Regional Criteria (collectively "Reliability Standards"). The Reliability Standards apply to the interconnected electric system in the United States and are intended to address the reality that within an integrated network, whatever one Balancing Authority Area does can affect the reliability of other Balancing Authority Areas. Consistent with the mandatory nature of the Reliability Standards, the CAISO is under a statutory obligation to ensure efficient use and reliable operation of the transmission grid consistent with achievement of the Reliability Standards.<sup>2</sup> The CAISO is further under an obligation, pursuant to its FERC-approved Transmission Control Agreement, to secure compliance with all "Applicable Reliability Criteria." Applicable Reliability Criteria consists of the Reliability Standards as well as reliability criteria adopted by the CAISO (Grid Planning Standards).

The Reliability Standards define reliability on interconnected electric systems using the terms "adequacy" and "security." "Adequacy" is the ability of the electric systems to supply the aggregate electrical demand and energy requirements of their customers at all times, taking into account physical characteristics of the transmission system such as transmission ratings and scheduled and reasonably expected unscheduled outages of system elements. "Security" is the ability of the electric systems to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements. The Reliability Standards are organized by Performance Categories. Certain categories require that the grid operator not only ensure that grid integrity is maintained under certain adverse system conditions (e.g., security), but also that all customers continue to receive electric supply to meet demand (e.g., adequacy). In that case, grid reliability and service reliability would overlap. But there are other levels of performance where security can be maintained without ensuring adequacy.

## 1.4 Application of N-1, N-1-1, and N-2 Criteria

The CAISO will maintain the system in a safe operating mode at all times. This obligation translates into respecting the Reliability Criteria at all times, for example during normal operating conditions (N-0) the CAISO must protect for all single contingencies (N-1) and common mode (N-2) double line outages. Also, after a single contingency, the CAISO must re-adjust the system to support the loss of the next most stringent contingency. This is referred to as the N-1-1 condition.

The N-1-1 vs N-2 terminology was introduced only as a temporal differentiation between two existing NERC Category P6 and P7 events. N-1-1 represents NERC Category C6 ("category P1 contingency, manual system adjustment, followed by another category P1 contingency"). The N-2 represents NERC Category P7 ("any two circuits of a multiple circuit tower line") as well as WECC-S2 (for 500 kV only) ("any two circuits in the same right-of-way") with no manual system adjustment between the two contingencies.

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<sup>&</sup>lt;sup>2</sup> Pub. Utilities Code § 345



#### 1.5 Performance Criteria

As set forth on the Summary Table of Inputs and Methodology, this LCR Report is based on the most stringent mandatory standard (NERC, WECC or CAISO). The CAISO tests the electric system in regards to thermal overloads as well as dynamic and reactive margin compliance with the existing standards.

#### 1.5.1 Performance Criteria

Category P0, P1 & P3 system performance requires that all thermal and voltage limits must be within their "Applicable Rating," which, in this case, are the emergency ratings as generally determined by the PTO or facility owner. Applicable Rating includes a temporal element such that emergency ratings can only be maintained for certain duration. Under this category, load cannot be shed in order to assure the Applicable Ratings are met however there is no guarantee that facilities are returned to within normal ratings or to a state where it is safe to continue to operate the system in a reliable manner such that the next element out will not cause a violation of the Applicable Ratings.

The NERC Planning Standards require system operators to "look forward" to make sure they safely prepare for the "next" N-1 following the loss of the "first" N-1 (stay within Applicable Ratings after the "next" N-1). This is commonly referred to as N-1-1. Because it is assumed that some time exists between the "first" and "next" element losses, operating personnel may make any reasonable and feasible adjustments to the system to prepare for the loss of the second element, including, operating procedures, dispatching generation, moving load from one substation to another to reduce equipment loading, dispatching operating personnel to specific station locations to manually adjust load from the substation site, or installing a "Special Protection Scheme" that would remove pre-identified load from service upon the loss of the "next " element.<sup>3</sup> All Category P2, P4, P5, P6, P7 and extreme event requirements in this report refer to situations when in real time (N-0) or after the first contingency (N-1) the system requires additional readjustment in order to prepare for the next worst contingency. In this time frame, load drop is not allowed per existing planning criteria.

Generally, Category P2, P4, P5, P6, P7 and extreme event describes system performance that is expected following the loss of two or more system elements. This loss of two elements is generally expected to happen simultaneously, referred to as N-2. It should be noted that once the "next" element is lost after the first contingency, as discussed above under the Performance Criteria P1, the event is effectively a Category P6 or N-1-1 scenario. As noted above, depending on system design and expected system impacts, the **planned and controlled** interruption of

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<sup>&</sup>lt;sup>3</sup> A Special Protection Scheme is typically proposed as an operational solution that does not require additional generation and permits operators to effectively prepare for the next event as well as ensure security should the next event occur. However, these systems have their own risks, which limit the extent to which they could be deployed as a solution for grid reliability augmentation. While they provide the value of protecting against the next event without the need for pre-contingency load shedding, they add points of potential failure to the transmission network. This increases the potential for load interruptions because sometimes these systems will operate when not required and other times they will not operate when needed.



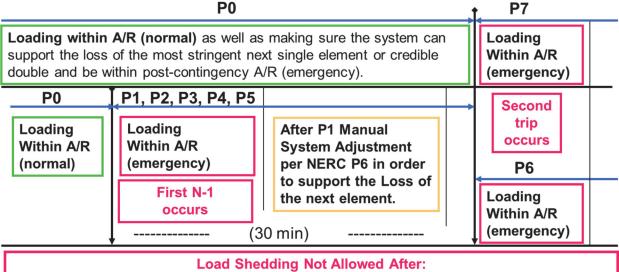
supply to customers (load shedding), the removal from service of certain generators and curtailment of exports may be utilized to maintain grid "security."

#### 1.5.2 CAISO Statutory Obligation Regarding Safe Operation

The ISO must maintain the system in a safe operating mode at all times. This obligation translates into respecting the Reliability Criteria at all times. For example, during normal operating conditions (8760 hours per year), the ISO must protect for all single contingencies (P1, P2) and multiple contingencies (P4, P5) as well as common mode double line outages (P7). As a further example, after a single contingency, the ISO must readjust the system in order to be able to support the loss of the next most stringent contingency (P3, P6 and P1+P7 resulting in potential voltage collapse or dynamic instability).

Figure 1.5-1 Temporal graph of LCR Category P0-P7

P0



P0, P1, P2.1, P2.2EHV, P2.3EHV, P3, P4.1-5EHV, P5.1-5EHV, P6(High Density), P7(High Density)

Planned and Controlled Load Shedding Allowed After:

P2.2HV, P2.3HV, P2.4, P4.1-5HV, P4.6, P5.1-5HV, P6(Non-High Density), P7(Non-High Density)

The following definitions guide the CAISO's interpretation of the Reliability Criteria governing safe mode operation and are used in this LCT Study:

#### **Applicable Rating:**

This represents the equipment rating that will be used under certain contingency conditions.

Normal rating is to be used under normal conditions.

<u>Long-term emergency ratings</u>, if available, will be used in all emergency conditions as long as "system readjustment" is provided in the amount of time given (specific to each element) to reduce the flow to within the normal ratings. If not available, the normal rating is to be used.



<u>Short-term emergency ratings</u>, if available, can be used as long as "system readjustment" is provided in the "short-time" available in order to reduce the flow to within the long-term emergency ratings where the element can be kept for another length of time (specific to each element) before the flow needs to be reduced the below the normal ratings. If not available long-term emergency rating should be used.

<u>Temperature-adjusted ratings</u> shall not be used because this is a year-ahead study, not a real-time tool, and as such the worst-case scenario must be covered. In case temperature-adjusted ratings are the only ratings available then the minimum rating (highest temperature) given the study conditions shall be used.

<u>CAISO Transmission Register</u> is the only official keeper of all existing ratings mentioned above.

Ratings for future projects provided by PTO and agreed upon by the CAISO shall be used.

<u>Other short-term ratings</u> not included in the CAISO Transmission Register may be used as long as they are engineered, studied and enforced through clear operating procedures that can be followed by real-time operators.

<u>Path Ratings</u> need to be maintained within their limits in order to assure that proper capacity is available in order to operate the system in real-time in a safe operating zone.

#### **Controlled load drop:**

This is achieved with the use of a Special Protection Scheme.

#### Planned load drop:

This is achieved when the most limiting equipment has short-term emergency ratings AND the operators have an operating procedure that clearly describes the actions that need to be taken in order to shed load.

#### **Special Protection Scheme:**

All known SPS shall be assumed. New SPS must be verified and approved by the CAISO and must comply with the new SPS guideline described in the CAISO Planning Standards.

#### **System Readjustment:**

This represents the actions taken by operators in order to bring the system within a safe operating zone after any given contingency in the system.

Actions that can be taken as system readjustment after a Category P1, P2.1, P2.2(EHV), P2.3(EHV), P3, P4.1-5(EHV), P5.1-5(EHV), P6(high density area) &P7(high density area) contingency:

- 1. System configuration change based on validated and approved operating procedures
- 2. Generation re-dispatch



- a. Decrease generation (up to 1150 MW) limit given by single contingency SPS as part of the ISO Grid Planning standards (ISO SPS3)
- b. Increase generation this generation will become part of the LCR need

Actions, which shall not be taken as system readjustment after a Category P1, P2.1, P2.2(EHV), P2.3(EHV), P3, P4.1-5(EHV), P5.1-5(EHV), P6(high density area)&P7(high density area) contingency:

1. Load drop – based on the intent of the ISO/WECC and NERC criteria for category P1 contingencies.

An objective of the planning process is to minimize the likelihood and magnitude of Non-Consequential Load Loss following Contingency events. NERC and ISO Planning standards mandate that no load shedding should be done immediately after a Category P1, P2.1, P2.2(EHV), P2.3(EHV), P3, P4.1-5(EHV), P5.1-5(EHV), P6(high density area)&P7(high density area) contingency. The system should be planned with no load shedding regardless of when it may occur (immediately or within 15-30 minutes after the first contingency). It follows that load shedding may not be utilized as part of the system readjustment period – in order to protect for the next most limiting contingency. Therefore, if there are available resources in the local area, such resources should be used during the manual adjustment period (and included in the LCR need) before resorting to shedding firm load.

Firm load shedding is allowed in a planned and controlled manner after the first contingency in P2.2(HV), P2.3(HV), P2.4, P4.1-5(HV), P4.6, P5.1-5(HV) and after the second contingency in P6(non-high density area), P7(non-high density area) & P1 system adjusted followed by P7 category events.

This interpretation tends to guarantee that firm load shedding is used to address Category P1, P2.1, P2.2(EHV), P2.3(EHV), P3, P4.1-5(EHV), P5.1-5(EHV), P6(high density area)&P7(high density area) conditions only under the limited circumstances where no other resource or validated operational measure is available. A contrary interpretation would constitute a departure from existing practice and degrade current service expectations by increasing load's exposure to service interruptions.

#### Time allowed for manual readjustment:

Tariff Section 40.3.1.1, requires the CAISO, in performing the Local Capacity Technical Study, to apply the following reliability criterion:

Time Allowed for Manual Adjustment: This is the amount of time required for the Operator to take all actions necessary to prepare the system for the next Contingency. The time should not be more than thirty (30) minutes.



The CAISO Planning Standards also impose this manual readjustment requirement. As a parameter of the Local Capacity Technical Study, the CAISO must assume that as the system operator the CAISO will have sufficient time to:

- (1) make an informed assessment of system conditions after a contingency has occurred;
- (2) identify available resources and make prudent decisions about the most effective system redispatch;
- (3) manually readjust the system within safe operating limits after a first contingency to be prepared for the next contingency; and
- (4) allow sufficient time for resources to ramp and respond according to the operator's redispatch instructions. This all must be accomplished within 30 minutes.

Local capacity resources can meet this requirement by either (1) responding with sufficient speed, allowing the operator the necessary time to assess and redispatch resources to effectively reposition the system within 30 minutes after the first contingency, or (2) having sufficient energy available for frequent dispatch on a pre-contingency basis to ensure the operator can meet minimum online commitment constraints or reposition the system within 30 minutes after the first contingency occurs. Accordingly, when evaluating resources that satisfy the requirements of the CAISO Local Capacity Technical Study, the CAISO assumes that local capacity resources need to be available in no longer than 20 minutes so the CAISO and demand response providers have a reasonable opportunity to perform their respective and necessary tasks and enable the CAISO to reposition the system within the 30 minutes in accordance with applicable reliability criteria.



## 2. Assumption Details: How the Study was Conducted

## 2.1 System Planning Criteria

The following table provides a comparison of system planning criteria, based on the NERC performance standards, used in the study:

Table 2.1-1: Criteria Comparison for Bulk Electric System contingencies

Contingency Component(s)	Mandatory Reliability Standards	Old Local Capacity Criteria	Local Capacity Criteria
P0 – No Contingencies	Х	Х	X
P1 – Single Contingency			
1. Generator (G-1)	X	X <sup>1</sup>	X1
2. Transmission Circuit (L-1)	X	X <sup>1</sup>	X1
3. Transformer (T-1)	X	X1,2	X1
4. Shunt Device	X		X1
5. Single Pole (dc) Line	X	X <sup>1</sup>	X1
P2 – Single contingency			
1. Opening a line section w/o a fault	X		X
2. Bus Section fault	X		X
3. Internal Breaker fault (non-Bus-tie Breaker)	X		X
4. Internal Breaker fault (Bus-tie Breaker)	X		X
P3 – Multiple Contingency – G-1 + system adjustment and:			
1. Generator (G-1)	X	X	X
2. Transmission Circuit (L-1)	X	X	X
3. Transformer (T-1)	X	X <sup>2</sup>	X
4. Shunt Device	X		X
5. Single Pole (dc) Line	X	X	X
P4 - Multiple Contingency - Fault plus stuck breaker			
1. Generator (G-1)	X		X
2. Transmission Circuit (L-1)	X		X
3. Transformer (T-1)	X		X
4. Shunt Device	X		X
5. Bus section	X		X
6. Bus-tie breaker	X		X
P5 - Multiple Contingency - Relay failure (delayed clearing)			
1. Generator (G-1)	X		X
2. Transmission Circuit (L-1)	X		X
3. Transformer (T-1)	X		X
4. Shunt Device	X		X
5. Bus section	X		X



P6 – Multiple Contingency – P1.2-P1.5 system adjustment			
and:	X	Х	X
1. Transmission Circuit (L-1)	X	x	X
2. Transformer (T-1)	X		X
3. Shunt Device	X		X
4. Bus section			
P7 – Multiple Contingency - Fault plus stuck breaker			
1. Two circuits on common structure (L-2)	X	X	X
2. Bipolar DC line	X	X	X
Extreme event – loss of two or more elements			
Two generators (Common Mode) G-2	X <sup>4</sup>	X	X <sup>4</sup>
Any P1.1-P1.3 & P1.5 system readjusted (Common Mode) L-2	X <sup>4</sup>	X <sup>3</sup>	X <sup>5</sup>
All other extreme combinations.	X <sup>4</sup>		X <sup>4</sup>

- System must be able to readjust to a safe operating zone in order to be able to support the loss of the next contingency.
- A thermal or voltage criterion violation resulting from a transformer outage may not be cause for a local area reliability requirement if the violation is considered marginal (e.g. acceptable loss of facility life or low voltage), otherwise, such a violation will necessitate creation of a requirement.
- <sup>3</sup> Evaluate for risks and consequence, per NERC standards. No voltage collapse or dynamic instability allowed.
- Evaluate for risks and consequence, per NERC standards.
- Expanded to include any P1 system readjustment followed by any P7 without stuck breaker. For voltage collapse or dynamic instability situations mitigation is required "if there is a risk of cascading" beyond a relatively small predetermined area less than 250 MW directly affected by the outage.

Table 2.1-2: Criteria Comparison for non-Bulk Electric System contingencies

Contingency Component(s)	Mandatory Reliability Standards	Old Local Capacity Criteria	Local Capacity Criteria
P0 – No Contingencies	X	Х	Х
P1 – Single Contingency			
1. Generator (G-1)	X	X1	X
2. Transmission Circuit (L-1)	X	X1	X
3. Transformer (T-1)	X	X1,2	X
4. Shunt Device	X		X
5. Single Pole (dc) Line	X	X1	X
P2 – Single contingency			
1. Opening a line section w/o a fault			
2. Bus Section fault			
3. Internal Breaker fault (non-Bus-tie Breaker)			
4. Internal Breaker fault (Bus-tie Breaker)			



			1
P3 – Multiple Contingency – G-1 + system adjustment and:			
1. Generator (G-1)	X	X	X
2. Transmission Circuit (L-1)	X	X	X
3. Transformer (T-1)	X	X <sup>2</sup>	X
4. Shunt Device	X		X
5. Single Pole (dc) Line	X	Х	X
P4 – Multiple Contingency - Fault plus stuck breaker			
1. Generator (G-1)			
2. Transmission Circuit (L-1)			
3. Transformer (T-1)			
4. Shunt Device			
5. Bus section			
6. Bus-tie breaker			
P5 – Multiple Contingency – Relay failure (delayed clearing)			
1. Generator (G-1)			
2. Transmission Circuit (L-1)			
3. Transformer (T-1)			
4. Shunt Device			
5. Bus section			
P6 – Multiple Contingency – P1.2-P1.5 system adjustment and:			
1. Transmission Circuit (L-1)		x	
2. Transformer (T-1)		х	
3. Shunt Device			
4. Bus section			
P7 – Multiple Contingency - Fault plus stuck breaker			
Two circuits on common structure (L-2)		X	
2. Bipolar DC line		X	
Extreme event – loss of two or more elements			
Two generators (Common Mode) G-2		X	
Any P1.1-P1.3 & P1.5 system readjusted (Common Mode) L-2		X <sup>3</sup>	
All other extreme combinations.		^	
4 O ( ) I I I I I I I I I I I I I I I I I I			

System must be able to readjust to a safe operating zone in order to be able to support the loss of the next contingency.

A significant number of simulations were run to determine the most critical contingencies within each local area. Using power flow, post-transient load flow, and stability assessment tools, the system performance results of all tested contingencies were measured against the system performance requirements defined by the criteria shown in Tables 1 and 2. Where the specific system performance requirements were not met, generation was adjusted until performance requirements were met for the local area. The adjusted generation constitutes the minimum

A thermal or voltage criterion violation resulting from a transformer outage may not be cause for a local area reliability requirement if the violation is considered marginal (e.g. acceptable loss of facility life or low voltage), otherwise, such a violation will necessitate creation of a requirement.

<sup>&</sup>lt;sup>3</sup> Evaluate for risks and consequence, per NERC standards. No voltage collapse or dynamic instability allowed.



generation needed in the local area. The following describes how the criteria were tested for the specific type of analysis performed.

#### 2.1.19 Power Flow Assessment:

Table 2.1-3 Power flow criteria

Contingencies	Thermal Criteria <sup>1</sup>	Voltage Criteria <sup>2</sup>
P0	Applicable Rating	Applicable Rating
P1 <sup>3</sup>	Applicable Rating	Applicable Rating
P2	Applicable Rating	Applicable Rating
P3	Applicable Rating	Applicable Rating
P4	Applicable Rating	Applicable Rating
P5	Applicable Rating	Applicable Rating
P6 <sup>4</sup>	Applicable Rating	Applicable Rating
P7	Applicable Rating	Applicable Rating
P1 + P7 <sup>4</sup>	-	No Voltage Collapse

- <sup>1</sup> Applicable Rating Based on CAISO Transmission Register or facility upgrade plans including established Path ratings.
- <sup>2</sup> Applicable Rating CAISO Grid Planning Criteria or facility owner criteria as appropriate.
- <sup>3</sup> Following the first contingency (N-1), the generation must be sufficient to allow the operators to bring the system back to within acceptable operating range (voltage and loading) and/or appropriate OTC following the studied outage conditions and be able to safely prepare for the loss of the next most stringent element and be within Applicable Rating after the loss of the second element.
- During normal operation or following the first contingency (N-1), the generation must be sufficient to allow the operators to prepare for the next worst N-1 or common mode N-2 without pre-contingency interruptible or firm load shedding. SPS/RAS/Safety Nets may be utilized to satisfy the criteria after the second N-1 or common mode N-2 except if the problem is of a thermal nature such that short-term ratings could be utilized to provide the operators time to shed either interruptible or firm load.



#### 2.1.20 Post Transient Load Flow Assessment:

Table 2.1-4 Post transient load flow criteria

Contingencies	Reactive Margin Criteria <sup>2</sup>
Selected <sup>1</sup>	Applicable Rating

- If power flow results indicate significant low voltages for a given power flow contingency, simulate that outage using the post transient load flow program. The post-transient assessment will develop appropriate Q/V and/or P/V curves.
- <sup>2</sup> Applicable Rating positive margin based on the higher of imports or load increase by 5% for N-1 contingencies, and 2.5% for N-2 contingencies.

#### 2.1.21 Stability Assessment:

Table 2.1-5 Stability criteria

Contingencies	Stability Criteria <sup>2</sup>	
Selected <sup>1</sup>	Applicable Rating	

- Base on historical information, engineering judgment and/or if power flow or post transient study results indicate significant low voltages or marginal reactive margin for a given contingency.
- <sup>2</sup> Applicable Rating CAISO Grid Planning Criteria or facility owner criteria as appropriate.

#### 2.1.22 Engineering Estimate for Intermediate Years:

Due to combined CEC/CPUC/CAISO timelines required by the RA process, the ISO must estimate LCR requirement for intermediate years, between the technical studies run for years one and five.

ISO will be using an engineering estimate for intermediate years. Elements of the engineering judgement estimates are described below:

#### 2.1.22.1 Net Peak Load Growth driven estimate

Assuming nothing else changes, no transmission or resource mix changes, including no changes to long-term contractual arrangements, the increase (or decrease) in LCR, assuming a linear function, will be estimated based on ratio of load growth to ratio of LCR needs to be multiplied by the number of years using the following formula:

LCR for Year of Need = Year 1 LCR + [(Year 5 LCR-Year 1 LCR)/4] X (Year of Need-Year 1)

For non-linear functions, like voltage collapse or dynamic instability, ISO will use engineering judgment in order to provide estimated LCR requirement.



#### 2.1.22.2 Single New Transmission driven estimate

Assuming nothing else changes, no load growth, no other new transmission projects or resource mix changes, including no changes to long-term contractual arrangements, the increase (or decrease in LCR) will be estimated based on a step function (usually decreasing the LCR needs) in the year when the transmission project is supposed to be first operational (if in-service before June 1-st of estimated year for summer peaking areas).

#### 2.1.22.3 Single New Resource driven estimate

Assuming nothing else changes, no load growth, no new transmission projects or any other resource mix changes, including no changes to long-term contractual arrangements, the increase (or decrease in LCR) will be estimated based on a step function if:

- a) The new resource is catalogued with a higher dispatch priority or the same priority as the marginal resource used for establishment of LCR need AND
- b) The new resource has a significantly different (10% or more) effectiveness factor difference vs. the marginal resource used for the establishment of the LCR need.

Priority dispatch order (from LCR study manual):

- 1. QF/MUNI/State/Federal
- 2. RA resources under long-term contracts
- 3. Unknown contractual status

#### 2.1.22.4 Single Change in Resource contractual status driven estimate

Assuming nothing else changes, no load growth, no new transmission projects or resource mix changes, including no changes to other long-term contractual arrangements, the increase (or decrease in LCR) will be estimated based on a step function if:

- a) The resource is moving to a higher dispatch priority or the same priority as the marginal resource used for establishment of LCR need AND
- b) The resource has a significantly different (10% or more) effectiveness factor difference vs. the marginal resource used for the establishment of the LCR need.

#### 2.1.22.5 Single Known Resource Retirement driven estimate

Assuming nothing else changes, no load growth, no new transmission projects or other resource mix changes, including no changes to long-term contractual arrangements, the increase (or decrease in LCR) will be estimated based on a step function if:

- The retired resource was included in a higher dispatch priority or the same priority as the marginal resource used for establishment of LCR need AND
- b) The resource has a significantly different (10% or more) effectiveness factor difference vs. the marginal resource used for the establishment of the LCR need.



#### 2.1.22.6 Multi Reason Change driven estimate

From multi-year available LCR studies the ISO will use engineering judgement, guided by the above explain single change principles, in order to estimate intermediate year LCR needs any time more than one factor is influencing the LCR results:

- a) Net peak load growth
- b) New transmission project(s)
- c) New resource(s)
- d) Change in resource contractual status
- e) Known resource retirement(s)

#### 2.2 Load Forecast

#### 2.2.1 System Forecast

The California Energy Commission (CEC) derives the load forecast at the system and Participating Transmission Owner (PTO) levels. This relevant CEC forecast is then distributed across the entire system, down to the local area, division and substation level. The PTOs use an econometric equation to forecast the system load. The predominant parameters affecting the system load are (1) number of households, (2) economic activity (gross metropolitan products, GMP), (3) temperature and (4) increased energy efficiency and distributed generation programs.

#### 2.2.2 Base Case Load Development Method

The method used to develop the load in the base case is a melding process that extracts, adjusts and modifies the information from the system, distribution and municipal utility forecasts. The melding process consists of two parts: Part 1 deals with the PTO load and Part 2 deals with the municipal utility load. There may be small differences between the methodologies used by each PTO to disaggregate the CEC load forecast to their level of local area as well as bar-bus model.

#### 2.2.2.1 PTO Loads in Base Case

The methods used to determine the PTO loads are, for the most part, similar. One part of the method deals with the determination of the division<sup>4</sup> loads that would meet the requirements of 1-in-5 or 1-in-10 system or area base cases and the other part deals with the allocation of the division load to the transmission buses.

#### a. Determination of division loads

The annual division load is determined by summing the previous year division load and the current division load growth. Thus, the key steps are the determination of the initial year division load and

<sup>&</sup>lt;sup>4</sup> Each PTO divides its territory in a number of smaller area named divisions. These are usually smaller and compact areas that have the same temperature profile.



the annual load growth. The initial year for the base case development method is based heavily on recorded data. The division load growth in the system base case is determined in two steps. First, the total PTO load growth for the year is determined, as the product of the PTO load and the load growth rate from the system load forecast. Then this total PTO load growth is allocated to the division, based on the relative magnitude of the load growth projected for the divisions by the distribution planners. For example, for the 1-in-10 area base case, the division load growth determined for the system base case is adjusted to the 1-in-10 temperature using the load temperature relation determined from the latest peak load and temperature data of the division.

#### b. Allocation of division load to transmission bus level

Since the loads in the base case are modeled at the various transmission buses, the division loads developed must be allocated to those buses. The allocation process is different depending on the load types. For the most part, each PTO classifies its loads into four types: conforming, non-conforming, self-generation and generation-plant loads. Since the non-conforming and self-generation loads are assumed to not vary with temperature, their magnitude would be the same in the system or area base cases of the same year. The remaining load (the total division load developed above, less the quantity of non-conforming and self-generation load) is the conforming load. The remaining load is allocated to the transmission buses based on the relative magnitude of the distribution forecast. The summation of all base case loads is generally higher than the load forecast because some load, i.e., self-generation and generation-plant, are behind the meter and must be modeled in the base cases. However, for the most part, metered or aggregated data with telemetry is used to come up with the load forecast.

#### 2.2.2.2 Municipal Loads in Base Case

The municipal utility forecasts that have been provided to the CEC and PTOs for the purposes of their base cases were also used for this study.

## 2.3 Power Flow Program Used in the LCR analysis

The technical studies were conducted using General Electric's Power System Load Flow (GE PSLF) program version 22.0.4.1 and PowerGem's Transmission Adequacy and Reliability Assessment (TARA) program version 2302.1. This GE PSLF program is available directly from GE or through the Western System Electricity Council (WECC) to any member and TARA program is commercially available.

To evaluate Local Capacity Areas, the starting base case was adjusted to reflect the latest generation and transmission projects as well as the one-in-ten-year peak load forecast for each Local Capacity Area as provided to the CAISO by the PTOs.

Electronic contingency files provided by the PTOs were utilized to perform the numerous contingencies required to identify the LCR. These contingency files include remedial action and special protection schemes that are expected to be in operation during the year of study. A CAISO created EPCL (a GE programming language contained within the GE PSLF package) routine and/or TARA software were used to run the combination of contingencies; however, other routines are available from WECC with the GE PSLF package or can be developed by third parties to



identify the most limiting combination of contingencies requiring the highest amount of generation within the local area to maintain power flows within applicable ratings.

#### 2.4 Estimate of Battery Storage Needs due to Charging Constraints

Local areas and sub-areas have limited transmission capability and therefore rely on internal resources to be available in order to reliably serve internal load. Battery storage will help serve local load during the discharge cycle, however it will also increase local load during the charging cycle.

Due to recent procurement activities geared toward the acquisition of this type of technology, the CAISO is herein estimating the characteristics (MW, MWh, discharge duration) required from battery storage technology in order to seamlessly integrate in each local area and sub-area.

The CAISO expects that for batteries that displace other local resource adequacy resources, the transmission capability under the most limiting contingency and the other local capacity resources must be sufficient to recharge the batteries in anticipation of the outage continuing through the night and into the next day's peak load period.

For each local area and sub-area, the CAISO has estimated the battery storage characteristics, given their unique load shape, constraints and requirements as well as the energy characteristics of other resources required to meet standards. Due to this fact, the strict addition of the sub-area battery storage characteristics (MW, MWh and duration) may not closely align with the overall local area battery storage characteristic requirements (MW, MWh and duration).

#### **Assumptions**

- 1) Total load serving capability includes capability from transmission system and local generation needed for LCR under the worst contingency.
- 2) Storage added replaces existing generation MW for MW. First the batteries will replace as much as possible of existing gas resources, Second if the area and/or sub-area has run out of gas resources to displace then other technologies may be reduced in order to determine the maximum battery charging limit.
- Effectiveness factors are assumed not to be a factor. Battery storage is assumed to be installed at the same sites where resources are displaced or assumed to have the same effectiveness factors.
- 4) Deliverability of incremental storage capacity is not evaluated. It is assumed battery storage will take over deliverability from old resources through repower. Any new battery storage resource needs to go through the generation interconnection process in order to receive deliverability and it is not evaluated in this study. CAISO cannot guaranty that there is enough deliverability available for new resources. New transmission upgrades may be required in order to make such new resources deliverable to the aggregate of load.
- 5) Includes battery storage charging/discharging efficiency of 85%.



- 6) Daily charging required is distributed to all non-discharging hours proportionally using delta between net load and the total load serving capability.
- 7) Energy required for charging, beyond the transmission capability under contingency condition, is produced by other LCR required resources within the local area and sub-area that are available for production during off-peak hours.
- 8) Hydro resources are considered to be available for production during off-peak hours, however these resources are energy limited themselves and based on past availability data they can have severely limited output during off-peak hours especially during late summer peaks under either normal or dry hydro years.
- 9) The study assumes the ability to provide perfect dispatch and the ability to enforce charging requirements for multiple contingency conditions (like N-1-1) in the day ahead time frame while the system is under normal (no contingency) conditions. CAISO software improvements and/or augmentations are required in order to achieve this goal.

Installing battery storage with insufficient characteristics (MW, MWh and duration) will not result in a one for one reduction of the local area or sub-area need for other types of resources. The CAISO expects that the overall RA portfolio provided by all LSEs to account for the uplift, beyond the minimum LCR need, in MWs required from other type of resources for all areas and sub-areas where LSEs have procured battery storage beyond the charging capability or with incorrect characteristics (MW, MWh and duration). If uplift is not provided the CAISO may use its back stop authority to assure that reliability standards are met throughout the day, including off-peak hours.



# 3. Locational Capacity Requirement Study Results

## 3.1 Summary of Study Results

LCR is defined as the amount of resource capacity that is needed within a Local Capacity Area to reliably serve the load located within this area. The results of the CAISO's analysis are summarized in the Executive Summary Tables.

Table 3.1-1 2025 Local Capacity Needs vs. Peak Load and Local Area Resources

	2025 Total LCR (MW)	Peak Load (1 in10) (MW)	2025 LCR as % of Peak Load	Total NQC Local Area Resources (MW)	2025 LCR as % of Total NQC
Humboldt	164	214	77%	175	94%
North Coast/North Bay	967	1483	65%	985	98%
Sierra	1532	2000	77%	1925	80%**
Stockton	740	1129	66%	740	100%**
Greater Bay	7976	11992	67%	8389	95%**
Greater Fresno	2532	3888	65%	3267	78%**
Kern	434	950	46%	449	97%**
Big Creek/Ventura	2145	5075	42%	4350	49%
LA Basin	4797	19297	25%	10296	47%
San Diego/Imperial Valley	2709	4780	57%	5469	50%
Total*	23996	50808	47%	36045	67%

Table 3.1-2 2024 Local Capacity Needs vs. Peak Load and Local Area Resources

	2024 Total LCR (MW)	Peak Load (1 in10) (MW)	2024 LCR as % of Peak Load	Total Dependable Local Area Resources (MW)	2024 LCR as % of Total Area Resources
Humboldt	133	173	77%	176	76%
North Coast/North Bay	983	1495	66%	989	99%
Sierra	1212	1758	69%	1883	64%**
Stockton	750	1080	69%	750	100%**
Greater Bay	7329	11081	66%	7948	92%**
Greater Fresno	2028	3354	60%	3127	65%**
Kern	427	924	46%	427	100%**
LA Basin	1971	4579	43%	4117	48%
Big Creek/Ventura	4413	19637	22%	8353	53%
San Diego/Imperial Valley	2834	4908	58%	5388	53%
Total*	22080	48989	45%	33158	67%

<sup>\*</sup> Value shown only illustrative, since each local area peaks at a different time.



\*\* Resource deficient LCA (or with sub-area that are deficient). Resource deficient area implies that in order to comply with the criteria, at summer peak, load must be shed immediately after the first contingency.

Table 3.1-1 and Table 3.1-2 shows how much of the Local Capacity Area load is dependent on local resources and how many local resources must be available in order to serve the load in those Local Capacity Areas in a manner consistent with the Reliability Criteria. These tables also indicate where new transmission projects, new resource additions or demand side management programs would be most useful in order to reduce the dependency on existing, generally older and less efficient local area resources.

The term "Qualifying Capacity" used in this report is the "Net Qualifying Capacity" ("NQC") posted on the CAISO web site at:

#### http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx

The NQC list includes the area (if applicable) where each resource is located for units already Neither the NQC list nor this report incorporates Demand Side Management programs and their related NQC. Units scheduled to become operational before June 1 of 2025 have been included in this 2025 LCT Study Report and added to the total NQC values for those respective areas (see detail write-up for each area).

Regarding the main tables up front (page 2), the first column, "August Qualifying Capacity," reflects three sets of resources. The first set is comprised of resources that would normally be expected to be on-line such as Municipal and Regulatory Must-take resources (state, federal, municipal and QFs). The second set is "market" based resources (market, net seller, wind and battery). The third set are solar resources, since they may or may not be available during the actual peak hour for the respective local area. The second column, "Capacity at Peak" identifies how much of the August Qualifying Capacity is expected to be available during the peak time for each particular local area. The third column, "YEAR LCR Need", sets forth the local capacity requirements, without the deficiencies that must be addressed, necessary to attain a service reliability level required to comply with NERC/WECC/CAISO mandatory reliability standards.

Table 3.1-3 includes estimated characteristics (MW, MWh, discharge duration) required from battery storage technology in order to seamlessly integrate in each local area and sub-area. The CAISO expects that for batteries that displace other local resource adequacy resources, the transmission capability under the most limiting contingency and the other local capacity resources must be sufficient to recharge the batteries in anticipation of the outage continuing through the night and into the next day's peak load period.

Table 3.1-3 2025 Battery Storage Characteristics Limited by Charging Capability

Area/Sub-area	Pmax MW	Energy MWh	Max. # of discharge hours	1 for 1 Replacement with 4-hour battery	Replacing mostly	Comment
Humboldt	36	145	8	36	gas	
North Coast/North Bay Overall	480	3596	10	86	geothermal	
Eagle Rock	75	489	10	15	geothermal	
Fulton	333	1329	10	175	geothermal	

28



Area/Sub-area	Pmax MW	Energy MWh	Max. # of discharge hours	1 for 1 Replacement with 4-hour battery	Replacing mostly	Comment
Sierra	-	-	-	-	-	Flow through
Placer	25	172	11	14	hydro	
Pease	22	144	10	12	gas	Need to be eliminated
Gold Hill-Drum	65	115	4	0	hydro	
Stockton	-	-	-	-	-	Sum of sub-areas
Lockeford	8	64	10	0	gas	Need to be eliminated
Tesla-Bellota	250	1343	10	165	gas	
Greater Bay Overall	1677	6670	9	1667	gas	
Llagas	110	231	8	24	gas	
San Jose	325	1280	10	99	gas	
South Bay-Moss Landing	1128	4510	12	1128	gas	
Oakland	51	204	11	51	distillate	N/A
Greater Fresno Overall	1110	6658	11	650	hydro	
Panoche	95	764	12	36	gas	
Herndon	425	2679	11	210	hydro	
Hanford	45	276	15	15	gas	
Coalinga	33	222	10	3	solar	
Borden	68	221	8	0	gas	
Reedley	67	400	10	35	hydro	
Kern Overall	-	-	-	-	-	N/A
Westpark	39	154	8	18	gas	
Kern Power-Tevis	-	-	-	-	solar	N/A
Kern Oil	110	401	9	22	gas	
South Kern PP	434	1185	9	135	gas	
Big Creek/Ventura Overall	793	5658	12	349	gas	
Vestal	220	1469	13	78	gas	
Santa Clara	154	775	14	148	gas	
LA Basin Overall	3095	19243	12	1487	gas	
Eastern	1138	5038	7	800	gas	
Western	1957	14205	11	687	gas	
El Nido	188	1420	11	46	gas	
San Diego/Imperial Valley Overall	1170	6610	11	463	gas	
San Diego	1170	6610	11	789	gas	
El Cajon	47	300	10	23	gas	
Border	23	144	8	12	gas	



#### 3.2 Summary of Zonal Needs

Based on the existing import allocation methodology, the only major 500 kV constraint not accounted for is path 26 (Midway-Vincent). Table 3.2-1 shows the total resources needed (based on the latest CEC load forecast) in each the two relevant zones, SP26 and NP26.

Zone	Load Forecast (MW)	15% reserves (MW)	(-) Allocated imports (MW)	(-) Maximum Path 26 Flow (MW)	Total Zonal Resource Need (MW)
SP26	27736	4160	-7892	-3750	20254
NP26=NP15+ZP26	21140	3171	-3545	-3000	17766

Table 3.2-1 Total Zonal Resource Needs

#### Where:

<u>Load Forecast</u> is the most recent 1 in 2 load forecast for year 2025 - based on the final adopted California Energy Demand 2023-2040 Forecast developed by the CEC; namely the CED 2023 Planning Forecast LSE and BAA tables:

https://efiling.energy.ca.gov/GetDocument.aspx?tn=255151

Reserve Margin is 15% the minimum CPUC approved planning reserve margin.

<u>Allocated Imports</u> are the actual 2024 Available Import Capability for loads in the CAISO control area numbers that are not expected to change much by 2025, other then the accounted for increase in MIC from the IID area.

<u>Maximum Path 26 flow</u> The CAISO determines the maximum amount of Path 26 transfer capacity available after accounting for (1) Existing Transmission Contracts (ETCs) that serve load outside the CAISO Balancing Area<sup>5</sup> and (2) loop flow<sup>6</sup> from the maximum path 26 rating of 4000 MW (North-to-South) and 3000 MW (South-to-North).

Both NP 26 and SP 26 load forecast, import allocation and zonal results refer to the CAISO Balancing Area only. This is done in order to be consistent with the import allocation methodology.

All resources that are counted as part of the Local Area Capacity Requirements fully count toward the Zonal Need. The local areas of San Diego, LA Basin and Big Creek/Ventura are all situated in SP26 and the remaining local areas are in NP26.

<sup>&</sup>lt;sup>5</sup> The transfer capability on Path 26 must be de-rated to accommodate ETCs on Path 26 that are used to serve load outside of the CAISO Balancing Area. These particular ETCs represent physical transmission capacity that cannot be allocated to LSEs within the CAISO Balancing Area.

<sup>&</sup>lt;sup>6</sup> "Loop flow" is a phenomenon common to large electric power systems like the Western Electricity
Coordinating Council. Power is scheduled to flow point-to-point on a Day-ahead and Hour-ahead basis through the CAISO.
However, electric grid physics prevails and the actual power flow in real-time will differ from the pre-arranged scheduled flows. Loop flow is real, physical energy and it uses part of the available transfer capability on a path. If not accommodated, loop flow will cause overloading of lines, which can jeopardize the security and reliability of the grid.



#### Changes compared to last year's results:

The load forecast went up in Northern California by about 270 MW and down in Southern California by about 570 MW.

The Import Allocations have increased by about 260 MW in Southern California and by about 130 MW in Northern California.

The Path 26 maximum transfer capability has not changed and is not envisioned to change in the near future.

#### 3.3 Summary of Results by Local Area

Each Local Capacity Area's overall requirement is determined by also achieving each sub-area requirement. Because these areas are a part of the interconnected electric system, the total for each Local Capacity Area is not simply a summation of the sub-area needs. For example, some sub-areas may overlap and therefore the same units may count for meeting the needs in both sub-areas.

#### 3.3.1 Humboldt Area

#### 3.3.1.1 Area Definition

The transmission tie lines into the area include:

Bridgeville-Cottonwood 115 kV line #1

Humboldt-Trinity 115 kV line #1

Laytonville-Garberville 60 kV line #1

Trinity-Maple Creek 60 kV line #1

The substations that delineate the Humboldt Area are:

Bridgeville is in, Low Gap, Wildwood and Cottonwood are out

Humboldt is in, Trinity is out

Kekawaka and Garberville are in, Laytonville is out

Maple Creek is in, Trinity and Ridge Cabin are out

#### **Humboldt LCR Area Diagram**



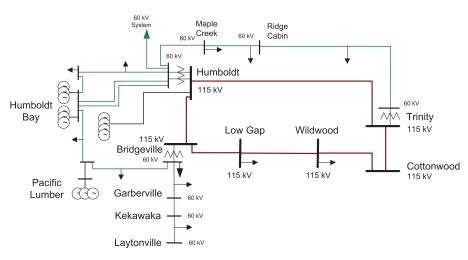


Figure 3.3-1 Humboldt LCR Area

#### **Humboldt LCR Area Load and Resources**

Table 3.3-1 provides the forecasted load and resources. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 19:00 PM.

This area does not contain models of solar resources capable of providing resource adequacy. If required, all non-solar technology type resources are dispatched at NQC.

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	204	Market /Net Seller	175	175
AAEE	-1	Battery	0	0
Behind the meter DG	0	MUNI/QF	0	0
Net Load	203	Solar	0	0
Transmission Losses	11	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	214	Total	175	175

Table 3.3-1 Humboldt LCR Area 2025 Forecast Load and Resources

### **Humboldt LCR Area Hourly Profiles**

Figure 3.3-2 illustrates the forecast 2025 profile for the peak day for the Humboldt LCR area with the Category P6 transmission capability without resources. Figure 3.3-3 illustrates the forecast 2025 hourly profile for Humboldt LCR area with the Category P6 transmission capability without resources.



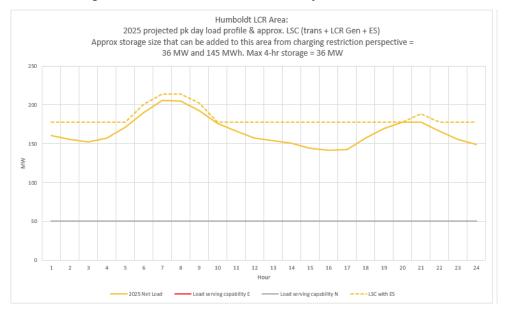
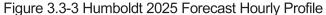
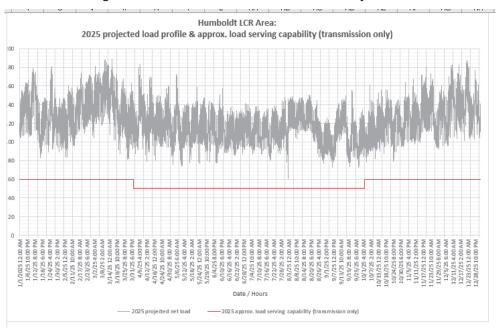


Figure 3.3-2 Humboldt 2025 Peak Day Forecast Profiles





## Approved transmission projects included in base cases

None

# 3.3.1.2 Humboldt Overall LCR Requirement

Table 3.3-2 identifies the area LCR requirements. The LCR requirement for Category P6 contingency is 164 MW.



## Table 3.3-2 Humboldt LCR Area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Humboldt-Trinity 115 kV	Cottonwood-Bridgeville 115 kV & Humboldt - Humboldt Bay 115 kV	164

### **Effectiveness factors**

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7110 posted at: http://www.caiso.com/Documents/2210Z.pdf

## Changes compared to last year's results

Compared with 2024, the load forecast has increased by 46 MW and the total LCR has increased by 32 MW mostly due to load forecast increase.

# 3.3.2 North Coast / North Bay Area

### 3.3.2.1 Area Definition

The transmission tie facilities coming into the North Coast/North Bay area are:

Cortina-Mendocino 115 kV Line

Cortina-Eagle Rock 115 kV Line

Willits-Garberville 60 kV line #1

Vaca Dixon-Lakeville 230 kV line #1

Tulucay-Vaca Dixon 230 kV line #1

Lakeville-Sobrante 230 kV line #1

Ignacio-Sobrante 230 kV line #1

The substations that delineate the North Coast/North Bay area are:

Cortina is out, Mendocino and Indian Valley are in

Cortina is out, Eagle Rock, Highlands and Homestake are in

Willits and Lytonville are in, Kekawaka and Garberville are out

Vaca Dixon is out, Lakeville is in

Tulucay is in, Vaca Dixon is out

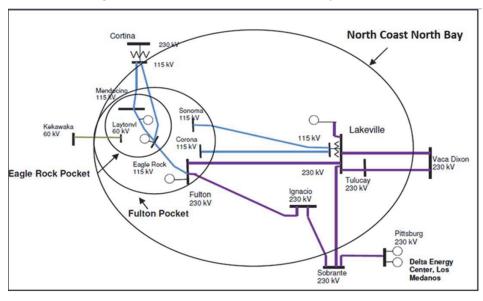


Lakeville is in, Sobrante is out

Ignacio is in, Sobrante and Crocket are out

## North Coast and North Bay LCR Area Diagram

Figure 3.3-4 North Coast and North Bay LCR Area



# North Coast and North Bay LCR Area Load and Resources

Table 3.3-3 provides the forecasted load and resources. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 17:50 PM.

This area does not contain models of solar resources capable of providing resource adequacy. If required, all non-solar technology type resources are dispatched at NQC.

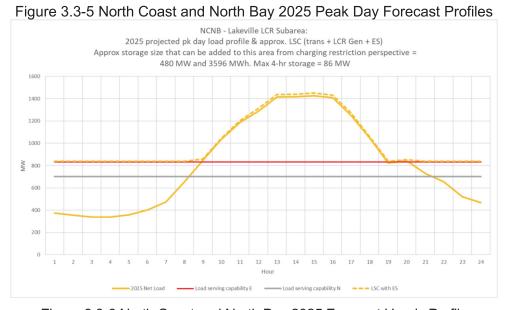
Table 3.3-3 North Coast and North Bay LCR Area 2025 Forecast Load and Resources

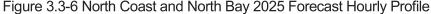
Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	1514	Market/Net Seller	837	837
AAEE	-13	Battery	0	0
Behind the meter DG	-59	MUNI/QF	136	136
Net Load	1442	Solar	0	0
Transmission Losses	41	Existing 20-minute Demand Response	12	12
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	1483	Total	985	985

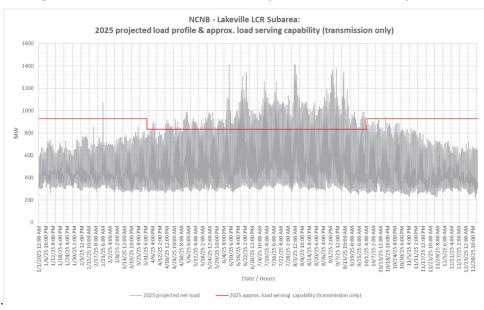


## North Coast and North Bay LCR Area Hourly Profiles

Figure 3.3-5 5 illustrates the forecast 2025 profile for the peak day for the North Coast North Bay LCR sub-area with the Category P3 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-6 illustrates the forecast 2025 hourly profile for North Coast North Bay LCR sub-area with the Category P3 emergency load serving capability without local resources.







### Approved transmission projects modeled in base cases

None.



# 3.3.2.2 Eagle Rock LCR Sub-area

Eagle Rock is a Sub-area of the North Coast and North Bay LCR Area.

# Eagle Rock LCR Sub-area Diagram

Figure 3.3-7 Eagle Rock LCR Sub-area

# Eagle Rock LCR sub-area Load and Resources

Table 3.3-4 provides the forecasted load and resources. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-4 Eagle Rock LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At P	
Gross Load	242	Market/Net Seller	271	2	

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	242	Market/Net Seller	271	271
AAEE	-2	Battery	0	0
Behind the meter DG	-9	MUNI/QF	2	2
Net Load	231	Solar	0	0
Transmission Losses	13	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	244	Total	273	273



## **Eagle Rock LCR Sub-area Hourly Profiles**

Figure 3.3-8 illustrates the forecast 2025 profile for the peak day for the Eagle Rock LCR subarea with the Category P3 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-9 illustrates the forecast 2025 hourly profile for Eagle Rock LCR sub-area with the Category P3 emergency load serving capability without local resources.

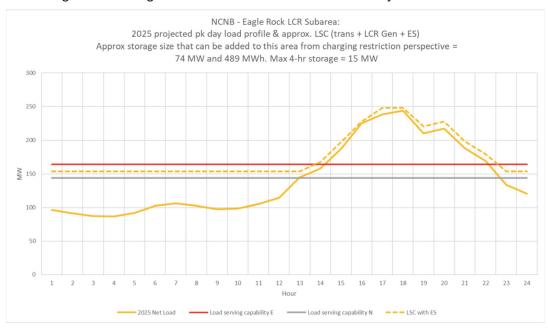
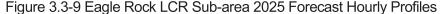
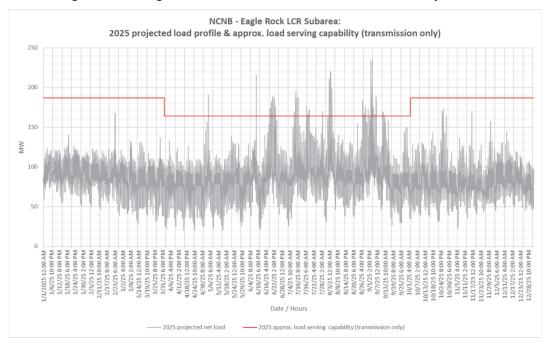


Figure 3.3-8 Eagle Rock LCR Sub-area 2025 Peak Day Forecast Profiles







# **Eagle Rock LCR Sub-area Requirement**

Table 3.3-5 identifies the sub-area LCR requirements. The LCR requirement for Category P3 contingency is 186 MW.

Table 3.3-5 Eagle Rock LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P3	Eagle Rock-Cortina 115 kV line	Cortina-Mendocino 115 kV with Geyser #11 unit out	186

#### **Effectiveness factors**

Effective factors for generators in the Eagle Rock LCR sub-area are in Attachment B table titled <a href="Eagle Rock">Eagle Rock</a>.

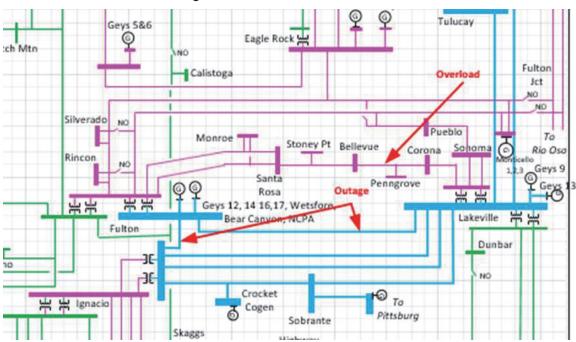
For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7120 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

### 3.3.2.3 Fulton Sub-area

Fulton is a sub-area of the North Coast and North Bay LCR area.

### Fulton LCR Sub-area Diagram

Figure 3.3-10 Fulton LCR Sub-area





#### Fulton LCR Sub-area Load and Resources

Table 3.3-6 provides the forecasted load and resources. The list of generators within the LCR sub-area are provided in Attachment A.

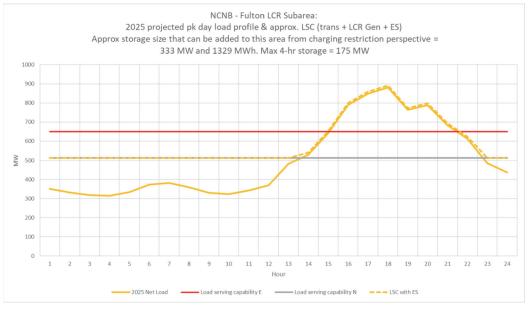
Table 3.3-6 Fulton LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	901	Market/Net Seller	537	537
AAEE	-7	Battery	0	0
Behind the meter DG	-34	MUNI/QF	57	57
Net Load	860	Solar	0	0
Transmission Losses	24	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	884	Total	594	594

## **Fulton LCR Sub-area Hourly Profiles**

Figure 3.3-11 illustrates the forecast 2025 profile for the peak day for the Fulton LCR sub-area with the Category P6 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-12 illustrates the forecast 2025 hourly profile for Fulton LCR sub-area with the Category P6 emergency load serving capability without local resources.

Figure 3.3-11 Fulton LCR Sub-area 2025 Peak Day Forecast Profiles





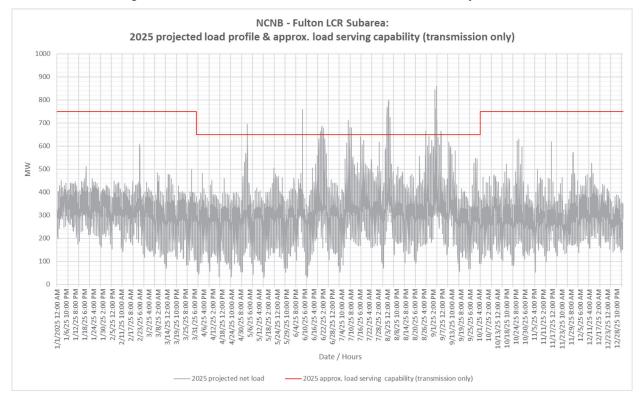


Figure 3.3-12 Fulton LCR Sub-area 2025 Forecast Hourly Profiles

# **Fulton LCR Sub-area Requirement**

Table 3.3-7 identifies the sub-area LCR requirements. The LCR requirement for Category P6 contingency is 333 MW.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Thermal overload on Lakeville- Corona 115 kV Line	Fulton-Lakeville #1 230 kV & Fulton-Ignacio #1 230 kV	333

Table 3.3-7 Fulton LCR Sub-area Requirements

### **Effectiveness factors**

Effective factors for generators in the Fulton LCR sub-area are in Attachment B table titled Fulton.

# 3.3.2.4 North Coast and North Bay Overall

## North Coast and North Bay Overall Requirement

Table 3.3-8 identifies the sub-area LCR requirements. The LCR requirement for Category P3 contingency is 967 MW.



Table 3.3-8 North Coast and North Bay LCR area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P3	Vaca Dixon-Tulucay 230 kV line	Vaca Dixon-Lakeville 230 kV line with Delta Energy Center power plant out of service	967

#### **Effectiveness factors**

Effective factors for generators in the North Coast and North Bay LCR area are in Attachment B table titled North Coast and North Bay.

## Changes compared to last year's results

Compared to 2024 load forecast decreased up by 12 MW; and, the total LCR need decreased up by 16 MW due to load forecast decrease.

#### 3.3.3 Sierra Area

### 3.3.3.1 Area Definition

The transmission tie lines into the Sierra Area are:

Table Mountain-Rio Oso 230 kV line

Table Mountain-Palermo 230 kV line

Table Mt-Pease 60 kV line

Caribou-Palermo 115 kV line

Drum-Summit 115 kV line #1

Drum-Summit 115 kV line #2

Spaulding-Summit 60 kV line

Brighton-Bellota 230 kV line

Rio Oso-Lockeford 230 kV line

Gold Hill-Eight Mile Road 230 kV line

Lodi-Eight Mile Road 230 kV line

Gold Hill-Lake 230 kV line

The substations that delineate the Sierra Area are:

Table Mountain is out Rio Oso is in



Table Mountain is out Palermo is in

Table Mt is out Pease is in

Caribou is out Palermo is in

Drum is in Summit Metering Station is out

Drum is in Summit Metering Station is out

Spaulding, Tamarak and Summit (PG&E) are in Summit Metering Station is out

Brighton is in Bellota is out

Rio Oso is in Lockeford is out

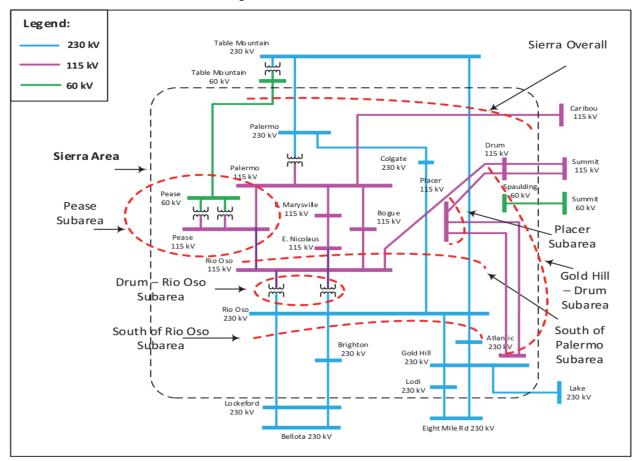
Gold Hill is in Eight Mile is out

Lodi is in Eight Mile is out

Gold Hill is in Lake is out

## Sierra LCR Area Diagram

Figure 3.3-13 Sierra LCR Area





### Sierra LCR Area Load and Resources

Table 3.3-9 provides the forecasted load and resources. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 19:10 PM.

At the local area peak time the estimated, ISO metered, solar output is 2.00%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-9 Sierra LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	1941	Market/Net Seller	699	699
AAEE	-17	Battery	5	5
Behind the meter DG	0	MUNI/QF	1221	1221
Net Load	1924	Solar	0	0
Transmission Losses	76	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	2000	Total	1925	1925

## Approved transmission projects modeled:

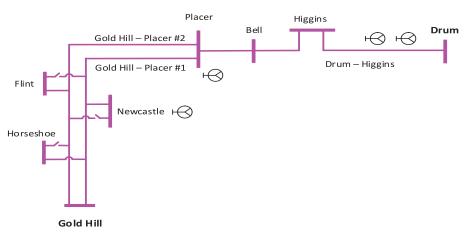
Rio Oso 230/115 kV transformer upgrade

### 3.3.3.2 Placer Sub-area

Placer is sub-area of the Sierra LCR area.

## Placer LCR Sub-area Diagram

Figure 3.3-14 Placer LCR Sub-area





### Placer LCR Sub-area Load and Resources

Table 3.3-10 provides the forecasted load and resources. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-10 Placer LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	196	Market/Net Seller	36	36
AAEE	-2	Battery	0	0
Behind the meter DG	0	MUNI/QF	28	28
Net Load	194	Solar	0	0
Transmission Losses	3	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	197	Total	64	64

## **Placer LCR Sub-area Hourly Profiles**

Figure 3.3-15 illustrates the forecast 2025 profile for the peak day for the Placer sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area. Figure 3.3-16 illustrates the forecast 2025 hourly profile for Placer sub-area with the Category P6 emergency load serving capability without local resources.

Sierra - Placer LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 25 MW and 172 MWh. Max 4-hr storage = 14 MW 200 180 160 140 ₹ 120 100 60 10 11 12 13 14 15 16 17 18 ----- Load serving capability E Load serving capability N --- LSC with ES

Figure 3.3-15 Placer LCR Sub-area 2025 Peak Day Forecast Profiles



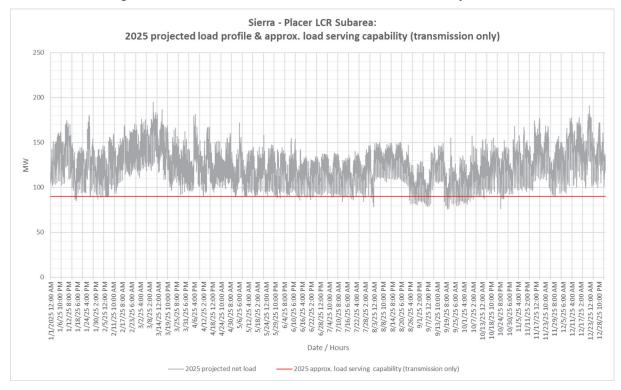


Figure 3.3-16 Placer LCR Sub-area 2025 Forecast Hourly Profiles

## Placer LCR Sub-area Requirement

Table 3.3-11 identifies the sub-area requirements. The Category P6 and P7 LCR requirement is 125 MW including 61 MW of NQC and peak deficiencies..

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6, P7	Drum–Higgins 115 kV	Gold Hill-Placer #1 115 kV & Gold Hill-Placer #2 115 kV	125 (61)

Table 3.3-11 Placer LCR Sub-area Requirements

#### **Effectiveness factors**

All units within the Placer Sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7240 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

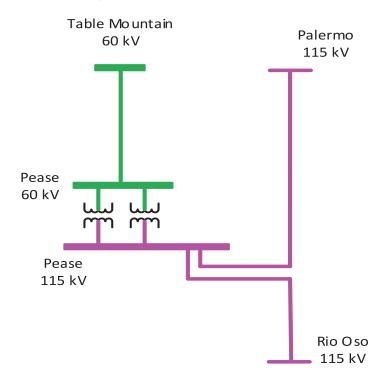
### 3.3.3.3 Pease Sub-area

Pease is sub-area of the Sierra LCR area.



# Pease LCR Sub-area Diagram

Figure 3.3-17 Pease LCR Sub-area



## Pease LCR Sub-area Load and Resources

Table 3.3-12 provides the forecasted load and resources. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-12 Pease LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	184	Market/Net Seller	97	97
AAEE	-1	Battery	5	5
Behind the meter DG	0	MUNI/QF	49	49
Net Load	183	Solar	0	0
Transmission Losses	3	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	186	Total	151	151



## **Pease LCR Sub-area Hourly Profiles**

Figure 3.3-18 illustrates the forecast 2025 profile for the peak day for the Pease sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-19 illustrates the forecast 2025 hourly profile for Pease sub-area with the Category P6 load serving capability without local resources.

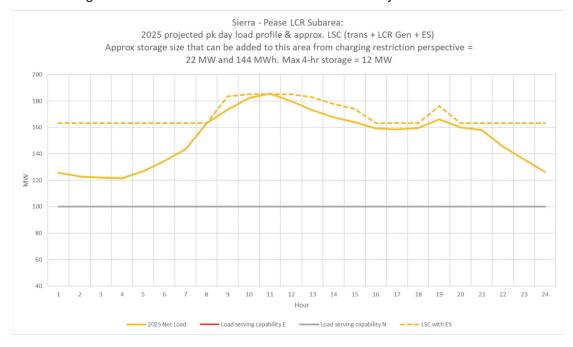
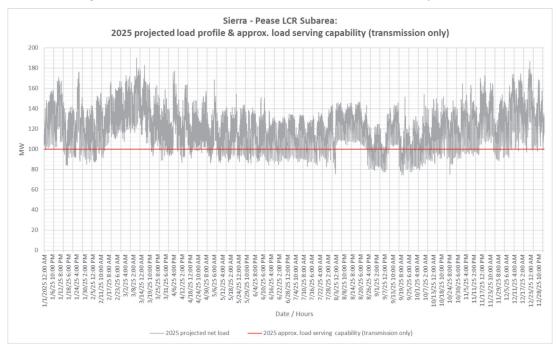


Figure 3.3-18 Pease LCR Sub-area 2025 Peak Day Forecast Profiles







## Pease LCR Sub-area Requirement

Table 3.3-13 identifies the sub-area LCR requirements. The Category P6, P7 LCR requirement is 109 MW.

Table 3.3-13 Pease LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6, P7	Table Mountain – Pease 60 kV	Palermo – Pease 115 kV and Pease – Rio Oso 115 kV lines	109

#### **Effectiveness factors:**

All units within the Pease sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7230 posted at: http://www.caiso.com/Documents/2210Z.pdf

### 3.3.3.4 Drum-Rio Oso Sub-area

Drum-Rio Oso is a sub-area of the Sierra LCR area

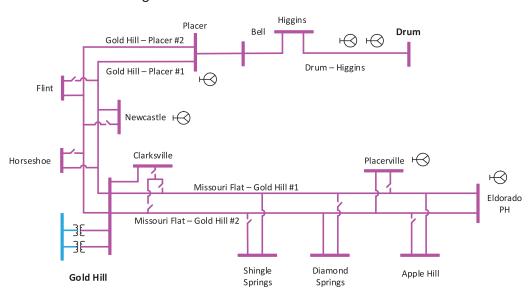
Drum-Rio Oso sub-area will be eliminated due to the Rio Oso 230/115 kV Transformers Upgrade project.

#### 3.3.3.5 Gold Hill-Drum Sub-area

Gold Hill-Drum is sub-area of the Sierra LCR area.

### Gold Hill-Drum LCR Sub-area Diagram

Figure 3.3-20 Gold Hill-Drum LCR Sub-area





#### Gold Hill-Drum LCR Sub-area Load and Resources

Table 3.3-14 provides the forecasted load and resources. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-14 Gold Hill-Drum LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	561	Market/Net Seller	47	47
AAEE	-5	Battery	0	0
Behind the meter DG	0	MUNI/QF	28	28
Net Load	556	Solar	0	0
Transmission Losses	10	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	566	Total	75	75

## **Gold Hill-Drum LCR Sub-area Hourly Profiles**

Figure 3.3-21 illustrates the forecast 2025 profile for the peak day for the Gold Hill-Drum sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-22 illustrates the forecast 2025 hourly profile for Gold Hill-Drum sub-area with the Category P6 load serving capability without local resources.

Sierra - GoldHill-Drum LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 65 MW and 115 MWh. Max 4-hr storage = 0 MW 500 ₹ 300 200

Figure 3.3-21 Gold Hill-Drum LCR Sub-area 2025 Peak Day Forecast Profiles

Load serving capability N --- LSC with ES

11 12 13 14 15 16 17 18

2025 Net Load Load serving capability E



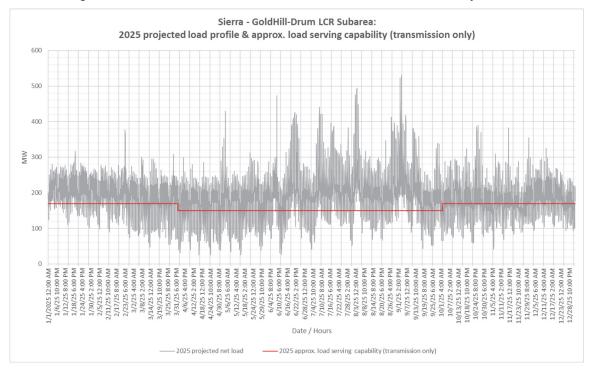


Figure 3.3-22 Gold Hill-Drum LCR Sub-area 2025 Forecast Hourly Profiles

## Gold Hill-Drum LCR Sub-area Requirement

Table 3.3-15 identifies the sub-area LCR requirements. The Category P6 LCR requirement is 461 MW including 386 MW of NQC and peak deficiency.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Drum – Higgins 115 kV	Gold Hill 230/115 kV #1 and Gold Hill 230/115 kV #2 Txrs	461 (386)

Table 3.3-15 Gold Hill-Drum LCR Sub-area Requirements

### **Effectiveness factors:**

All units within the Gold Hill-Drum Sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7230 and 7240 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

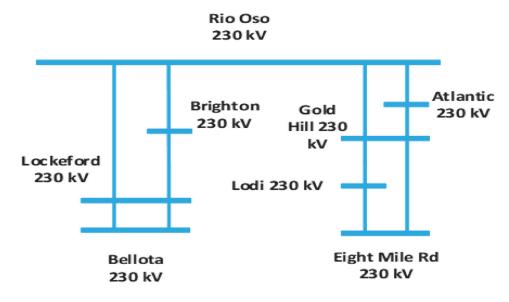
## 3.3.3.6 South of Rio Oso Sub-area

South of Rio Oso is sub-area of the Sierra LCR area.



## South of Rio Oso LCR Sub-area Diagram

Figure 3.3-23 South of Rio Oso LCR Sub-area



#### South of Rio Oso LCR Sub-area Load and Resources

The South of Rio Oso sub-area does not have a defined load pocket with the limits based upon power flow through the area. Table 3.3-16 provides the forecasted resources in the sub-area. The list of generators within the LCR area are provided in Attachment A.

Table 3.3-16 South of Rio Oso LCR Sub-area 2025 Forecast Load and Resources

Load (MW)	Generation (MW)	Aug NQC	At Peak
	Market/Net Seller	84	84
	Battery	0	0
	MUNI/QF	606	606
The South of Rio Oso Sub-area does not have a defined load pocket with the limits	Solar	0	0
based upon power flow through the area.	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	690	690

# South of Rio Oso LCR Sub-area Hourly Profiles

The South of Rio Oso sub-area does not have a defined load pocket with the limits based upon power flow through the area. As such, no load profile is provided for this sub-area.



## South of Rio Oso LCR Sub-area Requirement

Table 3.3-17 identifies the sub-area LCR requirements. The LCR requirement for Category P6 is 453 MW.

Table 3.3-17 South of Rio Oso LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P6	Rio Oso – Atlantic 230 kV	Rio Oso – Gold Hill 230 kV Rio Oso – Brighton 230 kV	453

#### **Effectiveness factors:**

Effective factors for generators in the South of Rio Oso LCR sub-area are in Attachment B table titled Rio Oso.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7230 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

### 3.3.3.7 Sierra Area Overall

## **Sierra LCR Area Hourly Profiles**

The Sierra LCR Area limits are based upon power flow through the area. As such, no load profile is provided for the area.

### Sierra LCR Area Requirement

Table 3.3-18 identifies the area requirements. The LCR requirement for Category P6 is 1532 MW.

Table 3.3-18 Sierra LCR Area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P6	Table Mountain – Pease 60 kV	Table Mountain – Palermo 230 kV Table Mountain – Rio Oso 230 kV	1532

### **Effectiveness factors:**

Effective factors for generators in the Sierra Overall LCR area are in Attachment B table titled Sierra Overall.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7230 and 7240 posted at: http://www.caiso.com/Documents/2210Z.pdf

## Changes compared to last year's results:

The load forecast has increased by 242 MW. The total LCR requirement increased by 320 MW mostly due to load forecast increase.



## 3.3.4 Stockton Area

The LCR requirement for the Stockton Area is driven by the sum of the requirements for the Tesla-Bellota and Lockeford sub-areas.

#### 3.3.4.1 Area Definition

Tesla-Bellota Sub-Area Definition

The transmission facilities that establish the boundary of the Tesla-Bellota sub-area are:

Bellota 230/115 kV Transformer #1

Bellota 230/115 kV Transformer #2

Tesla-Tracy 115 kV Line

Tesla-Salado 115 kV Line

Tesla-Salado-Manteca 115 kV line

Tesla-Schulte #1 115 kV Line

Tesla-Schulte #2 115kV line

The substations that delineate the Tesla-Bellota Sub-area are:

Bellota 230 kV is out Bellota 115 kV is in

Bellota 230 kV is out Bellota 115 kV is in

Tesla is out Tracy is in

Tesla is out Salado is in

Tesla is out Salado and Manteca are in

Tesla is out Schulte is in

Tesla is out Schulte is in

Lockeford Sub-Area Definition

The transmission facilities that establish the boundary of the Lockeford Sub-area are:

Lockeford-Industrial 60 kV line

Lockeford-Lodi #1 60 kV line

Lockeford-Lodi #2 60 kV line

Lockeford-Lodi #3 60 kV line

The substations that delineate the Lockeford Sub-area are:

Lockeford is out Industrial is in

Lockeford is out Lodi is in



Lockeford is out Lodi is in

Lockeford is out Lodi is in

## **Stockton LCR Area Diagram**

The Stockton LCR area is comprised of the individual noncontiguous sub-areas with diagrams provided for each of the sub-areas below.

#### Stockton LCR Area Load and Resources

Table 3.3-19 provides the forecast load and resources in the area. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 19:10 PM.

At the local area peak time the estimated, ISO metered, solar output is 2.00%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-19 Stockton LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	1116	Market/Net Seller	450	450
AAEE	-8	Battery	153	153
Behind the meter DG	0	MUNI/QF	125	125
Net Load	1108	Solar	7	0
Transmission Losses	21	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	1129	Total	740	733

#### **Stockton LCR Area Hourly Profiles**

The Stockton LCR area is comprised of the individual noncontiguous sub-areas with profiles provided for each of the sub-areas below.

## Approved transmission projects modeled

Banta 60 kV Bus Voltage Conversion

#### 3.3.4.2 Lockeford Sub-area

Lockeford is a sub-area of the Stockton LCR area.

### Lockeford LCR Sub-area Diagram



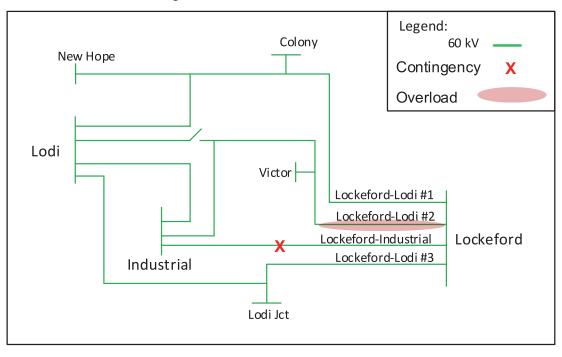


Figure 3.3-24 Lockeford LCR Sub-area

### Lockeford LCR Sub-area Load and Resources

Table 3.3-20 provides the forecasted load and resources. The list of generators within the LCR Sub-area are provided in Attachment A.

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	187	Market	0	0
AAEE	-0	MUNI	24	24
Behind the meter DG	0	QF	0	0
Net Load	187	Solar	0	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	188	Total	24	24

Table 3.3-20 Lockeford LCR Sub-area 2025 Forecast Load and Resources

# **Lockeford LCR Sub-area Hourly Profiles**

Figure 3.3-25 illustrates the forecast 2025 profile for the peak day for the Lockeford sub-area with the Category P3 normal and emergency load serving capabilities without local resources. Figure 3.3-26 illustrates the forecast 2025 hourly profile for Lockeford sub-area with the Category P3 load serving capability without local resources.



Figure 3.3-25 Lockeford LCR Sub-area 2025 Peak Day Forecast Profiles

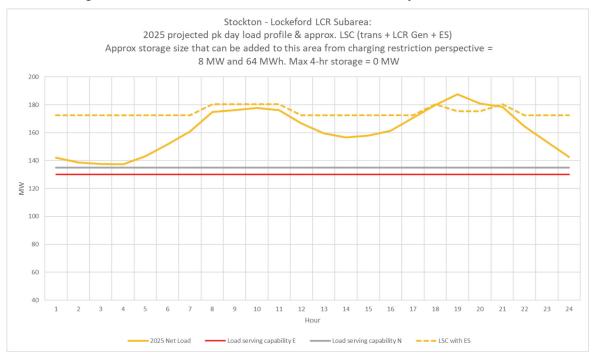
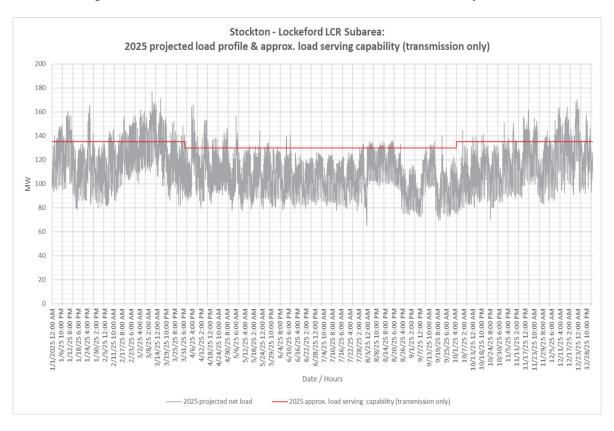


Figure 3.3-26 Lockeford LCR Sub-area 2025 Forecast Hourly Profiles





## **Lockeford LCR Sub-area Requirement**

Table 3.3-21 identifies the sub-area requirements. The LCR requirement for for this sub-area is based on the Category P3 contingency at 19 MW.

Table 3.3-21 Lockeford LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P3	Lockeford-Lodi #2 60 kV	Lockeford-Industrial 60 kV & Lodi CT	19

### **Effectiveness factors:**

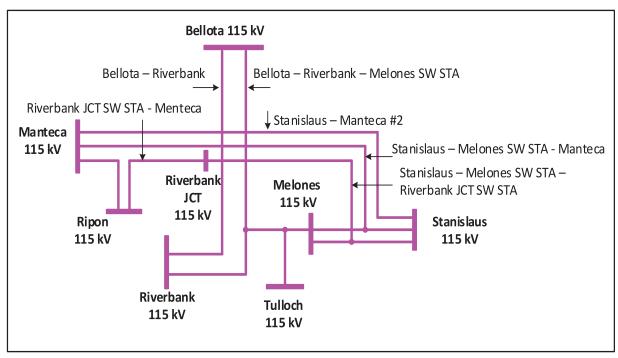
No effectiveness factor is required.

### 3.3.4.3 Stanislaus Sub-area

Stanislaus is a sub-area within the Tesla – Bellota sub-area of the Stockton LCR area.

### Stanislaus LCR Sub-area Diagram

Figure 3.3-27 Stanislaus LCR Sub-area



### Stanislaus LCR Sub-area Load and Resources

The Stanislaus sub-area does not has a defined load pocket with the limits based upon power flow through the area. Table 3.3-22 provides the forecasted resources in the sub-area. The list of generators within the LCR sub-area are provided in Attachment A.



Table 3.3-22 Stanislaus LCR Sub-area 2025 Forecast Load and Resources

Load (MW)	Generation (MW)	Aug NQC	At Peak
	Market/Net Seller	94	94
	Battery	132	132
	MUNI/QF	82	82
The Stanislaus Sub-area does not has a defined load pocket with the limits based	Solar	0	0
upon power flow through the area.	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	308	308

## Stanislaus LCR Sub-area Hourly Profiles

The Stanislaus sub-area does not has a defined load pocket with the limits based upon power flow through the area. As such, no load profile is provided for this sub-area.

## Stanislaus LCR Sub-area Requirement

Table 3.3-23 identifies the sub-area requirements. The LCR requirement for Category P3 contingency is 171 MW.

Table 3.3-23 Stanislaus LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P3	Vierra 115 kV – Manteca 115 kV	Bellota-Riverbank-Melones 115 kV and Stanislaus PH	171

#### Effectiveness factors:

All units within this sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7410 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

### 3.3.4.4 Tesla-Bellota Sub-area

Tesla-Bellota is a sub-area of the Stockton LCR area.

## Tesla-Bellota LCR Sub-area Diagram



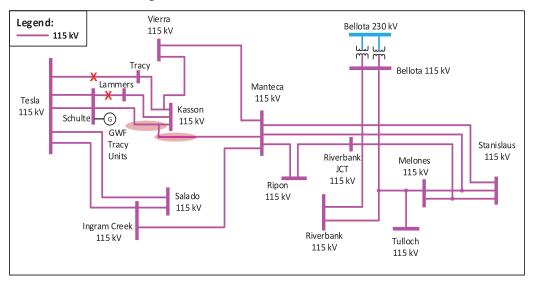


Figure 3.3-28 Tesla-Bellota LCR Sub-area

### Tesla Bellota LCR Sub-area Load and Resources

Table 3.3-24 provides the forecasted load and resources. The list of generators within the LCR Sub-area are provided in Attachment A.

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	928	Market/Net Seller	450	450
AAEE	-8	Battery	152	152
Behind the meter DG	0	MUNI/QF	101	101
Net Load	920	Solar	7	0
Transmission Losses	20	Existing 20-minute Demand Response	6	6
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	940	Total	710	703

Table 3.3-24 Tesla-Bellota LCR Sub-area 2025 Forecast Load and Resources

All of the resources needed to meet the Stanislaus sub-area count towards the Tesla-Bellota sub-area LCR need.

#### Tesla-Bellota LCR Sub-area Hourly Profiles

Figure 3.3-29 illustrates the forecast 2025 profile for the peak day for the Tesla-Bellota sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-30 illustrates the forecast 2025 hourly profile for Tesla-Bellota sub-area with the Category P6 emergency load serving capability without local resources.



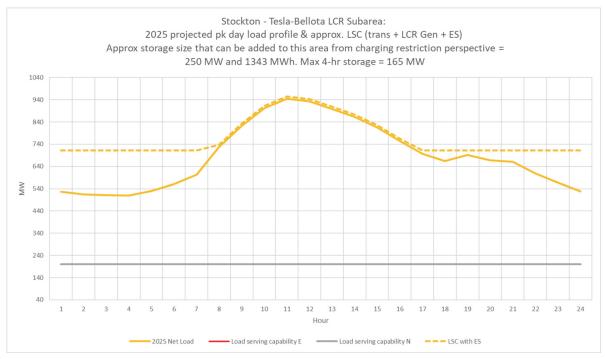
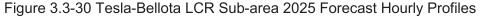
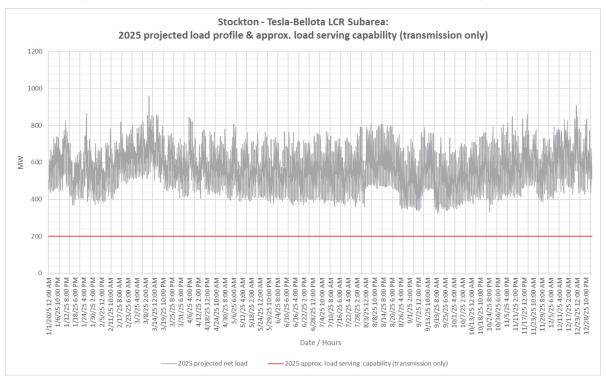


Figure 3.3-29 Tesla-Bellota LCR Sub-area 2025 Peak Day Forecast Profiles





# Tesla-Bellota LCR Sub-area Requirement

Table 3.3-25 identifies the sub-area requirements. The LCR requirement for Category P6 contingency is 1296 MW including a 586 MW NQC and 593 MW at peak deficiency.



Table 3.3-25 Tesla-Bellota LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P2-4	Melones–Riverbank- Bellota 115 kV	Tesla 115 KV - Section 2D & 1D	665 (87 NQC/ 94 Peak)
2025	First limit	P6	Tesla – Tracy 115 kV	Schulte - Lammers 115 kV Line and Schulte - Kasson - Manteca 115 kV Line	960 (586 NQC/ 593 Peak)
Total LCR Need for Tesla – Bellota Sub-area in 2025					1296 (586 NQC/ 593 Peak)

### **Effectiveness factors:**

All units within this sub-area are needed therefore no effectiveness factor is required.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7410 posted at: http://www.caiso.com/Documents/2210Z.pdf

### 3.3.4.5 Stockton Overall

### **Stockton LCR Area Overall Requirement**

The requirement for this area is driven by the sum of requirements for the Tesla-Bellota and Lockeford sub-areas. Table 3.3-26 identifies the area requirements. The LCR requirement is 1315 MW with a 586 MW NQC deficiency or 593 MW at peak deficiency.

Table 3.3-26 Stockton LCR Area Overall Requirements

Year	LCR (MW) (Deficiency)
2025	1315 (586 NQC/ 593 Peak)

## Changes compared to last year's results

The load forecast has increased by 49 MW, resulting in a total LCR requirement rise of 17 MW and a total deficiency increase of 38 MW. These changes are primarily attributed to the increase in load forecast.



## 3.3.5 Greater Bay Area

### 3.3.5.1 Area Definition:

The transmission tie lines into the Greater Bay Area are:

Lakeville-Sobrante 230 kV

Ignacio-Sobrante 230 kV

Parkway-Moraga 230 kV

Bahia-Moraga 230 kV

Lambie SW Sta-Vaca Dixon 230 kV

Peabody-Contra Costa P.P. 230 kV

Tesla-Kelso 230 kV

Tesla-Delta Switching Yard 230 kV

Tesla-Pittsburg #1 230 kV

Tesla-Pittsburg #2 230 kV

Tesla-Newark #1 230 kV

Tesla-Newark #2 230 kV

Tesla-Ravenswood 230 kV

Tesla-Metcalf 500 kV

Moss Landing-Los Banos 500 kV

Moss Landing-Coburn #1 230 kV

Moss Landing-Las Aguilas #2 230 kV

Oakdale TID-Newark #1 115 kV

Oakdale TID-Newark #2 115 kV

The substations that delineate the Greater Bay Area are:

Lakeville is out Sobrante is in

Ignacio is out Sobrante is in

Parkway is out Moraga is in

Bahia is out Moraga is in

Lambie SW Sta is in Vaca Dixon is out

Peabody is out Contra Costa P.P. is in

Tesla is out Kelso is in

Tesla is out Delta Switching Yard is in



Tesla is out Pittsburg is in

Tesla is out Pittsburg is in

Tesla is out Newark is in

Tesla is out Newark is in

Tesla is out Ravenswood is in

Tesla is out Metcalf is in

Los Banos is out Moss Landing is in

Coburn is out Moss Landing is in

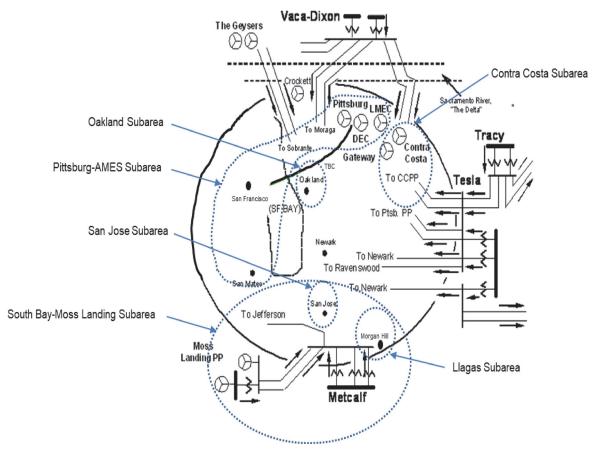
Las Aguilas is out Moss Landing is in

Oakdale TID is out Newark is in

Oakdale TID is out Newark is in

## **Greater Bay LCR Area Diagram**

Figure 3.3-31 Greater Bay LCR Area





## **Greater Bay LCR Area Load and Resources**

Table 3.3-27 provides the forecasted load and resources. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 17:30 PM.

At the local area peak time the estimated, ISO metered, solar output is 10.08%.

If required, all technology type resources, including solar, are dispatched at NQC.

Table 3.3-27 Greater Bay Area LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	11570	Market/Net Seller	6131	6131
AAEE	-83	Wind	248	248
Behind the meter DG	-119	Battery	1337	1337
Net Load	11368	MUNI/QF	604	604
Transmission Losses	360	Existing 20-minute Demand Response	65	65
Pumps	264	Solar	4	0
Load + Losses + Pumps	11992	Total	8389	8385

### Approved transmission projects modeled

- Moraga Castro Valley 230 kV Line capacity increase
- Vasona Metcalf 230 kV Line limiting elements removal
- Oakland Clean Energy Initiative Project
- Ravenswood 230/115 kV Transformer #1 Limiting Facility Upgrade
- Newark Milpitas #1 115 kV Line Limiting Facility Upgrade
- Series Compensation on Los Esteros Nortech 115 kV Line

# 3.3.5.2 Llagas Sub-area

Llagas is a sub-area of the Greater Bay LCR area.

## Llagas LCR Sub-area Diagram



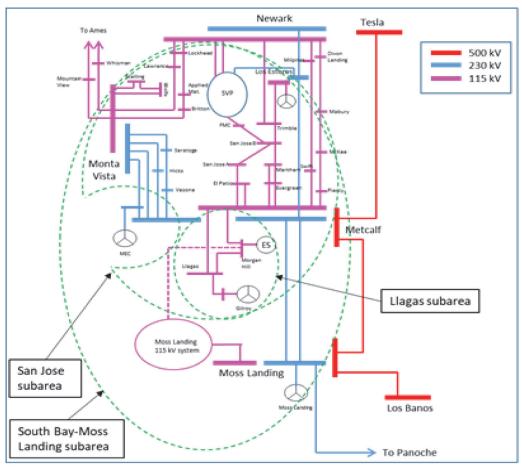


Figure 3.3-32 Llagas LCR Sub-area

# Llagas LCR Sub-area Load and Resources

Table 3.3-28 provides the forecasted load and resources. The list of generators within the LCR Sub-area are provided in Attachment A.

Table 3.3-28 Llagas LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	233	Market/Net Seller	256	256
AAEE	-2	Battery	20	20
Behind the meter DG	-3	MUNI/QF	0	0
Net Load	228	Solar	0	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	229	Total	276	276



## Llagas LCR Sub-area Hourly Profiles

Figure 3.3-33 illustrates the forecast 2025 profile for the peak day for the Llagas LCR sub-area with the Category P3 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-34 illustrates the forecast 2025 hourly profile for Llagas LCR sub-area with the Category P3 emergency load serving capability without local resources.

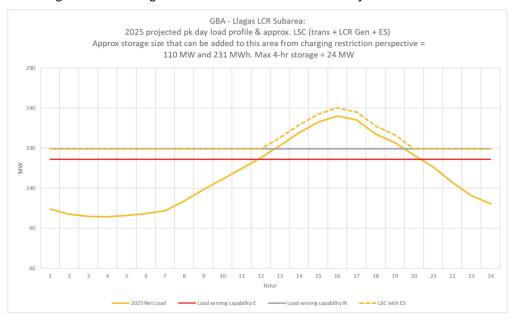
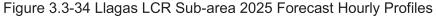
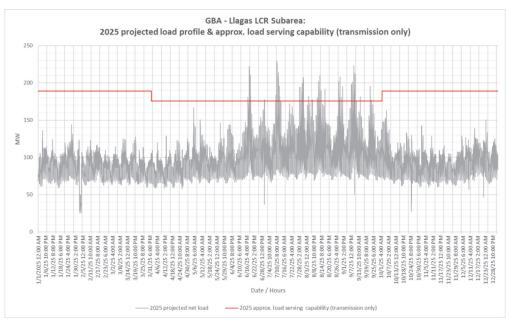


Figure 3.3-33 Llagas LCR Sub-area 2025 Peak Day Forecast Profiles







## Llagas LCR Sub-area Requirement

Table 3.3-29 identifies the sub-area requirements. The LCR requirement for the worst contingency is 60 MW.

Table 3.3-29 Llagas LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P3	Metcalf-Llagas 115 kV	Metcalf-Morgan Hill 115 kV + Gilroy Cogen Unit 1	60

#### **Effectiveness factors:**

All units within this sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

#### 3.3.5.3 San Jose Sub-area

San Jose is a Sub-area of the Greater Bay LCR Area.

# San Jose LCR Sub-area Diagram

The San Jose LCR Sub-area is identified in Figure 3.3-32.

## San Jose LCR Sub-area Load and Resources

Table 3.3-30 provides the forecast load and resources in San Jose LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-30 San Jose LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	2909	Market/Net Seller	584	584
AAEE	-21	Battery	95	95
Behind the meter DG	-22	MUNI/QF	197	197
Net Load	2867	Solar	0	0
Transmission Losses	130	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	2997	Total	876	876



## San Jose LCR Sub-area Hourly Profiles

Figure 3.3-35 illustrates the forecast 2025 profile for the peak day for the San Jose LCR sub-area with the Category P2 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-36 illustrates the forecast 2025 hourly profile for San Jose LCR sub-area with the Category P2 emergency load serving capability without local resources.

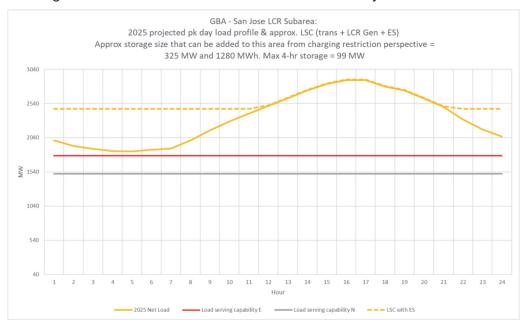
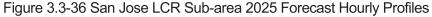
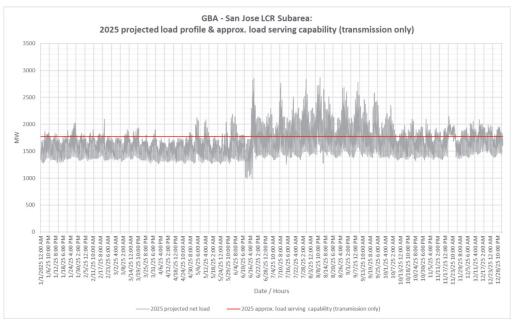


Figure 3.3-35 San Jose LCR Sub-area 2025 Peak Day Forecast Profiles







## San Jose LCR Sub-area Requirement

Table 3.3-31 identifies the sub-area LCR requirements. The LCR requirement for the worst contingency is 1418 MW including a deficiency of 562 MW.

Table 3.3-31 San Jose LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P2	Metcalf 230/115 kV transformer # 1 or # 3	Metcalf 230 kV - Section 2D & 2E	1418 (542)

#### **Effectiveness factors:**

Effective factors for generators in the San Jose LCR sub-area are in Attachment B table titled <u>San Jose</u>.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.5.4 South Bay-Moss Landing Sub-area

South Bay-Moss Landing is a Sub-area of the Greater Bay LCR Area.

# South Bay-Moss Landing LCR Sub-area Diagram

The South Bay-Moss Landing LCR sub-area is identified in Figure 3.3-32.

# South Bay-Moss Landing LCR Sub-area Load and Resources

Table 3.3-32 provides the forecast load and resources in South Bay-Moss Landing LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-32 South Bay-Moss Landing LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	4555	Market/Net Seller	2201	2201
AAEE	-35	Battery	1038	1038
Behind the meter DG	-47	MUNI/QF	197	197
Net Load	4473	Solar	0	0
Transmission Losses	166	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	4639	Total	3436	3436



## South Bay-Moss Landing LCR Sub-area Hourly Profiles

Figure 3.3-37 illustrates the forecasted 2025 profile for the peak day for the South Bay-Moss Landing LCR sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-38 illustrates the forecast 2025 hourly profile for South Bay-Moss Landing LCR sub-area with the Category P6 emergency load serving capability without local resources.

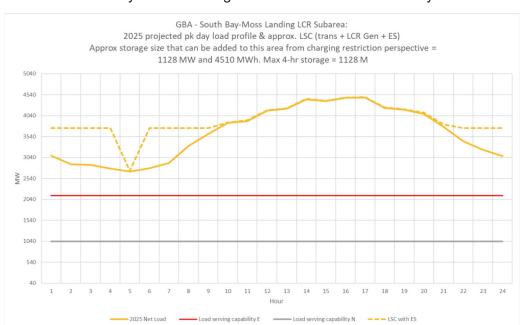
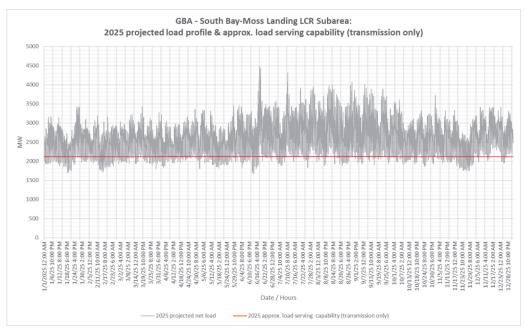


Figure 3.3-37 South Bay-Moss Landing LCR Sub-area 2025 Peak Day Forecast Profiles







## South Bay-Moss Landing LCR Sub- Requirement

Table 3.3-33 identifies the sub-area LCR requirements. The LCR Requirement for the worst contingency is 2399 MW.

Table 3.3-33 South Bay-Moss Landing LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First Limit	P6	Moss Landing-Las Aguilas 230 kV	Tesla-Metcalf 500 kV and Moss Landing-Los Banos 500 kV	2399

#### **Effectiveness factors:**

Effective factors for generators in the South Bay-Moss Landing LCR sub-area are in Attachment B table titled South Bay-Moss Landing.

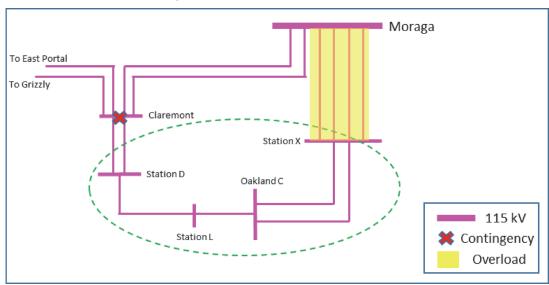
For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

### 3.3.5.5 Oakland Sub-area

Oakland is a sub-area of the Greater Bay LCR area.

### Oakland LCR Sub-area Diagram

Figure 3.3-39 Oakland LCR Sub-area



## Oakland LCR Sub-area Load and Resources

Table 3.3-34 provides the forecast load and resources in Oakland LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.



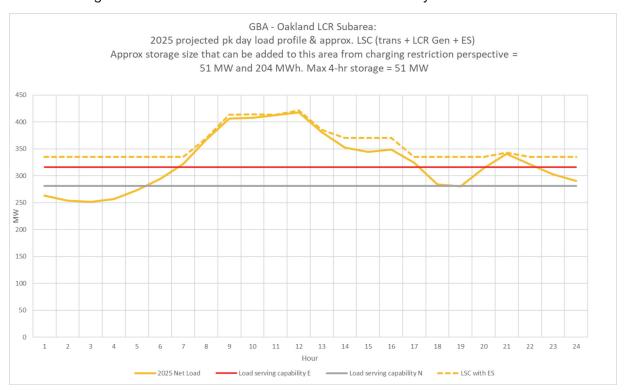
Table 3.3-34 Oakland LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	439	Market/Net Seller	110	110
AAEE	-3	Battery	0	0
Behind the meter DG	-3	MUNI/QF	49	49
Net Load	433	Solar	0	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	434	Total	159	159

## Oakland LCR Sub-area Hourly Profiles

Figure 3.3-37 illustrates the forecasted 2025 profile for the peak day for the Oakland LCR subarea with the Category P6 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-38 illustrates the forecast 2025 hourly profile for Oakland LCR sub-area with the Category P6 emergency load serving capability without local resources.

Figure 3.3-40 Oakland LCR Sub-area 2025 Peak Day Forecast Profiles





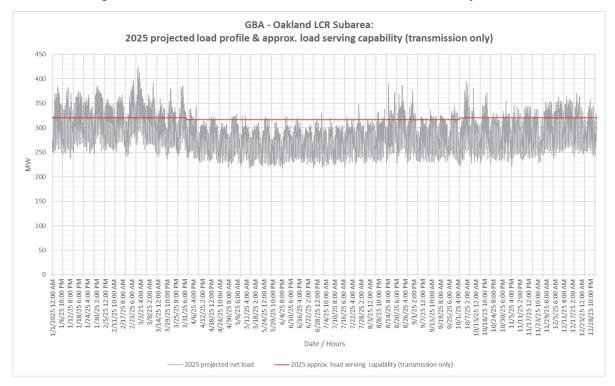


Figure 3.3-41 Oakland LCR Sub-area 2025 Forecast Hourly Profiles

## Oakland LCR Sub-area Requirement

Table 3.3-35 identifies the sub-area requirements. The LCR Requirement for the worst contingency is 101 MW.

 Year
 Limit
 Category
 Limiting Facility
 Contingency
 LCR (MW)

 2025
 First limit
 P2
 Moraga – Oakland X #1-4 115 kV – Section 1D & kV lines
 Claremont 115 kV – Section 1D & 2D

Table 3.3-35 Oakland LCR Sub-area Requirements

#### **Effectiveness factors:**

All units within the Oakland sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

# 3.3.5.6 Ames-Pittsburg-Oakland Sub-areas Combined

Ames-Pittsburg-Oakland is a sub-area of the Greater Bay LCR area.



# Ames-Pittsburg-Oakland LCR Sub-area Diagram

Pittsburg/Ames/ Oakland subarea To NCNB Sobrante San Francisco 230/115 East Bay 115 kV To Pittsburg kV system system Oakland Subarea > To Conti Claremont Moraga To Tri-Valley Peninsula 230/115/60 kV City system E. Shore Ravenswood To Newark 115 kV **X** Contingency To Monta Vista

Figure 3.3-42 Ames-Pittsburg-Oakland LCR Sub-area

# Ames-Pittsburg-Oakland LCR Sub-area Load and Resources

Table 3.3-36 provides the forecast load and resources in Ames-Pittsburg-Oakland LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-36 Ames-Pittsburg-Oakland LCR Sub-area 2025 Forecast Load and Resources

Load (MW)	Generation (MW)	Aug NQC	At Peak
	Market/Net Seller	2266	2266
	Battery	200	200
The Ames-Pittsburg-Oakland Sub-area	MUNI/QF	274	274
does not has a defined load pocket with the limits based upon power flow through the	Solar	2	0
area.	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	2742	2740



## Ames-Pittsburg-Oakland LCR Sub-area Hourly Profiles

The Ames-Pittsburg-Oakland sub-area does not have a defined load pocket with the limits based upon power flow through the area. As such, no load profile is provided for this sub-area.

# Ames-Pittsburg-Oakland LCR Sub-area Requirement

Table 3.3-37 identifies the sub-area LCR requirements. The LCR Requirement for the worst contingency is 2606 MW.

Table 3.3-37 Ames-Pittsburg-Oakland LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P6	Ames-Ravenswood #1 & #2 115 kV lines	Newark-Ravenswood 230 kV & Tesla-Ravenswood 230 kV lines	2606

#### **Effectiveness factors:**

Effective factors for generators in the Ames-Pittsburg-Oakland LCR sub-area are in Attachment B table titled Ames/Pittsburg/Oakland.

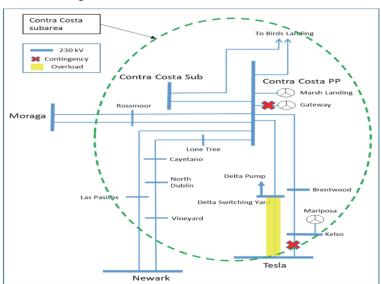
For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.5.7 Contra Costa Sub-area

Contra Costa is a sub-area of the Greater Bay LCR area.

## Contra Costa LCR Sub-area Diagram

Figure 3.3-43 Contra Costa LCR Sub-area





### Contra Costa LCR Sub-area Load and Resources

Table 3.3-38 provides the forecast load and resources in Contra Costa LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-38 Contra Costa LCR Sub-area 2025 Forecast Load and Resources

Load (MW)	Generation (MW)	Aug NQC	At Peak
	Market/Net Seller	1662	1662
	Wind	248	248
	Battery	100	100
The Contra Costa Sub-area does not has a defined load pocket with the limits based	MUNI/QF	127	127
upon power flow through the area.	Existing 20-minute Demand Response	0	0
	Solar	0	0
	Total	2137	2137

# **Contra Costa LCR Sub-area Hourly Profiles**

The Contra Costa sub-area does not have a defined load pocket with the limits based upon power flow through the area. As such, no load profile is provided for this sub-area.

## **Contra Costa LCR Sub-area Requirement**

Table 3.3-39 identifies the sub-area LCR requirements. The LCR requirement for the worst contingency is 948 MW.

Table 3.3-39 Contra Costa LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P3	Delta Switching Yard-Tesla 230 kV Line	Kelso-Tesla 230 kV Line and Gateway unit	948

#### **Effectiveness factors:**

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7230 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

### 3.3.5.8 Bay Area overall

### **Bay Area LCR Area Hourly Profiles**

Figure 3.3-44 illustrates the forecast 2025 profile for the peak day for the Bay Area LCR area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also



includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-45 illustrates the forecast 2025 hourly profile for Bay Area LCR area with the Category P6 emergency load serving capability without local resources.

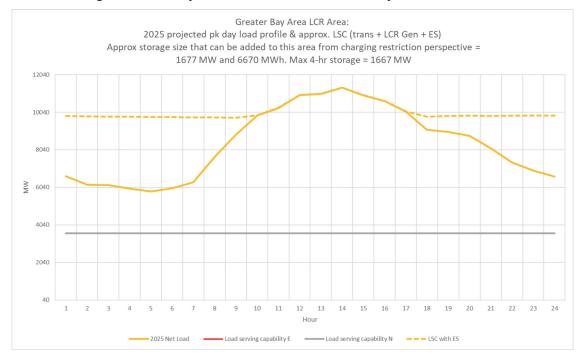
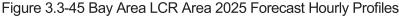
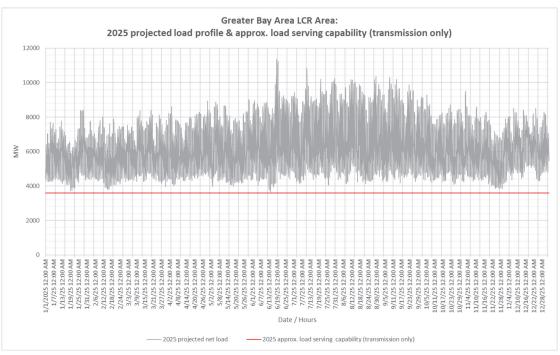


Figure 3.3-44 Bay Area LCR Area 2025 Peak Day Forecast Profiles







## **Greater Bay LCR Area Overall Requirement**

Table 3.3-40 identifies the area LCR requirements. The LCR requirement for the worst contingency is 7976 MW including 535 MW of deficiency.

Table 3.3-40 Bay Area LCR Overall area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2025	First limit	P6	Metcalf 500/230 kV #13 transformer	Metcalf 500/230 kV #11 & #12 transformers	7976 (535)

#### Effectiveness factors:

Effective factors for generators in the Greater Bay Area LCR sub-area are in Attachment B table titled <u>Greater Bay Area</u>.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7320 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## Changes compared to last year's results

The load forecast increased by 911 MW compared to 2024, and consequently, the total LCR need increased by 647 MW.

### 3.3.6 Greater Fresno Area

## 3.3.6.1 Area Definition:

The transmission facilities coming into the Greater Fresno area are:

Gates-Mustang #1 230 kV

Gates-Mustang #2 230 kV

Gates #5 230/70 kV Transformer Bank

Mercy Spring 230 /70 Bank # 1

Los Banos #3 230/70 Transformer Bank

Los Banos #4 230/70 Transformer Bank

Warnerville-Wilson 230kV

Melones-North Merced 230 kV line

Panoche-Tranquility #1 230 kV

Panoche-Tranquility #2 230 kV



Panoche #1 230/115 kV Transformer Bank

Panoche #2 230/115 kV Transformer Bank

Corcoran-Smyrna 115kV

Coalinga #1-San Miguel 70 kVThe substations that delineate the Greater Fresno area are:

Gates is out Mustang is in

Gates is out Mustang is in

Gates 230 is out Gates 70 is in

Mercy Springs 230 is out Mercy Springs 70 is in

Los Banos 230 is out Los Banos 70 is in

Los Banos 230 is out Los Banos 70 is in

Warnerville is out Wilson is in

Melones is out North Merced is in

Panoche is out Tranquility #1 is in

Panoche is out Tranquility #2 is in

Panoche 230 is out Panoche 115 is in

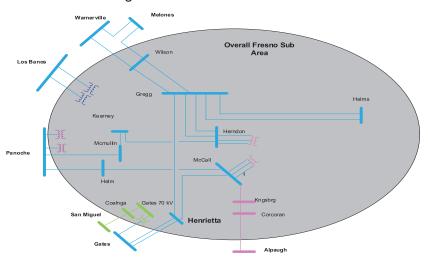
Panoche 230 is out Panoche 115 is in

Corcoran is in Smyrna is out

Coalinga is in San Miguel is out

## Fresno LCR Area Diagram

Figure 3.3-46 Fresno LCR Area





### Fresno LCR Area Load and Resources

Table 3.3-41 provides the forecast load and resources in Fresno LCR Area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 19:20 PM.

At the local area peak time the estimated, ISO metered, solar output is 0%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-41 Fresno LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	3914	Market/Net Seller	2382	2382
AAEE	-31	Battery/Hybrid	457	457
Behind the meter DG	-151	MUNI/QF	229	229
Net Load	3732	Solar	199	0
Transmission Losses	156	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	3888	Total	3267	3051

## Approved transmission projects modeled

Giffen Line Reconductoring (Completed)

Bellota-Warnerville 230 kV Reconductoring (April 2024)

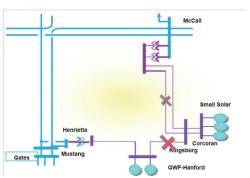
Panoche – Oro Loma 115 kV Line Reconductoring (April 2024)

#### 3.3.6.2 Hanford Sub-area

Hanford is a sub-area of the Fresno LCR area.

## Hanford LCR Sub-area Diagram

Figure 3.3-47 Hanford LCR Sub-area





### Hanford LCR Sub-area Load and Resources

Table 3.3-42 provides the forecast load and resources in Hanford LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-42 Hanford LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	237	Market/Net Seller	133	133
AAEE	-2	Battery	0	0
Behind the meter DG	-10	MUNI/QF	0	0
Net Load	225	Solar	28	0
Transmission Losses	8	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	233	Total	161	133

## **Hanford LCR Sub-area Hourly Profiles**

Figure 3.3-48 illustrates the forecast 2025 profile for the peak day for the Hanford sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-49 illustrates the forecast 2025 hourly profile for Hanford sub-area with the Category P6 emergency load serving capability without local resources.

GFA - Hanford LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 45 MW and 276 MWh. Max 4-hr storage = 15 MW 150 ≷ 10 11 13 17 18 19 20 21 - 2025 Net Load ■ Load serving capability E — Load serving capability N — — LSC with ES

Figure 3.3-48 Hanford LCR Sub-area 2025 Peak Day Forecast Profiles



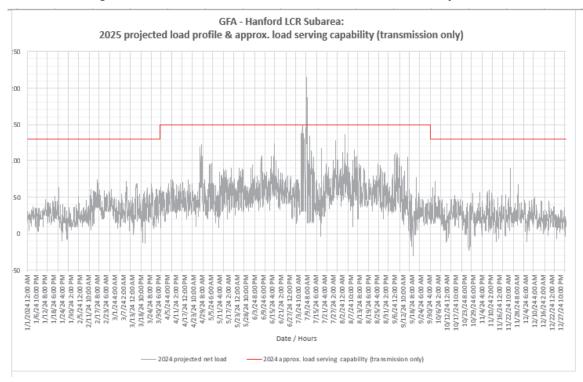


Figure 3.3-49 Hanford LCR Sub-area 2025 Forecast Hourly Profiles

## **Hanford LCR Sub-area Requirement**

Table 3.3-43 identifies the sub-area requirements. The LCR Requirement for a Category P6 contingency is 46 MW.

 Year
 Limit
 Category
 Limiting Facility
 Contingency
 LCR (MW) (Deficiency)

 2025
 First Limit
 P6
 Henrietta 230/115 kV Bank 3
 McCall-Kingsburg #1 115 kV line and GWF-Kingsburg 115 kV line
 46

Table 3.3-43 Hanford LCR Sub-area Requirements

## **Effectiveness factors:**

All units within the Hanford sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

# 3.3.6.3 Coalinga Sub-area

Coalinga is a sub-area of the Fresno LCR area.

## Coalinga LCR Sub-area Diagram



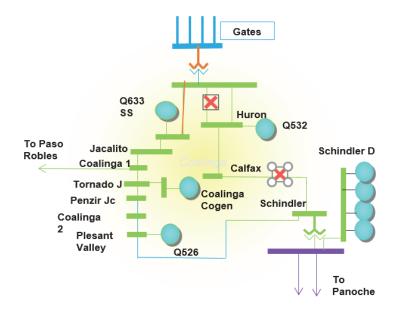


Figure 3.3-50 Coalinga LCR Sub-area

# Coalinga LCR Sub-area Load and Resources

Table 3.3-44 provides the forecast load and resources in Coalinga LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	144	Market/Net Seller	0	0
AAEE	-1	Battery	10	10
Behind the meter DG	-4	MUNI/QF	3	3
Net Load	139	Solar	14	0
Transmission Losses	3	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	142	Total	27	13

Table 3.3-44 Coalinga LCR Sub-area 2025 Forecast Load and Resources

## Coalinga LCR Sub-area Hourly Profiles

Figure 3.3-51 illustrates the forecast 2025 profile for the peak day for the Coalinga sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-52 illustrates the forecast 2025 hourly profile for



Coalinga sub-area with the Category P6 emergency load serving capability without local resources.

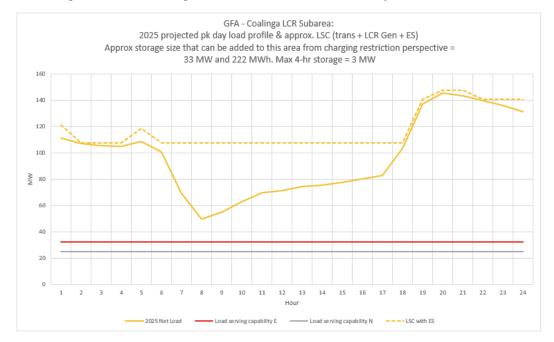
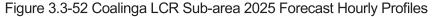
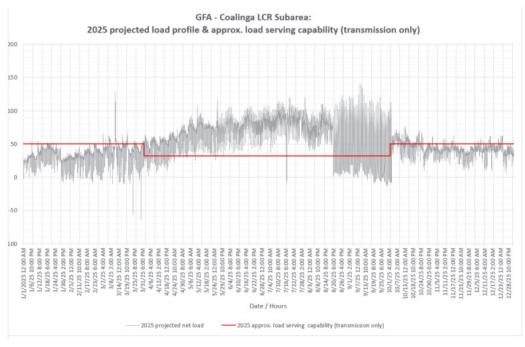


Figure 3.3-51 Coalinga LCR Sub-area 2025 Peak Day Forecast Profiles





## Coalinga LCR Sub-area Requirement

Table 3.3-45 identifies the sub-area requirements. The LCR Requirement for a Category P6 contingency is 105 MW including a 92 MW at peak deficiency and 78 MW NQC deficiency.



Table 3.3-45 Coalinga LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Coalinga-Jacalito 70 kV line	Gates-Coalinga #2 70 kV line and Schindler- five points switching station 70 kV line	105 ( 92 Peak; 78 NQC)

### **Effectiveness factors:**

All units within the Coalinga sub-area have the same effectiveness factor.

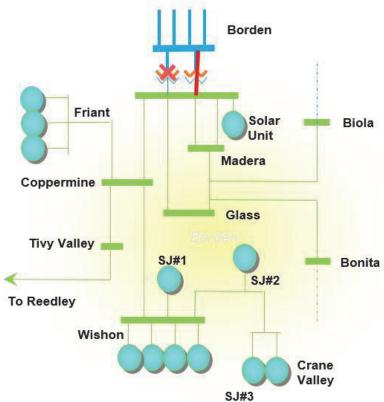
For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.6.4 Borden Sub-area

Borden is a sub-area of the Fresno LCR area.

# **Borden LCR Sub-area Diagram**

Figure 3.3-53 Borden LCR Sub-area





#### **Borden LCR Sub-area Load and Resources**

Table 3.3-46 provides the forecast load and resources in Borden LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-46 Borden LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	182	Market/Net Seller	4	4
AAEE	-1	Battery	0	0
Behind the meter DG	-8	MUNI/QF	0	0
Net Load	173	Solar	6	0
Transmission Losses	2	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	175	Total	10	4

## **Borden LCR Sub-area Hourly Profiles**

Figure 3.3-54 illustrates the forecasted 2025 profile for the peak day for the Borden sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-55 illustrates the forecasted 2025 hourly profile for Borden sub-area with the Category P6 emergency load serving capability without local resources.

Figure 3.3-54 Borden LCR Sub-area 2025 Peak Day Forecast Profiles GFA - Borden LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 68 MW and 221 MWh. Max 4-hr storage = 0 MW 200 180 160 140 120 **≥** 100 60 13 17 Load serving capability E Load serving capability N --- LSC with ES



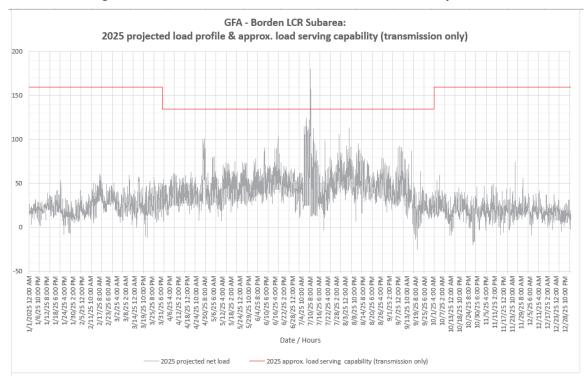


Figure 3.3-55 Borden LCR Sub-area 2025 Forecast Hourly Profiles

# **Borden LCR Sub-area Requirement**

Table 3.3-47 identifies the sub-area requirements. The LCR Requirement for a Category P6 contingency is 68 MW with a 58 MW NQC deficiency and 64 MW peak deficiency.

YearLimitCategoryLimiting FacilityContingencyLCR (MW) (Deficiency)2025First LimitP1Borden 230/70 kV TB # 1Borden 230/70 kV TB # 468 (58 NQC, 64 peak)

Table 3.3-47 Borden LCR Sub-area Requirements

#### **Effectiveness factors:**

All units within the Borden sub-area have the same effectiveness factor.

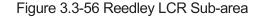
For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

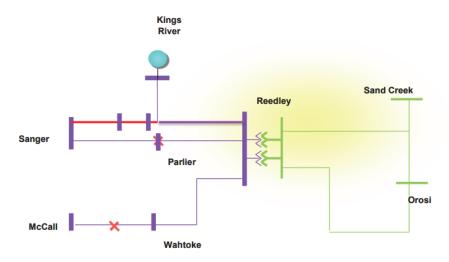
# 3.3.6.5 Reedley Sub-area

Reedley is a sub-area of the Fresno LCR area.



## Reedley LCR Sub-area Diagram





## Reedley LCR Sub-area Load and Resources

Table 3.3-48 provides the forecast load and resources in Reedley LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-48 Reedley LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	262	Market/Net Seller	41	41
AAEE	-2	Battery	0	0
Behind the meter DG	-11	MUNI/QF	0	0
Net Load	249	LTPP Preferred Resources	0	0
Transmission Losses	74	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	323	Total	41	41

### Reedley LCR Sub-area Hourly Profiles

Figure 3.3-57 illustrates the forecast 2025 profile for the peak day for the Reedley sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-58 illustrates the forecast 2025 hourly profile for Reedley sub-area with the Category P6 emergency load serving capability without local resources.



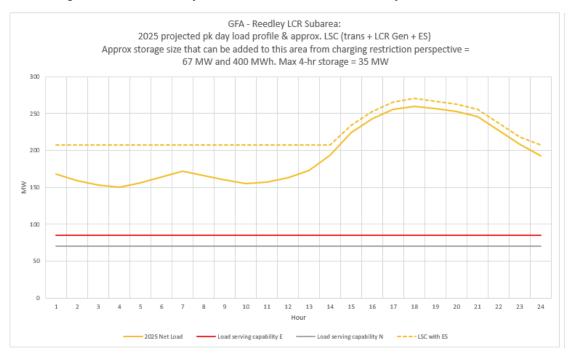
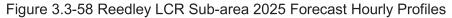
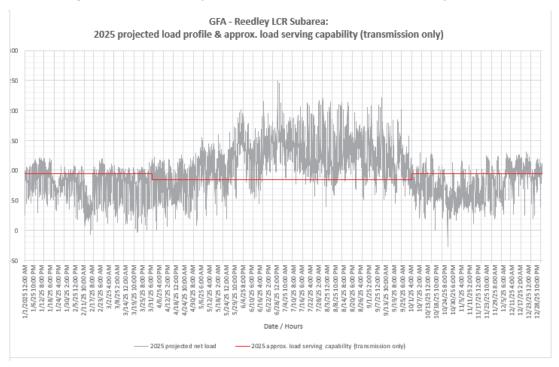


Figure 3.3-57 Reedley LCR Sub-area 2025 Peak Day Forecast Profiles





# Reedley LCR Sub-area Requirement

Table 3.3-49 identifies the sub-area requirements. The LCR Requirement for a Category P6 contingency is 170 MW with a 129 MW deficiency.



Table 3.3-49 Reedley LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Kings River-Sanger-Reedley 115 kV line with Wahtoke load online	McCall-Reedley 115 kV & Sanger-Reedley 115 kV	170 (129)

## **Effectiveness factors:**

All units within the Reedley sub-area have the same effectiveness factor.

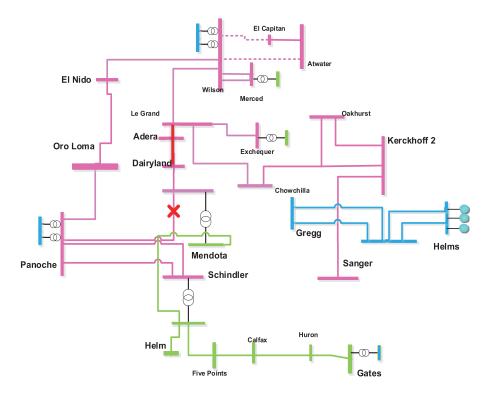
For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

# 3.3.6.6 Panoche Sub-area

Panoche is a sub-area of the Fresno LCR area.

# Panoche LCR Sub-area Diagram

Figure 3.3-59 Panoche LCR Sub-area





#### Panoche LCR Sub-area Load and Resources

Table 3.3-50 provides the forecast load and resources in Panoche LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-50 Panoche LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	541	Market/Net Seller	274	274
AAEE	-4	Battery	0	0
Behind the meter DG	-18	MUNI/QF	107	107
Net Load	519	Solar	43	0
Transmission Losses	16	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	535	Total	424	381

## Panoche LCR Sub-area Hourly Profiles

Figure 3.3-60 illustrates the forecast 2025 profile for the peak day for the Panoche sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-61 illustrates the forecast 2025 hourly profile for Panoche sub-area with the Category P6 emergency load serving capability without local resources.

GFA - Panoche LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 95 MW and 764 MWh. Max 4-hr storage = 36 MW ₹ 300 200 100 10 11 12 13 14 15 16 17 18 19

Figure 3.3-60 Panoche LCR Sub-area 2025 Peak Day Forecast Profiles



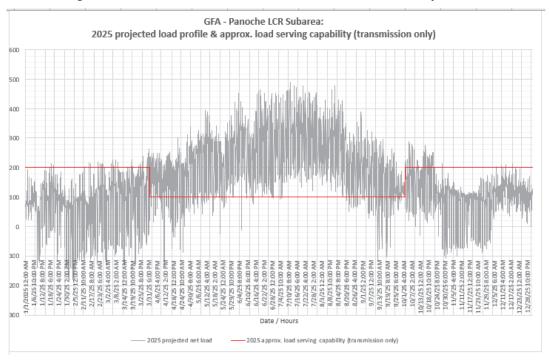


Figure 3.3-61 Panoche LCR Sub-area 2025 Forecast Hourly Profiles

## Panoche LCR Sub-area Requirement

Table 3.3-51 identifies the sub-area LCR requirements. The LCR Requirement for a Category P6 contingency is 426 MW including a 45 MW deficiency at peak and 2 MW NQC deficiency.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P1	Dairyland-Adera Solar Junction 115 kV	Panoche-Mendota 115 kV	426 (2 NQC, 45 at Peak)

Table 3.3-51 Panoche LCR Sub-area Requirements

#### **Effectiveness factors:**

Effective factors for generators in the Panoche LCR sub-area are in Attachment B table title Panoche.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: http://www.caiso.com/Documents/2210Z.pdf

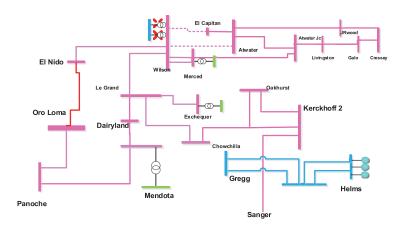
## 3.3.6.7 Wilson Sub-area

Wilson is a sub-area of the Fresno LCR area.



# Wilson LCR Sub-area Diagram

Figure 3.3-62 Wilson LCR Sub-area



## Wilson LCR Sub-area Load and Resources

The Wilson sub-area does not has a defined load pocket with the limits based upon power flow through the area. Table 3.3-52 provides the forecasted resources in the sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-52 Wilson LCR Sub-area 2025 Forecast Load and Resources

Load (MW)	Generation (MW)	Aug NQC	At Peak
	Market/nd Net Seller	127	127
	Battery	0	0
	MUNI/QF	104	104
The Wilson sub-area does not have a defined load pocket with the limits based	Solar	27	0
upon power flow through the area.	Existing 20-minute Demand Response	0	0
	Mothballed	0	0
	Total	258	231

## Wilson LCR Sub-area Hourly Profiles

The Wilson sub-area is a flow-through sub-area therefore hourly profiles are not provided.



## Wilson LCR Sub-area Requirement

Table 3.3-53 identifies the sub-area LCR requirements. The LCR Requirement for a Category P6 contingency is 435 MW with a 204 MW deficiency at Peak and 177 MW NQC deficiency.

Table 3.3-53 Wilson LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Oro Loma-El Nido 115 kV Line	Wilson 230/115kV TB #1 and Wilson 230/115kV TB #2	435 (177 NQC; 204 Peak)

## **Effectiveness factors:**

Effective factors for generators in the Wilson 115 kV LCR sub-area are in Attachment B table titled Wilson 115 kV.

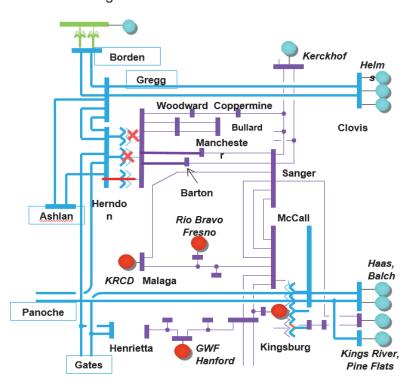
For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

#### 3.3.6.8 Herndon Sub-area

Herndon is a sub-area of the Fresno LCR area.

## Herndon LCR Sub-area Diagram

Figure 3.3-63 Herndon LCR Sub-area





### Herndon LCR Sub-area Load and Resources

Table 3.3-54 provides the forecast load and resources in Herndon LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-54 Herndon LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	1798	Market/Net Seller	864	864
AAEE	-15	Battery	16	16
Behind the meter DG	-71	MUNI/QF	121	121
Net Load	1712	Solar	31	0
Transmission Losses	40	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	1752	Total	1032	1001

## **Herndon LCR Sub-area Hourly Profiles**

Figure 3.3-64 illustrates the forecast 2025 profile for the peak day for the Herndon sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-65 illustrates the forecast 2025 hourly profile for Herndon sub-area with the Category P6 emergency load serving capability without local resources.

GFA - Herndon LCR Subarea:

2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES)

Approx storage size that can be added to this area from charging restriction perspective =

425 MW and 2679 MWh. Max 4-hr storage = 210 MW

2000

1800

1600

1400

200

800

600

400

Figure 3.3-64 Herndon LCR Sub-area 2025 Peak Day Forecast Profiles

10 11 12

Load serving capability E

13

15

- Load serving capability N



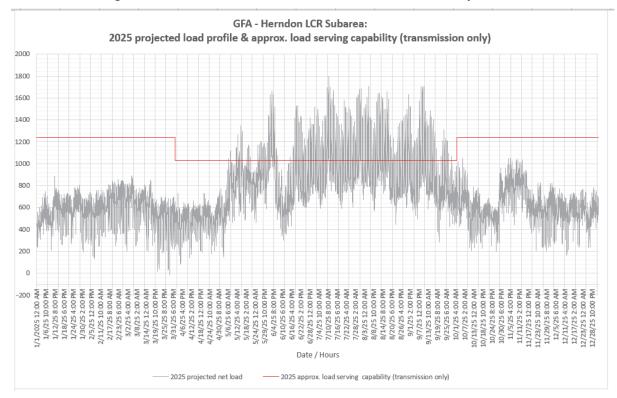


Figure 3.3-65 Herndon LCR Sub-area 2025 Forecast Hourly Profiles

# **Herndon LCR Sub-area Requirement**

Table 3.3-55 identifies the sub-area LCR requirements. The LCR Requirement for a Category P6 contingency is 812 MW.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P6	Herndon #3 230/115 kV Transformer Bank	Herndon 230/115 kV Bank 1 and Herndon 230/115 kV Bank 2	812

Table 3.3-55 Herndon LCR Sub-area Requirements

### **Effectiveness factors:**

Effective factors for generators in the Herndon LCR Sub-area are in Attachment B table titled Herndon.

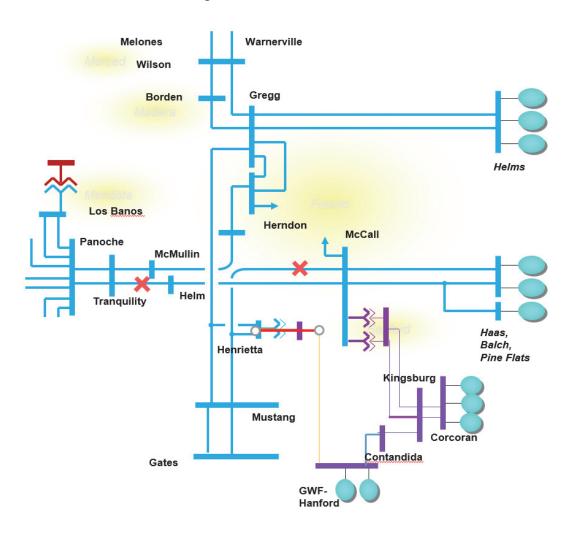
For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: http://www.caiso.com/Documents/2210Z.pdf



## 3.3.6.9 Fresno Overall area

## Fresno LCR area Diagram

Figure 3.3-66 Fresno LCR area



#### Fresno Overall LCR area Load and Resources

Table 3.3-41 provides the forecast load and resources in Fresno LCR area in 2025. The list of generators within the LCR area are provided in Attachment A.

### Fresno Overall LCR area Hourly Profiles

Figure 3.3-67 illustrates the forecast 2025 profile for the peak day for the Fresno Overall sub-area with the Category P6 normal and emergency load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-68 illustrates the forecast 2025 hourly profile for Fresno Overall sub-area with the Category P6 emergency load serving capability without local resources.



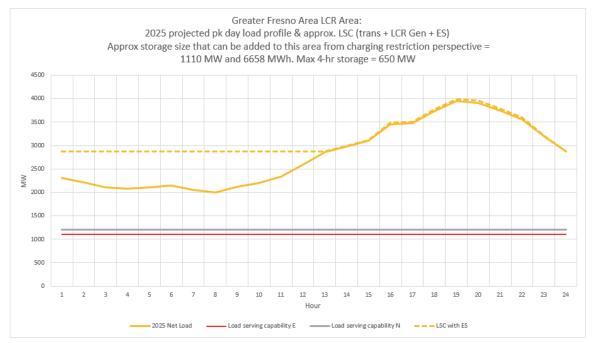
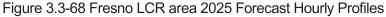
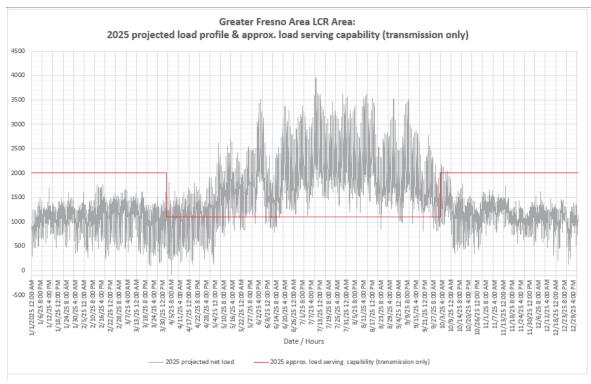


Figure 3.3-67 Fresno LCR area 2025 Peak Day Forecast Profiles





## Fresno Overall LCR Area Requirement

Table 3.3-56 identifies the area LCR requirements. The LCR Requirement for a Category P6 contingency is 2532 MW.



Table 3.3-56 Fresno Overall LCR Area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First limit	P6	Henrietta 230/115 kV Bank 3	Mc Call-Helm 230 kV Line and Henrietta Tap-Mustang 230 kV line	2532

#### **Effectiveness factors:**

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7430 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## Changes compared to last year's results

Compared with 2024 the load forecast increased by 534 MW and the LCR need increased by 504 MW mostly due to load forecast increase.

#### 3.3.7 Kern Area

### 3.3.7.1 Area Definition:

The transmission facilities coming into the Kern PP sub-area are:

Midway-Kern PP #1 230 kV Line

Midway-Kern PP #3 230 kV Line

Midway-Kern PP #4 230 kV Line

Famoso-Lerdo 115 kV Line (Seasonal Open)

Adobe Switching Station #1 115 kV Tap (Normal Open)

Wasco-Famoso 70 kV Line (Seasonal Open)

Kern-Magunden 70 kV Line (Seasonal Open)

Copus-Old River 70 kV Line (Seasonal Open)

Copus-Old River 70 kV Line (Normal Open)

The substations that delineate the Kern-PP sub-area are:

Midway 230 kV is out and Bakersfield 230 kV is in

Midway 230 kV is out and Kern PP 230 kV is in

Midway 230 kV is out and Kern PP 230 kV is in

Famoso 115 kV is out and Cawelo 115 kV is in



Adobe Switching Station 115 kV is out and Wheeler Ridge Junction 115 kV is in

Wasco 70 kV is out and Mc Farland 70 kV is in

Magunden 70 kV is out and Bakersfield Junction 70 kV is in

Copus 70 kV is out and South Kern Solar 70 kV is in

Lakeview 70 kV is out and San Emidio Junction 70 kV is in

# Kern LCR Area Diagram

Figure 3.3-69 Kern LCR Sub-area Lerdo Oxy Kem-Fr (G) Vedder Kern Oil Live Oak Poso 7<sup>th</sup> Standard Mountain HG Shafter PV Badger Creek Co-Gen Kern Front Co-Gen Kern Oil South Columbus Kern PP Westpark Kem PP Westpark Magunden Bulk Bolthouse Grimmway-Malaga Kern 70 Ros eda le Lamont G Regulus PV Solar Arvin Edison Kern PP-Redwood Tevis Bulk Tevis Stockdale 115kV



### **Kern LCR Area Load and Resources**

Table 3.3-57 provides the forecast load and resources in Kern LCR Area in 2025. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 19:20 PM.

At the local area peak time the estimated, ISO metered, solar output is 0.00%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-57 Kern LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	952	Market/Net Seller	368	368
AAEE	-11	Battery	20	20
Behind the meter DG	0	MUNI/QF	9	9
Net Load	941	Solar	43	0
Transmission Losses	9	Existing 20-minute Demand Response	9	9
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	950	Total	449	406

## Approved transmission projects modeled

None

### 3.3.7.2 Kern Power-Tevis Sub Area

Kern Power-Tevis is a sub-area of the Kern LCR area.

## Kern Power-Tevis Sub-area Diagram

Please see Figure 3.3-69 for Kern PWR-Tevis sub-area diagram.

### Kern Power-Tevis LCR Sub-area Requirement

No LCR need was identified for the Kern Power-Tevis sub area.

## 3.3.7.3 Westpark Sub-area

Westpark is a sub-area of the Kern LCR area.

## Westpark LCR Sub-area Diagram

Please see Figure 3.3-69 for Westpark sub-area diagram.



## Westpark LCR Sub-area Load and Resources

Table 3.3-58 provides the forecast load and resources in Westpark LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

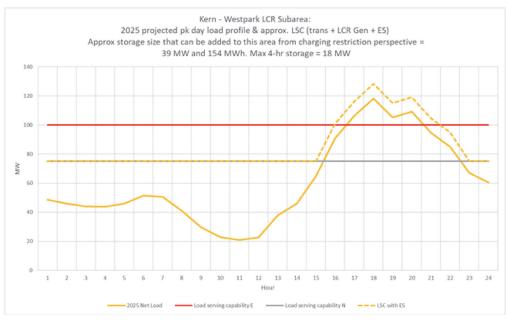
Table 3.3-58 Westpark LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	130	Market/Net Seller	49	49
AAEE	-2	Battery	0	0
Behind the meter DG	0	MUNI/QF	0	0
Net Load	128	LTPP Preferred Resources	0	0
Transmission Losses	0	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	128	Total	49	49

## **Westpark LCR Sub-area Hourly Profiles**

Figure 3.3-70 illustrates the forecast 2025 profile for the peak day for the Westpark LCR sub-area with the Category P3 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-71 illustrates the forecast 2025 hourly profile for Westpark LCR sub-area with the Category P7 emergency load serving capability without local resources.

Figure 3.3-70 Westpark LCR Sub-area 2025 Peak Day Forecast Profiles





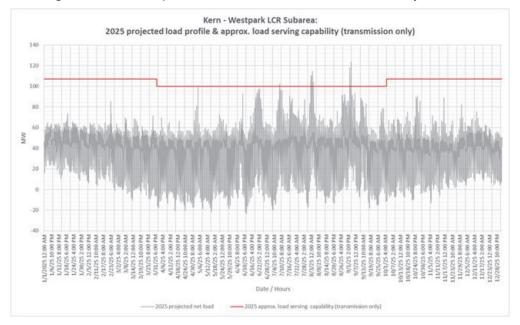


Figure 3.3-71 Westpark LCR Sub-area 2025 Forecast Hourly Profisles

## Westpark LCR Sub-area Requirement

Table 3.3-59 identifies the sub-area LCR requirements. The LCR requirement for Category P7 contingency is 39 MW.

 Year
 Category
 Limiting Facility
 Contingency
 LCR (MW) (Deficiency)

 2025
 P7
 Magunden-Magunden Jct 115 kV Line
 Kern PP-Westpark No. 1 & 2 115 kV Lines
 39

Table 3.3-59 Westpark LCR Sub-area Requirements

#### **Effectiveness factors:**

All units within the Westpark Sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7450 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.7.4 Kern Oil Sub-area

Kern Oil is a sub-area of the Kern LCR area.

## Kern Oil LCR Sub-area Diagram

Please see Figure 3.3-69 for Kern Oil sub-area diagram.



#### Kern Oil LCR Sub-area Load and Resources

Table 3.3-60 provides the forecast load and resources in Kern Oil LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-60 Kern Oil LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	319	Market/Net Seller	110	110
AAEE	-3	Battery	0	0
Behind the meter DG	0	MUNI/QF	10	10
Net Load	316	Solar	3	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	317	Total	123	120

## Kern Oil LCR Sub-area Hourly Profiles

Figure 3.3-72 illustrates the forecast 2025 profile for the peak day for the Kern Oil LCR sub-area with the Category P6 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-73 illustrates the forecast 2025 hourly profile for Kern Oil LCR sub-area with the Category P6 emergency load serving capability without local resources.

Kern - Kern Oil LCR Subarea: 2025 projected pk day load profile & approx. LSC (trans + LCR Gen + ES) Approx storage size that can be added to this area from charging restriction perspective = 110 MW and 401 MWh. Max 4-hr storage = 22 MW 10 16 17 18 21 22 11 12 13 15 19 20 Load serving capability E —

Figure 3.3-72 Kern Oil LCR Sub-area 2025 Peak Day Forecast Profiles



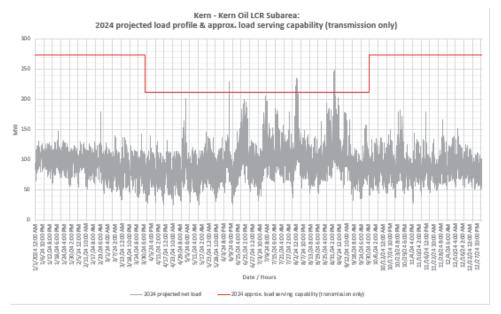


Figure 3.3-73 Kern Oil LCR Sub-area 2025 Forecast Hourly Profiles

## Kern Oil LCR Sub-area Requirement

Table 3.3-61 identifies the sub-area LCR requirements. The LCR requirement for Category P6 contingency is 110 MW.

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	P6	Kern Oil Jct –Kernwater 115 kV Line	7 <sup>th</sup> Standard – Kern 115 kV line & Kern PP-Live Oak 115 kV Line	110

Table 3.3-61 Kern Oil LCR Sub-area Requirements

#### **Effectiveness factors:**

All units within the Kern Oil sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7450 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.7.5 South Kern PP Sub-area

South Kern PP is sub-area of the Kern LCR area.

# South Kern PP LCR Sub-area Diagram

Please see Figure 3.3-69 for South Kern PP area diagram.

## South Kern PP LCR Sub-area Load and Resources

Refer to Table 3.3-57 Kern Area Load and Resources table.



# South Kern PP LCR Sub-area Hourly Profiles

Figure 3.3-74 illustrates the forecast 2025 profile for the peak day for the South Kern PP LCR sub-area with the Category P6 normal and emergengy load serving capabilities without local resources. The chart also includes an estimated amount of energy storage that can be added to this local area from charging restriction perspective. Figure 3.3-75 illustrates the forecast 2025 hourly profile for South Kern PP LCR sub-area with the Category P6 emergency load serving capability without local resources.

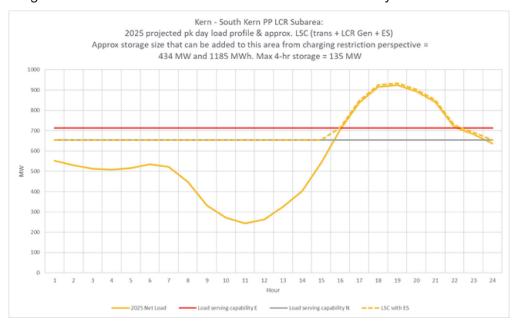
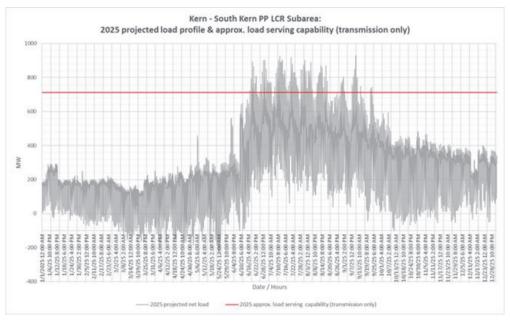


Figure 3.3-74 South Kern PP LCR Sub-area 2025 Peak Day Forecast Profiles







## South Kern PP LCR Sub-area Requirement

Table 3.3-62 identifies the sub-area LCR requirements. The LCR requirement for Category P6 contingency is 434 MW including a 28 MW at peak deficiency as well as 0 MW NQC deficiency.

Table 3.3-62 South Kern PP LCR Sub-area Requirements

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	P6	Kern 230/115 kV T/F # 5	Kern 230/115 kV T/F # 3 & Kern 230/115 kV T/F # 4	434 (0 NQC; 28 Peak)

#### **Effectiveness factors:**

All units within the South Kern PP sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7450 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

# 3.3.7.6 Kern Area Overall Requirements

## Kern LCR Area Overall Requirement

Table 3.3-63 identifies the limiting facility and contingency that establishes the Kern Area 2025 LCR requirements. The LCR requirement for Category P6 (Multiple Contingency) is 434 MW including a 28 MW at peak deficiency as well as a 0 MW NQC deficiency.

Table 3.3-63 Kern Overall LCR Sub-area Requirements

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	P6	Aggregate of Sub-areas.		434 (0 NQC: 28 Peak)

## Kern Overall LCR Area Hourly Profile

Refer to South Kern PP LCR area profiles.

## Changes compared to last year's results

The 2025 load forecast has increased by 26 MW and the overall Kern resource requirements have decreased by 20 MW mostly due to due to small increase in rating for the limiting component

108



# 3.3.8 Big Creek/Ventura Area

## 3.3.8.1 Area Definition:

The transmission tie lines into the Big Creek/Ventura Area are:

Antelope #1 500/230 kV Transformer

Antelope #2 500/230 kV Transformer

Sylmar - Pardee 230 kV #1 and #2 Lines

Vincent - Pardee 230 kV #2 Line

Vincent - Santa Clara 230 kV Line

The substations that delineate the Big Creek/Ventura Area are:

Antelope 500 kV is out Antelope 230 kV is in

Antelope 500 kV is out Antelope 230 kV is in

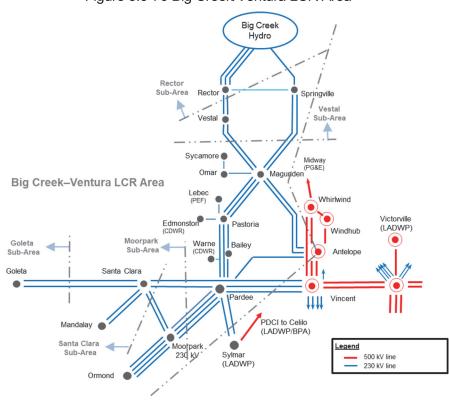
Sylmar is out Pardee is in

Vincent is out Pardee is in

Vincent is out Santa Clara is in

## Big Creek/Ventura LCR Area Diagram

Figure 3.3-76 Big Creek/Ventura LCR Area





## Big Creek/Ventura LCR Area Load and Resources

Table 3.3-64 provides the forecast load and resources in the Big Creek/Ventura LCR Area in 2025. The list of generators within the LCR area are provided in Attachment A.

In year 2025 the estimated time of local area peak is 5:00 PM (PDT).

At the local area peak time the estimated ISO-metered solar output is about 56%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-64 Big Creek/Ventura LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	4663	Market/Net Seller/Wind	2554	2554
AAEE	-45	Battery/Hybrid	1085	1085
Behind the meter DG	0	MUNI/QF	399	399
Net Load	4618	Solar	249	249
Transmission Losses	67	Demand Response	63	63
Pumps	390	Mothballed	0	0
Load + Losses + Pumps	5075	Total	4350	4350

## Approved transmission projects modeled:

Sylmar Bank E is out of service through 2026

## 3.3.8.2 Rector Sub-area

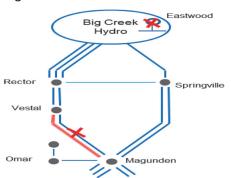
LCR need is satisfied by the need in the larger Vestal sub-area.

## 3.3.8.3 Vestal Sub-area

Vestal is a sub-area of the Big Creek/Ventura LCR area.

## **Vestal LCR Sub-area Diagram**

Figure 3.3-77 Vestal LCR Sub-area





## **Vestal LCR Sub-area Load and Resources**

Table 3.3-65 provides the forecast load and resources in Vestal LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-65 Vestal LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	1415	Market/Net Seller	954	954
AAEE	-14	Battery	269	269
Behind the meter DG	N/A	MUNI/QF	0	0
Net Load	1401	Solar	59	59
Transmission Losses	23	Existing 20-minute Demand Response	41	41
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	1424	Total	1323	1323

## **Vestal LCR Sub-area Hourly Profiles**

Figure 3.3-78 illustrates the forecast 2025 annual load profile in the Vestal LCR sub-area with the Category P3 normal and emergengy load serving capabilities without local capacity resources. Figure 3.3-79 provides the load shape for the peak load day, estimated energy storage maximum capacity and energy based on area maximum charging capability under the most critical contingency as well as estimated 1 for 1 replacement with four-hour capacity battery.

Figure 3.3-78 Vestal LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Only Load Serving Capability

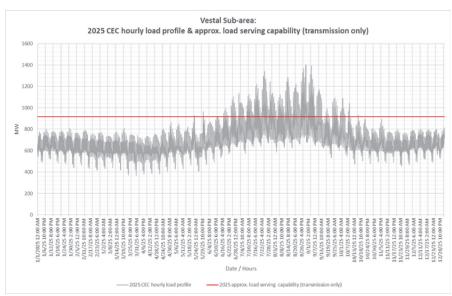
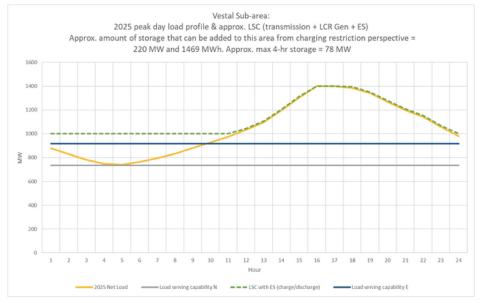




Figure 3.3-79 Vestal LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency



# **Vestal LCR Sub-area Requirement**

Table 3.3-66 identifies the sub-area requirements. The LCR requirement for Category P3 contingency is 485 MW.

Table 3.3-66 Vestal LCR Sub-area Requirements

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	P3	Magunden–Vestal #1 230 kV line	Magunden–Vestal #2 230 kV line with Eastwood out of service	485

#### **Effectiveness factors:**

For helpful procurement information please read procedure 2210Z Effectiveness Factors under 7500 posted at: http://www.caiso.com/Documents/2210Z.pdf

#### 3.3.8.4 Goleta Sub-area

Goleta is a sub-area of the Santa Clara sub-area. LCR need in Goleta is satisfied by the need in the larger Santa Clara sub-area.

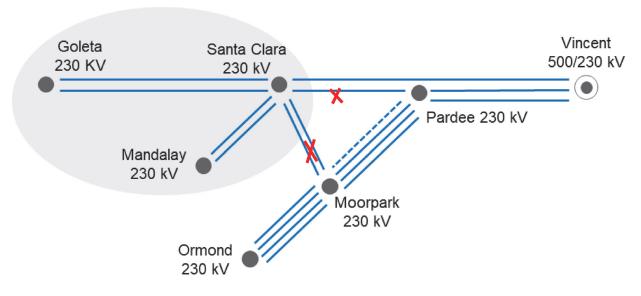
## 3.3.8.5 Santa Clara Sub-area

Santa Clara is a sub-area of the Big Creek/Ventura LCR area.



## Santa Clara LCR Sub-area Diagram

Figure 3.3-80 Santa Clara LCR Sub-area



## Santa Clara LCR Sub-area Load and Resources

Table 3.3-67 provides the forecast load and resources in Santa Clara LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-67 Santa Clara LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	875	Market/Net Seller	170	170
AAEE	-9	Battery	221	221
Behind the meter DG	N/A	MUNI/QF	87	87
Net Load	866	Solar	0	0
Transmission Losses	5	Existing Demand Response	7	7
Pumps	0	Mothballed	0	0
Load + Losses + Pumps	871	Total	485	485

#### Santa Clara LCR Sub-area Hourly Profiles

Figure 3.3-81 illustrates the forecast 2025 annual load profile in the Santa Clara LCR sub-area with the Category P1/P7 voltage stability related load serving capabily without local capacity resources. Figure 3.3-82 provides the load shape for the peak load day, estimated energy storage maximum capacity and energy based on area maximum charging capability under the most critical contingency as well as estimated 1 for 1 replacement with four-hour capacity battery.



Figure 3.3-81 Santa Clara LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Only Load Serving Capability

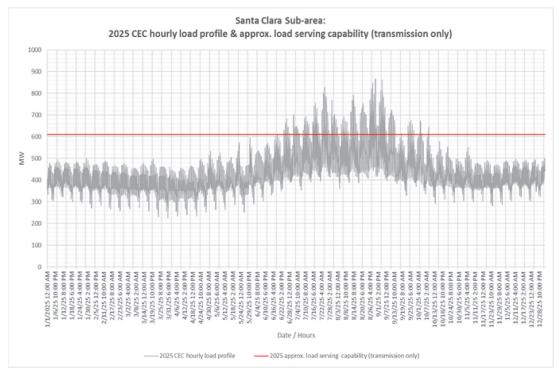
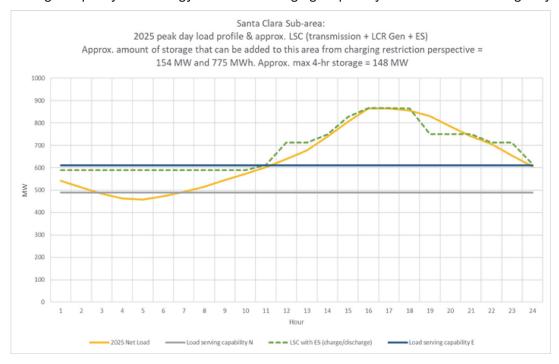


Figure 3.3-82 Santa Clara LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency





## Santa Clara LCR Sub-area Requirement

Table 3.3-68 identifies the sub-area requirements. The LCR requirement for Category P1 followed by P7 contingency is 255 MW.

Table 3.3-68 Santa Clara LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P1 + P7	Voltage collapse	Pardee - Santa Clara 230 kV followed by Moorpark - Santa Clara #1 & #2 230 kV	255

#### Effectiveness factors:

For helpful procurement information please read procedure 2210Z Effectiveness Factors under 7550 and 7680 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.8.6 Big Creek/Ventura Overall

## Big Creek/Ventura LCR Sub-area Hourly Profiles

Figure 3.3-83 illustrates the forecast 2025 annual load profile in the Big Creek/Ventura LCR area with the Category P6 normal and emergency load serving capabilities without local capacity resources. The normal and emergency ratings for the limiting element are the same. Figure 3.3-84 provides the load shape for the peak load day, estimated energy storage maximum capacity and energy based on area maximum charging capability under the most critical contingency as well as estimated 1 for 1 replacement with four-hour capacity battery.

Figure 3.3-83 Big Creek/Ventura LCR area 2025 Annual Load Profile with Estimated Transmission Only Load Serving Capability

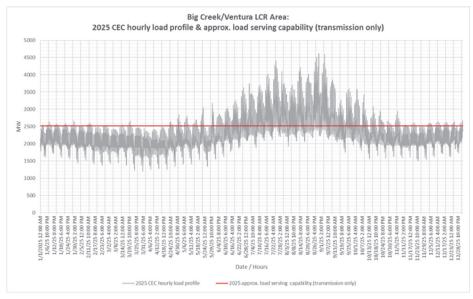
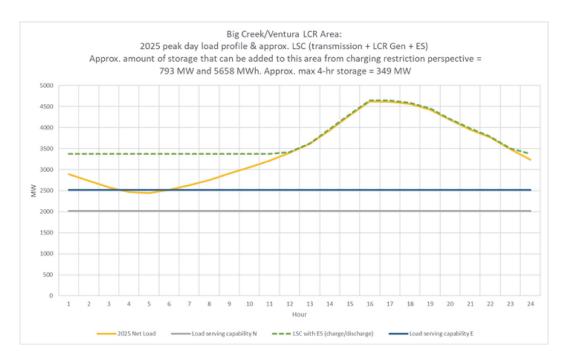




Figure 3.3-84 Big Creek/Ventura LCR area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency



## Big Creek/Ventura LCR area Requirement

Table 3.3-69 identifies the area LCR requirements. The LCR requirement for Category P6 contingency is 2145 MW.

Table 3.3-69 Big Creek/Ventura LCR area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Remaining Sylmar - Pardee 230 kV	Lugo - Victorville 500 kV line followed by one of the Sylmar - Pardee #1 or #2 230 kV lines	2145

## **Effectiveness factors:**

For helpful procurement information please read procedure 2210Z Effectiveness Factors under 7500, 7510, 7550 and 7680 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

# Changes compared to last year's results

Compared with the results for 2024, the load forecast is up by 496 MW and the LCR increased by 174 MW mainly due to increase in load and the decrease in flows from Sylmar because Sylmar Bank E is out of service through 2026.



#### 3.3.9 LA Basin Area

## 3.3.9.1 Area Definition:

The transmission tie lines into the LA Basin Area are:

San Onofre - San Luis Rey #1, #2, and #3 230 kV Lines

San Onofre - Talega #2 230 kV Line

San Onofre - Capistrano #1 230 kV Line

Lugo - Mira Loma #2 & #3 500 kV Lines

Lugo - Rancho Vista #1 500 kV Line

Vincent - Mira Loma 500 kV Line

Sylmar - Eagle Rock 230 kV Line

Sylmar - Gould 230 kV Line

Vincent - Mesa #1 & #2 230 kV Lines

Vincent - Rio Hondo #1 & #2 230 kV Lines

Devers - Red Bluff 500 kV #1 and #2 Lines

Mirage – Coachella Valley # 1 230 kV Line

Mirage - Ramon # 1 & 2 230 kV Lines

Mirage - Julian Hinds 230 kV Line

The substations that delineate the LA Basin Area are:

San Onofre is in San Luis Rey is out

San Onofre is in Talega is out

San Onofre is in Capistrano is out

Mira Loma is in Lugo is out

Rancho Vista is in Lugo is out

Eagle Rock is in Sylmar is out

Gould is in Sylmar is out

Mira Loma is in Vincent is out

Mesa is in Vincent is out

Rio Hondo is in Vincent is out

Devers is in Red Bluff is out

Mirage is in Coachella Valley is out

Mirage is in Ramon is out



Mirage is in Julian Hinds is out

## LA Basin LCR Area Diagram

Vincent

Parde

Sylmar

Rio Hondo

Rock
Godrich

Rio Hondo

Walnut

Olinda

Serrano

Sybarea

San Diego

Subarea

Figure 3.3-85 LA Basin LCR Area

## LA Basin LCR Area Load and Resources

Table 3.3-70 provides the forecast load and resources in the LA Basin LCR Area in 2025. The list of generators within the LCR area are provided in Attachment A and does not include the CPUC-approved local capacity preferred resources or DR.

In year 2025 the estimated time of local area peak is 3:00 PM (PDT) based on the CEC hourly forecast for the 2023-2040 California Energy Demand Forecast.

At the local area peak time the estimated, ISO metered, solar output is 12.4%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-70 LA Basin LCR Area 2024 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	19200	Market/Net Seller/Wind	5670	5670
AAEE, AAFS & AATE	-72	Battery/Hybrid	2696	2696
Behind the meter DG	-264	Muni/QF	1157	1157
Net Load	18864	Local Capacity Preferred Resources (BTM BESS, EE, DR, PV)	175	175
Transmission Losses	433	Existing Demand Response	588	588
Pumps	0	Solar	10	10
Load + Losses + Pumps	19297	Total	10296	10296



# Approved new transmission and resource projects modeled:

Mesa Loop-In Project (500 kV and 230 kV)

West of Devers 230 kV Upgrades

Ten West Link Project (Delaney – Colorado 500 kV Line)

Various battery energy storage system projects in the LA Basin

## 3.3.9.2 El Nido Sub-area

El Nido is a Sub-area of the LA Basin LCR Area.

## El Nido LCR Sub-area Diagram

Please refer to Figure 3.3-85 above.

#### El Nido LCR Sub-area Load and Resources

Table 3.3-71 provides the forecast load and resources in El Nido LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-71 El Nido LCR Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	911	Market/Net Seller	554	554
AAEE & AAFS	-9	Battery	100	100
Behind the meter DG	-25	MUNI/QF	0	0
Net Load	877	LTPP Preferred Resources	10	10
Transmission Losses	18	Existing Demand Response	28	28
Pumps	0	Solar	0	0
Load + Losses + Pumps	895	Total	692	692

## El Nido LCR Sub-area Hourly Profiles

Figure 3.3-86 illustrates the forecast 2025 annual load profile in the El Nido LCR sub-area with the transmission load serving capability only. Figure 3.3-87 provides load shape for peak load day, estimated energy storage maximum capacity and energy as well as estimated four-hour capacity amount based on its maximum charging capability under the most critical contingency.



Figure 3.3-86 El Nido LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Load Serving Capability Only

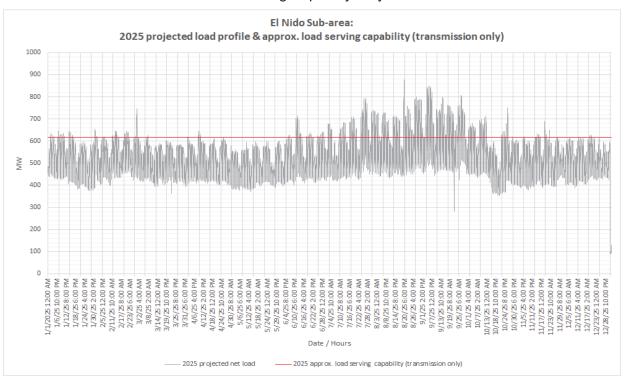
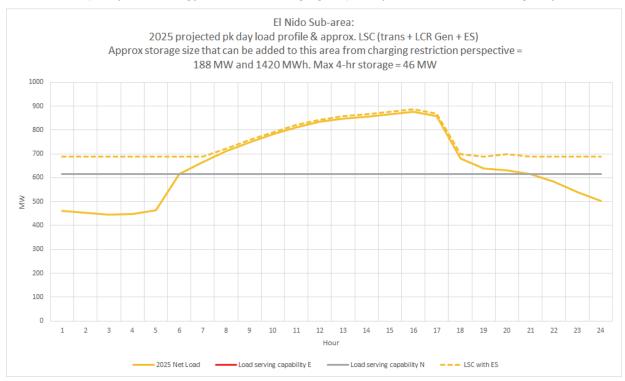


Figure 3.3-87 El Nido LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency





## El Nido LCR Sub-area Requirement

Table 3.3-72 identifies the sub-area requirements. The LCR requirement for Category P7 contingency is 261 MW. The LCR need decreases compared to the 2024 requirements due to lower demand forecast for the sub-area.

Table 3.3-72 El Nido LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P7	La Fresa - La Cienega 230 kV	La Fresa – El Nido #3 & 4 230 kV lines	261

## **Effectiveness factors:**

All units within the El Nido Sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7630 posted at: http://www.caiso.com/Documents/2210Z.pdf

## 3.3.9.3 Western LA Basin Sub-area

Western LA Basin is a sub-area of the LA Basin LCR area.

# Western LA Basin LCR Sub-area Diagram

Please refer to Figure 3.3-85 above.

## Western LA Basin LCR Sub-area Load and Resources

Table 3.3-73 provides the forecast load and resources in Western LA Basin LCR sub-area in 2025. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-73 Western LA Basin Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	11490	Market/Net Seller	3343	3343
AAEE, AAFS & AATE	-34	Battery/Hybrid	719	719
Behind the meter DG	-219	MUNI/QF	593	593
Net Load	11237	LTPP Preferred Resources	175	175
Transmission Losses	225	Existing Demand Response	337	337
Pumps	0	Solar	7	7
Load + Losses + Pumps	11462	Total	5174	5174



# Western LA Basin LCR Sub-area Hourly Profiles

Figure 3.3-88 illustrates the forecast 2025 annual load profile in the Western LA Basin LCR sub-area with the transmission load serving capability only. Figure 3.3-89 provides load shape for peak load day, estimated energy storage maximum capacity and energy as well as estimated four-hour capacity amount based on its maximum charging capability under the most critical contingency.

Figure 3.3-88 Western LA Basin LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Load Serving Capability Only

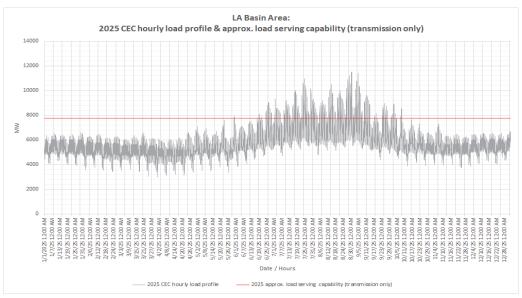
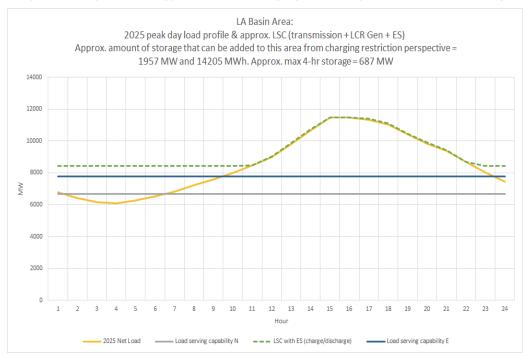


Figure 3.3-89 Western LA Basin LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency





## Western LA Basin LCR Sub-area Requirement

Table 3.3-74 identifies the sub-area LCR requirements. The LCR need for the Western LA Basin is higher than the 2023 LCR need due to the following:

 Potential delay in transmission upgrade (i.e., Laguna Bell – Mesa #1 230kV line upgrade) in the western LA Basin subarea<sup>7</sup>.

Table 3.3-74 Western LA Basin LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)		
Study	Study Results with Laguna Bell – Mesa #1 230kV Upgrade Project Delay Beyond June 1, 2025 Scenario						
2025	First Limit			3715 <sup>8</sup>			
Sens	Sensitivity Study Results for the Laguna Bell – Mesa #1 230kV Line Upgrade Project Completed with In-Service Date Prior to June 1, 2025						
2024	First Limit	P6	Laguna Bell – Mesa #1 230kV line	Mesa – Redondo 230 kV line, followed by Mesa – Lighthipe 230 kV line, or vice versa	3041		

The LCR need for the Western LA Basin sub-area is higher by an additional 674 MW if the planned Laguna Bell – Mesa 230 kV #1 line rating increase project is delayed beyond June 1, 2025. The CAISO will work closely with SCE to ascertain the commercial operating date for the project.

## **Effectiveness factors:**

See Attachment B - Table titled LA Basin.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7630 (G-219Z) posted at: http://www.caiso.com/Documents/2210Z.pdf

There are other combinations of contingencies in the area that could overload a significant number of 230 kV lines in this sub-area have less LCR need. As such, anyone of them (combination of contingencies) could become binding for any given set of procured resources. As a result, these effectiveness factors may not be the best indicator towards informed procurement.

## 3.3.9.4 West of Devers Sub-area

West of Devers is a sub-area of the LA Basin LCR area.

There are no LCR needs for this sub-area due to implementation of prior transmission upgrades.

<sup>&</sup>lt;sup>7</sup> The CAISO will coordinate with SCE for the status update of the Laguna Bell – Mesa #1 230kV line upgrade.

<sup>&</sup>lt;sup>8</sup> Results with the delay of the Laguna Bell – Mesa #1 230kV line upgrade



## 3.3.9.5 Valley-Devers Sub-area

Valley-Devers is a sub-area of the LA Basin LCR area.

There are no LCR needs for this sub-area due to implementation of prior transmission upgrades.

## 3.3.9.6 Valley Sub-area

Valley is a sub-area of the LA Basin LCR area.

There are no LCR needs for this sub-area due to implementation of prior transmission upgrades.

#### 3.3.9.7 Eastern LA Basin Sub-area

Eastern LA Basin is a sub-area of the LA Basin LCR area.

## Eastern LA Basin LCR Sub-area Diagram

Please refer to Figure 3.3-85 above.

## Eastern LA Basin LCR Sub-area Load and Resources

Table 3.3-75 provides the forecast load and resources in Eastern LA Basin LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.

Table 3.3-75 Eastern LA Basin LCR Sub-area 2025 Forecasted Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	7898	Market/Net Seller/Wind	2327	2327
AAEE, AAFS & AATE	-29	Battery	1976	1976
Behind the meter DG	-242	MUNI/QF	564	564
Net Load	7627	LTPP Preferred Resources	0	0
Transmission Losses	153	Existing Demand Response	206	206
Pumps	0	Solar	4	4
Load + Losses + Pumps	7780	Total	5077	5077

## Eastern LA Basin LCR Sub-area Hourly Profiles

Figure 3.3-90 illustrates the forecast 2025 annual load profile in the Eastern LA Basin LCR sub-area with the transmission load serving capability only. Figure 3.3-91 provides load shape for peak load day, estimated energy storage maximum capacity and energy as well as estimated four-hour capacity amount based on its maximum charging capability under the most critical contingency.



Figure 3.3-90 Eastern LA Basin LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Load Serving Capability Only

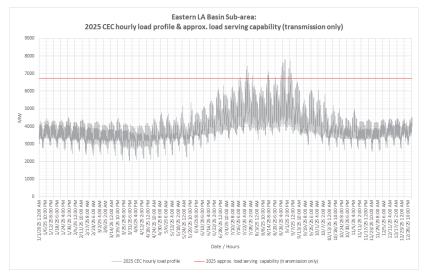
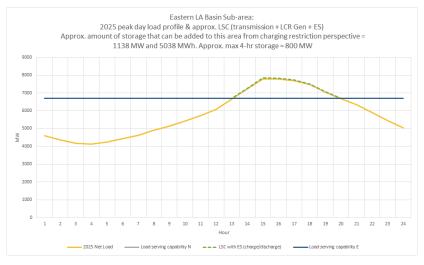


Figure 3.3-91 Eastern LA Basin LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency



# Eastern LA Basin LCR Sub-area Requirement

Table 3.3-76 identifies the sub-area LCR requirements. The LCR need for the Eastern LA Basin is lower than the 2024 LCR need due lower demand forecast.

Table 3.3-76 Eastern LA Basin LCR Sub-area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P1 & P7	Voltage stability	Lugo – Rancho Vista 500 kV line, followed by N-2 of Lugo – Mira Loma #2 and #3 500 kV lines (common structure)	1082



#### **Effectiveness factors:**

All units within the Eastern LA Basin Sub-area have the same effectiveness factor.

For most helpful procurement information please read procedure 2210Z Effectiveness Factors under 7580, 7590, 7630 and 7750 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.9.8 LA Basin Overall

## **LA Basin LCR Hourly Profiles**

The following is a summary of estimated amount of storage for the sub-areas and the overall area based on maximum charging capability perspective. The LA Basin overall estimated energy storage maximum capacity and energy is the sum of the Western and Eastern LA Basin sub-area amounts.

Table 3.3-77 Estimated LA Basin Subareas and Overall Area Energy Storage Capacity and Energy Based on Maximum Charging Capability Perspective

Area/Sub-area	Estimated Energy Storage Maximum Capacity (MW)	Estimated Energy Storage Maximum Energy (MWh)	1 for 1 Replacement with 4- hour Energy Storage Capacity (MW)
El Nido sub-area	188	1420	46
Western LA Basin sub-area	1957	14205	687
Eastern LA Basin sub-area	1138	5038	800
Overall LA Basin area	3095	19243	1487

#### LA Basin LCR area Requirement

Table 3.3-78 identifies the area requirements. The LCR requirement for the LA Basin is the sum of the Western and Eastern LA Basin local capacity requirements.

Table 3.3-78 LA Basin LCR area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)		
	Study Results for the Delay Scenario for Laguna Bell – Mesa #1 230 kV Line Upgrade Project						
2025	First Limit	See Western LA Basin and Eastern LA Basin	Sum of Western and Eastern LA Basin LCR needs	See Western and Eastern LA Basin LCR results	4797		
Sens	Sensitivity Study Results for the Laguna Bell – Mesa #1 230 kV Line Upgrade Project If Implemented Prior to  June 1, 2025						
2024	First Limit	See Western LA Basin and Eastern LA Basin	Sum of Western and Eastern LA Basin LCR needs	See Western and Eastern  LA Basin LCR results	4123		



#### **Effectiveness factors:**

See Attachment B - Table titled LA Basin.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7550, 7570, 7580, 7590, 7630, and 7750 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

There are other combinations of contingencies in the area that could overload other 230 kV lines in this sub-area resulting in less LCR need. As such, anyone of them (combination of contingencies) could become binding for any given set of procured resources. As a result, these effectiveness factors may not be the best indicator towards informed procurement.

# Changes compared to last year's results

Compared with 2024, the study demand for the LA Basin is 340 MW lower and the LCR needs have increased by 384 MW. The increase in the LCR need for the overall LA Basin is driven by the current uncertainty of the Laguna Bell — Mesa #1 230kV line upgrade project being implemented and placed in service before June 1, 2025 at this time. However, if this upgrade project is able to achieve in-service date prior to June 1, 2025, the overall LA Basin LCR need can decrease by 290 MW. The CAISO will work closely with SCE to ascertain the commercial operating date for the project.

# 3.3.10 San Diego-Imperial Valley Area

## 3.3.10.1 **Area Definition:**

The transmission tie lines forming a boundary around the Greater San Diego-Imperial Valley area include:

Imperial Valley – North Gila 500 kV Line

Otay Mesa - Tijuana 230 kV Line

San Onofre - San Luis Rey #1 230 kV Line

San Onofre – San Luis Rey #2 230 kV Line

San Onofre – San Luis Rey #3 230 kV Line

San Onofre - Talega 230 kV Line

San Onofre – Capistrano 230 kV Line

Imperial Valley – Wixom – El Centro 230 kV Line

Imperial Valley – La Rosita 230 kV Line

The substations that delineate the Greater San Diego-Imperial Valley area are:

Imperial Valley is in North Gila is out



Otay Mesa is in Tijuana is out

San Onofre is out San Luis Rey is in

San Onofre is out San Luis Rey is in

San Onofre is out San Luis Rey is in

San Onofre is out Talega is in

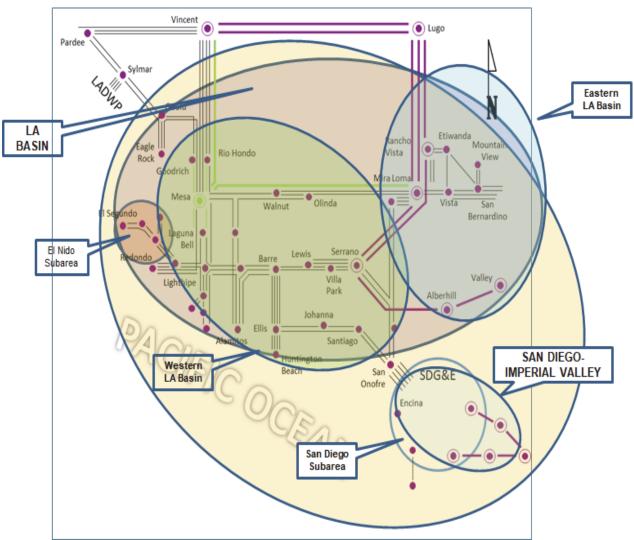
San Onofre is out Capistrano is in

Imperial Valley is in Wixom (El Centro) is out

Imperial Valley is in La Rosita is out

# San Diego-Imperial Valley LCR Area Diagram

Figure 3.3-92 San Diego-Imperial Valley LCR Area





## San Diego-Imperial Valley LCR Area Load and Resources

Table 3.3-79 provides the forecast load and resources in the San Diego-Imperial Valley LCR Area in 2025. The list of generators within the LCR area are provided in Attachment A.

In the year 2025 the estimated time of local area peak is 5:00 PM (PDT).

At the local area peak time the estimated, ISO metered, solar output is 12.4%.

If required, all non-solar technology type resources are dispatched at NQC.

Table 3.3-79 San Diego-Imperial Valley LCR Area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	4874	Market/Net Seller/Wind	3707	3707
AAEE, AAFS & AATE	4	Battery/Hybrid	1564	1564
Behind the meter DG	-236	MUNI/QF	3	3
Net Load	4642	LTPP Preferred Resources	0	0
Transmission Losses	138	Existing Demand Response	26	26
Pumps	0	Solar	169	169
Load + Losses + Pumps	4780	Total	5469	5469

## Approved transmission projects modeled:

- 1. S-Line (aka Imperial Valley El Centro 230kV) upgrade
- 2. Southern Orange County Reliability Upgrade Project Alternative 3 (Rebuild Capistrano Substation, construct a new SONGS Capistrano 230 kV line and a new 230 kV tap line to Capistrano)
- 3. TL649D Reconductor (San Ysidro Otay Lake Tap)
- 4. Reconductor TL 605 Silvergate Urban

The 500kV line series capacitors on the on the Southwest Powerlink and Sunrise Powerlink lines are bypassed in the study case.

## 3.3.10.2 El Cajon Sub-area

El Cajon is sub-area of the San Diego-Imperial Valley LCR area.

## El Cajon LCR Sub-area Diagram



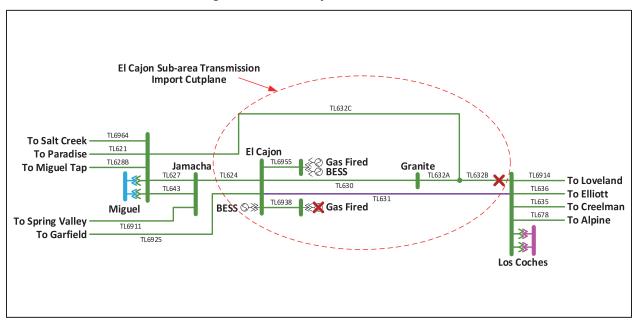


Figure 3.3-93 El Cajon LCR Sub-area

## El Cajon LCR Sub-area Load and Resources

Table 3.3-80 provides the forecast load and resources in El Cajon LCR sub-area. The list of generators within the LCR Sub-area are provided in Attachment A.

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	184	Market/Net Seller	94	94
AAEE, AAFS & AATE	-2	Battery/Hybrid	57	57
Behind the meter DG	-16	MUNI/QF	0	0
Net Load	166	LTPP Preferred Resources	0	0
Transmission Losses	0	Existing 20-minute Demand Response	0	0
Pumps	0	Solar	0	0
Load + Losses + Pumps	166	Total	151	151

Table 3.3-80 El Cajon Sub-area Forecast Load and Resources

# El Cajon LCR Sub-area Hourly Profiles

Figure 3.3-94 illustrates the forecast 2025 annual load forecast profile in the El Cajon LCR subarea and the Category P1 (L-1 Contingency) transmission load serving capability without generation. Figure 3.3-95 provides the 2025 daily load forecast profile for the peak day, estimated amount of energy storage that can be added to this local area from charging restriction perspective, and estimated four-hour capacity amount under the most critical contingency.



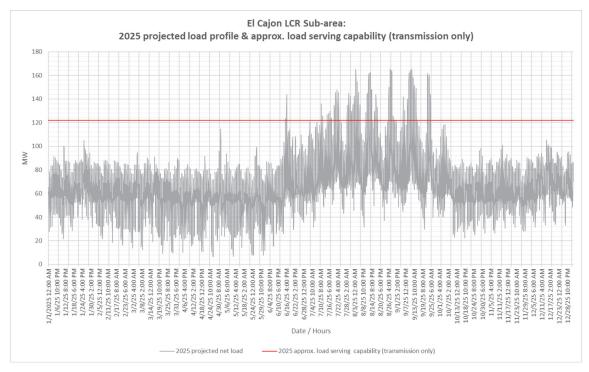
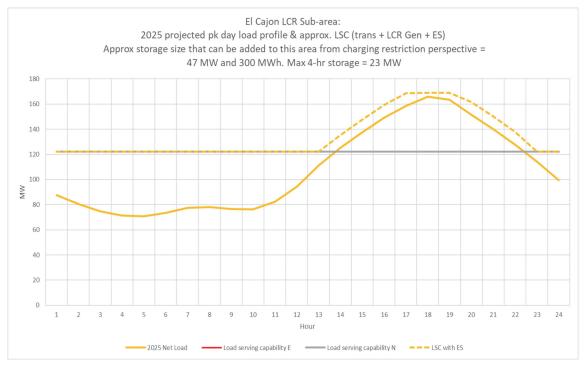


Figure 3.3-94 El Cajon LCR Sub-area 2025 Annual Load Forecast Profiles





## El Cajon LCR Sub-area Requirement

Table 3.3-81 identifies the sub-area 2025 LCR requirements. The Category P3 (Single Contingency) LCR requirement is 96 MW.



Table 3.3-81 El Cajon LCR Sub-area Requirements

Year	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	P3	El Cajon – Los Coches 69 kV Line (TL631)	El Cajon unit out of service followed by TL632 Granite–Los Coches–Miguel 69 kV 3-Terminal Line	96

#### **Effectiveness factors:**

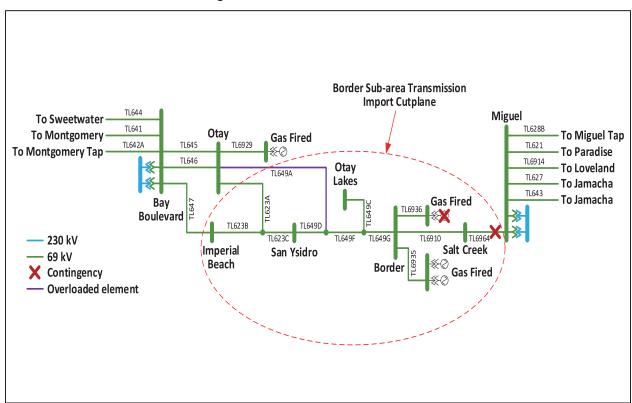
All units within the El Cajon sub-area have the same effectiveness factor.

## 3.3.10.3 Border Sub-area

Border is sub-area of the San Diego – Imperial Valley LCR area.

## **Border LCR Sub-area Diagram**

Figure 3.3-96 Border LCR Sub-area



## **Border LCR Sub-area Load and Resources**

Table 3.3-82 provides the forecast load and resources in Border LCR sub-area. The list of generators within the LCR Sub-area are provided in Attachment A.

Table 3.3-82 Border Sub-area Forecast Load and Resources



Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	176	Market/Net Seller	149	149
AAEE, AAFS & AATE	-2	Battery	0	0
Behind the meter DG	-18	MUNI/QF	0	0
Net Load	156	LTPP Preferred Resources	0	0
Transmission Losses	1	Existing 20-minute Demand Response	0	0
Pumps	0	Solar	0	0
Load + Losses + Pumps	157	Total	149	149

## **Border LCR Sub-area Hourly Profiles**

Figure 3.3-97 illustrates the 2025 annual load forecast profile in the Border LCR sub-area and the Category P1 transmission load serving capability without gas generation. Figure 3.3-98 illustrates the 2025 daily load forecast profile for the peak day, estimated amount of energy storage that can be added to this local area from charging restriction perspective, and estimated four-hour capacity amount under the most critical contingency.

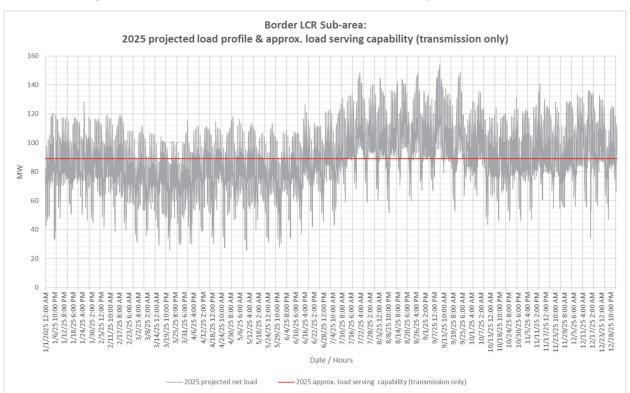
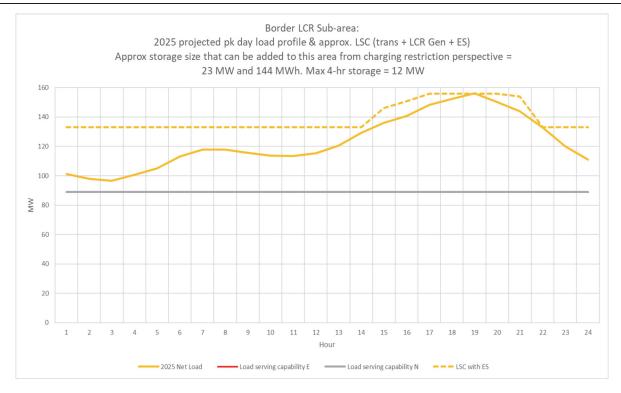


Figure 3.3-97 Borden LCR Sub-area 2025 Annual Day Forecast Profiles

Figure 3.3-98 Border LCR Sub-area 2025 Peak Day Forecast Profiles





## **Border LCR sub-area requirement**

Table 3.3-83 identifies the sub-area requirements. The LCR requirement for Category P3 contingency is 99 MW.

 Year
 Category
 Limiting Facility
 Contingency
 LCR (MW) (Deficiency)

 2025
 P3
 Otay – Otay Lakes Tap 69 kV (TL649A)
 Border unit out of service followed by the outage of Miguel-Salt Creek 69 kV (TL6964)
 99

Table 3.3-83 Border LCR Sub-area Requirements

## **Effectiveness factors:**

All units within the Border sub-area have the same effectiveness factor.

## 3.3.10.4 San Diego Sub-area

San Diego is a sub-area of the San Diego-Imperial Valley LCR area.

## San Diego LCR Sub-area Diagram

Please refer to Figure 3.3-92 above.

## San Diego LCR Sub-area Load and Resources

Table 3.3-84 provides the forecast load and resources in San Diego LCR sub-area. The list of generators within the LCR sub-area are provided in Attachment A.



Table 3.3-84 San Diego Sub-area 2025 Forecast Load and Resources

Load (MW)		Generation (MW)	Aug NQC	At Peak
Gross Load	4874	Market/Net Seller/Wind	2735	2735
AAEE, AAFS & AATE	4	Battery/Hybrid	1209	1209
Behind the meter DG	-236	MUNI/QF	3	3
Net Load	4642	LTPP Preferred Resources	0	0
Transmission Losses	138	Existing Demand Response	26	26
Pumps	0	Solar	7	7
Load + Losses + Pumps	4780	Total	3980	3980

# San Diego LCR Sub-area Hourly Profiles

Figure 3.3-99 illustrates the forecast 2025 annual load profile in the San Diego LCR sub-area with the transmission load serving capability only. Figure 3.3-100 provides load shape for peak load day, estimated energy storage maximum capacity and energy as well as estimated four-hour capacity amount based on its maximum charging capability under the most critical contingency.

Figure 3.3-99 San Diego LCR Sub-area 2025 Annual Load Profile with Estimated Transmission Load Serving Capability Only

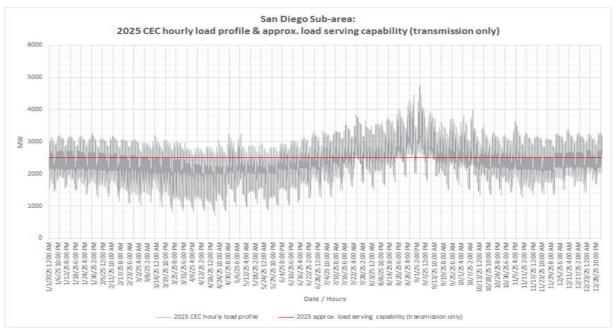
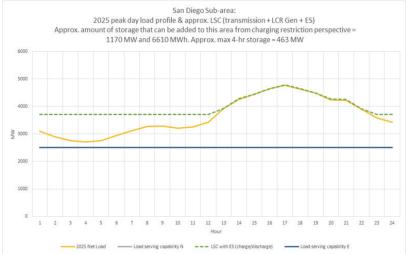




Figure 3.3-100 San Diego LCR Sub-area 2025 Load Shape and Estimated Maximum Energy Storage Capacity and Energy Based on Charging Capability Under Critical Contingency



## San Diego LCR Sub-area Requirement

Table 3.3-85 identifies the sub-area LCR requirements. The Category P6 contingency LCR requirement is 2709 MW. The LCR need is lower due to lower demand forecast from the CEC for the San Diego area.

Table 3.3-85 San Diego Sub-area LCR Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Remaining Sycamore- Suncrest 230 kV line	ECO-Miguel 500 kV line, system readjustment, followed by one of the Sycamore-Suncrest 230 kV lines, or vice versa	2709

#### **Effectiveness factors:**

See Attachment B - Table titled San Diego.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7820 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## 3.3.10.5 San Diego-Imperial Valley Overall

## San Diego-Imperial Valley LCR area Hourly Profiles

Since the San Diego sub-area has all the substation loads, the overall San Diego-Imperial Valley area has the same load profile as the San Diego bulk sub-area (Figure 3.3-101). The Imperial Valley area has extra generating resources. With the implementation of the S-line upgrade, additional LCR need beyond the San Diego sub-area need is eliminated. Thus, the LCR need for the overall San Diego-Imperial Valley LCR area is the same as the San Diego bulk sub-area.



The following is a summary of estimated amount of storage for the sub-areas and the overall area based on maximum charging capability perspective. Due to non-linearity of power system and the various critical contingencies and load shapes for each sub-area and the overall area, it is noted that the estimated maximum amount of storage for the sub-areas many not add up to be sum of the overall area. Since the San Diego sub-area has all the substation loads, the overall San Diego-Imperial Valley area has the same load profile as the San Diego bulk sub-area and therefore same amount of energy storage for the San Diego sub-area.

Table 3.3-86 Estimated San Diego Sub-areas and Overall Area Energy Storage Capacity and Energy Based on Maximum Charging Capability Perspective

Area/Sub-area	Estimated Energy Storage Maximum Capacity (MW)	Estimated Energy Storage Maximum Energy (MWh)	1 for 1 Replacement with 4- hour Energy Storage Capacity (MW)
El Cajon sub-area	47	300	23
Border sub-area	23	144	12
San Diego sub-area	1170	6610	463
Overall San Diego-Imperial Valley Area	1170	6610	463

## San Diego-Imperial Valley LCR area Requirement

Table 3.3-87 identifies the area LCR requirements. The LCR requirement for Category P3 contingency is 2709 MW.

Table 3.3-87 San Diego-Imperial Valley LCR area Requirements

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW) (Deficiency)
2025	First Limit	P6	Remaining Sycamore- Suncrest 230 kV line	ECO-Miguel 500 kV line, system readjustment, followed by one of the Sycamore-Suncrest 230 kV lines, or vice versa	2709

#### Effectiveness factors:

See Attachment B - Table titled San Diego.

For other helpful procurement information please read procedure 2210Z Effectiveness Factors under 7820 posted at: <a href="http://www.caiso.com/Documents/2210Z.pdf">http://www.caiso.com/Documents/2210Z.pdf</a>

## Changes compared to last year's results

Compared with the 2024 LCT Study results, the demand forecast is lower by 128 MW. The overall LCR needs for the San Diego-Imperial Valley decreases by 125 MW due to lower demand forecast.



# 3.3.11 Valley Electric Area

Valley Electric Association LCR area has been eliminated on the basis of the following:

No category B issues were observed in this area

Category C and beyond -

- No common-mode N-2 issues were observed
- No issues were observed for category B outage followed by a common-mode N-2 outage
- All the N-1-1 issues that were observed can either be mitigated by the existing UVLS or by an operating procedure

# 3.4 Summary of Engineering Estimates for Intermediate Years by Local Area

Engineering estimates, along with detailed explanations for contributing factors in each local area are given below per methodology explained in Chapter 2 above. The estimates represent an engineering approximation. They are not actual technical studies and they may be superseded by actual technical studies.

## 3.4.19.1 Humboldt Area

The net peak load growth from 2025 to 2029 is estimated at 2.25 MW/year.

There is no new transmission project that directly affects the LCR change from 2025 to 2029, although the Maple Creek reactive support is now rescoped to Willow Creek 60 kV substation.

There is no new resource that directly affects the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total increase for each intermediate year depends only on the load forecast and the study results for year 2025 and it is estimated at about 2.25 MW/year for Category P6.



Table 3.4-1 ISO's estimated Humboldt LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	P6	Humboldt-Trinity 115 kV	Cottonwood-Bridgeville 115 kV & Humboldt - Humboldt Bay 115 kV	166
2027	First Limit	P6	Humboldt-Trinity 115 kV	Cottonwood-Bridgeville 115 kV & Humboldt - Humboldt Bay 115 kV	169

## 3.4.19.2 North Coast/ North Bay Area

The net peak load growth from 2025 to 2029 is estimated at about 8.5 MW/year.

There are 4 new transmission project that directly affects the LCR change from 2025 to 2029.

- Clear Lake 60 kV System Reinforcement (sub-area need only)
- Vaca Dixon-Lakeville 230 kV Corridor Series Compensation (Oct 2025)
- Santa Rosa 115 kV lines Reconductoring project (sub-area need only)
- New Collinsville 500 kV Substation (Oct 2027)

The Vaca Dixon-Lakeville 230 kV Corridor Series Compensation project will be in-service before year 2026 and will influence the results in both year, whereas the New Collinsville 500 kV Substation project with LCR reduction will be in-service at the end of 2027 and will not influence the LCR results starting until 2028.

There is no new resource that directly affects the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total need for years 2026 and 2027 depend on load growth and the drop in need due to the first project.

Table 3.4-2 ISO's estimated North Coast/ North Bay LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	P3	Tulucay - Vaca Dixon 230 kV Line	Vaca Dixon - Lakeville 230 kV with DEC out of service	836
2027	First Limit	P3	Tulucay - Vaca Dixon 230 kV Line	Vaca Dixon - Lakeville 230 kV with DEC out of service	844

## 3.4.19.3 *Sierra Area*

The net peak load growth from 2025 to 2029 is estimated at -5.5 MW/year.

There are 2 new transmission projects that directly affects the LCR change from 2025 to 2029.



- East Marysville 115/60 kV (Jan 2028)
- Gold Hill 230/115 kV Transformer Addition (June 2028)

These projects inpact sub-area need only and will not influence years 2026 and 2027,

There is no new resource that directly affects the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total requirement for both year 2026 and 2027 depend on the result for year 2025 only plus an estimated increase of 88.25 MW/year for Category P6.

Year	Limit	Limit Category Limiting Facility Contingency		Contingency	LCR (MW)
2026	First limit	P6	Table Mountain – Pease 60 kV	Table Mountain – Palermo 230 kV Table Mountain – Rio Oso 230 kV	1620
2027	First limit	P6	Table Mountain – Pease 60 kV	Table Mountain – Palermo 230 kV Table Mountain – Rio Oso 230 kV	1709

Table 3.4-3 ISO's estimated Sierra LCR need:

#### 3.4.19.4 Stockton Area

The net peak load growth from 2025 to 2029 is estimated at -4.25 MW/year.

There are two new transmission project that directly affects the LCR change from 2025 to 2029. One with in-service date in July 2026 that affects the Tesla-Bellota sub-area in year 2027 only and one with in-service date in 2029 that affects Lockeford sub-area and therefore it will not impact the LCR results in 2026 and 2027.

There is one new resource that directly affects the LCR change from 2025 to 2029 and it get's added to the Tesla-Bellota sub-area in 2027 after the in-service date of the Vierra Loop-in project.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total increase for each intermediate year depends on the study results for year 2025 and 2029 and on the available resources in the Lockeford and Tesla-Bellota sub-areas.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	N/A	Stockton Overall		736
2027	First Limit	N/A	Stockton Overall		737

Table 3.4-4 ISO's estimated Stockton LCR need:



#### 3.4.19.5 **Bay Area**

The net peak load growth from 2025 to 2029 is estimated at 88.25 MW/year.

There are a few new transmission projects that directly affect the LCR change from 2025 to 2029.

However for both years the TPP project impact is minimal to the Bay Area overall requirement because the most important LCR reduction projects in-service dates are past 2027.

There are no new resources that directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There are no resources projected to retire that directly affects the LCR change from 2025 to 2029.

The total LCR need in 2026 and 2027 depend on the studie results for year 2025, the load growth between years and the available resources in the area. Because Bay Area in already deficient in year 2025 it will stay deficient in 2026 and 2027.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First limit	P6	Metcalf #13 500/230 kV TB	Metcalf #11 & #12 500/230 kV TBs	7441
2027	First limit	P6	Metcalf #13 500/230 kV TB	Metcalf #11 & #12 500/230 kV TBs	7441

Table 3.4-5 ISO's estimated Bay Area LCR need:

#### 3.4.19.6 Fresno Area

The net peak load growth from 2025 to 2029 is estimated at -28.75 MW/year.

There are a few new transmission projects that directly affect the LCR change from 2025 to 2029.

The TPP project impact is minimal to both years because none of the projects directly impact the Fresno overall LCR need.

There are no new resources that directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total increase for each intermediate year depends on load growth and the study results between years 2025 and 2029 and it is estimated at about -5.00 MW/year for Category P6.



Table 3.4-0	3 ISO's	estimated	Fresno	I CR	need:
1 0010 0.7	J 100 3	Collinated	1 103110		niccu.

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First limit	P6	Henrietta 230/115 kV Bank 3	Mc Call-Helm 230 kV Line and Mc Call-Mustang 230 kV line	2527
2027	First limit	P6	Kingsburg-Contadina 115 kV Line	Mc Call-Helm 230 kV Line and Mc Call-Mustang 230 kV line	2522

#### 3.4.19.7 Kern Area

The net peak load growth from 2025 to 2029 is estimated at -12 MW/year.

There are three new transmission projects that directly affect the LCR change from 2025 to 2029. (All with 2027 in-service dates and therefore not influencing year 2026 and 2027.)

There are no new resources that directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.

The total requirement for each intermediate year depends on the load increase and the study results regarding South Kern PP sub-area in year 2025 and it is estimated to be an increase of about -12 MW/year for Category P6.

Table 3.4-7 ISO's estimated Kern LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	N/A	P6	Aggregate of Sub-areas.	422	
2027	N/A	P6	Aggregate of Sub-areas.		410

#### 3.4.19.8 Big Creek/Ventura Area

The net peak load growth from 2025 to 2029 is estimated at 27.25 MW/year.

There is one new transmission project that directly affects the LCR change from 2025 to 2029.

The Sylmar-Pardee 230 kV Rating Increase Project does not influence years 2026 and 2027 due to it Oct 2027 in-service date.

There are no new resources that directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There are no resources projected to retire that directly affects the LCR change from 2025 to 2029.



The total LCR requirement for year 2026 and 2027 are only dependent on year 2025 results and load growth between years.

Table 3.4-8 ISO's estimated Big Creek/Ventura LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	P6	Remaining Sylmar - Pardee 230 kV	Lugo - Victorville 500 kV line followed by one of the Sylmar - Pardee #1 or #2 230 kV lines	2172
2027	First Limit	P6	Remaining Sylmar - Pardee 230 kV	Lugo - Victorville 500 kV line followed by one of the Sylmar - Pardee #1 or #2 230 kV lines	2200

#### 3.4.19.9 *LA Basin Area*

The net peak load growth from 2025 to 2029 is estimated at 74.75 MW/year.

There are one new transmission projects that directly affect the LCR change from 2025 to 2029.

There are no new resources that directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There are no resources projected to retire that directly affect the LCR change from 2025 to 2029.

The total increase for each intermediate year depends on load growth and the study results between years 2025 (with the Laguna Bell-Mesa #1 230 KV Line Upgrade project in-service) and 2029 and it is estimated at about 238.25 MW/year.

Table 3.4-9 ISO's estimated LA Basin LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	N/A	Sum of Western and Eastern	See Western and Eastern	4361
2027	First Limit	N/A	Sum of Western and Eastern	See Western and Eastern	4600

#### 3.4.19.10 San Diego-Imperial Valley Area

The net peak load growth from 2025 to 2029 is estimated at 66.5 MW/year.

There are a few transmission projects that directly affect the LCR change from 2025 to 2029. The projects however do not meaningfully impact the overall LCR results.

There are 2 new resources that do not directly affect the LCR change from 2025 to 2029.

There is no projected change in resource contractual status that directly affects the LCR change from 2025 to 2029.

There is no resource projected to retire that directly affects the LCR change from 2025 to 2029.



The total increase for each intermediate year depends on load growth and the study results between years 2025 and 2029 and it is estimated at about 103 MW/year for Category P6.

Table 3.4-10 ISO's estimated San Diego-Imperial Valley LCR need:

Year	Limit	Category	Limiting Facility	Contingency	LCR (MW)
2026	First Limit	P6	Remaining Sycamore  – Suncrest 230 kV	Eco – Miguel 500 kV, followed by one of the Sycamore – Suncrest 230 kV lines	2812
2027	First Limit	P6	Remaining Sycamore – Suncrest 230 kV	Eco – Miguel 500 kV, followed by one of the Sycamore – Suncrest 230 kV lines	2915



#### 4. Energy Storage Assessment as Part of LCR Study

#### 4.1 Introduction

Energy storage is emerging as an essential part of the of the resource mix due to its characteristic of being able to store and release energy as required. Due to this flexibility, the energy storage compliments the development of renewable generation like wind and solar which are intermittent in nature. However, similar to wind and solar, energy storage resources are also use limited. As such, when energy storage is considered as a solution to the transmission system reliability needs, the sufficiency of the alternative needs to be validated for every hour of the day. Unlike other use limited resources, energy storage is also a load when it is operating in a charging mode. Therefore, the 24-hour validation also need to make sure that the transmission system has sufficient capability to charge the energy storage resource.

As part of the annual LCR study, the ISO has been performing assessment to estimate a maximum amount of energy storage that can be added to a local capacity area from the charging restriction perspective. The purpose of this section is to outline the approach of the evaluation of energy storage as part of the LCR study.

#### 4.2 Energy Storage Assessment Approach

The basic concept of the energy storage assessment is to perform a 24-hour validation. The 24-hour validation is performed to make sure that there will be sufficient window and system capacity to be able to charge the storage for the next day peak under the worst contingency condition. The validation includes hour-by-hour comparison of the net load<sup>9</sup> versus the total (transmission + generation) load serving capability.

Peak day 24-hour load profile is used, either directly from the CEC hourly load forecast for the year of study or, if the study area is smaller (local) and the corresponding CEC hourly load forecast is not available, the future year load profile is developed by escalating from the historical load profile for the study area. In the latter approach, the historical load profile is escalated in a manner that accounts for the change in load shape from historical due to forecasted incremental behind-the-meter PV generation (BTM-PV) in the area.

System load serving capability includes transmission system load serving capability and local generation load serving capability. The transmission system load serving capability is calculated under the worst contingency condition without any local generation. The local generation load serving capability is calculated under the worst contingency condition with amount of generation needed according to the local capacity requirement considering effectiveness of the aggregate of local generation to the worst constraint.

145

<sup>&</sup>lt;sup>9</sup> Net load here is defined as gross load minus contribution from behind-the-meter generation and load modifier, like additional achievable energy efficiency (AAEE).



Table below includes key assumptions used in the energy storage assessment.

Table 4.2-1 Key assumptions used in the energy storage assessment

Assumption	Rationale
Storage added displaces existing generation (all types) MW to MW in aggregation.	To maintain local RA capacity. Any incremental storage is assumed to be an local RA resource
Maximum storage addition cannot exceed LCR amount.	To maintain local RA capacity. Any incremental storage is assumed to be an local RA resource
Includes storage charging/discharging efficiency of 85%.	Based on general battery efficiency
Storage is charged in all hours where the storage is not discharged. Maximum charging is capped at the amount of storage size (Pmin).	Under worst contingency condition, for battery to have sufficient discharge energy, it is assumed that battery is charged in all hours it is not discharged.
An hourly energy margin of 5% or 10 MW, the larger of the two, is applied to both charging and discharging need.	To add margin when battery is discharging so it does not have to follow load curve exactly. For charging same margin is added to discount available system capability each hour.

#### 4.2.1 Load Data

The first step in preforming the 24-hour validation is to develop a peak-day load profile. For the local capacity areas for which the area definition match with the definition of areas in CEC load forecast, the 24-hour peak day profile can be extracted directly from the CEC hourly load forecast data. For other local capacity areas, future year load profile need to be developed by escalating from the historical load profile for the study area. In the latter approach, the historical load profile is escalated in a manner that accounts for the change in load shape from historical due to forecasted incremental behind-the-meter PV generation (BTM-PV) in the area.

#### 4.2.2 Load Serving Capabilities

Second step in performing the 24-hour validation is to calculate load serving capabilities. Transmission-only load serving capabilities are calculated in power flow under the worst LCR contingency by turning off all local generation following by scaling down load in the local area until the constraint is addressed. For some local areas, it may not be feasible to achieve this with AC solution in the power flow and may need to rely on the spreadsheet based calculation using DC effectiveness factors. The transmission-only load serving capability is used uniformly for each hour within the 24-hour validation. Local generation load serving capability is calculated



under the same worst LCR contingency condition with amount of generation needed according to the local capacity requirement considering effectiveness of the aggregate of local generation to the constraint. The generation load serving capability needs to be captured separately for different technologies due to having different output profiles within the 24-hour period. The conventional thermal resources are assumed to have uniform capability throughout the 24-hour period. Whereas, the renewables, like solar and wind are dispatched using appropriate output profiles. The use-limited resources, like storage and demand response are to be dispatched within the period of peak load hours staying within the available total energy. The transmission-only and the local generation load serving capabilities are then added together to get the total load serving capabilities for each hour.

With the transmission-only load serving capability and generation load serving capabilities using LCR resources calculated, each hour should have sufficient load serving capability to serve the net load and provides the setup for energy storage addition estimation.

#### 4.2.3 Estimating Energy Storage Addition

Once the hourly data for the net load and load serving capabilities are stablished, additional amount storage can be estimated by adding storage and displacing existing local area LCR resource by the same amount. Because of the displacement of the existing local resources, generation load serving capability will be reduced, which will result in the total load serving capability being less than the net load for certain hours. The storage added then can be dispatched within those hours. An hourly energy margin of 5% or 10 MW, the larger of the two, is added to the storage MW needed for each of the deficient hours. This is done to create a step dispatch in the storage operation instead of following the load curve perfectly. Once the storage is dispatched for all the deficient hours with appropriate amount, the storage MW dispatched are added together to get the total storage energy (MWh) need associated with the storage MW chosen. The storage is charged within the hours that it is not discharged by using the surplus load serving capability. An hourly energy margin of 5% or 10 MW, the larger of the two, is reduced from the surplus load serving capabilities to account for potential inaccuracies load forecasting and in calculating various load serving capabilities. The process is repeated by increasing or decreasing the chosen storage MW until the total discharging energy becomes equal to the total available charging energy, which establishes the maximum amount of energy storage that can be added to the local area from the charging restriction perspective.

The energy storage addition estimation is performed only for the LCR area /subareas with a defined load pocket. The energy storage addition estimation is not performed for flow-through areas as these don't have defined load pocket and as such, don't have a particular load profile.

#### 4.2.4 1-to-1 Replacement with 4-hour Storage

The maximum 4-hour energy storage amount is also estimated as part of this assessment. The maximum 4-hour MW is not a physical limit. Instead, it is a limit up to which a 4-hour energy storage can replace the existing local resource 1-to-1.

# Attachment A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical studies

https://www.caiso.com/InitiativeDocuments/AttachmentA-ListofPhysicalResourcesAccountedforinthe2025and2029LocalCapacityTechnicalStudies.xls

#### ATTACHMENT A

List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies

#### ! Attention!

This list is populated with 2024 NQC data where available.

This is not the offical NQC data for year 2025.

The official 2025 NQC data will be developed later and published on the ISO web site.

	The NQC for this resources can be found on the 2024 NQC list
ZZ_	These units are modeled in the base case however they cannot be matched to the NQC list
	These are new units not operational at the time of studies or represent a change to existing units once new resurces become operational
ZZZ_	Resources represented in the 2025 studies
ZZZZ_	Resources represented in the 2029 studies in addition to those already used in the 2025 study
	Current mathballed resources
	Resources expected to retire by a certain date or otherwise not beeing available
ZZZZZ_	Current retired resources
ZZZZZZ_	Current retired resources

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1	PG&E	ALMEGT_1_UNIT 1	38118	ALMDACT1	13.8	23.40	1	Bay Area	Oakland		MUNI
2	PG&E	ALMEGT_1_UNIT 2	38119	ALMDACT2	13.8	23.50	1	Bay Area	Oakland		MUNI
3	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	1	Bay Area	Contra Costa	Pumps	MUNI
4	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	2	Bay Area	Contra Costa	Pumps	MUNI
5	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	3	Bay Area	Contra Costa	Pumps	MUNI
6	PG&E	BANKPP_2_NSPIN	38815	DELTA B	13.2	11.55	4	Bay Area	Contra Costa	Pumps	MUNI
7	PG&E	BANKPP_2_NSPIN	38815	DELTA B	13.2	11.55	5	Bay Area	Contra Costa	Pumps	MUNI
8	PG&E	BANKPP_2_NSPIN	38770	DELTA C	13.2	11.55	6	Bay Area	Contra Costa	Pumps	MUNI
9	PG&E	BANKPP_2_NSPIN	38770	DELTA C	13.2	11.55	7	Bay Area	Contra Costa	Pumps	MUNI
10	PG&E	BANKPP_2_NSPIN	38765	DELTA D	13.2	11.55	8	Bay Area	Contra Costa	Pumps	MUNI
11	PG&E	BANKPP_2_NSPIN	38765	DELTA D	13.2	11.55	9	Bay Area	Contra Costa	Pumps	MUNI
12	PG&E	BANKPP_2_NSPIN	38760	DELTA E	13.2	11.55	10	Bay Area	Contra Costa	Pumps	MUNI
13	PG&E	BANKPP_2_NSPIN	38760	DELTA E	13.2	11.55	11	Bay Area	Contra Costa	Pumps	MUNI
14	PG&E	BLKDIA_2_BDEBT1	365773	Q1111BES	0.69	200.00	1	Bay Area	Pittsburg		Battery
15	PG&E	BRDSLD_2_HIWIND	32172	HIGHWINDS	34.5	34.28	1	Bay Area	Contra Costa	Aug NQC	Wind
16	PG&E	BRDSLD_2_MTZUM2	32179	MONTEZUM	0.69	16.55	1	Bay Area	Contra Costa	Aug NQC	Wind
17	PG&E	BRDSLD_2_MTZUMA	32188	MONTEZUM	0.69	7.79	1	Bay Area	Contra Costa	Aug NQC	Wind
18	PG&E	BRDSLD_2_SHILO1	32181	SHILOH1W	34.5	31.74	1	Bay Area	Contra Costa	Aug NQC	Wind
19	PG&E	BRDSLD_2_SHILO2	365749	SHILOH2WIND	0.575	31.74	1	Bay Area	Contra Costa	Aug NQC	Wind
20	PG&E	BRDSLD_2_SHLO3A	32191	SHILOH3W	0.58	21.69	1	Bay Area	Contra Costa	Aug NQC	Wind
21	PG&E	BRDSLD_2_SHLO3B	32194	SHILOH4W	0.58	21.16	1	Bay Area	Contra Costa	Aug NQC	Wind
22	PG&E	CALPIN_1_AGNEW	35860	AGNEWCOG	13.8	21.71	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
23	PG&E	CALPIN_1_AGNEW	35860	AGNEWCOG	13.8	6.85	2	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
24	PG&E	CAYTNO_2_VASCO				4.30		Bay Area	Contra Costa	Aug NQC	Market
25	PG&E	CLRMTK_1_QF				0.00		Bay Area	Oakland	Not modeled	QF/Selfgen
26	PG&E	COCOPP_2_CTG1	33188	MARSHCT1	16.4	193.09	1	Bay Area	Contra Costa	Aug NQC	Market
27	PG&E	COCOPP_2_CTG2	33188	MARSHCT2	16.4	192.32	2	Bay Area	Contra Costa	Aug NQC	Market
28	PG&E	COCOPP_2_CTG3	33189	MARSHCT3	16.4	191.57	3	Bay Area	Contra Costa	Aug NQC	Market
29	PG&E	COCOPP_2_CTG4	33189	MARSHCT4	16.4	192.89	4	Bay Area	Contra Costa	Aug NQC	Market
30	PG&E	COCOSB_6_SOLAR				0.00		Bay Area	Contra Costa	Not modeled Energy Only	Solar
31	PG&E	CROKET_7_UNIT	32900	CRCKTCOG	18	223.00	1	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
32	PG&E	CSCCOG_1_UNIT 1				6.00		Bay Area	San Jose, South Bay-Moss Landing		MUNI
33	PG&E	CSCGNR_1_UNIT 1	36858	Gia100	13.8	24.00	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
34	PG&E	CSCGNR_1_UNIT 2	36895	Gia200	13.8	24.00	2	Bay Area	San Jose, South Bay-Moss Landing		MUNI
35	PG&E	CUMBIA_1_SOLAR	33102	COLUMBIA	0.38	2.36	1	Bay Area	Pittsburg	Aug NQC	Solar

	PTO	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
36	PG&E	DELTA_2_PL1X4	33107	DEC STG1	24	289.49	1	Bay Area	Pittsburg	Aug NQC	Market
37	PG&E	DELTA_2_PL1X4	33108	DEC CTG1	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
38	PG&E	DELTA_2_PL1X4	33109	DEC CTG2	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
39	PG&E	DELTA_2_PL1X4	33110	DEC CTG3	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
40	PG&E	DIXNLD_1_LNDFL				0.87		Bay Area		Not modeled Aug NQC	Market
41	PG&E	DUANE_1_PL1X3	36863	DVRaGT1	13.8	48.27	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
42	PG&E	DUANE_1_PL1X3	36864	DVRbGT2	13.8	48.27	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
43	PG&E	DUANE_1_PL1X3	36865	DVRaST3	13.8	46.96	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
44	PG&E	ELKHRN_1_EESX3	366107	Q1374BESS1	0.505	62.50	1	Bay Area	South Bay-Moss Landing		Battery
45	PG&E	ELKHRN_1_EESX3	366108	Q1374BESS2	0.505	60.00	2	Bay Area	South Bay-Moss Landing		Battery
46	PG&E	ELKHRN_1_EESX3	366109	Q1374BESS3	0.505	60.00	3	Bay Area	South Bay-Moss Landing		Battery
47	PG&E	GATWAY_2_PL1X3	33118	GATEWAY1	18	172.79	1	Bay Area	Contra Costa	Aug NQC	Market
48	PG&E	GATWAY_2_PL1X3	33119	GATEWAY2	18	163.61	1	Bay Area	Contra Costa	Aug NQC	Market
49	PG&E	GATWAY_2_PL1X3	33120	GATEWAY3	18	163.61	1	Bay Area	Contra Costa	Aug NQC	Market
50	PG&E	GILROY_1_UNIT	35850	GILROYEN	13.8	75.57	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
51	PG&E	GILROY_1_UNIT	35871	GILROYEN	13.8	39.43	2	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
52	PG&E	GILRPP_1_PL1X2	35851	GROYPKR1	13.8	47.60	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
53	PG&E	GILRPP_1_PL1X2	35852	GROYPKR2	13.8	47.60	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
54	PG&E	GILRPP_1_PL3X4	35853	GROYPKR3	13.8	46.20	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
55	PG&E	GRZZLY_1_BERKLY	32741	HILLSIDE_12	12.47	0.31	1	Bay Area		Aug NQC	Net Seller
56	PG&E	KELSO_2_UNITS	33813	MARIPCT1	13.8	49.51	1	Bay Area	Contra Costa	Aug NQC	Market
57	PG&E	KELSO_2_UNITS	33815	MARIPCT2	13.8	49.51	2	Bay Area	Contra Costa	Aug NQC	Market
58	PG&E	KELSO_2_UNITS	33817	MARIPCT3	13.8	49.51	3	Bay Area	Contra Costa	Aug NQC	Market
59	PG&E	KELSO_2_UNITS	33819	MARIPCT4	13.8	49.51	4	Bay Area	Contra Costa	Aug NQC	Market
60	PG&E	KIRKER_7_KELCYN				3.41		Bay Area	Pittsburg	Not modeled	Market
61	PG&E	LAWRNC_7_SUNYVL				0.15		Bay Area		Not modeled Aug NQC	Market
62	PG&E	LECEF_1_UNITS	35858	LECEFST1	13.8	112.13	1	Bay Area	San Jose, South Bay-Moss Landing		Market
63	PG&E	LECEF_1_UNITS	35854	LECEFGT1	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
64	PG&E	LECEF_1_UNITS	35855	LECEFGT2	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
65	PG&E	LECEF_1_UNITS	35856	LECEFGT3	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
66	PG&E	LECEF_1_UNITS	35857	LECEFGT4	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
67	PG&E	LMBEPK_2_UNITA1	32173	LAMBIE	13.8	47.50	1	Bay Area	Contra Costa	Aug NQC	Market
68	PG&E	LMBEPK_2_UNITA2	32174	GOOSEHAV	13.8	47.60	3	Bay Area	Contra Costa	Aug NQC	Market
69	PG&E	LMBEPK_2_UNITA3	32175	CREED	13.8	47.75	2	Bay Area	Contra Costa	Aug NQC	Market
70	PG&E	LMEC_1_PL1X3	33113	LMECST1	18	246.03	1	Bay Area	Pittsburg	Aug NQC	Market
71	PG&E	LMEC_1_PL1X3	33111	LMECCT2	18	166.98	1	Bay Area	Pittsburg	Aug NQC	Market
72	PG&E	LMEC_1_PL1X3	33112	LMECCT1	18	166.98	1	Bay Area	Pittsburg	Aug NQC	Market
73	PG&E	MARTIN_1_SUNSET				0.56		Bay Area		Not modeled Aug NQC	QF/Selfgen
74	PG&E	METEC_2_PL1X3	35883	MEC STG1	18	223.24	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
75	PG&E	METEC_2_PL1X3	35881	MEC CTG1	18	186.90	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
76	PG&E	METEC_2_PL1X3	35882	MEC CTG2	18	186.90	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
77	PG&E	MISSIX_1_QF	33250	MISSON_D4	12.47	0.01	1	Bay Area	Ames	Aug NQC	QF/Selfgen
78	PG&E	MLPTAS_7_QFUNTS				0.00		Bay Area	San Jose, South Bay-Moss Landing	Not modeled Aug NQC	QF/Selfgen
79	PG&E	MOSSLD_2_PSP1	36223	DUKMOSS3	18	183.60	1	Bay Area	South Bay-Moss Landing		Market
80	PG&E	MOSSLD_2_PSP1	36221	DUKMOSS1	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
81	PG&E	MOSSLD_2_PSP1	36222	DUKMOSS2	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
82	PG&E	MOSSLD_2_PSP2	36226	DUKMOSS6	18	183.60	1	Bay Area	South Bay-Moss Landing		Market
83	PG&E	MOSSLD_2_PSP2	36224	DUKMOSS4	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
84	PG&E	MOSSLD_2_PSP2	36225	DUKMOSS5	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
85	PG&E	NEWARK_1_QF				0.03		Bay Area		Not modeled Aug NQC	QF/Selfgen
86	PG&E	OAK C_1_EBMUD				1.70		Bay Area	Oakland	Not modeled Aug NQC	MUNI
87	PG&E	OAK C_7_UNIT 1	32901	OAKLND 1	13.8	55.00	1	Bay Area	Oakland	Could retire by 2026	Market
88	PG&E	OAK C_7_UNIT 3	32903	OAKLND 3	13.8	55.00	1	Bay Area	Oakland	Could retire by 2026	Market
89	PG&E	OAK L_1_GTG1				0.00		Bay Area	Oakland	Not modeled Energy Only	Market
90	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	1	Bay Area	Ames		Market
91	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	2	Bay Area	Ames		Market
92	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	3	Bay Area	Ames		Market
93	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	4	Bay Area	Ames		Market
94	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	5	Bay Area	Ames		Market
95	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	6	Bay Area	Ames		Market
96	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	7	Bay Area	Ames		Market
97	PG&E	PALALT_7_COBUG				4.50		Bay Area		Not modeled	MUNI
98	PG&E	RICHMN_1_CHVSR2				1.05		Bay Area		Not modeled Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
99	PG&E	RICHMN_1_SOLAR				0.25		Bay Area		Not modeled Aug NQC	Solar
100	PG&E	RICHMN_7_BAYENV				0.37		Bay Area		Not modeled Aug NQC	Market
101	PG&E	RUSCTY_2_UNITS	35306	RUSELST1	15	237.09	3	Bay Area	Ames	No NQC - Pmax	Market
102	PG&E	RUSCTY_2_UNITS	35304	RUSELCT1	15	180.15	1	Bay Area	Ames	No NQC - Pmax	Market
103	PG&E	RUSCTY_2_UNITS	35305	RUSELCT2	15	180.15	2	Bay Area	Ames	No NQC - Pmax	Market
104	PG&E	RVRVEW_1_UNITA1	33178	RVEC_GEN	13.8	47.60	1	Bay Area	Contra Costa	Aug NQC	Market
105	PG&E	SHELRF_1_UNITS	33141	SHELL 1	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
106	PG&E	SHELRF_1_UNITS	33142	SHELL 2	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
107	PG&E	SHELRF_1_UNITS	33143	SHELL 3	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
108	PG&E	SRINTL_6_UNIT	33468	SRI INTL	9.11	0.96	1	Bay Area		Aug NQC	QF/Selfgen
109	PG&E	STOILS_1_UNITS	32921	CHEVGEN1	13.8	3.83	1	Bay Area	Pittsburg	Aug NQC	Market
110	PG&E	STOILS_1_UNITS	32922	CHEVGEN2	13.8	3.83	1	Bay Area	Pittsburg	Aug NQC	Market
111	PG&E	STOILS_1_UNITS	32923	CHEVGEN3	13.8	1.77	3	Bay Area	Pittsburg	Aug NQC	Market
112	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	29.66	1	Bay Area	Pittsburg	Aug NQC	Net Seller
113	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	29.66	2	Bay Area	Pittsburg	Aug NQC	Net Seller
114	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	22.57	3	Bay Area	Pittsburg	Aug NQC	Net Seller
115	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	1	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
116	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	2	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
117	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	3	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
118	PG&E	USWNDR_2_LABWD1	365729	LABRISAWIND	0.575	1.90	1	Bay Area	Contra Costa	Aug NQC	Wind
119	PG&E	USWNDR_2_SMUD	365574	SOLANO2W	1	18.38	2	Bay Area	Contra Costa	Aug NQC	Wind
120	PG&E	USWNDR_2_SMUD	365566	SOLANO1W	0.69	3.24	1	Bay Area	Contra Costa	Aug NQC	Wind
121	PG&E	USWNDR_2_SMUD2	365600	SOLANO3W	1	27.04	3	Bay Area	Contra Costa	Aug NQC	Wind
122	PG&E	USWPFK_6_FRICK	365608	FRICKWIND	0.69	2.12	1	Bay Area	Contra Costa	Aug NQC	Wind
123	PG&E	USWPJR_2_UNITS	39233	GRNRDG	0.69	16.55	1	Bay Area	Contra Costa	Aug NQC	Wind
124	PG&E	VISTRA_5_DALBT1	366711	DALLASBESS1	34.5	100.00	1	Bay Area	South Bay-Moss Landing		Battery
125	PG&E	VISTRA_5_DALBT2	366712	DALLASBESS2	34.5	100.00	2	Bay Area	South Bay-Moss Landing		Battery
126	PG&E	VISTRA_5_DALBT3	366713	DALLASBESS3	34.5	100.00	3	Bay Area	South Bay-Moss Landing		Battery
127	PG&E	VISTRA_5_DALBT4	366715	DALLASBESS4	34.5	100.00	4	Bay Area	South Bay-Moss Landing		Battery
128	PG&E	VISTRA_5_PLABT1	366244	PLANOBESS4	34.5	100.40	4	Bay Area	South Bay-Moss Landing		Battery
129	PG&E	VISTRA_5_PLABT2	366243	PLANOBESS3	34.5	100.40	3	Bay Area	South Bay-Moss Landing		Battery
130	PG&E	VISTRA_5_PLABT3	366242	PLANOBESS2	34.5	74.60	2	Bay Area	South Bay-Moss Landing		Battery
131	PG&E	VISTRA_5_PLABT4	366241	PLANOBESS1	34.5	74.60	1	Bay Area	South Bay-Moss Landing		Battery
132	PG&E	WNDMAS_2_UNIT 1	33173	BVISTAWND	0.6	8.04	1	Bay Area	Contra Costa	Aug NQC	Wind
133	PG&E	ZOND_6_UNIT				3.62		Bay Area	Contra Costa	Not modeled Aug NQC	Wind
134	PG&E	ZZ_FLOWD1_6_ALTPP1	35318	FLOWPTR	9.11	1.80	1	Bay Area	Contra Costa	No NQC - est. data	Wind

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
135	PG&E	ZZ_IMHOFF_1_UNIT 1	33136	CCCSD	12.47	0.00	1	Bay Area	Pittsburg	No NQC - hist. data	QF/Selfgen
136	PG&E	ZZ_MOSSLD_1_QF				0.00		Bay Area		Not modeled Aug NQC	QF/Selfgen
137	PG&E	ZZ_NA	35861	SJ-SCL W	4.3	0.00	1	Bay Area	San Jose, South Bay-Moss Landing	No NQC - hist. data	QF/Selfgen
138	PG&E	ZZ_NA	36209	SLD ENRG	12.47	0.00	1	Bay Area	South Bay-Moss Landing		QF/Selfgen
139	PG&E	ZZ_ZANKER_1_UNIT 1	35861	SJ-SCL W	4.3	0.00	RN	Bay Area	San Jose, South Bay-Moss Landing	No NQC - hist. data	QF/Selfgen
140	PG&E	ZZZ_New Unit	366330	Q1349BESS	0.55	100.00	2	Bay Area	Contra Costa	No NQC - est. data	Battery
141	PG&E	ZZZ_New Unit	366394	Q1454B	0.69	75.00	1	Bay Area	San Jose, South Bay-Moss Landing	No NQC - est. data	Battery
142	PG&E	ZZZ_New Unit	365342	MRGNHILL_D1	21	20.00	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	No NQC - est. data	Battery
143	PG&E	ZZZ_New Unit	365348	HOLLISTER_D1	21	10.00	1	Bay Area	South Bay-Moss Landing	No NQC - est. data	Battery
144	PG&E	ZZZ_New Unit	365540	CHEVRONS	12.47	0.00	1	Bay Area		Energy Only	Market
145	PG&E	ZZZ_New Unit	365685	P66RODEO_1	12	0.00	1	Bay Area	Pittsburg	Energy Only	Market
146	PG&E	ZZZ_New Unit	38921	BESS_SVP	60	0.00	1	Bay Area	San Jose, South Bay-Moss Landing	Waiting TPD allocation	Battery
147	PG&E	ZZZ_New Unit	366328	Q1349SPV	0.55	0.00	1	Bay Area	Contra Costa	Energy Only	Solar
148	PG&E	ZZZ_New Unit	32741	HILLSIDE_12	12.47	0.00	2	Bay Area		Energy Only	Market
149	PG&E	ZZZ_New Unit	32172	HIGHWINDS	34.5	0.00	2	Bay Area	Contra Costa	Energy Only	Wind
150	PG&E	ZZZ_New Unit	365617	OAKLANDES3	13.8	0.00	3	Bay Area	Oakland	On Hold	Battery
151	PG&E	ZZZ_New Unit	32788	STATIN L	115	0.00	ES	Bay Area	Oakland	Energy Only	Battery
152	PG&E	ZZZ_New Unit	92296	2296-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
153	PG&E	ZZZ_New Unit	92154	2154-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
154	PG&E	ZZZ_New Unit	92849	2849-WD	115	0.00	EW	Bay Area		Energy Only	Solar
155	PG&E	ZZZ_New Unit	92848	2848-WD	115	0.00	EW	Bay Area		Energy Only	Solar
156	PG&E	ZZZ_New Unit	92598	2598-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
157	PG&E	ZZZ_New Unit	92333	2333-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
158	PG&E	ZZZ_New Unit	33103	TASSAJARA_D1	21.6	0.00	RE	Bay Area	Pittsburg	Energy Only	Solar
159	PG&E	ZZZ_New Unit	36232	CAMPEVERS_D 1	21.6	0.00	RE	Bay Area	South Bay-Moss Landing	Energy Only	Solar
160	PG&E	ZZZ_New Unit	33450	FACEBOOKBH	12	0.00	RE	Bay Area	Ames	Energy Only	Solar
161	PG&E	ZZZ_New Unit	365688	2509-RD-SPV	0.63	0.00	RE	Bay Area	Pittsburg	Energy Only	Solar
162	PG&E	ZZZ_New Unit	35863	CATALYST	12.47	0.00	RE	Bay Area	San Jose, South Bay-Moss Landing	Energy Only	Solar
163	PG&E	ZZZ_New Unit	365338	GRANITEROCK	4.16	0.00	RE	Bay Area	South Bay-Moss Landing	Energy Only	Solar
164	PG&E	ZZZ_New Unit	32741	HILLSIDE_12	12.47	0.00	RN	Bay Area		Energy Only	Market
165	PG&E	ZZZ_New Unit	365559	STANFORD	12.47	0.00	RN	Bay Area		Energy Only	Market
166	PG&E	ZZZ_New Unit	35302	NUMMI-LV	12.56	0.00	RN	Bay Area		Energy Only	Market

	PTO	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
167	PG&E	ZZZ_New Unit	35859	HGST-LV	12.41	0.00	RN	Bay Area		Energy Only	Market
168	PG&E	ZZZ_New Unit	35307	A100US-L	12.56	0.00	RN	Bay Area		Energy Only	Market
169	PG&E	ZZZZZ_MARKHM_1_CATLST	35863	CATALYST	12.47	0.00	1	Bay Area	San Jose, South Bay-Moss Landing		QF/Selfgen
170	PG&E	ZZZZZ_STAUFF_1_UNIT	33139	STAUFER	9.11	0.00	1	Bay Area		Retired	QF/Selfgen
171	PG&E	ZZZZZ_UNCHEM_1_UNIT	32920	UNION CH	9.11	0.00	1	Bay Area	Pittsburg	Retired	QF/Selfgen
172	PG&E	ADERA_1_SOLAR1	34319	ADERASLR	0.48	0.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Energy Only	Solar
173	PG&E	ADMEST_6_SOLAR	34315	ADAMS_E	12.47	2.36	1	Fresno	Herndon		Solar
174	PG&E	AGRICO_6_PL3N5	34608	AGRICO	13.8	22.69	3	Fresno	Herndon		Market
175	PG&E	AGRICO_7_UNIT	34608	AGRICO	13.8	43.13	4	Fresno	Herndon		Market
176	PG&E	AGRICO_7_UNIT	34608	AGRICO	13.8	7.47	2	Fresno	Herndon		Market
177	PG&E	AKINGS_6_AMESR1	34688	AMRCNKNG	0.36	15.25	1	Fresno	Hanford	Aug NQC	Solar
178	PG&E	AVENAL_6_AVPARK	34265	AVENAL P	12	0.74	1	Fresno	Coalinga	Aug NQC	Solar
179	PG&E	AVENAL_6_AVSLR1	34691	AVENAL_D	21	0.00	1	Fresno	Coalinga	Energy Only	Solar
180	PG&E	AVENAL_6_AVSLR2	34691	AVENAL_D	21	0.00	1	Fresno	Coalinga	Energy Only	Solar
181	PG&E	AVENAL_6_SANDDG	34263	SANDDRAG	12	1.97	1	Fresno	Coalinga	Aug NQC	Solar
182	PG&E	AVENAL_6_SUNCTY	34257	SUNCTY D	12	2.48	1	Fresno	Coalinga	Aug NQC	Solar
183	PG&E	BALCHS_7_UNIT 1	34624	BALCH 1	13.2	31.00	1	Fresno	Herndon	Aug NQC	Market
184	PG&E	BALCHS_7_UNIT 2	34612	BLCH 2-3	13.8	52.50	1	Fresno	Herndon	Aug NQC	Market
185	PG&E	BALCHS_7_UNIT 3	34614	BLCH 2-3	13.8	54.60	1	Fresno	Herndon	Aug NQC	Market
186	PG&E	CABALO_2_M2BSR1	365524	MUSTANG4	0.36	6.20	2	Fresno		Aug NQC	Solar
187	PG&E	CABALO_2_M2WSR2	365523	MUSTANG3	0.36	12.40	1	Fresno		Aug NQC	Solar
188	PG&E	CANTUA_1_SOLAR	34349	CANTUA_D	12.47	1.24	1	Fresno	Panoche 115 kV	Aug NQC	Solar
189	PG&E	CANTUA_1_SOLAR	34349	CANTUA_D	12.47	1.24	2	Fresno	Panoche 115 kV	Aug NQC	Solar
190	PG&E	CHEVCO_6_UNIT 1	34652	CHV.COAL	9.11	2.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	QF/Selfgen
191	PG&E	CHEVCO_6_UNIT 2	34652	CHV.COAL	9.11	0.73	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	QF/Selfgen
192	PG&E	CHWCHL_1_UNIT	34301	CHOWCOGN	13.8	48.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV		Market
193	PG&E	CORCAN_1_SOLAR1	34690	CORCORAN_D3	12.47	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
194	PG&E	CORCAN_1_SOLAR2	34692	CORCORAN_D4	12.47	1.36	1	Fresno	Herndon, Hanford	Aug NQC	Solar
195	PG&E	CRESSY_1_PARKER	34140	CRESSEY	115	1.03		Fresno		Not modeled Aug NQC	MUNI
196	PG&E	CRNEVL_6_CRNVA	34634	CRANEVLY	12	0.00	1	Fresno	Borden	Aug NQC	Market
197	PG&E	CRNEVL_6_SJQN 2	34631	SJ2GEN	9.11	0.00	1	Fresno	Borden	Aug NQC	Market
198	PG&E	CURTIS_1_CANLCK				0.00		Fresno		Not modeled Aug NQC	Market
199	PG&E	CURTIS_1_FARFLD				0.28		Fresno		Not modeled Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
200	PG&E	DAIRLD_1_MD1SL1				0.00		Fresno		Not modeled Energy Only	Solar
201	PG&E	DAIRLD_1_MD2BM1				0.00		Fresno		Not modeled Energy Only	Market
202	PG&E	EEKTMN_6_SOLAR1	34629	KETTLEMN	0.8	0.00	1	Fresno		Energy Only	Solar
203	PG&E	ELCAP_1_SOLAR				0.00		Fresno		Not Modeled Aug NQC	Solar
204	PG&E	EXCHEC_7_UNIT 1	34306	EXCHQUER	13.8	94.50	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	MUNI
205	PG&E	EXCLSG_1_SOLAR	34623	EXCLSRSL	0.5	7.44	1	Fresno	Panoche 115 kV	Aug NQC	Solar
206	PG&E	FRESHW_1_SOLAR1	34699	FRSHWTRSLR	0.385	0.00	1	Fresno	Herndon	Energy Only	Solar
207	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	2.47	2	Fresno	Borden	Aug NQC	Net Seller
208	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	1.32	3	Fresno	Borden	Aug NQC	Net Seller
209	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	0.35	4	Fresno	Borden	Aug NQC	Net Seller
210	PG&E	GIFENS_6_BUGSL1	34644	BRFRDGFNSPV	0.55	2.48	1	Fresno		Aug NQC	Solar
211	PG&E	GIFFEN_6_SOLAR	34467	GIFFEN_DIST	12.47	1.24	1	Fresno	Herndon	Aug NQC	Solar
212	PG&E	GIFFEN_6_SOLAR1				0.00		Fresno	Herndon	Not modeled Energy Only	Solar
213	PG&E	GUERNS_6_HD3BM3				0.00		Fresno		Not modeled Energy Only	Market
214	PG&E	GUERNS_6_SOLAR	34463	GUERNSEY_D2	12.47	1.24	5	Fresno		Aug NQC	Solar
215	PG&E	GUERNS_6_SOLAR	34461	GUERNSEY_D1	12.47	1.24	8	Fresno		Aug NQC	Solar
216	PG&E	GUERNS_6_VH2BM1				0.00		Fresno		Not modeled Energy Only	Market
217	PG&E	GWFPWR_1_UNITS	34431	HANFORDPPCT 1	13.8	49.23	1	Fresno	Herndon, Hanford		Market
218	PG&E	GWFPWR_1_UNITS	34433	HANFORDPPCT 2	13.8	49.23	1	Fresno	Herndon, Hanford		Market
219	PG&E	HAASPH_7_PL1X2	34610	HAAS	13.8	72.00	1	Fresno	Herndon	Aug NQC	Market
220	PG&E	HAASPH_7_PL1X2	34610	HAAS	13.8	72.00	2	Fresno	Herndon	Aug NQC	Market
221	PG&E	HARDWK_6_STWBM1				0.00		Fresno		Not modeled Energy Only	Market
222	PG&E	HELMPG_7_UNIT 1	34600	HELMS	18	407.00	1	Fresno		Aug NQC	Market
223	PG&E	HELMPG_7_UNIT 2	34602	HELMS	18	407.00	2	Fresno		Aug NQC	Market
224	PG&E	HELMPG_7_UNIT 3	34604	HELMS	18	404.00	3	Fresno		Aug NQC	Market
225	PG&E	HENRTA_6_HDEBT1	34654	HENRIETT	12.47	10.00	1	Fresno			Battery
226	PG&E	HENRTA_6_SOLAR1				0.19		Fresno		Not modeled Aug NQC	Solar
227	PG&E	HENRTA_6_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
228	PG&E	HENRTA_6_UNITA1	34539	GWF_GT1	13.8	49.98	1	Fresno			Market
229	PG&E	HENRTA_6_UNITA2	34541	GWF_GT2	13.8	49.42	1	Fresno			Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
230	PG&E	HENRTS_1_SOLAR	34617	HRNTASLR	0.38	12.40	1	Fresno	Herndon	Aug NQC	Solar
231	PG&E	HURON_6_SOLAR	34557	HURON_DI	12.47	1.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
232	PG&E	HURON_6_SOLAR	34557	HURON_DI	12.47	1.24	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
233	PG&E	INTTRB_6_UNIT	34342	INT.TURB	9.11	3.89	1	Fresno		Aug NQC	Market
234	PG&E	JAVASR_1_JAVSR1	34649	JAVASLRSPV	0.6	1.67	1	Fresno	Herndon, Hanford	Aug NQC	Solar
235	PG&E	JAYNE_6_WLSLR	34639	WESTLNDS	0.48	2.23	1	Fresno	Coalinga	Energy Only	Solar
236	PG&E	KANSAS_6_SOLAR	34666	KANSASS_S	12.47	2.48	F	Fresno		Energy Only	Solar
237	PG&E	KERKH2_7_UNIT 1	34308	KERCKHOF	13.8	75.00	1	Fresno	Herndon, Wilson 115 kV	Aug NQC	Market
238	PG&E	KERMAN_6_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
239	PG&E	KERMAN_6_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
240	PG&E	KINGCO_1_KINGBR	34642	KINGSBUR	13.8	21.74	1	Fresno	Herndon, Hanford	Aug NQC	Net Seller
241	PG&E	KINGCO_1_KINGBR	34642	KINGSBUR	13.8	12.77	2	Fresno	Herndon, Hanford	Aug NQC	Net Seller
242	PG&E	KINGRV_7_UNIT 1	34616	KINGSRIV	13.8	40.80	1	Fresno	Herndon, Reedley	Aug NQC	Market
243	PG&E	KNGBRG_1_KBSLR1				0.00		Fresno		Not modeled Energy Only	Solar
244	PG&E	KNGBRG_1_KBSLR2				0.00		Fresno		Not modeled Energy Only	Solar
245	PG&E	KNTSTH_6_SOLAR	34694	KENT_S	8.0	2.48	1	Fresno		Energy Only	Solar
246	PG&E	LEPRFD_1_KANSAS	34680	KANSAS	12.47	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
247	PG&E	LOTUS_6_LSFSR1	34335	LOTUSSFS	0.315	6.20	1	Fresno	Borden	Aug NQC	Solar
248	PG&E	LTBEAR_1_LB3SR3	365663	LILBEAR3	0.36	2.48	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
249	PG&E	LTBEAR_1_LB4SR4	365673	LILBEAR4	0.36	6.20	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
250	PG&E	LTBEAR_1_LB4SR5	365675	LILBEAR5	0.36	6.20	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
251	PG&E	LTBERA_1_LB1SR1	365604	Q1028Q10	0.36	4.96	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
252	PG&E	MALAGA_1_PL1X2	34671	KRCDPCT1	13.8	48.31	1	Fresno	Herndon		Market
253	PG&E	MALAGA_1_PL1X2	34672	KRCDPCT2	13.8	48.31	1	Fresno	Herndon		Market
254	PG&E	MCCALL_1_QF	34219	MCCALL 4	12.47	0.20	QF	Fresno	Herndon	Aug NQC	QF/Selfgen
255	PG&E	MCSWAN_6_UNITS	34320	MCSWAIN	9.11	9.00	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	MUNI
256	PG&E	MENBIO_6_RENEW1	34339	CALRENEW	12.5	0.62	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Aug NQC	Net Seller
257	PG&E	MERCED_1_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
258	PG&E	MERCED_1_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
259	PG&E	MERCFL_6_UNIT	34322	MERCEDFL	9.11	3.50	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
260	PG&E	MNDOTA_1_SOLAR1	34313	NORTHSTA	0.2	7.44	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
261	PG&E	MNDOTA_1_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
262	PG&E	MSTANG_2_MTGBT1	34685	MUSTANGBES	0.8	75.00	2	Fresno			Battery
263	PG&E	MSTANG_2_SOLAR	34683	REMUSTANGS PV	0.36	0.00	1	Fresno		Aug NQC	Solar
264	PG&E	MSTANG_2_SOLAR3	34683	REMUSTANGS PV	0.36	1.85	1	Fresno		Aug NQC	Solar
265	PG&E	MSTANG_2_SOLAR4	34683	REMUSTANGS PV	0.36	3.72	1	Fresno		Aug NQC	Solar
266	PG&E	ONLLPP_6_UNITS	34316	ONEILPMP	9.11	0.63	1	Fresno		Aug NQC	MUNI
267	PG&E	OROLOM_1_SOLAR1	34689	OROLOMA_D3	12.47	0.00	1	Fresno	Panoche 115 kV	Energy Only	Solar
268	PG&E	OROLOM_1_SOLAR2	34689	OROLOMA_D3	12.47	0.00	1	Fresno	Panoche 115 kV	Energy Only	Solar
269	PG&E	ORTGA_6_ME1SL1				0.37		Fresno		Not modeled Energy Only	Solar
270	PG&E	PAIGES_6_SOLAR	34653	PAIGESLR	0.55	0.00	1	Fresno	Coalinga, Panoche 115 kV	Energy Only	Solar
271	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	1	Fresno	Herndon	Aug NQC	MUNI
272	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	2	Fresno	Herndon	Aug NQC	MUNI
273	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	3	Fresno	Herndon	Aug NQC	MUNI
274	PG&E	PNCHPP_1_PL1X2	34328	STRWDPNC	13.8	59.96	1	Fresno	Panoche 115 kV		Market
275	PG&E	PNCHPP_1_PL1X2	34329	STRWDPNC	13.8	59.96	2	Fresno	Panoche 115 kV		Market
276	PG&E	PNOCHE_1_PL1X2	34142	WHD_PAN2	13.8	49.97	1	Fresno	Herndon, Panoche 115 kV		Market
277	PG&E	PNOCHE_1_UNITA1	34186	CALPEAKP	13.8	52.01	1	Fresno	Panoche 115 kV		Market
278	PG&E	REEDLY_6_SOLAR				0.00		Fresno	Herndon, Reedley	Not modeled Energy Only	Solar
279	PG&E	S_RITA_6_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
280	PG&E	SCHNDR_1_FIVPTS	34353	SCHINDLER_D	12.47	1.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
281	PG&E	SCHNDR_1_FIVPTS	34353	SCHINDLER_D	12.47	0.62	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
282	PG&E	SCHNDR_1_WSTSDE	34353	SCHINDLER_D	12.47	1.24	3	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
283	PG&E	SCHNDR_1_WSTSDE	34353	SCHINDLER_D	12.47	0.62	4	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
284	PG&E	SGREGY_6_SANGER	34646	SANGERCG1	13.8	38.77	1	Fresno	Herndon	Aug NQC	Market
285	PG&E	SGREGY_6_SANGER	34646	SANGERCG2	13.8	9.31	2	Fresno	Herndon	Aug NQC	Market
286	PG&E	SLATE_2_SLASR1	365694	SLATESPV1	0.645	40.29	1	Fresno		Aug NQC	Hybrid
287	PG&E	SLATE_2_SLASR2	365695	SLATEBESS1	0.66	55.39	2	Fresno		Aug NQC	Hybrid
288	PG&E	SLATE_2_SLASR3				40.20		Fresno		Aug NQC	Hybrid
289	PG&E	SLATE_2_SLASR4	365698	SLATESPV2	0.645	54.97	3	Fresno		Aug NQC	Hybrid

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
290	PG&E	SLATE_2_SLASR5	365699	SLATEBESS2	0.66	12.66	4	Fresno		Aug NQC	Hybrid
291	PG&E	STOREY_2_MDRCH2				0.04		Fresno		Not modeled Aug NQC	Market
292	PG&E	STOREY_2_MDRCH3				0.02		Fresno		Not modeled Aug NQC	Market
293	PG&E	STOREY_2_MDRCH4				0.01		Fresno		Not modeled Aug NQC	Market
294	PG&E	STOREY_7_MDRCHW	34209	STOREY D	12.47	0.06	1	Fresno		Aug NQC	Net Seller
295	PG&E	STROUD_6_SOLAR	34563	STROUD_D	12.47	1.24	1	Fresno	Herndon	Aug NQC	Solar
296	PG&E	STROUD_6_SOLAR	34563	STROUD_D	12.47	1.24	2	Fresno	Herndon	Aug NQC	Solar
297	PG&E	STROUD_6_WWHSR1				0.00		Fresno	Herndon	Energy Only	Solar
298	PG&E	SUMWHT_6_SWSSR1				2.29		Fresno		Aug NQC	Solar
299	PG&E	TRNQL8_2_AMASR1	365514	Q1032G1	0.55	2.48	1	Fresno		Aug NQC	Solar
300	PG&E	TRNQL8_2_AZUSR1	365517	Q1032G2	0.55	2.48	2	Fresno		Aug NQC	Solar
301	PG&E	TRNQL8_2_ROJSR1	365520	Q1032G3	0.55	12.40	3	Fresno		Aug NQC	Solar
302	PG&E	TRNQL8_2_VERSR1	365520	Q1032G3	0.55	7.44	3	Fresno		Aug NQC	Solar
303	PG&E	TRNQLT_2_RETBT1	34343	Q643XBES	0.8	72.00	2	Fresno			Battery
304	PG&E	TRNQLT 2 SOLAR	34340	Q643X	0.8	20.42	1	Fresno		Aug NQC	Solar
305	PG&E	TVYVLY_6_KRSHY1				0.32		Fresno		Not modeled Aug NQC	Market
306	PG&E	ULTPFR_1_UNIT 1	34640	RIOBRVOF	12.47	16.10	1	Fresno	Herndon	Aug NQC	Market
307	PG&E	VEGA_6_SOLAR1	34314	VEGA	34.5	0.00	1	Fresno		Energy Only	Solar
308	PG&E	WAUKNA_1_SOLAR	34696	CORCORANPV _S	0.41	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
309	PG&E	WAUKNA_1_SOLAR2	34677	CORCORAN2S PV	0.41	2.45	1	Fresno	Herndon, Hanford	No NQC - Pmax	Solar
310	PG&E	WFRESN_1_SOLAR				0.00		Fresno		Not modeled Energy Only	Solar
311	PG&E	WHITNY_6_SOLAR	34673	WHTNYPTSPV	0.55	0.00	1	Fresno	Coalinga, Panoche 115 kV	Energy Only	Solar
312	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	1	Fresno	Borden	Aug NQC	Market
313	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	2	Fresno	Borden	Aug NQC	Market
314	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	3	Fresno	Borden	Aug NQC	Market
315	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	4	Fresno	Borden	Aug NQC	Market
316	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	SJ	Fresno	Borden	Aug NQC	Market
317	PG&E	WOODWR_1_HYDRO				0.00		Fresno	Herndon	Not modeled Energy Only	Market
318	PG&E	ZZ_BORDEN_2_QF	34253	BORDEN D	12.47	0.00	QF	Fresno		No NQC - hist. data	Net Seller
319	PG&E	ZZ_BULLRD_7_SAGNES	34213	BULLD 12	12.47	0.00	1	Fresno	Herndon	Aug NQC	QF/Selfgen
320	PG&E	ZZ_CHWCHL_1_BIOMAS	34305	CHWCHLA2	13.8	0.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Aug NQC	Market
321	PG&E	ZZ_DINUBA_6_UNIT	34648	DINUBA E	13.8	0.00	MB	Fresno	Herndon, Reedley	Mothballed	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
322	PG&E	ZZ_ELNIDP_6_BIOMAS	34330	ELNIDOBM	13.8	0.00	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Market
323	PG&E	ZZ_KERKH1_7_UNIT 2	34343	KERCK1-2	6.6	0.00	2	Fresno	Herndon, Wilson 115 kV	No NQC - hist. data	Market
324	PG&E	ZZ_NA	34485	FRESNOWW	12.5	0.00	RE	Fresno		No NQC - hist. data	QF/Selfgen
325	PG&E	ZZ_NA	34651	JACALITO	0.55	0.00	RN	Fresno	Coalinga	No NQC - hist. data	Market
326	PG&E	ZZ_SCHNDR_1_OS2BM2				0.00		Fresno	Coalinga	Energy Only	Market
327	PG&E	ZZ_WRGHTP_7_AMENGY	34207	WRIGHT D	12.47	0.00	QF	Fresno			QF/Selfgen
328	PG&E	ZZZ_New Unit	366342	Q1378BESS	0.69	50.00	2	Fresno		No NQC - est. data	Battery
329	PG&E	ZZZ_New Unit	365341	MERCED_D1	21	20.00	1	Fresno		No NQC - est. data	Battery
330	PG&E	ZZZ_New Unit	366340	Q1378WIND	0.75	16.93	1	Fresno		No NQC - est. data	Wind
331	PG&E	ZZZ_New Unit	365706	FSNOCGNBESS 2	6.9	16.40	5	Fresno	Herndon	No NQC - est. data	Battery
332	PG&E	ZZZ_New Unit	92484	2484-WD	21	9.90	FW	Fresno	Coalinga	No NQC - est. data	Battery
333	PG&E	ZZZ_New Unit	365327	MUSTANGSPV4	0.36	4.10	4	Fresno		No NQC - est. data	Solar
334	PG&E	ZZZ_New Unit	365325	MUSTANGSPV3	0.36	3.70	3	Fresno		No NQC - est. data	Solar
335	PG&E	ZZZ_New Unit	365504	SCULINS	0.55	2.34	1	Fresno		No NQC - est. data	Solar
336	PG&E	ZZZ_New Unit	365679	WSTALMONDS PV	0.63	2.28	1	Fresno		No NQC - est. data	Solar
337	PG&E	ZZZ_New Unit	34668	KEARNEY_D1	12.47	0.90	1	Fresno		No NQC - hist. data	Solar
338	PG&E	ZZZ_New Unit	92142	2142-WD	70	0.08	FW	Fresno		No NQC - est. data	Solar
339	PG&E	ZZZ_New Unit	92799	2799-WD	115	0.00	EW	Fresno	Panoche 115 kV	Energy Only	Solar
340	PG&E	ZZZ_New Unit	92007	2007-RD	70	0.00	RN	Fresno	Borden	Energy Only	Market
341	PG&E	ZZZ_New Unit	365340	LEPRINOFDLM R	21	0.00	RN	Fresno	Herndon, Hanford	Energy Only	Market
342	PG&E	ZZZ_New Unit	34603	JGBSWLT	12.47	0.00	ST	Fresno	Herndon	Energy Only	Market
343	PG&E	ZZZZZ_CRNEVL_6_SJQN 3	34633	SJ3GEN	9.11	0.00	1	Fresno	Borden	Retired	Market
344	PG&E	ZZZZZ_GATES_6_PL1X2	34553	WHD_GAT2	13.8	0.00	RT	Fresno	Coalinga	Retired	Market
345	PG&E	ZZZZZ_KERKH1_7_UNIT 3	34345	KERCK1-3	6.6	0.00	3	Fresno	Herndon, Wilson 115 kV	Retired	Market
346	PG&E	BRDGVL_7_BAKER				0.00		Humboldt		Not modeled Aug NQC	Net Seller
347	PG&E	FTSWRD_6_TRFORK				0.11		Humboldt		Not modeled Aug NQC	Market
348	PG&E	FTSWRD_7_QFUNTS				0.00		Humboldt		Not modeled Aug NQC	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
349	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.69	7	Humboldt			Market
350	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.32	6	Humboldt			Market
351	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.22	5	Humboldt			Market
352	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	15.85	4	Humboldt			Market
353	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	16.62	8	Humboldt			Market
354	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.33	3	Humboldt			Market
355	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	16.33	9	Humboldt			Market
356	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.24	2	Humboldt			Market
357	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.14	1	Humboldt			Market
358	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	15.95	10	Humboldt			Market
359	PG&E	KEKAWK_6_UNIT	31166	KEKAWAK	9.1	0.00	1	Humboldt		Aug NQC	Net Seller
360	PG&E	PACLUM_6_UNIT	31152	HRCGENSAB	13.8	4.87	1	Humboldt		Aug NQC	Net Seller
361	PG&E	PACLUM_6_UNIT	31152	HRCGENSAB	13.8	4.87	2	Humboldt		Aug NQC	Net Seller
362	PG&E	PACLUM_6_UNIT	31153	HRCGENC	2.4	2.92	3	Humboldt		Aug NQC	Net Seller
363	PG&E	ZZ_BLULKE_6_BLUELK	31156	BLUELKPP	12.5	0.00	MB	Humboldt		Mothballed	Market
364	PG&E	ZZ_FAIRHV_6_UNIT	31150	FAIRHAVN	13.8	0.00	1	Humboldt		No NQC - hist. data	Net Seller
365	PG&E	ZZ_LAPAC_6_UNIT	31158	LP SAMOA	12.5	0.00	1	Humboldt			Market
366	PG&E	7STDRD_1_SOLAR1	35065	7STNDRD_D1	21.6	2.48	1	Kern	South Kern PP, Kern Oil	Aug NQC	Solar
367	PG&E	BDGRCK_1_UNITS	35029	BADGERCK	13.8	48.08	1	Kern	South Kern PP	Aug NQC	Net Seller
368	PG&E	BEARMT_1_UNIT	35066	PSE-BEAR	13.8	49.21	1	Kern	South Kern PP, Westpark	Aug NQC	Net Seller
369	PG&E	BKRFLD_2_SOLAR1				0.17		Kern	South Kern PP	Not modeled Aug NQC	Solar
370	PG&E	DEXZEL_1_UNIT	35024	DEXZEL	13.8	20.00	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller
371	PG&E	DISCOV_1_CHEVRN	35062	DISCOVRY	13.8	6.33	1	Kern	South Kern PP, Kern Oil	Aug NQC	QF/Selfgen
372	PG&E	DOUBLC_1_UNITS	35023	DOUBLE C	13.8	26.12	1	Kern	South Kern PP	Aug NQC	Net Seller
373	PG&E	DOUBLC_1_UNITS	35023	DOUBLE C	13.8	26.12	2	Kern	South Kern PP	Aug NQC	Net Seller
374	PG&E	KERNFT_1_UNITS	35026	KERNFRNT	13.8	26.20	1	Kern	South Kern PP	Aug NQC	Net Seller
375	PG&E	KERNFT_1_UNITS	35026	KERNFRNT	13.8	26.20	2	Kern	South Kern PP	Aug NQC	Net Seller
376	PG&E	LAMONT_1_SOLAR1	35019	REGULUS	0.4	7.44	1	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
377	PG&E	LAMONT_1_SOLAR2	35092	REDWOODSPV	0.6	2.48	4	Kern	South Kern PP, Kern PWR-Tevis	Aug NQC	Solar
378	PG&E	LAMONT_1_SOLAR3	35087	WOODMERESP V	0.4	1.86	3	Kern	South Kern PP, Kern PWR-Tevis	Aug NQC	Solar
379	PG&E	LAMONT_1_SOLAR4	35059	HAYWORTHSP V	0.4	17.37	2	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
380	PG&E	LAMONT_1_SOLAR5	35054	REDCRESTSPV	0.4	2.07	1	Kern	South Kern PP, Kern PWR-Tevis	Aug NQC	Solar
381	PG&E	LIVOAK_1_UNIT 1	35058	PSE-LVOK	9.1	49.70	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller
382	PG&E	MAGUND_1_BKISR1				0.12		Kern	South Kern PP, Kern Oil	Not modeled Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
383	PG&E	MAGUND_1_BKSSR2				0.65		Kern	South Kern PP, Kern Oil	Not modeled Aug NQC	Solar
384	PG&E	MTNPOS_1_UNIT	35036	MT POSO	13.8	40.55	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller
385	PG&E	OLDRIV_6_BIOGAS				1.75		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
386	PG&E	OLDRIV_6_CESDBM				0.93		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
387	PG&E	OLDRIV_6_LKVBM1				0.93		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
388	PG&E	OLDRV1_6_SOLAR	35091	OLDRIVER1SPV	0.69	2.48	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
389	PG&E	SIERRA_1_UNITS	35027	HISIERRA	13.8	26.22	1	Kern	South Kern PP	Aug NQC	Market
390	PG&E	SIERRA_1_UNITS	35027	HISIERRA	13.8	26.22	2	Kern	South Kern PP	Aug NQC	Market
391	PG&E	SKERN_6_SOLAR1	35089	S_KERN	0.48	2.48	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
392	PG&E	SKERN_6_SOLAR2	365563	SKICSPV	0.4	1.24	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
393	PG&E	VEDDER_1_SEKERN	35046	SEKR	9.11	3.04	1	Kern	South Kern PP, Kern Oil	Aug NQC	QF/Selfgen
394	PG&E	ZZZ_New Unit	365347	TEVIS_D1	21	20.00	1	Kern	South Kern PP, Kern PWR-Tevis	No NQC - est. data	Battery
395	PG&E	ZZZ_New Unit	365597	Q744P5G5	0.6	1.48	5	Kern	South Kern PP, Kern PWR-Tevis	No NQC - est. data	Solar
396	PG&E	ZZZ_New Unit	366955	2446-RD-SPV	0.645	0.00	RE	Kern	South Kern PP, Kern Oil	Energy Only	Solar
397	PG&E	ZZZ_New Unit	35068	EANDB_D1	12.47	0.00	RE	Kern	South Kern PP	Energy Only	Solar
398	PG&E	ADLIN_1_UNITS	31435	AIDLINGYSR1	13.8	11.00	1	NCNB	Eagle Rock, Fulton		Market
399	PG&E	ADLIN_1_UNITS	31437	AIDLINGYSR2	13.8	11.00	2	NCNB	Eagle Rock, Fulton		Market
400	PG&E	CLOVDL_1_SOLAR				0.19		NCNB	Eagle Rock, Fulton	Not modeled Aug NQC	Solar
401	PG&E	CSTOGA_6_LNDFIL				0.00		NCNB	Fulton	Not modeled Energy Only	Market
402	PG&E	FULTON_1_QF				0.02		NCNB	Fulton	Not modeled Aug NQC	QF/Selfgen
403	PG&E	GEYS11_7_UNIT11	31412	GEYSER11	13.8	68.00	1	NCNB	Eagle Rock, Fulton		Market
404	PG&E	GEYS12_7_UNIT12	31414	GEYSER12	13.8	50.00	1	NCNB	Fulton		Market
405	PG&E	GEYS13_7_UNIT13	31416	GEYSER13	13.8	56.00	1	NCNB			Market
406	PG&E	GEYS14_7_UNIT14	31418	GEYSER14	13.8	70.00	1	NCNB	Fulton		Market
407	PG&E	GEYS16_7_UNIT16	31420	GEYSER16	13.8	63.00	1	NCNB	Fulton		Market
408	PG&E	GEYS17_7_UNIT17	31422	GEYSER17	13.8	75.50	1	NCNB	Fulton		Market
409	PG&E	GEYS18_7_UNIT18	31424	GEYSER18	13.8	72.00	1	NCNB			Market
410	PG&E	GEYS20_7_UNIT20	31426	GEYSER20	13.8	50.00	1	NCNB			Market
411	PG&E	GYS5X6_7_UNITS	31406	GEYSR5-6	13.8	42.50	1	NCNB	Eagle Rock, Fulton		Market
412	PG&E	GYS5X6_7_UNITS	31406	GEYSR5-6	13.8	42.50	2	NCNB	Eagle Rock, Fulton		Market
413	PG&E	GYS7X8_7_UNITS	31408	GEYSER78	13.8	47.90	1	NCNB	Eagle Rock, Fulton		Market
414	PG&E	GYS7X8_7_UNITS	31408	GEYSER78	13.8	47.90	2	NCNB	Eagle Rock, Fulton		Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
415	PG&E	GYSRVL_7_WSPRNG				0.00		NCNB	Fulton	Not modeled Aug NQC	QF/Selfgen
416	PG&E	HILAND_7_YOLOWD				0.00		NCNB	Eagle Rock, Fulton	Not Modeled. Energy Only	Market
417	PG&E	IGNACO_1_QF				0.01		NCNB		Not modeled Aug NQC	QF/Selfgen
418	PG&E	INDVLY_1_UNITS	31436	INDIAN V	9.1	0.61	1	NCNB	Eagle Rock, Fulton	Aug NQC	Net Seller
419	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	2.96	1	NCNB	Fulton	Aug NQC	Market
420	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	2.96	2	NCNB	Fulton	Aug NQC	Market
421	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	0.89	3	NCNB	Fulton	Aug NQC	Market
422	PG&E	NCPA_7_GP1UN1	38106	NCPA1GY1	13.8	38.85	1	NCNB		Aug NQC	MUNI
423	PG&E	NCPA_7_GP1UN2	38108	NCPA1GY2	13.8	39.94	1	NCNB		Aug NQC	MUNI
424	PG&E	NCPA_7_GP2UN3	38110	NCPA2GY1	13.8	0.00	1	NCNB	Fulton	Aug NQC	MUNI
425	PG&E	NCPA_7_GP2UN4	38112	NCPA2GY2	13.8	52.73	1	NCNB	Fulton	Aug NQC	MUNI
426	PG&E	NOVATO_6_LNDFL				2.87		NCNB		Not modeled Aug NQC	Market
427	PG&E	POTTER_7_VECINO				0.00		NCNB	Eagle Rock, Fulton	Not modeled Aug NQC	QF/Selfgen
428	PG&E	SANTFG_7_UNITS	31400	SANTA FE	13.8	36.00	1	NCNB			Market
429	PG&E	SANTFG_7_UNITS	31401	SANTA FE	13.8	36.00	2	NCNB			Market
430	PG&E	SMUDGO_7_UNIT 1	31430	SONOMAPPGE O	13.8	47.00	1	NCNB			Market
431	PG&E	SNMALF_6_UNITS	31446	SONMA LF	9.1	3.05	1	NCNB	Fulton	Aug NQC	QF/Selfgen
432	PG&E	UKIAH_7_LAKEMN	38020	CITY UKH	115	1.21	2	NCNB	Eagle Rock, Fulton	Aug NQC	MUNI
433	PG&E	UKIAH_7_LAKEMN	38020	CITY UKH	115	0.49	1	NCNB	Eagle Rock, Fulton	Aug NQC	MUNI
434	PG&E	ZZ_GEYS17_2_BOTRCK	31421	BOTTLERK	13.8	0.00	1	NCNB	Fulton	Energy Only and Mothballed	Market
435	PG&E	ZZZ_New Unit	366061	Q1700BESS	0.385	0.00	1	NCNB		Energy Only	Battery
436	PG&E	ZZZ_New Unit	92287	2287-WD	60	0.00	EW	NCNB		Energy Only	Solar
437	PG&E	ZZZ_New Unit	92606	2606-WD	115	0.00	EW	NCNB		Energy Only	Battery
438	PG&E	ZZZ_New Unit	93077	3077-WD	115	0.00	EW	NCNB		Energy Only	Solar
439	PG&E	ZZZ_New Unit	92365	2365-WD	60	0.00	EW	NCNB	Fulton	Energy Only	Solar
440	PG&E	ZZZZZ_BEARCN_2_UNITS	31402	BEAR CAN	13.8	0.00	1	NCNB	Fulton	Retired	Market
441	PG&E	ZZZZZ_BEARCN_2_UNITS	31402	BEAR CAN	13.8	0.00	2	NCNB	Fulton	Retired	Market
442	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	1	NCNB	Eagle Rock, Fulton	Retired	Market
443	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	3	NCNB	Eagle Rock, Fulton	Retired	Market
444	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	4	NCNB	Eagle Rock, Fulton	Retired	Market
445	PG&E	ZZZZZ_WDFRDF_2_UNITS	31404	WEST FOR	13.8	0.00	1	NCNB	Fulton	Retired	Market
446	PG&E	ZZZZZ_WDFRDF_2_UNITS	31404	WEST FOR	13.8	0.00	2	NCNB	Fulton	Retired	Market
447	PG&E	ALLGNY_6_HYDRO1				0.00		Sierra		Not modeled Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
448	PG&E	APLHIL_1_SFKHY1				0.00		Sierra	South of Rio Oso, South of Palermo	Not modeled Energy Only	Market
449	PG&E	BELDEN_7_UNIT 1	31784	BELDEN	13.8	93.95	1	Sierra	South of Palermo	Aug NQC	Market
450	PG&E	BIOMAS_1_UNIT 1	32156	WOODLAND	13.8	8.07	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Net Seller
451	PG&E	BNNIEN_7_ALTAPH	32376	BONNIE N	60	0.61		Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
452	PG&E	BOGUE_1_UNITA1	32451	FREC	13.8	47.38	1	Sierra	Bogue, Drum-Rio Oso	Aug NQC	Market
453	PG&E	BOWMN_6_HYDRO	32480	BOWMAN	9.11	2.00	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
454	PG&E	BUCKCK_2_HYDRO				0.08		Sierra	South of Palermo	Not modeled Aug NQC	Market
455	PG&E	BUCKCK_7_OAKFLT				0.38		Sierra	South of Palermo	Not modeled Aug NQC	Market
456	PG&E	BUCKCK_7_PL1X2	31820	BCKS CRK	11	25.04	1	Sierra	South of Palermo	Aug NQC	Market
457	PG&E	BUCKCK_7_PL1X2	31820	BCKS CRK	11	21.76	2	Sierra	South of Palermo	Aug NQC	Market
458	PG&E	CAMPFW_7_FARWST	32470	CMP.FARW	9.11	2.94	1	Sierra		Aug NQC	MUNI
459	PG&E	CHICPK_7_UNIT 1	32462	CHI.PARK	11.5	28.04	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	MUNI
460	PG&E	COLGAT_7_UNIT 1	32450	COLGATE1	13.8	176.72	1	Sierra		Aug NQC	MUNI
461	PG&E	COLGAT_7_UNIT 2	32452	COLGATE2	13.8	175.67	1	Sierra		Aug NQC	MUNI
462	PG&E	CRESTA_7_PL1X2	31812	CRESTA	11.5	26.14	2	Sierra	South of Palermo	Aug NQC	Market
463	PG&E	CRESTA_7_PL1X2	31812	CRESTA	11.5	25.64	1	Sierra	South of Palermo	Aug NQC	Market
464	PG&E	DAVIS_1_SOLAR1				0.00		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Energy Only	Solar
465	PG&E	DAVIS_1_SOLAR2				0.00		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	Solar
466	PG&E	DAVIS_7_MNMETH				2.26		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	Market
467	PG&E	DEADCK_1_UNIT	31862	DEADWOOD	9.11	0.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
468	PG&E	DEERCR_6_UNIT 1	32474	DEER CRK	2.4	3.41	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
469	PG&E	DRUM_7_PL1X2	32504	DRUMPHU1U2	6.6	5.20	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
470	PG&E	DRUM_7_PL1X2	32504	DRUMPHU1U2	6.6	5.20	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
471	PG&E	DRUM_7_PL3X4	32506	DRUMPHU3U4	6.6	6.93	4	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
472	PG&E	DRUM_7_PL3X4	32506	DRUMPHU3U4	6.6	5.87	3	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
473	PG&E	DRUM_7_UNIT 5	32454	DRUM 5	13.8	47.74	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
474	PG&E	DUTCH1_7_UNIT 1	32464	DTCHFLT1	11	20.78	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
475	PG&E	DUTCH2_7_UNIT 1	32502	DTCHFLT2	6.9	16.76	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
476	PG&E	ELDORO_7_UNIT 1	32513	ELDRADO1	21.6	4.10	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo		Market
477	PG&E	ELDORO_7_UNIT 2	32514	ELDRADO2	21.6	5.19	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo		Market
478	PG&E	FMEADO_6_HELLHL	32486	HELLHOLE	9.11	0.40	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
479	PG&E	FMEADO_7_UNIT	32508	FRNCH MD	4.2	16.00	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
480	PG&E	FORBST_7_UNIT 1	31814	FORBSTWN	11.5	37.50	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
481	PG&E	GRIDLY_6_SOLAR	38054	GRIDLEY	60	0.00	1	Sierra	Pease	Energy Only	Solar
482	PG&E	GRIZLY_1_UNIT 1	31900	GRIZZLYG	6.9	5.82	1	Sierra	South of Palermo	Aug NQC	MUNI
483	PG&E	GRNLF2_1_UNIT	32492	GRNLEAF2	13.8	49.20	1	Sierra	Pease, Drum-Rio Oso	Aug NQC	QF/Selfgen
484	PG&E	HALSEY_6_UNIT	32478	HALSEY F	6.6	5.52	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
485	PG&E	HAYPRS_6_HAYHD1	32488	HAYPRES+	9.11	1.21	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
486	PG&E	HAYPRS_6_HAYHD2	32488	HAYPRES+	9.11	1.40	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
487	PG&E	HIGGNS_1_COMBIE				0.01		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
488	PG&E	HIGGNS_7_QFUNTS				0.24		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	QF/Selfgen
489	PG&E	KELYRG_6_UNIT	31834	KELLYRDG	4.16	11.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
490	PG&E	LIVEOK_6_SOLAR				0.06		Sierra	Pease	Not modeled Aug NQC	Solar
491	PG&E	LODIEC_2_PL1X2	38123	LODIECCT	18	199.03	1	Sierra	South of Rio Oso, South of Palermo		MUNI
492	PG&E	LODIEC_2_PL1X2	38124	LODIECST	18	103.55	1	Sierra	South of Rio Oso, South of Palermo		MUNI
493	PG&E	MDFKRL_2_PROJCT	32458	RALSTON	13.8	82.13	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
494	PG&E	MDFKRL_2_PROJCT	32456	MIDLFORK	13.8	63.94	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
495	PG&E	MDFKRL_2_PROJCT	32456	MIDLFORK	13.8	63.94	2	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
496	PG&E	NAROW1_2_UNIT	32466	NARROWS1	11	12.00	1	Sierra		Aug NQC	Market
497	PG&E	NAROW2_2_UNIT	32468	NARROWSPH2	13.8	55.00	1	Sierra		Aug NQC	MUNI
498	PG&E	NWCSTL_7_UNIT 1	32460	NEWCSTLE	13.2	0.00	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
499	PG&E	OROVIL_6_UNIT	31888	OROVLENRG	4.16	7.50	1	Sierra	Drum-Rio Oso	Aug NQC	Market
500	PG&E	OXBOW_6_DRUM	32484	OXBOW F	9.11	2.41	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
501	PG&E	PEASE_1_TBEBT1	91902	1902-WD	115	5.00	FW	Sierra	Pease, Drum-Rio Oso		Battery
502	PG&E	PLACVL_1_CHILIB	32510	CHILIBAR	4.2	1.89	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo	Aug NQC	Market
503	PG&E	PLACVL_1_RCKCRE				0.00		Sierra	South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
504	PG&E	PLSNTG_7_LNCLND	32408	PLSNT GR	60	3.78		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
505	PG&E	POEPH_7_UNIT 1	31790	POE 1	13.8	45.18	1	Sierra	South of Palermo	Aug NQC	Market
506	PG&E	POEPH_7_UNIT 2	31792	POE 2	13.8	42.64	1	Sierra	South of Palermo	Aug NQC	Market
507	PG&E	RCKCRK_7_UNIT 1	31786	ROCK CK1	13.8	32.00	1	Sierra	South of Palermo	Aug NQC	Market
508	PG&E	RCKCRK_7_UNIT 2	31788	ROCK CK2	13.8	40.00	1	Sierra	South of Palermo	Aug NQC	Market
509	PG&E	RIOOSO_1_QF				0.30		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	QF/Selfgen
510	PG&E	ROLLIN_6_UNIT	32476	ROLLINSF	6.6	6.20	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
511	PG&E	SLYCRK_1_UNIT 1	31832	SLY.CR.	6.6	13.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
512	PG&E	SPAULD_6_UNIT 3	32472	SPAULDG	9.11	3.53	3	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
513	PG&E	SPAULD_6_UNIT12	32472	SPAULDG	9.11	2.22	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
514	PG&E	SPAULD_6_UNIT12	32472	SPAULDG	9.11	1.40	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
515	PG&E	SPI LI_2_UNIT 1	32498	SPILINCF	12.5	9.55	1	Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Net Seller
516	PG&E	STIGCT_2_LODI	38114	STIG CC	13.8	49.50	1	Sierra	South of Rio Oso, South of Palermo		MUNI
517	PG&E	ULTRCK_2_UNIT	32500	RBROCKLI	12.47	23.38	1	Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
518	PG&E	WDLEAF_7_UNIT 1	31794	WOODLEAF	13.8	60.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
519	PG&E	WHEATL_6_LNDFIL	32350	WHEATLND	60	3.55		Sierra		Not modeled Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
520	PG&E	WISE_1_UNIT 1	32512	WISE	12	8.85	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
521	PG&E	WISE_1_UNIT 2	32512	WISE	12	0.00	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
522	PG&E	YUBACT_1_SUNSWT	32494	YUBA CTY	13.8	49.97	1	Sierra	Pease, Drum-Rio Oso	Aug NQC	Net Seller
523	PG&E	YUBACT_6_UNITA1	32496	YCEC	13.8	47.16	1	Sierra	Pease, Drum-Rio Oso		Market
524	PG&E	ZZ_GRNLF1_1_PL1X2	32490	GRNLEAF1	13.8	0.00	1	Sierra	Bogue, Drum-Rio Oso	Strategic Reserve	Market
525	PG&E	ZZ_GRNLF1_1_PL1X3	32491	GRNLEAF1	13.8	0.00	2	Sierra	Bogue, Drum-Rio Oso	Strategic Reserve	Market
526	PG&E	ZZ_NA	32162	RIV.DLTA	9.11	0.00	1	Sierra	Drum-Rio Oso, South of Palermo	No NQC - hist. data	QF/Selfgen
527	PG&E	ZZ_UCDAVS_1_UNIT	32166	UC DAVIS	9.11	0.00	RN	Sierra	Drum-Rio Oso, South of Palermo	No NQC - hist. data	QF/Selfgen
528	PG&E	ZZZ_New Unit	365936	Q653FSPV	0.12	0.00	1	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Solar
529	PG&E	ZZZ_New Unit	365940	Q653FSPV	0.12	0.00	2	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Solar
530	PG&E	ZZZ_New Unit	365938	Q653FC6B	0.48	0.00	3	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Battery
531	PG&E	ZZZZZ_GOLDHL_1_QF				0.00		Sierra	South of Rio Oso, South of Palermo	Retired	QF/Selfgen
532	PG&E	ZZZZZ_KANAKA_1_UNIT				0.00		Sierra	Drum-Rio Oso	Retired	MUNI
533	PG&E	ZZZZZ_PACORO_6_UNIT	31890	PO POWER	9.11	0.00	1	Sierra	Drum-Rio Oso	Retired	QF/Selfgen
534	PG&E	ZZZZZ_PACORO_6_UNIT	31890	PO POWER	9.11	0.00	2	Sierra	Drum-Rio Oso	Retired	QF/Selfgen
535	PG&E	BEARDS_7_UNIT 1	34074	BEARDSLY	6.9	5.94	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
536	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	1	Stockton	Tesla-Bellota	Aug NQC	MUNI
537	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	2	Stockton	Tesla-Bellota	Aug NQC	MUNI
538	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	3	Stockton	Tesla-Bellota	Aug NQC	MUNI
539	PG&E	CENT40_1_C40SR1	365683	Q1103SPV	0.315	4.96	1	Stockton	Tesla-Bellota	Aug NQC	Solar
540	PG&E	CRWCKS_1_SOLAR1	34053	CRWCRKSLR1 G	0.8	0.00	1	Stockton	Tesla-Bellota	Energy Only	Solar
541	PG&E	DONNLS_7_UNIT	34058	DONNELLS	13.8	72.00	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
542	PG&E	FROGTN_1_UTICAA				0.23		Stockton	Tesla-Bellota, Stanislaus	Not Modeled Aug NQC	Market
543	PG&E	FROGTN_1_UTICAM				1.26		Stockton	Tesla-Bellota, Stanislaus	Not Modeled Aug NQC	Market
544	PG&E	LOCKFD_1_BEARCK				0.19		Stockton	Tesla-Bellota	Not Modeled Aug NQC	Solar
545	PG&E	LOCKFD_1_KSOLAR				0.12		Stockton	Tesla-Bellota	Not Modeled Aug NQC	Solar
546	PG&E	LODI25_2_UNIT 1	38120	LODI25CT	13.8	23.80	1	Stockton	Lockeford		MUNI

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
547	PG&E	MANTEC_1_ML1SR1				0.00		Stockton	Tesla-Bellota	Not modeled Energy Only	Solar
548	PG&E	NORCNV_1_NCVBT1	39343	Q1109	0.48	132.00	1	Stockton	Tesla-Bellota, Stanislaus		Battery
549	PG&E	PEORIA_1_SOLAR				0.19		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	Solar
550	PG&E	PHOENX_1_UNIT				1.02		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	Market
551	PG&E	SCHLTE_1_PL1X3	33811	GWFTRCY3	13.8	149.94	1	Stockton	Tesla-Bellota		Market
552	PG&E	SCHLTE_1_PL1X3	33805	GWFTRCY1	13.8	93.05	1	Stockton	Tesla-Bellota		Market
553	PG&E	SCHLTE_1_PL1X3	33807	GWFTRCY2	13.8	93.05	1	Stockton	Tesla-Bellota		Market
554	PG&E	SNDBAR_7_UNIT 1	34060	SANDBAR	13.8	3.57	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
555	PG&E	SPIFBD_1_PL1X2	34055	SPISONOR	13.8	3.78	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
556	PG&E	SPRGAP_1_UNIT 1	34078	SPRNG GP	6	0.00	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
557	PG&E	STANIS_7_UNIT 1	34062	STANISLS	13.8	70.02	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
558	PG&E	STNRES_1_UNIT	34056	COVANTAS	13.8	19.79	1	Stockton	Tesla-Bellota	Aug NQC	Net Seller
559	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	7.13	2	Stockton	Tesla-Bellota	Aug NQC	MUNI
560	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	6.34	1	Stockton	Tesla-Bellota	Aug NQC	MUNI
561	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	4.68	3	Stockton	Tesla-Bellota	Aug NQC	MUNI
562	PG&E	ULTPCH 1 UNIT 1	34050	CHINESESTA	12.47	17.81	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
563	PG&E	VLYHOM_7_SSJID				0.29		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	MUNI
564	PG&E	ZZZ_New Unit	366130	Q1350BES	0.69	10.50	1	Stockton	Tesla-Bellota	No NQC - est. data	Battery
565	PG&E	ZZZ_New Unit	365769	Q1116BES	12.5	10.00	2	Stockton	Tesla-Bellota	No NQC - est. data	Battery
566	PG&E	ZZZ_New Unit	366966	Q1350SPV	0.66	1.76	2	Stockton	Tesla-Bellota	No NQC - est. data	Solar
567	PG&E	ZZZ_New Unit	365556	SAFEWAYB	12.5	0.00	RN	Stockton	Tesla-Bellota	Energy Only	Market
568	PG&E	ZZZZZZ_NA	33830	GEN.MILL	9.11	0.00	1	Stockton	Lockeford	Retired	QF/Selfgen
569	PG&E	ZZZZZZ_NA	365339	SPICHINESEST	12.47	0.00	RE	Stockton	Tesla-Bellota, Stanislaus	Retired	QF/Selfgen
570	SCE	ACACIA_6_SOLAR	29878	ACACIA_G	0.48	2.48	EQ	BC/Ventura		Aug NQC	Solar
571	SCE	ALAMO_6_UNIT	25653	ALAMO SC	13.8	14.00	1	BC/Ventura		Aug NQC	MUNI
572	SCE	BGSKYN_2_AS2SR1	29773	ANT2_EXP	0.63	11.58	EQ	BC/Ventura		Aug NQC	Solar
573	SCE	BGSKYN_2_ASPSR2	29776	ANT2_SPA	0.6	11.03	EQ	BC/Ventura		Aug NQC	Solar
574	SCE	BGSKYN_2_ASSR1B				13.42		BC/Ventura		Aug NQC	Solar
575	SCE	BGSKYN_2_ASSR3A	29745	BSKY_G_DSR3	0.6	1.65	1	BC/Ventura		Aug NQC	Solar
576	SCE	BGSKYN_2_ASSR3B	29745	BSKY_G_DSR3	0.6	0.55	1	BC/Ventura		Aug NQC	Solar
577	SCE	BGSKYN_2_BS3SR3	29774	ANTLP2_P45_G	0.44	2.21	EQ	BC/Ventura		Aug NQC	Solar
578	SCE	BIGCRK_2_EXESWD	24317	MAMOTH1G	13.8	80.45	1	BC/Ventura	Rector, Vestal	Aug NQC	Market

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
579	SCE	BIGCRK_2_EXESWD	24318	MAMOTH2G	13.8	80.45	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
580	SCE	BIGCRK_2_EXESWD	24308	B CRK2-1	13.8	44.74	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
581	SCE	BIGCRK_2_EXESWD	24308	B CRK2-1	13.8	43.71	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
582	SCE	BIGCRK_2_EXESWD	24314	B CRK 4	11.5	43.54	42	BC/Ventura	Rector, Vestal	Aug NQC	Market
583	SCE	BIGCRK_2_EXESWD	24314	B CRK 4	11.5	43.37	41	BC/Ventura	Rector, Vestal	Aug NQC	Market
584	SCE	BIGCRK_2_EXESWD	24315	B CRK 8	13.8	37.86	82	BC/Ventura	Rector, Vestal	Aug NQC	Market
585	SCE	BIGCRK_2_EXESWD	24313	B CRK3-3	13.8	31.41	5	BC/Ventura	Rector, Vestal	Aug NQC	Market
586	SCE	BIGCRK_2_EXESWD	24312	B CRK3-2	13.8	30.98	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
587	SCE	BIGCRK_2_EXESWD	24311	B CRK3-1	13.8	30.12	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
588	SCE	BIGCRK_2_EXESWD	24312	B CRK3-2	13.8	30.12	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
589	SCE	BIGCRK_2_EXESWD	24311	B CRK3-1	13.8	29.26	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
590	SCE	BIGCRK_2_EXESWD	24307	B CRK1-2	13.8	26.85	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
591	SCE	BIGCRK_2_EXESWD	24315	B CRK 8	13.8	21.00	81	BC/Ventura	Rector, Vestal	Aug NQC	Market
592	SCE	BIGCRK_2_EXESWD	24306	B CRK1-1	7.2	18.59	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
593	SCE	BIGCRK_2_EXESWD	24307	B CRK1-2	13.8	18.59	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
594	SCE	BIGCRK_2_EXESWD	24306	B CRK1-1	7.2	17.12	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
595	SCE	BIGCRK_2_EXESWD	24309	B CRK2-2	7.2	16.95	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
596	SCE	BIGCRK_2_EXESWD	24309	B CRK2-2	7.2	16.09	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
597	SCE	BIGCRK_2_EXESWD	24310	B CRK2-3	7.2	15.92	6	BC/Ventura	Rector, Vestal	Aug NQC	Market
598	SCE	BIGCRK_2_EXESWD	24310	B CRK2-3	7.2	14.63	5	BC/Ventura	Rector, Vestal	Aug NQC	Market
599	SCE	BIGCRK_2_EXESWD	24323	PORTAL	4.8	8.26	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
600	SCE	BIGCRK_7_DAM7				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
601	SCE	BIGCRK_7_MAMRES				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
602	SCE	BIGSKY_2_AS2BT1				127.00		BC/Ventura			Battery
603	SCE	BIGSKY_2_ASLBT2				100.00		BC/Ventura			Battery
604	SCE	BIGSKY_2_BSKSR6	29736	BSKY_G_BA	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
605	SCE	BIGSKY_2_BSKSR7	29742	BSKY_G_BC	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
606	SCE	BIGSKY_2_BSKSR8	29739	BSKY_G_BB	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
607	SCE	BIGSKY_2_SOLAR1	29724	BSKY_G_ABSR	0.42	2.48	1	BC/Ventura		Aug NQC	Solar
608	SCE	BIGSKY_2_SOLAR2				31.53		BC/Ventura		Not modeled Aug NQC	Solar
609	SCE	BIGSKY_2_SOLAR3	29727	BSKY_G_SMR	0.42	2.48	1	BC/Ventura		Aug NQC	Solar
610	SCE	BIGSKY_2_SOLAR4	29701	BSKY_G_ESWA	0.42	15.82	1	BC/Ventura		Aug NQC	Solar
611	SCE	BIGSKY_2_SOLAR5	29733	BSKY_G_DR12	0.44	0.55	1	BC/Ventura		Aug NQC	Solar
612	SCE	BIGSKY_2_SOLAR6	29730	BSKY_G_SOLV	0.42	9.37	1	BC/Ventura		Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
613	SCE	BIGSKY_2_SOLAR7	29733	BSKY_G_DSR1 2	0.44	6.20	1	BC/Ventura		Aug NQC	Solar
614	SCE	CEDUCR_2_SOLAR1	25049	DUCOR1	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
615	SCE	CEDUCR_2_SOLAR2	25052	DUCOR2	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
616	SCE	CEDUCR_2_SOLAR3	25055	DUCOR3	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
617	SCE	CEDUCR_2_SOLAR4	25058	DUCOR4	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
618	SCE	CHARMN_2_PGONG1	24340	CHARMIN	13.8	19.61	1	BC/Ventura	S.Clara, Moorpark		QF/Selfgen
619	SCE	DELSUR_6_BSOLAR	25802	DEL SUR FD2	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
620	SCE	DELSUR_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
621	SCE	DELSUR_6_DRYFRB	25802	DEL SUR FD2	12.47	0.62	EQ	BC/Ventura		Aug NQC	Market
622	SCE	DELSUR_6_SOLAR1	25803	DEL SUR FD3	12.47	0.81	EQ	BC/Ventura		Aug NQC	Solar
623	SCE	DELSUR_6_SOLAR4				0.00		BC/Ventura		Not modeled Energy Only	Solar
624	SCE	DELSUR_6_SOLAR5				0.00		BC/Ventura		Not modeled Energy Only	Solar
625	SCE	EASTWD_7_UNIT	24319	EASTWOOD	13.8	199.00	1	BC/Ventura	Rector, Vestal		Market
626	SCE	EDMONS_2_NSPIN	25605	EDMON1AP	14.4	16.86	1	BC/Ventura		Pumps	MUNI
627	SCE	EDMONS_2_NSPIN	25606	EDMON2AP	14.4	16.86	2	BC/Ventura		Pumps	MUNI
628	SCE	EDMONS_2_NSPIN	25607	EDMON3AP	14.4	16.86	3	BC/Ventura		Pumps	MUNI
629	SCE	EDMONS_2_NSPIN	25607	EDMON3AP	14.4	16.86	4	BC/Ventura		Pumps	MUNI
630	SCE	EDMONS_2_NSPIN	25608	EDMON4AP	14.4	16.86	5	BC/Ventura		Pumps	MUNI
631	SCE	EDMONS_2_NSPIN	25608	EDMON4AP	14.4	16.86	6	BC/Ventura		Pumps	MUNI
632	SCE	EDMONS_2_NSPIN	25609	EDMON5AP	14.4	16.86	7	BC/Ventura		Pumps	MUNI
633	SCE	EDMONS_2_NSPIN	25609	EDMON5AP	14.4	16.86	8	BC/Ventura		Pumps	MUNI
634	SCE	EDMONS_2_NSPIN	25610	EDMON6AP	14.4	16.86	9	BC/Ventura		Pumps	MUNI
635	SCE	EDMONS_2_NSPIN	25610	EDMON6AP	14.4	16.86	10	BC/Ventura		Pumps	MUNI
636	SCE	EDMONS_2_NSPIN	25611	EDMON7AP	14.4	16.86	11	BC/Ventura		Pumps	MUNI
637	SCE	EDMONS_2_NSPIN	25611	EDMON7AP	14.4	16.86	12	BC/Ventura		Pumps	MUNI
638	SCE	EDMONS_2_NSPIN	25612	EDMON8AP	14.4	16.86	13	BC/Ventura		Pumps	MUNI
639	SCE	EDMONS_2_NSPIN	25612	EDMON8AP	14.4	16.86	14	BC/Ventura		Pumps	MUNI
640	SCE	GLDFGR_6_SOLAR1	25079	PRIDE B G	0.64	2.48	1	BC/Ventura		Aug NQC	Solar
641	SCE	GLDFGR_6_SOLAR2	25169	PRIDE C G	0.64	1.41	1	BC/Ventura		Aug NQC	Solar
642	SCE	GLOW_6_SOLAR	29896	APPINV	0.42	0.00	EQ	BC/Ventura		Energy Only	Solar
643	SCE	GOLETA_2_QF	25895	GOLETA EQFD	12.47	0.11	EQ	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC	QF/Selfgen
644	SCE	GOLETA_2_VALBT1	25726	WDT1492_G	0.6	10.00	EQ	BC/Ventura	S.Clara, Moorpark, Goleta		Battery
645	SCE	GOLETA_6_ELLWOD	29004	ELLWOOD	13.8	54.00	1	BC/Ventura	S.Clara, Moorpark, Goleta		Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
646	SCE	GOLETA_6_EXGEN	24362	EXGEN2	13.8	0.00	G1	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC - Currently out of service	QF/Selfgen
647	SCE	GOLETA_6_EXGEN	24326	EXGEN1	13.8	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC - Currently out of service	QF/Selfgen
648	SCE	LEBECS_2_UNITS	29053	PSTRIAS1	18	176.14	S1	BC/Ventura		Aug NQC	Market
649	SCE	LEBECS_2_UNITS	29051	PSTRIAG1	18	171.10	G1	BC/Ventura		Aug NQC	Market
650	SCE	LEBECS_2_UNITS	29052	PSTRIAG2	18	171.10	G2	BC/Ventura		Aug NQC	Market
651	SCE	LEBECS_2_UNITS	29054	PSTRIAG3	18	171.10	G3	BC/Ventura		Aug NQC	Market
652	SCE	LEBECS_2_UNITS	29055	PSTRIAS2	18	85.55	S2	BC/Ventura		Aug NQC	Market
653	SCE	LITLRK_6_GBCSR1	25798	OASIS FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
654	SCE	LITLRK_6_SEPV01				0.00		BC/Ventura		Not moleded Energy Only	Market
655	SCE	LITLRK_6_SOLAR1	25840	LITLRCK FD	12.47	0.62	EQ	BC/Ventura		Aug NQC	Solar
656	SCE	LITLRK_6_SOLAR2	25840	LITLRCK FD	12.47	0.25	EQ	BC/Ventura		Aug NQC	Solar
657	SCE	LITLRK_6_SOLAR3	25840	LITLRCK FD	12.47	0.25	EQ	BC/Ventura		Aug NQC	Solar
658	SCE	LITLRK_6_SOLAR4	25840	LITLRCK FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
659	SCE	LNCSTR_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
660	SCE	LNCSTR_6_SOLAR2	25796	LANCSTR FD1	12.47	6.90	EQ	BC/Ventura		Aug NQC	Solar
661	SCE	MNDALY_6_MCGRTH	29306	MCGPKGEN	13.8	48.56	1	BC/Ventura	S.Clara, Moorpark		Market
662	SCE	MOORPK_2_ACOBT1				1.00		BC/Ventura	Moorpark	Not modeled	Battery
663	SCE	MOORPK_2_CALABS	25081	WDT251	13.8	3.44	EQ	BC/Ventura	Moorpark	Aug NQC	Market
664	SCE	MOORPK_6_QF	240111	MOORARK EQFD	16	0.28	HY	BC/Ventura	Moorpark	Aug NQC	Market
665	SCE	NEENCH_6_SOLAR	29900	ALPINE_G	0.48	8.18	EQ	BC/Ventura		Aug NQC	Solar
666	SCE	OASIS_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
667	SCE	OASIS_6_GBDSR4	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
668	SCE	OASIS_6_SOLAR1	25095	SOLARISG2	0.2	0.00	EQ	BC/Ventura		Energy Only	Solar
669	SCE	OASIS_6_SOLAR2	25075	SOLARISG	0.2	2.48	EQ	BC/Ventura		Aug NQC	Solar
670	SCE	OASIS_6_SOLAR3				0.00		BC/Ventura		Not modeled Energy Only	Solar
671	SCE	OMAR_2_UNIT 1	24102	OMAR 1G	13.8	72.67	1	BC/Ventura			Net Seller
672	SCE	OMAR_2_UNIT 2	24103	OMAR 2G	13.8	73.00	2	BC/Ventura			Net Seller
673	SCE	OMAR_2_UNIT 3	24104	OMAR 3G	13.8	73.00	3	BC/Ventura			Net Seller
674	SCE	OMAR_2_UNIT 4	24105	OMAR 4G	13.8	73.67	4	BC/Ventura			Net Seller
675	SCE	ORMOND_7_UNIT 1	24107	ORMOND1G	26	0.00	1	BC/Ventura	Moorpark	Strategic Reserve	Market
676	SCE	ORMOND_7_UNIT 2	24108	ORMOND2G	26	0.00	2	BC/Ventura	Moorpark	Strategic Reserve	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
677	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	1	BC/Ventura		Pumps	MUNI
678	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	2	BC/Ventura		Pumps	MUNI
679	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	3	BC/Ventura		Pumps	MUNI
680	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	4	BC/Ventura		Pumps	MUNI
681	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	5	BC/Ventura		Pumps	MUNI
682	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	6	BC/Ventura		Pumps	MUNI
683	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	7	BC/Ventura		Pumps	MUNI
684	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	8	BC/Ventura		Pumps	MUNI
685	SCE	PIUTE_6_GNBSR1	25840	LITLRCK FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
686	SCE	PLAINV_6_BSOLAR	29917	SSOLAR_GRW KS	0.8	0.00	1	BC/Ventura		Energy Only	Solar
687	SCE	PLAINV_6_DSOLAR	29914	WADR_PV	0.42	1.24	1	BC/Ventura		Aug NQC	Solar
688	SCE	PLAINV_6_NLRSR1	29921	NLR_INVTR	0.42	0.00	1	BC/Ventura		Energy Only	Solar
689	SCE	PLAINV_6_SOLAR3	25089	CNTRL ANT G	0.42	0.00	1	BC/Ventura		Energy Only	Solar
690	SCE	PLAINV_6_SOLARC	25086	SIRA SOLAR G	0.8	0.00	1	BC/Ventura		Energy Only	Solar
691	SCE	PMDLET_6_SOLAR1	29926	WDT404_G	0.8	1.24	EQ	BC/Ventura		AugNQC	Solar
692	SCE	RECTOR_2_CREST				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
693	SCE	RECTOR_2_IVANPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Solar
694	SCE	RECTOR_2_KAWEAH	25756	KAWEAH3G	2.4	0.02	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
695	SCE	RECTOR_2_KAWEAH	25755	KAWEAH1G	2.4	0.01	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
696	SCE	RECTOR_2_KAWEAH	25754	KAWEAH2G	2.4	0.01	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
697	SCE	RECTOR_2_KAWH 1	24370	KAWGEN	13.8	0.03	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
698	SCE	RECTOR_2_QF				0.00		BC/Ventura	Rector, Vestal	Aug NQC	Net Seller
699	SCE	RECTOR_2_TFDBM1				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
700	SCE	RECTOR_7_TULARE				0.00		BC/Ventura	Rector, Vestal	Not modeled Aug NQC	Market
701	SCE	REDMAN_2_SOLAR	25800	ANTLOPE EQFD	12.47	0.47	EQ	BC/Ventura		Aug NQC	Solar
702	SCE	REDMAN_6_AVSSR1	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
703	SCE	ROSMND_6_SOLAR	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
704	SCE	RSMSLR_6_SOLAR1	29884	DAWNGEN	0.8	2.48	EQ	BC/Ventura		Aug NQC	Solar
705	SCE	RSMSLR_6_SOLAR2	29888	TWILGHTG	0.8	2.48	EQ	BC/Ventura		Aug NQC	Solar
706	SCE	SAUGUS_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
707	SCE	SAUGUS_6_MWDFTH	25721	FOOTHILL	66	4.00	EQ	BC/Ventura		Aug NQC	MUNI
708	SCE	SAUGUS_6_QF	25891	SUAGUS EQFD	12.47	0.30	EQ	BC/Ventura		Aug NQC	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
709	SCE	SAUGUS_6_QF	25865	SUAGUS EQFD	12.47	0.30	EQ	BC/Ventura		Aug NQC	QF/Selfgen
710	SCE	SAUGUS_7_CHIQCN	25722	LANDFILL	66	5.35	EQ	BC/Ventura		Aug NQC	Market
711	SCE	SHUTLE_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
712	SCE	SNCLRA_2_HOWLNG				5.03		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	Market
713	SCE	SNCLRA_2_SILBT1	25899	WDT1520_G	0.48	11.00	EQ	BC/Ventura	S.Clara, Moorpark		Battery
714	SCE	SNCLRA_2_SPRHYD				0.16		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	Market
715	SCE	SNCLRA_2_UNIT	29952	CAMGEN	13.8	27.50	D1	BC/Ventura	S.Clara, Moorpark		Market
716	SCE	SNCLRA_2_UNIT1	24159	WILLAMET	3.8	27.80	D1	BC/Ventura	S.Clara, Moorpark	Aug NQC	Market
717	SCE	SNCLRA_2_VESBT1	29824	WDT1519	66	100.00	1	BC/Ventura	S.Clara, Moorpark		Battery
718	SCE	SNCLRA_6_OXGEN	24110	OXGEN	13.8	47.70	D1	BC/Ventura	S.Clara, Moorpark		QF/Selfgen
719	SCE	SNCLRA_6_PROCGN	24119	PROCGEN	13.8	19.41	D1	BC/Ventura	S.Clara, Moorpark	Aug NQC	QF/Selfgen
720	SCE	SNCLRA_6_QF				0.31		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	QF/Selfgen
721	SCE	SPRGVL_2_CREST				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
722	SCE	SPRGVL_2_EXETPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
723	SCE	SPRGVL_2_LINDPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
724	SCE	SPRGVL_2_PORTPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
725	SCE	SPRGVL_2_TULESC	25714	TULE	66	0.00	EQ	BC/Ventura	Rector, Vestal	Aug NQC	Market
726	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	1	BC/Ventura		Aug NQC	Market
727	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	2	BC/Ventura		Aug NQC	Market
728	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	3	BC/Ventura		Aug NQC	Market
729	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	4	BC/Ventura		Aug NQC	Market
730	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	5	BC/Ventura		Aug NQC	Market
731	SCE	SYCAMR_2_UNIT 1	24143	SYCCYN1G	13.8	74.00	1	BC/Ventura		Aug NQC	Net Seller
732	SCE	SYCAMR_2_UNIT 2	24144	SYCCYN2G	13.8	76.00	2	BC/Ventura		Aug NQC	Net Seller
733	SCE	SYCAMR_2_UNIT 3	24145	SYCCYN3G	13.8	74.00	3	BC/Ventura		Aug NQC	Net Seller
734	SCE	SYCAMR_2_UNIT 4	24146	SYCCYN4G	13.8	76.00	4	BC/Ventura		Aug NQC	Net Seller
735	SCE	TENGEN_2_PL1X2	24148	TENNGEN1	13.8	18.85	D1	BC/Ventura		Aug NQC	Net Seller
736	SCE	TENGEN_2_PL1X2	24149	TENNGEN2	13.8	18.85	D2	BC/Ventura		Aug NQC	Net Seller
737	SCE	TULARE_2_TULBM1				0.00		BC/Ventura		Not modeled Energy Only	Market
738	SCE	VESTAL_2_KERN	24372	KR 3-1	11	0.15	1	BC/Ventura	Vestal	Aug NQC	QF/Selfgen
739	SCE	VESTAL_2_KERN	24373	KR 3-2	11	0.15	2	BC/Ventura	Vestal	Aug NQC	QF/Selfgen
740	SCE	VESTAL_2_RTS042	25874	VESTAL EQFC	12,47	0.00	HY	BC/Ventura	Vestal	Energy Only	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
741	SCE	VESTAL_2_SOLAR1	25064	TULRESLR_1G	0.39	2.48	EQ	BC/Ventura	Vestal	Aug NQC	Solar
742	SCE	VESTAL_2_SOLAR2	25065	TULRESLR_2G	0.39	1.74	EQ	BC/Ventura	Vestal	Aug NQC	Solar
743	SCE	VESTAL_2_TS5SR1	25874	VESTAL EQFC	12.47	6.92	PV	BC/Ventura	Vestal	Aug NQC	Solar
744	SCE	VESTAL_2_UNIT1	25874	VESTAL EQFC	12.47	2.69	SY	BC/Ventura	Vestal	Aug NQC	Market
745	SCE	VESTAL_2_WELLHD	24116	WELLGEN	13.8	49.00	1	BC/Ventura	Vestal		Market
746	SCE	VESTAL_6_QF	29008	LAKEGEN	13.8	1.77	1	BC/Ventura	Vestal	Aug NQC	Market
747	SCE	VESTAL_6_QF	29008	LAKEGEN	13.8	0.72	2	BC/Ventura	Vestal	Aug NQC	Market
748	SCE	WARNE_2_UNIT	25651	WARNE1	13.8	19.54	1	BC/Ventura		Aug NQC	MUNI
749	SCE	WARNE_2_UNIT	25652	WARNE2	13.8	19.54	2	BC/Ventura		Aug NQC	MUNI
750	SCE	ZZZ_New Unit	102903	WDT1647_G	0.69	134.90	1	BC/Ventura	Moorpark	No NQC - est. data	Battery
751	SCE	ZZZ_New Unit	29561	ANTLP2_P1_G1	0.63	125.00	1	BC/Ventura		No NQC - est. data	Battery
752	SCE	ZZZ_New Unit	25967	TOT896_G2ST	0.55	109.50	1	BC/Ventura	Vestal	No NQC - Pmax	Battery
753	SCE	ZZZ_New Unit	25961	TOT896_G1ST	0.55	109.50	1	BC/Ventura	Vestal	No NQC - Pmax	Battery
754	SCE	ZZZ_New Unit	99064	WDT1649_G	0.385	80.00	1	BC/Ventura		No NQC - est. data	Battery
755	SCE	ZZZ_New Unit	29836	WDT1384_G	0.63	50.00	1	BC/Ventura	Vestal	No NQC - est. data	Hybrid
756	SCE	ZZZ_New Unit	29826	WDT1454	66	40.00	1	BC/Ventura	S.Clara, Moorpark	No NQC - Pmax	Battery
757	SCE	ZZZ_New Unit	698426	WDT1532_G	0.48	30.00	0	BC/Ventura	S.Clara, Moorpark	No NQC - est. data	Battery
758	SCE	ZZZ_New Unit	29830	WDT1454	66	20.00	1	BC/Ventura	S.Clara, Moorpark	No NQC - Pmax	Battery
759	SCE	ZZZ_New Unit	25959	TOT896_G1PV	0.55	19.01	1	BC/Ventura	Vestal	No NQC - est. data	Solar
760	SCE	ZZZ_New Unit	25965	TOT896_G2PV	0.55	18.76	1	BC/Ventura	Vestal	No NQC - est. data	Solar
761	SCE	ZZZ_New Unit	101801	WDT1710_G	66	14.00	1	BC/Ventura		No NQC - est. data	Battery
762	SCE	ZZZ_New Unit	29767	ANTLP2_P7B_G	0.69	12.88	1	BC/Ventura		No NQC - est. data	Battery
763	SCE	ZZZ_New Unit	29563	ANTLP2_P9_G2	0.69	10.23	2	BC/Ventura		No NQC - est. data	Solar
764	SCE	ZZZ_New Unit	25795	WDT1539_G	0.8	10.00	1	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Battery
765	SCE	ZZZ_New Unit	29566	ANTLP2_P1BG2	0.69	8.06	1	BC/Ventura		No NQC - est. data	Solar
766	SCE	ZZZ_New Unit	29782	ANTLP2_C2_G1	0.44	7.19	EQ	BC/Ventura		No NQC - est. data	Solar
767	SCE	ZZZ_New Unit	25069	WDT1490_PV	0.36	7.11	1	BC/Ventura	Vestal	No NQC - est. data	Solar
768	SCE	ZZZ_New Unit	240115	GOLETA EQFD	16	5.50	SC	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
769	SCE	ZZZ_New Unit	29771	ANT2_SPB	0.6	5.08	EQ	BC/Ventura		No NQC - est. data	Solar
770	SCE	ZZZ_New Unit	29565	ANTLP2_P10_G 2	0.69	3.65	2	BC/Ventura		No NQC - est. data	Solar
771	SCE	ZZZ_New Unit	25855	RECTOR EQFD	12.47	2.42	PV	BC/Ventura	Rector, Vestal	No NQC - est. data	Solar
772	SCE	ZZZ_New Unit	29775	ANTLP2_P8_G1	0.66	2.18	1	BC/Ventura		No NQC - est. data	Solar
773	SCE	ZZZ_New Unit	29774	ANTLP2_P4_G	0.63	1.88	1	BC/Ventura		No NQC - est. data	Solar
774	SCE	ZZZ_New Unit	240113	GOLETA EQFD	16	1.10	HY	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Market
775	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	1.00	HY	BC/Ventura	Rector, Vestal	No NQC - est. data	Market
776	SCE	ZZZ_New Unit	29569	ANTLP2_P5_G	0.66	0.63	1	BC/Ventura		No NQC - est. data	Solar
777	SCE	ZZZ_New Unit	240011	ANODE_G1	34.5	0.00	1	BC/Ventura	Rector, Vestal	Waiting TPD allocation	Battery
778	SCE	ZZZ_New Unit	240014	ANODE_G2	34.5	0.00	2	BC/Ventura	Rector, Vestal	Waiting TPD allocation	Battery
779	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	0.00	EN	BC/Ventura	Rector, Vestal	No NQC - est. data	Market
780	SCE	ZZZ_New Unit	29775	ANTLP2_P7_G1	0.44	0.00	EQ	BC/Ventura		No NQC - est. data	Solar
781	SCE	ZZZ_New Unit	25865	SUAGUS EQFD	12.47	0.00	PV	BC/Ventura		Energy Only	Solar
782	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	0.00	PV	BC/Ventura	Rector, Vestal	Energy Only	Solar
783	SCE	ZZZ_New Unit	25800	ANTLOPE EQFD	12.47	0.00	WD	BC/Ventura		Energy Only	Wind
784	SCE	ZZZZZ_APPGEN_6_UNIT 1	24009	APPGEN1G	13.8	0.00	1	BC/Ventura		Retired	Market
785	SCE	ZZZZZ_APPGEN_6_UNIT 1	24010	APPGEN2G	13.8	0.00	2	BC/Ventura		Retired	Market
786	SCE	ZZZZZ_APPGEN_6_UNIT 1	24361	APPGEN3G	13.8	0.00	3	BC/Ventura		Retired	Market
787	SCE	ZZZZZ_GOLETA_6_GAVOTA	25335	GOLETA_DIST	66	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Retired	Market
788	SCE	ZZZZZ_GOLETA_6_TAJIGS	25335	GOLETA_DIST	66	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Retired	Market
789	SCE	ZZZZZ_MNDALY_7_UNIT 1	24089	MANDLY1G	13.8	0.00	1	BC/Ventura	S.Clara, Moorpark	Retired	Market
790	SCE	ZZZZZ_MNDALY_7_UNIT 2	24090	MANDLY2G	13.8	0.00	2	BC/Ventura	S.Clara, Moorpark	Retired	Market
791	SCE	ZZZZZ_MNDALY_7_UNIT 3	24222	MANDLY3G	16	0.00	3	BC/Ventura	S.Clara, Moorpark	Retired	Market
792	SCE	ZZZZZ_MOORPK_7_UNITA1	24098	MOORPARK	66	0.00		BC/Ventura	Moorpark	Retired	Market
793	SCE	ZZZZZ_PANDOL_6_UNIT	24113	PANDOL	13.8	0.00	1	BC/Ventura	Vestal	Retired	Market
794	SCE	ZZZZZ_PANDOL_6_UNIT	24113	PANDOL	13.8	0.00	2	BC/Ventura	Vestal	Retired	Market
795	SCE	ZZZZZ_SAUGUS_2_TOLAND	24135	SAUGUS	66	0.00		BC/Ventura		Retired	Market
796	SCE	ZZZZZ_SAUGUS_6_PTCHGN	24118	PITCHGEN	13.8	0.00	D1	BC/Ventura		Retired	MUNI
797	SCE	ZZZZZ_SAUGUS_7_LOPEZ	24135	SAUGUS	66	0.00		BC/Ventura		Retired	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
798	SCE	ZZZZZ_SPRGVL_2_TULE	25334	SPRNGVL_DIST	66	0.00	S2	BC/Ventura	Rector, Vestal	Retired	Market
799	SCE	ZZZZZ_VESTAL_6_ULTRGN	24150	ULTRAGEN	13.8	0.00	1	BC/Ventura	Vestal	Retired	QF/Selfgen
800	SCE	ALAMIT_2_PL1X3	24577	ALMT STG	18	251.66	S1	LA Basin	Western		Market
801	SCE	ALAMIT_2_PL1X3	24575	ALMT CTG1	18	211.52	G1	LA Basin	Western		Market
802	SCE	ALAMIT_2_PL1X3	24576	ALMT CTG2	18	211.52	G2	LA Basin	Western		Market
803	SCE	ALAMIT_7_ES1	25523	ALMITOS B1_G	0.645	100.00	1	LA Basin	Western		Battery
804	SCE	ALAMIT_7_UNIT 3	24003	ALAMT3 G	18	0.00	3	LA Basin	Western	Strategic Reserve	Market
805	SCE	ALAMIT_7_UNIT 4	24004	ALAMT4 G	18	0.00	4	LA Basin	Western	Strategic Reserve	Market
806	SCE	ALAMIT_7_UNIT 5	24005	ALAMT5 G	20	0.00	5	LA Basin	Western	Strategic Reserve	Market
807	SCE	ALTWD_2_AT3WD3	29077	ALTWNDGEN2	0.6	1.07	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
808	SCE	ALTWD_2_COAWD1	29075	ALTWNDGEN1	0.65	5.49	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
809	SCE	ANAHM_2_CANYN1	25211	CanyonGT 1	13.8	49.21	1	LA Basin	Western		MUNI
810	SCE	ANAHM_2_CANYN2	25212	CanyonGT 2	13.8	48.04	2	LA Basin	Western		MUNI
811	SCE	ANAHM_2_CANYN3	25213	CanyonGT 3	13.8	46.49	3	LA Basin	Western		MUNI
812	SCE	ANAHM_2_CANYN4	25214	CanyonGT 4	13.8	49.80	4	LA Basin	Western		MUNI
813	SCE	ARCOGN_2_UNITS	24011	ARCO 1G	13.8	61.00	1	LA Basin	Western	Aug NQC	Net Seller
814	SCE	ARCOGN_2_UNITS	24012	ARCO 2G	13.8	61.00	2	LA Basin	Western	Aug NQC	Net Seller
815	SCE	ARCOGN_2_UNITS	24013	ARCO 3G	13.8	61.00	3	LA Basin	Western	Aug NQC	Net Seller
816	SCE	ARCOGN_2_UNITS	24014	ARCO 4G	13.8	61.00	4	LA Basin	Western	Aug NQC	Net Seller
817	SCE	ARCOGN_2_UNITS	24163	ARCO 5G	13.8	30.50	5	LA Basin	Western	Aug NQC	Net Seller
818	SCE	ARCOGN_2_UNITS	24164	ARCO 6G	13.8	30.50	6	LA Basin	Western	Aug NQC	Net Seller
819	SCE	BARRE_2_ALASB1				5.96		LA Basin	Western	Not modeled	Hybrid
820	SCE	BARRE_2_QF				0.00		LA Basin	Western	Not modeled	QF/Selfgen
821	SCE	BARRE_6_PEAKER	29309	BARPKGEN	13.8	49.00	1	LA Basin	Western		Market
822	SCE	BLAST_1_WIND	29049	BLAST_G	0.6	5.33	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
823	SCE	BUCKWD_1_NPALM1	240150	DEVERS FC	12.47	0.30	EQ	LA Basin	Eastern, Valley-Devers	Not modeled Aug NQC	Wind
824	SCE	BUCKWD_1_QF	25634	BUCKWIND	115	1.80	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
825	SCE	BUCKWD_7_WINTCV	25634	BUCKWIND	115	0.14	W5	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
826	SCE	CABZON_1_WINDA1	29290	CABAZON	33	4.46	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
827	SCE	CAPWD_1_QF	25633	CAPWIND	115	2.13	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
828	SCE	CENTER_2_RHONDO	25810	CENTER EQFD	12.47	0.00	EQ	LA Basin	Western		QF/Selfgen
829	SCE	CENTER_2_SOLAR1				0.00		LA Basin	Western	Not modeled Energy Only	Solar
830	SCE	CENTER_2_TECNG1				0.00		LA Basin	Western	Not modeled Energy Only	Market
831	SCE	CENTER_6_PEAKER	29308	CTRPKGEN	13.8	47.30	1	LA Basin	Western		Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
832	SCE	CENTER_6_PEAKER	25187	WDT1429_BATT	0.48	0.00	1	LA Basin	Western	Start-up/Back-up	Battery
833	SCE	CENTRY_6_PL1X4	25302	CLTNCTRY	13.8	40.00	1	LA Basin	Eastern	Aug NQC	MUNI
834	SCE	CHEVMN_2_UNITS	29009	CHEVGEN 5	13.8	2.66	1	LA Basin	Western, El Nido	Aug NQC	Net Seller
835	SCE	CHEVMN_2_UNITS	24022	CHEVGEN 1	13.8	2.39	1	LA Basin	Western, El Nido	Aug NQC	Net Seller
836	SCE	CHEVMN_2_UNITS	24023	CHEVGEN 2	13.8	2.39	2	LA Basin	Western, El Nido	Aug NQC	Net Seller
837	SCE	CHEVMN_2_UNITS	29009	CHEVGEN 5	13.8	0.48	2	LA Basin	Western, El Nido	Aug NQC	Net Seller
838	SCE	CHINO_2_APEBT1	25180	WDT1445BESS	0.48	20.00	1	LA Basin	Eastern	Aug NQC	Battery
839	SCE	CHINO_2_JURUPA				0.00		LA Basin	Eastern	Not modeled Energy Only	Market
840	SCE	CHINO_2_PESBT1				10.00		LA Basin	Eastern	Not modeled	Battery
841	SCE	CHINO_2_QF	25812	CHINO EQFC	12.47	0.00	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
842	SCE	CHINO_2_SASOLR				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
843	SCE	CHINO_2_SOLAR2				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
844	SCE	CHINO_6_CIMGEN	24026	CIMGEN	13.8	26.00	D1	LA Basin	Eastern	Aug NQC	QF/Selfgen
845	SCE	COLTON_6_AGUAM1	25303	CLTNAGUA	13.8	43.00	1	LA Basin	Eastern	Aug NQC	MUNI
846	SCE	CORONS_2_SOLAR				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
847	SCE	CORONS_6_CLRWTR	29338	CLRWTRCT	13.8	20.72	G1	LA Basin	Eastern		MUNI
848	SCE	CORONS_6_CLRWTR	29340	CLRWTRST	13.8	7.28	S1	LA Basin	Eastern		MUNI
849	SCE	DELAMO_2_ALASB2				5.96		LA Basin	Western	Not modeled	Hybrid
850	SCE	DELAMO_2_SOLAR1	25818	DELAMO EQFD	12.47	0.19	EQ	LA Basin	Western	Aug NQC	Solar
851	SCE	DELAMO_2_SOLAR2	25818	DELAMO EQFD	12.47	0.22	EQ	LA Basin	Western	Aug NQC	Solar
852	SCE	DELAMO_2_SOLAR3	25818	DELAMO EQFD	12.47	0.16	EQ	LA Basin	Western	Aug NQC	Solar
853	SCE	DELAMO_2_SOLAR4	25818	DELAMO EQFD	12.47	0.16	EQ	LA Basin	Western	Aug NQC	Solar
854	SCE	DELAMO_2_SOLAR5	25818	DELAMO EQFD	12.47	0.12	EQ	LA Basin	Western	Aug NQC	Solar
855	SCE	DELAMO_2_SOLAR6	25818	DELAMO EQFD	12.47	0.25	EQ	LA Basin	Western	Aug NQC	Solar
856	SCE	DELAMO_2_SOLRC1				0.00		LA Basin	Western	Not modeled Energy Only	Solar
857	SCE	DELAMO_2_SOLRD				0.00		LA Basin	Western	Not modeled Energy Only	Solar
858	SCE	DEVERS_1_SEPV05				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
859	SCE	DEVERS_1_SOLAR				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
860	SCE	DEVERS_1_SOLAR1				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
861	SCE	DEVERS_1_SOLAR2				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
862	SCE	DEVERS_2_CS2SR4				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
863	SCE	DEVERS_2_DHSPG2				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
864	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	2	LA Basin	Eastern	Aug NQC	QF/Selfgen
865	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	3	LA Basin	Eastern	Aug NQC	QF/Selfgen
866	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	4	LA Basin	Eastern	Aug NQC	QF/Selfgen
867	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	6	LA Basin	Eastern	Aug NQC	QF/Selfgen
868	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	7	LA Basin	Eastern	Aug NQC	QF/Selfgen
869	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	8	LA Basin	Eastern	Aug NQC	QF/Selfgen
870	SCE	DMDVLY_1_UNITS	25426	ESRP P3	6.9	0.07	10	LA Basin	Eastern	Aug NQC	QF/Selfgen
871	SCE	DMDVLY_1_UNITS	25425	ESRP P3	6.9	0.07	11	LA Basin	Eastern	Aug NQC	QF/Selfgen
872	SCE	DMDVLY_1_UNITS	25425	ESRP P3	6.9	0.07	12	LA Basin	Eastern	Aug NQC	QF/Selfgen
873	SCE	DREWS_6_PL1X4	25301	CLTNDREW	13.8	40.00	1	LA Basin	Eastern	Aug NQC	MUNI
874	SCE	DVLCYN_1_UNITS	25603	DVLCYN3G	13.8	40.03	3	LA Basin	Eastern	Aug NQC	MUNI
875	SCE	DVLCYN_1_UNITS	25604	DVLCYN4G	13.8	40.03	4	LA Basin	Eastern	Aug NQC	MUNI
876	SCE	DVLCYN_1_UNITS	25648	DVLCYN1G	13.8	30.02	1	LA Basin	Eastern	Aug NQC	MUNI
877	SCE	DVLCYN_1_UNITS	25649	DVLCYN2G	13.8	30.02	2	LA Basin	Eastern	Aug NQC	MUNI
878	SCE	ELLIS_2_QF	24325	ORCOGEN	13.8	0.76	1	LA Basin	Western	Aug NQC	QF/Selfgen
879	SCE	ELSEGN_2_UN1011	29904	ELSEG5GT	16.5	137.16	5	LA Basin	Western, El Nido	Aug NQC	Market
880	SCE	ELSEGN_2_UN1011	29903	ELSEG6ST	13.8	137.16	6	LA Basin	Western, El Nido	Aug NQC	Market
881	SCE	ELSEGN_2_UN2021	29902	ELSEG7GT	16.5	135.87	7	LA Basin	Western, El Nido	Aug NQC	Market
882	SCE	ELSEGN_2_UN2021	29901	ELSEG8ST	13.8	135.87	8	LA Basin	Western, El Nido	Aug NQC	Market
883	SCE	ESNHWR_2_WC1BT1	25632	EISNHOW EQFD	12.47	1.50	EQ	LA Basin	Eastern, Valley-Devers		Battery
884	SCE	ETIWND_2_CHMPNE				0.00		LA Basin	Eastern	Not modeled Energy Only	Market
885	SCE	ETIWND_2_FONTNA	25822	ETIWANDA EQFD	12.47	0.38	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
886	SCE	ETIWND_2_SOLAR1	25822	ETIWANDA EQFD	12.47	0.12	EQ	LA Basin	Eastern	Aug NQC	Solar
887	SCE	ETIWND_2_SOLAR2				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
888	SCE	ETIWND_2_SOLAR5				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
889	SCE	ETIWND_2_UNIT1	24071	INLAND	13.8	33.60	1	LA Basin	Eastern	Aug NQC	QF/Selfgen
890	SCE	ETIWND_6_GRPLND	29305	ETWPKGEN	13.8	45.64	1	LA Basin	Eastern		Market
891	SCE	ETIWND_6_GRPLND	25188	WDT1430_BES S	13.8	0.00	1	LA Basin	Eastern	Start-up/Back-up	Battery
892	SCE	ETIWND_6_MWDETI	25422	ETI MWDG	13.8	0.00	1	LA Basin	Eastern	Aug NQC	Market

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Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
893	SCE	GARNET_1_SOLAR				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
894	SCE	GARNET_1_SOLAR2	25827	GARNET FD	34.5	0.50	EQ	LA Basin	Eastern, Valley-Devers	Aug NQC	Solar
895	SCE	GARNET_1_WIND	24815	GARNET	115	0.71	W3	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
896	SCE	GARNET_1_WINDS	24815	GARNET	115	2.45	W2	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
897	SCE	GARNET_1_WT3WND				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
898	SCE	GARNET_2_COAWD2	24815	GARNET	115	1.18	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
899	SCE	GARNET_2_HYDRO	24815	GARNET	115	0.00	PC	LA Basin	Eastern, Valley-Devers	Aug NQC	Market
900	SCE	GARNET_2_WIND1	24815	GARNET	115	1.22	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
901	SCE	GARNET_2_WIND2	24815	GARNET	115	1.27	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
902	SCE	GARNET_2_WIND3	24815	GARNET	115	1.37	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
903	SCE	GARNET_2_WIND4	24815	GARNET	115	1.07	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
904	SCE	GARNET_2_WIND5	24815	GARNET	115	0.33	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
905	SCE	GLNARM_2_UNIT 5	29013	GLENARM5_CT	13.8	50.00	СТ	LA Basin	Western		MUNI
906	SCE	GLNARM_2_UNIT 5	29014	GLENARM5_ST	13.8	15.00	ST	LA Basin	Western		MUNI
907	SCE	GLNARM_7_UNIT 1	29005	PASADNA1	13.8	22.13	1	LA Basin	Western		MUNI
908	SCE	GLNARM_7_UNIT 2	29006	PASADNA2	13.8	22.38	1	LA Basin	Western		MUNI
909	SCE	GLNARM_7_UNIT 3	25042	PASADNA3	13.8	44.83	1	LA Basin	Western		MUNI
910	SCE	GLNARM_7_UNIT 4	25043	PASADNA4	13.8	42.42	1	LA Basin	Western		MUNI
911	SCE	HARBGN_7_UNITS	24062	HARBOR G	13.8	76.27	1	LA Basin	Western		Market
912	SCE	HARBGN_7_UNITS	24062	HARBOR G	13.8	11.86	HP	LA Basin	Western		Market
913	SCE	HARBGN_7_UNITS	25510	HARBORG4	4.16	11.86	LP	LA Basin	Western		Market
914	SCE	HINSON_6_LBECH1	24170	LBEACH12	13.8	63.00	1	LA Basin	Western		Market
915	SCE	HINSON_6_LBECH2	24170	LBEACH12	13.8	63.00	2	LA Basin	Western		Market
916	SCE	HINSON_6_LBECH3	24171	LBEACH34	13.8	63.00	3	LA Basin	Western		Market
917	SCE	HINSON_6_LBECH4	24171	LBEACH34	13.8	63.00	4	LA Basin	Western		Market
918	SCE	HINSON_6_SERRGN	24139	SERRFGEN	13.8	34.00	D1	LA Basin	Western	Aug NQC	Market
919	SCE	HNTGBH_2_PL1X3	24582	HUNTBCH STG	18	251.34	S1	LA Basin	Western		Market
920	SCE	HNTGBH_2_PL1X3	24580	HUNTBCH CTG1	18	211.23	G1	LA Basin	Western		Market
921	SCE	HNTGBH_2_PL1X3	24581	HUNTBCH CTG2	18	211.23	G2	LA Basin	Western		Market
922	SCE	HNTGBH_7_UNIT 2	24067	HUNT2 G	13.8	0.00	2	LA Basin	Western	Strategic Reserve	Market
923	SCE	INDIGO_1_UNIT 1	29190	INDIGO G4	13.8	45.30	4	LA Basin	Eastern, Valley-Devers		Market
924	SCE	INDIGO_1_UNIT 2	29191	INDIGO G5	13.8	45.30	5	LA Basin	Eastern, Valley-Devers		Market
925	SCE	INDIGO_1_UNIT 3	29180	INDIGO G3	13.8	45.30	3	LA Basin	Eastern, Valley-Devers		Market
926	SCE	JOANEC_2_ST3BT3	102869	SNTANSG3	0.55	40.00	3	LA Basin	Western	<u> </u>	Battery

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
927	SCE	JOANEC_2_STABT1	102867	SNTANSG1	0.55	20.00	1	LA Basin	Western		Battery
928	SCE	JOANEC_2_STABT2	102868	SNTANSG2	0.55	20.00	2	LA Basin	Western		Battery
929	SCE	JOHANN_2_JOSBT1	698403	JOHANNA_PRP	66	10.00	EQ	LA Basin	Western		Battery
930	SCE	JOHANN_2_JOSBT2	698403	JOHANNA_PRP	66	10.00	EQ	LA Basin	Western		Battery
931	SCE	JOHANN_2_OCEBT2	698403	JOHANNA_PRP	66	9.00	EQ	LA Basin	Western		Battery
932	SCE	JOHANN_2_OCEBT3	698403	JOHANNA_PRP	66	6.00	EQ	LA Basin	Western		Battery
933	SCE	LACIEN_2_VENICE	24337	VENICE	13.8	0.00	1	LA Basin	Western, El Nido	Aug NQC	MUNI
934	SCE	LGHTHP_6_ICEGEN	24070	ICEGEN	13.8	37.80	GT	LA Basin	Western	Aug NQC	QF/Selfgen
935	SCE	LGHTHP_6_ICEGEN	24070	ICEGEN	13.8	10.20	ST	LA Basin	Western	Aug NQC	QF/Selfgen
936	SCE	MARVEL_2_MARBT3	25239	MARVEL_ES3	34.5	74.93	1	LA Basin	Eastern, Valley-Devers		Battery
937	SCE	MARVEL_2_MARBX2	25231	MARVEL_ES1	34.5	162.50	1	LA Basin	Eastern, Valley-Devers		Battery
938	SCE	MARVEL_2_MARBX2	25235	MARVEL_ES2	34.5	162.50	1	LA Basin	Eastern, Valley-Devers		Battery
939	SCE	MIRLOM_2_CORONA	25844	MIRALOMA EQFD	12.47	0.64	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
940	SCE	MIRLOM_2_CREST	25844	MIRALOMA EQFD	12.47	0.00	EQ	LA Basin	Eastern	Aug NQC	Market
941	SCE	MIRLOM_2_LNDFL	25844	MIRALOMA EQFD	12.47	0.37	EQ	LA Basin	Eastern	Aug NQC	Market
942	SCE	MIRLOM_2_MLBBTA	25185	WDT1425_G1	0.48	10.00	1	LA Basin	Eastern	Aug NQC	Battery
943	SCE	MIRLOM_2_MLBBTB	25186	WDT1426_G2	0.48	10.00	1	LA Basin	Eastern	Aug NQC	Battery
944	SCE	MIRLOM_2_TEMESC	25844	MIRALOMA EQFD	12.47	0.77	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
945	SCE	MIRLOM_6_PEAKER	29307	MRLPKGEN	13.8	47.18	1	LA Basin	Eastern		Market
946	SCE	MIRLOM_7_MWDLKM	24210	MIRALOMA	66	3.60		LA Basin	Eastern	Not modeled Aug NQC	MUNI
947	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	1	LA Basin	Eastern	Aug NQC	Market
948	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	2	LA Basin	Eastern	Aug NQC	Market
949	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	3	LA Basin	Eastern	Aug NQC	Market
950	SCE	MTWIND_1_MVPWD1	29064	MOUNTWND_1 G	0.6	7.25	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
951	SCE	MTWIND_1_UNIT 3	29069	MOUNTWND_3 G	0.6	2.44	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
952	SCE	OLINDA_2_COYCRK				0.00		LA Basin	Western	Not modeled	QF/Selfgen
953	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	7.72	S1	LA Basin	Western	Aug NQC	Market
954	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C1	LA Basin	Western	Aug NQC	Market
955	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C2	LA Basin	Western	Aug NQC	Market
956	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C3	LA Basin	Western	Aug NQC	Market
957	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C4	LA Basin	Western	Aug NQC	Market
958	SCE	OLINDA_7_BLKSND				0.25		LA Basin	Western	Not modeled Aug NQC	Market

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Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
959	SCE	PADUA_2_ONTARO	25851	PADUA EQFC	12.47	0.64	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
960	SCE	PADUA_2_SOLAR1				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
961	SCE	PADUA_6_MWDSDM	25851	PADUA EQFC	12.47	0.80	EQ	LA Basin	Eastern	Aug NQC	MUNI
962	SCE	PADUA_6_QF	25851	PADUA EQFC	12.47	0.34	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
963	SCE	PADUA_7_SDIMAS	25851	PADUA EQFC	12.47	1.05	EQ	LA Basin	Eastern	Aug NQC	Market
964	SCE	PWEST_1_UNIT	24815	GARNET	115	0.23	PC	LA Basin	Western	Aug NQC	Market
965	SCE	RENWD_1_QF	25636	RENWIND	115	0.55	Q1	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
966	SCE	RENWD_1_QF	25636	RENWIND	115	0.55	Q2	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
967	SCE	RVSIDE_2_RERCU3	24299	RERC2G3	13.8	49.00	1	LA Basin	Eastern		MUNI
968	SCE	RVSIDE_2_RERCU4	24300	RERC2G4	13.8	49.00	1	LA Basin	Eastern		MUNI
969	SCE	RVSIDE_6_RERCU1	24242	RERC1G	13.8	48.35	1	LA Basin	Eastern		MUNI
970	SCE	RVSIDE_6_RERCU2	24243	RERC2G	13.8	48.50	1	LA Basin	Eastern		MUNI
971	SCE	RVSIDE_6_SOLAR1				0.93		LA Basin	Eastern	Not modeled Aug NQC	Solar
972	SCE	RVSIDE_6_SPRING	24240	SPRINGS1	13.8	9.00	1	LA Basin	Eastern		Market
973	SCE	RVSIDE_6_SPRING	24241	SPRINGS3	13.8	9.00	1	LA Basin	Eastern		Market
974	SCE	RVSIDE_6_SPRING	24240	SPRINGS1	13.8	9.00	2	LA Basin	Eastern		Market
975	SCE	RVSIDE_6_SPRING	24241	SPRINGS3	13.8	9.00	2	LA Basin	Eastern		Market
976	SCE	SANITR_6_UNITS	24324	SANIGEN	13.8	1.11	D1	LA Basin	Eastern	Aug NQC	QF/Selfgen
977	SCE	SANTGO_2_LNDFL1	24341	COYGEN	13.8	18.64	1	LA Basin	Western	Aug NQC	Market
978	SCE	SANTGO_2_MABBT1	25192	WDT1406_G	0.48	2.00	1	LA Basin	Western	Aug NQC	Battery
979	SCE	SANWD_1_QF	29072	SANWIND_G	0.48	3.37	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
980	SCE	SBERDO_2_PSP3	24923	MNTV-ST3	18	257.82	1	LA Basin	Eastern, West of Devers		Market
981	SCE	SBERDO_2_PSP3	24921	MNTV-G3A	18	148.59	1	LA Basin	Eastern, West of Devers		Market
982	SCE	SBERDO_2_PSP3	24922	MNTV-G3B	18	148.59	1	LA Basin	Eastern, West of Devers		Market
983	SCE	SBERDO_2_PSP4	24926	MNTV-ST4	18	257.82	1	LA Basin	Eastern, West of Devers		Market
984	SCE	SBERDO_2_PSP4	24924	MNTV-G4A	18	148.59	1	LA Basin	Eastern, West of Devers		Market
985	SCE	SBERDO_2_PSP4	24925	MNTV-G4B	18	148.59	1	LA Basin	Eastern, West of Devers		Market
986	SCE	SBERDO_2_SNTANA	25861	SNBRDNO FD	12.47	0.00	EQ	LA Basin	Eastern, West of Devers	Aug NQC	QF/Selfgen
987	SCE	SBERDO_6_MILLCK	25861	SNBRDNO FD	12.47	0.57	EQ	LA Basin	Eastern, West of Devers	Aug NQC	QF/Selfgen
988	SCE	SENTNL_2_CTG1	29101	SENTINEL_G1	13.8	107.68	1	LA Basin	Eastern, Valley-Devers		Market
989	SCE	SENTNL_2_CTG2	29102	SENTINEL_G2	13.8	103.98	1	LA Basin	Eastern, Valley-Devers		Market
990	SCE	SENTNL_2_CTG3	29103	SENTINEL_G3	13.8	105.69	1	LA Basin	Eastern, Valley-Devers		Market
991	SCE	SENTNL_2_CTG4	29104	SENTINEL_G4	13.8	106.55	1	LA Basin	Eastern, Valley-Devers		Market
992	SCE	SENTNL_2_CTG5	29105	SENTINEL_G5	13.8	107.52	1	LA Basin	Eastern, Valley-Devers		Market
993	SCE	SENTNL_2_CTG6	29106	SENTINEL_G6	13.8	105.00	1	LA Basin	Eastern, Valley-Devers		Market
994	SCE	SENTNL_2_CTG7	29107	SENTINEL_G7	13.8	106.73	1	LA Basin	Eastern, Valley-Devers		Market
995	SCE	SENTNL_2_CTG8	29108	SENTINEL_G8	13.8	106.85	1	LA Basin	Eastern, Valley-Devers		Market
996	SCE	STANTN_2_SBEBX2	25675	WH_STN_5	0.55	34.40	1	LA Basin	Western		Battery

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
997	SCE	STANTN_2_SBEBX2	25677	WH_STN_7	0.55	34.40	1	LA Basin	Western		Battery
998	SCE	STANTN_2_STAGT1	25670	WH_STN_1	13.8	49.65	1	LA Basin	Western		Market
999	SCE	STANTN_2_STAGT2	25671	WH_STN_2	13.8	49.65	1	LA Basin	Western		Market
1000	SCE	TIFFNY_1_DILLON	29021	WINTEC6	115	4.90	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1001	SCE	TRNSWD_1_QF	25746	TRANWND_1G	0.4	2.12	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1002	SCE	TRNSWD_1_QF	25749	TRANWND_2G	0.4	2.12	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1003	SCE	TULEWD_1_TULWD1				14.21		LA Basin	Eastern, Valley-Devers	Not modeled Aug NQC	Wind
1004	SCE	VALLEY_5_PERRIS	25872	VALLEYS EQFD	12.47	2.40	EQ	LA Basin	Eastern, Valley, Valley- Devers	Not modeled Aug NQC	QF/Selfgen
1005	SCE	VALLEY_5_REDMTN	25872	VALLEYS EQFD	12.47	1.21	EQ	LA Basin	Eastern, Valley, Valley- Devers	Not modeled Aug NQC	QF/Selfgen
1006	SCE	VALLEY_5_SOLAR1				0.00		LA Basin	Eastern, Valley, Valley- Devers	Not modeled Energy Only	Solar
1007	SCE	VALLEY_5_SOLAR2	25846	WDT786G	34.5	2.48	EQ	LA Basin	Eastern, Valley, Valley- Devers	Aug NQC	Solar
1008	SCE	VENWD_1_WIND3	25645	VENWIND	115	4.85	EU	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1009	SCE	VERNON_6_GONZL1				5.75		LA Basin	Western	Not modeled	MUNI
1010	SCE	VERNON_6_GONZL2				5.75		LA Basin	Western	Not modeled	MUNI
1011	SCE	VERNON_6_MALBRG	24241	MALBRG3G	13.8	51.10	S3	LA Basin	Western		MUNI
1012	SCE	VERNON_6_MALBRG	24239	MALBRG1G	13.8	43.95	C1	LA Basin	Western		MUNI
1013	SCE	VERNON_6_MALBRG	24240	MALBRG2G	13.8	43.95	C2	LA Basin	Western		MUNI
1014	SCE	VILLPK_2_VALLYV				1.20		LA Basin	Western	Not modeled Aug NQC	QF/Selfgen
1015	SCE	VILLPK_6_MWDYOR				2.40		LA Basin	Western	Not modeled Aug NQC	MUNI
1016	SCE	VISTA_6_QF	25887	VSTA_EQFD	12.47	0.10	EQ	LA Basin	Eastern	Not modeled Aug NQC	QF/Selfgen
1017	SCE	WALCRK_2_CTG1	29201	WALCRKG1	13.8	96.43	1	LA Basin	Western		Market
1018	SCE	WALCRK_2_CTG2	29202	WALCRKG2	13.8	96.91	1	LA Basin	Western		Market
1019	SCE	WALCRK_2_CTG3	29203	WALCRKG3	13.8	96.65	1	LA Basin	Western		Market
1020	SCE	WALCRK_2_CTG4	29204	WALCRKG4	13.8	96.49	1	LA Basin	Western		Market
1021	SCE	WALCRK_2_CTG5	29205	WALCRKG5	13.8	96.65	1	LA Basin	Western		Market
1022	SCE	WALNUT_2_SOLAR				0.00		LA Basin	Western	Not modeled Energy Only	Solar
1023	SCE	WALNUT_6_HILLGEN				21.88		LA Basin	Western	Not modeled Aug NQC	Net Seller
1024	SCE	WALNUT_7_WCOVST				5.02		LA Basin	Western	Not modeled Aug NQC	Market
1025	SCE	WHTWTR_1_WINDA1	29061	WHITEWTR	33	6.69	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1026	SCE	ZZ_DEVERS_1_QF	25632	TERAWND	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1027	SCE	ZZ_DEVERS_1_QF	25639	SEAWIND	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1028	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1029	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market
1030	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market
1031	SCE	ZZ_MOBGEN_6_UNIT 1	24094	MOBGEN1	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1032	SCE	ZZ_MOBGEN_6_UNIT 1	24094	MOBGEN2	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1033	SCE	ZZ_MTWIND_1_UNIT 2	29066	MOUNTWND_2 G	0.6	0.00	1	LA Basin	Eastern, Valley-Devers	Mothballed	Wind
1034	SCE	ZZ_NA	25849	NEWARK FD1	16	4.39	EQ	LA Basin	Western	No NQC - est. data	Solar
1035	SCE	ZZ_NA	102902	HINSON EQDS	12.47	0.35	1	LA Basin	Western	No NQC - est. data	Solar
1036	SCE	ZZ_NA	25857	RIOHNDO EQFD	12.47	0.20	EQ	LA Basin	Western	No NQC - est. data	Solar
1037	SCE	ZZ_NA	25889	WALNUT EQFD	12.47	0.20	EQ	LA Basin	Western	No NQC - est. data	Solar
1038	SCE	ZZ_NA	25883	VILLAPK EQFD	12.47	0.14	EQ	LA Basin	Western	No NQC - est. data	Solar
1039	SCE	ZZ_NA	25820	EL NIDO EQFD	16	0.09	EQ	LA Basin	Western, El Nido	No NQC - est. data	Solar
1040	SCE	ZZ_NA	25838	LA FRSA EQFD	16	0.07	EQ	LA Basin	Western	No NQC - est. data	Solar
1041	SCE	ZZ_NA	25842	MESACAL EQFD	16	0.01	EQ	LA Basin	Western	No NQC - est. data	Solar
1042	SCE	ZZ_NA	24327	THUMSGEN	13.8	0.00	1	LA Basin	Western	No NQC - hist. data	QF/Selfgen
1043	SCE	ZZ_NA	24330	OUTFALL1	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1044	SCE	ZZ_NA	24331	OUTFALL2	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1045	SCE	ZZ_NA	29260	ALTAMSA4	115	0.00	1	LA Basin	Eastern, Valley-Devers	No NQC - hist. data	Wind
1046	SCE	ZZ_PANSEA_1_PANARO	25640	PANAERO	115	3.40	QF	LA Basin	Eastern, Valley-Devers		Wind
1047	SCE	ZZ_VENWD_1_WIND1	25645	VENWIND	115	0.00	Q1	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1048	SCE	ZZ_VENWD_1_WIND2	25645	VENWIND	115	0.00	Q2	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1049	SCE	ZZZ_JOANEC_2_ST3BT4	102870	SNTANSG4	0.55	40.00	4	LA Basin	Western	No NQC - P max	Battery
1050	SCE	ZZZ_New Unit	100251	TOT934_G1	0.55	235.00	1	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1051	SCE	ZZZ_New Unit	100252	TOT934_G2	0.55	235.00	2	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1052	SCE	ZZZ_New Unit	100253	TOT934_G3	0.55	235.00	3	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1053	SCE	ZZZ_New Unit	99116	WDT1659_G	0.6	200.00	EQ	LA Basin	Eastern, West of Devers	No NQC - Pmax	Battery
1054	SCE	ZZZ_New Unit	102874	WDT1711_G	0.385	120.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1055	SCE	ZZZ_New Unit	99139	WDT1641_G	0.6	100.00	1	LA Basin	Western, El Nido	No NQC - P max	Battery
1056	SCE	ZZZ_New Unit	99511	WDT1652_G	0.6	100.00	1	LA Basin	Western	No NQC - P max	Battery
1057	SCE	ZZZ_New Unit	98673	TOT913_G	0.6	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1058	SCE	ZZZ_New Unit	99615	WDT1669_G	0.69	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1059	SCE	ZZZ_New Unit	102866	WDT1719_G	0.385	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1060	SCE	ZZZ_New Unit	240008	SEPARATOR_G	34.5	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1061	SCE	ZZZ_New Unit	99035	WDT1648_G	0.385	100.00	1	LA Basin	Eastern, West of Devers	No NQC - Pmax	Battery
1062	SCE	ZZZ_New Unit	102675	ALMTES2	0.75	84.50	1	LA Basin	Western	No NQC - P max	Battery
1063	SCE	ZZZ_New Unit	100608	WDT1702_G	0.382	77.00	1	LA Basin	Western	No NQC - P max	Battery
1064	SCE	ZZZ_New Unit	698384	WDT1583	34.5	10.00	B1	LA Basin	Western	No NQC - P max	Battery
1065	SCE	ZZZ_New Unit	698385	WDT1582	34.5	10.00	B1	LA Basin	Western	No NQC - P max	Battery
1066	SCE	ZZZ_New Unit	240156	VALIEYS HYD	12.47	7.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	No NQC - est. data	Market
1067	SCE	ZZZ_New Unit	25834	HI DSRT	34.5	1.20	EQ	LA Basin	Eastern, Valley-Devers	No NQC - est. data	Market
1068	SCE	ZZZ_New Unit	240155	UNIMDGEN	12	1.00	1	LA Basin	Eastern, West of Devers	No NQC - est. data	Market
1069	SCE	ZZZ_New Unit	240157	VALLEYS GAS	12.47	1.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	No NQC - est. data	Market
1070	SCE	ZZZ_New Unit	240158	VSTA BIO	12.47	1.00	EQ	LA Basin	Eastern	No NQC - est. data	Market
1071	SCE	ZZZ_New Unit	240159	VSTA GAS	12.47	1.00	EQ	LA Basin	Eastern	No NQC - est. data	Market
1072	SCE	ZZZ_New Unit	240153	BOTTLE	34.5	0.60	W1	LA Basin	Eastern, Valley-Devers	No NQC - est. data	Wind
1073	SCE	ZZZ_New Unit	240002	CATHODE1_G	34.5	0.00	1	LA Basin	Western	Waiting TPD allocation	Battery
1074	SCE	ZZZ_New Unit	114201	WDT1510G	0.69	0.00	1	LA Basin	Eastern	Energy Only	Battery
1075	SCE	ZZZ_New Unit	698380	WDT1558_G	0.55	0.00	1	LA Basin	Eastern, West of Devers	Energy Only	Battery
1076	SCE	ZZZ_New Unit	240002	CATHODE2_G	34.5	0.00	2	LA Basin	Western	Waiting TPD allocation	Battery
1077	SCE	ZZZ_New Unit	25833	WDT458G	0.2	0.00	EQ	LA Basin	Eastern, Valley-Devers	Energy Only	Solar
1078	SCE	ZZZ_New Unit	25832	WDT334G	0.2	0.00	EQ	LA Basin	Eastern, Valley-Devers	Energy Only	Solar
1079	SCE	ZZZ_New Unit	98956	WDT1635_G	0.6	0.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	Energy Only	Battery
1080	SCE	ZZZ_New Unit	99213	WDT1636_G	0.6	0.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	Energy Only	Battery
1081	SCE	ZZZ_New Unit	698384	WDT1583	34.5	0.00	PV	LA Basin	Western	No NQC - est. data	Solar
1082	SCE	ZZZ_New Unit	698385	WDT1582	34.5	0.00	PV	LA Basin	Western	No NQC - est. data	Solar
1083	SCE	ZZZZZ_ALAMIT_7_UNIT 1	24001	ALAMT1 G	18	0.00	1	LA Basin	Western	Retired	Market
1084	SCE	ZZZZZ_ALAMIT_7_UNIT 2	24002	ALAMT2 G	18	0.00	2	LA Basin	Western	Retired	Market
1085	SCE	ZZZZZ_ALAMIT_7_UNIT 6	24161	ALAMT6 G	20	0.00	6	LA Basin	Western	Retired	Market
1086	SCE	ZZZZZ_ANAHM_7_CT	25208	DowlingCTG	13.8	0.00	1	LA Basin	Western	Retired	MUNI
1087	SCE	ZZZZZ_BRDWAY_7_UNIT 3	29007	BRODWYSC	13.8	0.00		LA Basin	Western	Retired	MUNI
1088	SCE	ZZZZZ_CENTER_2_QF	29953	SIGGEN	13.8	0.00	D1	LA Basin	Western	Retired	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1089	SCE	ZZZZZ_CHINO_6_SMPPAP	24140	SIMPSON	13.8	0.00	R1	LA Basin	Eastern	Retired	QF/Selfgen
1090	SCE	ZZZZZ_ETIWND_7_MIDVLY	24055	ETIWANDA	66	0.00		LA Basin	Eastern	Retired	QF/Selfgen
1091	SCE	ZZZZZ_ETIWND_7_UNIT 3	24052	MTNVIST3	18	0.00	3	LA Basin	Eastern	Retired	Market
1092	SCE	ZZZZZ_ETIWND_7_UNIT 4	24053	MTNVIST4	18	0.00	4	LA Basin	Eastern	Retired	Market
1093	SCE	ZZZZZ_GARNET_2_DIFWD1	24815	GARNET	115	0.00		LA Basin	Eastern, Valley-Devers	Retired	Market
1094	SCE	ZZZZZ_HINSON_6_CARBGN	24020	CARBGEN1	13.8	0.00	1	LA Basin	Western	Retired	Market
1095	SCE	ZZZZZ_HINSON_6_CARBGN	24328	CARBGEN2	13.8	0.00	1	LA Basin	Western	Retired	Market
1096	SCE	ZZZZZ_HNTGBH_7_UNIT 1	24066	HUNT1 G	13.8	0.00	1	LA Basin	Western	Retired	Market
1097	SCE	ZZZZZ_INLDEM_5_UNIT 1	29041	IEEC-G1	19.5	0.00	1	LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1098	SCE	ZZZZZ_INLDEM_5_UNIT 2	29042	IEEC-G2	19.5	0.00	1	LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1099	SCE	ZZZZZ_LAGBEL_2_STG1				0.00		LA Basin	Western	Retired	Market
1100	SCE	ZZZZZ_LAGBEL_6_QF	29951	REFUSE	13.8	0.00	D1	LA Basin	Western	Retired	QF/Selfgen
1101	SCE	ZZZZZ_MESAS_2_QF	24209	MESA CAL	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1102	SCE	ZZZZZ_MIRLOM_6_DELGEN	29339	DELGEN	13.8	0.00	1	LA Basin	Eastern	Retired	QF/Selfgen
1103	SCE	ZZZZZ_OLINDA_2_QF	24211	OLINDA	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1104	SCE	ZZZZZ_OLINDA_7_LNDFIL	24211	OLINDA	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1105	SCE	ZZZZZ_REDOND_7_UNIT 5	24121	REDON5 G	18	0.00	5	LA Basin	Western	Retired	Market
1106	SCE	ZZZZZ_REDOND_7_UNIT 6	24122	REDON6 G	18	0.00	6	LA Basin	Western	Retired	Market
1107	SCE	ZZZZZ_REDOND_7_UNIT 7	24123	REDON7 G	20	0.00	7	LA Basin	Western	Retired	Market
1108	SCE	ZZZZZ_REDOND_7_UNIT 8	24124	REDON8 G	20	0.00	8	LA Basin	Western	Retired	Market
1109	SCE	ZZZZZ_RHONDO_2_QF	24213	RIOHONDO	66	0.00	DG	LA Basin	Western	Retired	QF/Selfgen
1110	SCE	ZZZZZ_RHONDO_6_PUENTE	24213	RIOHONDO	66	0.00		LA Basin	Western	Retired	Net Seller
1111	SCE	ZZZZZ_SBERDO_2_QF	24214	SANBRDNO	66	0.00		LA Basin	Eastern, West of Devers	Retired	QF/Selfgen
1112	SCE	ZZZZZ_VALLEY_5_RTS044	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1113	SCE	ZZZZZ_VALLEY_7_BADLND	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1114	SCE	ZZZZZ_VALLEY_7_UNITA1	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1115	SCE	ZZZZZ_WALNUT_7_WCOVCT	24157	WALNUT	66	0.00		LA Basin	Western	Retired	Market
1116	SCE	ZZZZZZ_ELSEGN_7_UNIT 4	24048	ELSEG4 G	18	0.00	4	LA Basin	Western, El Nido	Retired	Market
1117	SDG&E	BORDER_6_UNITA1	22149	CALPK_BD	13.8	51.25	1	SD-IV	San Diego, Border		Market
1118	SDG&E	BREGGO_6_DEGRSL	22085	BORREGO	12.5	0.78	6	SD-IV	San Diego	Aug NQC	Solar
1119	SDG&E	BREGGO_6_SOLAR	22082	BR GEN1	0.21	3.22	1	SD-IV	San Diego	Aug NQC	Solar
1120	SDG&E	CARLS1_2_CARCT1	22783	EA GEN1 U8	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1121	SDG&E	CARLS1_2_CARCT1	22784	EA GEN1 U9	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1122	SDG&E	CARLS1_2_CARCT1	22786	EA GEN1 U6	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1123	SDG&E	CARLS1_2_CARCT1	22787	EA GEN1 U7	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1124	SDG&E	CARLS2_1_CARCT1	22789	EA GEN1 U10	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1125	SDG&E	CHILLS_1_SYCENG	22120	CARLTNHS	138	1.00	1	SD-IV	San Diego	Aug NQC	QF/Selfgen
1126	SDG&E	CHILLS_7_UNITA1	22120	CARLTNHS	138	1.52	2	SD-IV	San Diego	Aug NQC	QF/Selfgen
1127	SDG&E	CNTNLA_2_SOLAR1	23401	DW GEN3 G1	0.33	15.50	1	SD-IV		Aug NQC	Solar
1128	SDG&E	CNTNLA_2_SOLAR2	23402	DW GEN3 G2	0.33	5.65	2	SD-IV		Aug NQC	Solar
1129	SDG&E	CPVERD_2_SOLAR	23309	IV GEN3 G1	0.31	9.58	1	SD-IV		Aug NQC	Solar
1130	SDG&E	CPVERD_2_SOLAR	23301	IV GEN3 G2	0.31	7.66	1	SD-IV		Aug NQC	Solar
1131	SDG&E	CRELMN_6_RAMON1	22152	CREELMAN	69	0.25	27	SD-IV	San Diego	Aug NQC	Solar
1132	SDG&E	CRELMN_6_RAMON2	22152	CREELMAN	69	0.62	27	SD-IV	San Diego	Aug NQC	Solar
1133	SDG&E	CRELMN_6_RAMSR3	22152	CREELMAN	69	0.43	35	SD-IV	San Diego	Aug NQC	Solar
1134	SDG&E	CRSTWD_6_KUMYAY	22915	KUMEYAAY	0.69	5.44	1	SD-IV	San Diego	Aug NQC	Wind
1135	SDG&E	CSLR4S_2_SOLAR	23298	DW GEN1 G1	0.315	8.06	1	SD-IV		Aug NQC	Solar
1136	SDG&E	CSLR4S_2_SOLAR	23299	DW GEN1 G2	0.315	8.06	1	SD-IV		Aug NQC	Solar
1137	SDG&E	ELCAJN_6_EB1BT1	22208	EL CAJON	69	7.50	1	SD-IV	San Diego, El Cajon		Battery
1138	SDG&E	ELCAJN_6_LM6K	23320	EC GEN2	13.8	48.10	1	SD-IV	San Diego, El Cajon		Market
1139	SDG&E	ELCAJN_6_UNITA1	22150	EC GEN1	13.8	45.42	1	SD-IV	San Diego, El Cajon		Market
1140	SDG&E	ENERSJ_2_WIND	23100	ECO GEN1 G1	0.69	16.44	G1	SD-IV		Aug NQC	Wind
1141	SDG&E	ENERSJ_5_ESJWD2				11.43		SD-IV		Aug NQC	Wind
1142	SDG&E	ESCNDO_6_EB1BT1	22256	ESCNDIDO	69	10.00	10	SD-IV	San Diego		Battery
1143	SDG&E	ESCNDO_6_EB2BT2	22256	ESCNDIDO	69	10.00	11	SD-IV	San Diego		Battery
1144	SDG&E	ESCNDO_6_EB3BT3	22256	ESCNDIDO	69	10.00	12	SD-IV	San Diego		Battery
1145	SDG&E	ESCNDO_6_PL1X2	22257	ES GEN	13.8	48.71	1	SD-IV	San Diego		Market
1146	SDG&E	ESCNDO_6_UNITB1	22153	CALPK_ES	13.8	48.04	1	SD-IV	San Diego		Market
1147	SDG&E	ESCO_6_GLMQF	22333	GOALLINE	13.8	41.15	1	SD-IV	San Diego	Aug NQC	Net Seller
1148	SDG&E	ESCO_6_GLMQF	22333	GOALLINE	13.8	8.75	2	SD-IV	San Diego	Aug NQC	Net Seller
1149	SDG&E	FALBRK_6_FESBT1	23544	AV GEN1_BESS	0.64	40.00	1	SD-IV	San Diego		Battery
1150	SDG&E	GATEWY_2_GESBT1	23710	OM GEN4_BESS	0.508	175.00	1	SD-IV	San Diego		Battery
1151	SDG&E	IVSLR2_2_SM2SR1	23441	DW GEN6	0.42	18.60	1	SD-IV		Aug NQC	Solar
1152	SDG&E	IVSLRP_2_SOLAR1	23440	DW GEN2	0.36	24.80	1	SD-IV		Aug NQC	Solar
1153	SDG&E	IVWEST_2_SOLAR1	23155	DU GEN1 G1	0.2	10.06	1	SD-IV		Aug NQC	Solar
1154	SDG&E	IVWEST_2_SOLAR1	23156	DU GEN1 G2	0.2	8.54	1	SD-IV		Aug NQC	Solar
1155	SDG&E	JACMSR_1_JACSR1	23352	ECO GEN2	0.55	2.48	1	SD-IV		Aug NQC	Solar
1156	SDG&E	KEARNY_6_NESBT1	22372	KEARNY	60	10.00	25	SD-IV	San Diego	Aug NQC	Battery
1157	SDG&E	KEARNY_6_SESBT2	22372	KEARNY	60	10.00	26	SD-IV	San Diego	Aug NQC	Battery
1158	SDG&E	KYCORA_6_KMSBT1				0.00		SD-IV	San Diego	Not modeled Energy Only	Battery
1159	SDG&E	LAKHDG_6_UNIT 1	22625	LKHODG1	13.8	20.00	1	SD-IV	San Diego		Market
1160	SDG&E	LAKHDG_6_UNIT 2	22626	LKHODG2	13.8	20.00	2	SD-IV	San Diego		Market

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2025 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1161	SDG&E	LARKSP_6_UNIT 1	22074	LRKSPBD1	13.8	49.00	1	SD-IV	San Diego, Border		Market
1162	SDG&E	LARKSP_6_UNIT 2	22075	LRKSPBD2	13.8	49.00	1	SD-IV	San Diego, Border		Market
1163	SDG&E	LAROA2_2_UNITA1	22997	INTBCT	16	176.81	1	SD-IV			Market
1164	SDG&E	LAROA2_2_UNITA1	22996	INTBST	18	145.19	1	SD-IV			Market
1165	SDG&E	LECONT_2_LESBT1	23597	BW GEN8_BESS	0.69	40.00	1	SD-IV		PCDS	Battery
1166	SDG&E	LILIAC_6_SOLAR	22404	LILIAC	69	0.37	67	SD-IV	San Diego		Solar
1167	SDG&E	MRGT_6_MEF2	22487	MEF MR2	13.8	44.00	1	SD-IV	San Diego		Market
1168	SDG&E	MRGT_6_MMAREF	22486	MEF MR1	13.8	45.00	1	SD-IV	San Diego		Market
1169	SDG&E	MRGT_6_TGEBT1	23412	MRGT GEN	0.64	30.00	1	SD-IV	San Diego		Battery
1170	SDG&E	MSHGTS_6_MMARLF	22448	MESAHGTS	69	4.08	1	SD-IV	San Diego	Aug NQC	Market
1171	SDG&E	MSSION_2_QF	22496	MISSION	69	0.32	1	SD-IV	San Diego	Aug NQC	Market
1172	SDG&E	MURRAY_6_UNIT	22532	MURRAY	69	0.00		SD-IV	San Diego	Not modeled Energy Only	Market
1173	SDG&E	OCTILO_5_WIND	23314	OCO GEN G1	0.69	14.43	1	SD-IV		Aug NQC	Wind
1174	SDG&E	OCTILO_5_WIND	23318	OCO GEN G2	0.69	14.43	1	SD-IV		Aug NQC	Wind
1175	SDG&E	OGROVE_6_PL1X2	22628	PA GEN1	13.8	48.00	1	SD-IV	San Diego		Market
1176	SDG&E	OGROVE_6_PL1X2	22629	PA GEN2	13.8	48.00	1	SD-IV	San Diego		Market
1177	SDG&E	OTAY_6_PL1X2	22617	OY GEN	13.8	37.20	1	SD-IV	San Diego		Market
1178	SDG&E	OTMESA_2_PL1X3	22607	OTAYMST1	16	272.27	1	SD-IV	San Diego		Market
1179	SDG&E	OTMESA_2_PL1X3	22606	OTAYMGT2	18	166.17	1	SD-IV	San Diego		Market
1180	SDG&E	OTMESA_2_PL1X3	22605	OTAYMGT1	18	165.16	1	SD-IV	San Diego		Market
1181	SDG&E	PALOMR_2_PL1X3	22265	PEN_ST	18	234.24	1	SD-IV	San Diego		Market
1182	SDG&E	PALOMR_2_PL1X3	22262	PEN_CT1	18	176.98	1	SD-IV	San Diego		Market
1183	SDG&E	PALOMR_2_PL1X3	22263	PEN_CT2	18	176.98	1	SD-IV	San Diego		Market
1184	SDG&E	PIOPIC_2_CTG1	23162	PIO PICO CT1	13.8	111.30	1	SD-IV	San Diego	No NQC - Pmax	Market
1185	SDG&E	PIOPIC_2_CTG2	23163	PIO PICO CT2	13.8	112.70	1	SD-IV	San Diego	No NQC - Pmax	Market
1186	SDG&E	PIOPIC_2_CTG3	23164	PIO PICO CT3	13.8	112.00	1	SD-IV	San Diego	No NQC - Pmax	Market
1187	SDG&E	PRCTVY_1_MIGBT1	22672	PRCTRVLY	138	0.00	4	SD-IV	San Diego	Aug NQC	Battery
1188	SDG&E	SAMPSN_6_KELCO1	22704	SAMPSON	12.5	1.59	1	SD-IV	San Diego	Aug NQC	Net Seller
1189	SDG&E	SLRMS3_2_SRMSR1	23442	DW GEN4 G1	0.6	18.60	1	SD-IV		Aug NQC	Solar
1190	SDG&E	SLRMS3_2_SRMSR1	23443	DW GEN4 G2	0.6	12.40	1	SD-IV		Aug NQC	Solar
1191	SDG&E	SMRCOS_6_LNDFIL	22724	SANMRCOS	69	1.50	1	SD-IV	San Diego	Aug NQC	Market
1192	SDG&E	TERMEX_2_PL1X3	22981	IV GEN1 STG	21	280.13	1	SD-IV			Market
1193	SDG&E	TERMEX_2_PL1X3	22982	IV GEN1 CTG2	18	156.44	1	SD-IV			Market
1194	SDG&E	TERMEX_2_PL1X3	22983	IV GEN1 CTG3	18	156.44	1	SD-IV			Market
1195	SDG&E	VLCNTR_6_VCEBT1	23627	VC GEN1_GEN1	34.5	54.00	1	SD-IV	San Diego		Battery
1196	SDG&E	VLCNTR_6_VCEBT1	22991	VC GEN1_GEN3	34.5	0.00	1	SD-IV	San Diego	Energy Only	Battery

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1197	SDG&E	VLCNTR_6_VCEBT2	23628	VC GEN1_GEN2	34.5	50.00	1	SD-IV	San Diego		Battery
1198	SDG&E	VLCNTR_6_VCSLR	22870	VALCNTR	69	0.29	59	SD-IV	San Diego	Aug NQC	Solar
1199	SDG&E	VLCNTR_6_VCSLR1	22870	VALCNTR	69	0.31	28	SD-IV	San Diego	Aug NQC	Solar
1200	SDG&E	VLCNTR_6_VCSLR2	22870	VALCNTR	69	0.62	28	SD-IV	San Diego	Aug NQC	Solar
1201	SDG&E	VSTAES_6_VESBT1	23541	ME GEN 1_BS1	0.64	5.00	1	SD-IV	San Diego		Battery
1202	SDG&E	VSTAES_6_VESBT1	23216	ME GEN 1_BS2	0.48	5.00	1	SD-IV	San Diego		Battery
1203	SDG&E	WESCAN_2_BDSBT1	23421	Q1531_ES1	0.55	65.50	1	SD-IV			Battery
1204	SDG&E	WESCAN_2_BDSBT1	23425	Q1531_ES2	0.55	65.50	1	SD-IV			Battery
1205	SDG&E	WISTRA_2_WRSSR1	23287	DW GEN5 G1	0.418	12.40	1	SD-IV		Aug NQC	Solar
1206	SDG&E	ZZ_CBRLLO_6_PLSTP1	22092	CABRILLO	69	2.70	1	SD-IV	San Diego		Market
1207	SDG&E	ZZ_CCRITA_7_RPPCHF	22124	CHCARITA	138	2.00	1	SD-IV	San Diego		Market
1208	SDG&E	ZZ_LAROA1_2_UNITA1	20187	LRP-U1	16	0.00	1	SD-IV		Connect to CENACE/CFE grid for the summer – not available for ISO BAA RA purpose	Market
1209	SDG&E	ZZ_NA	22604	ОТАҮ	69	2.80	1	SD-IV	San Diego	No NQC - hist. data	Market
1210	SDG&E	ZZ_NA	22604	ОТАҮ	69	2.20	3	SD-IV	San Diego	No NQC - hist. data	Market
1211	SDG&E	ZZ_NA	22204	EASTGATE	69	0.20	1	SD-IV	San Diego	No NQC - hist. data	Market
1212	SDG&E	ZZ_NA	22916	PFC-AVC	0.6	0.00	1	SD-IV	San Diego	No NQC - hist. data	QF/Selfgen
1213	SDG&E	ZZZ_New Unit	23959	Q1673_ES1	0.6	300.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1214	SDG&E	ZZZ_New Unit	23933	Q1670_ES	0.6	200.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1215	SDG&E	ZZZ_New Unit	23929	Q1669_ES	0.6	100.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1216	SDG&E	ZZZ_New Unit	23416	Q1166_ES_G1	0.63	87.00	1	SD-IV		No NQC - PCDS	Battery
1217	SDG&E	ZZZ_New Unit	23438	Q1166_ES_G2	0.63	87.00	1	SD-IV		No NQC - PCDS	Battery
1218	SDG&E	ZZZ_New Unit	23710	Q1170_BESS	0.508	75.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1219	SDG&E	ZZZ_New Unit	23871	Q1662_ES	34.5	50.00	12	SD-IV	San Diego, El Cajon	No NQC - Pmax	Battery
1220	SDG&E	ZZZ_New Unit	23253	Q1432_ES	0.48	17.40	1	SD-IV	San Diego	No NQC - Pmax	Battery
1221	SDG&E	ZZZ_New Unit	22440	MELROSE	69	10.00	22	SD-IV	San Diego	No NQC - Pmax	Battery
1222	SDG&E	ZZZ_New Unit	22440	MELROSE	69	10.00	23	SD-IV	San Diego	No NQC - Pmax	Battery
1223	SDG&E	ZZZ_New Unit	22088	BOULEVRD	69	10.00	27	SD-IV		No NQC - Pmax	Battery
1224	SDG&E	ZZZ_New Unit	22136	CLAIRMNT	69	10.00	28	SD-IV	San Diego	No NQC - Pmax	Battery
1225	SDG&E	ZZZ_New Unit	22216	ELLIOTT	69	10.00	29	SD-IV	San Diego	No NQC - Pmax	Battery
1226	SDG&E	ZZZ_New Unit	22636	PARADISE	69	10.00	30	SD-IV	San Diego	No NQC - Pmax	Battery
1227	SDG&E	ZZZ_New Unit	22112	CAPSTRNO	138	5.65	1	SD-IV	San Diego	No NQC - Pmax	Market

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2025 LCR

	PTO	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1228	SDG&E	ZZZ_New Unit	22949	BUE GEN 1_G4	0.69	0.00	1	SD-IV		Energy Only	Wind
1229	SDG&E	ZZZ_New Unit	23475	Q1832_GEN	0.385	0.00	1	SD-IV	San Diego	Waiting TPD allocation	Battery
1230	SDG&E	ZZZ_New Unit	23231	Q1432_PV	0.385	0.00	1	SD-IV	San Diego	Energy Only	Solar
1231	SDG&E	ZZZ_New Unit	23414	Q1166_PV_G1	0.63	0.00	1	SD-IV		Energy Only	Solar
1232	SDG&E	ZZZ_New Unit	23436	Q1166_PV_G2	0.63	0.00	1	SD-IV		Energy Only	Solar
1233	SDG&E	ZZZ_New Unit	22624	PALA	69	0.00	88	SD-IV	San Diego	Waiting TPD allocation	Battery
1234	SDG&E	ZZZZZ_PTLOMA_6_NTCQF	22660	POINTLMA	69	0.00	1	SD-IV	San Diego	Retired	QF/Selfgen

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1	PG&E	ALMEGT_1_UNIT 1	38118	ALMDACT1	13.8	23.40	1	Bay Area	Oakland		MUNI
2	PG&E	ALMEGT_1_UNIT 2	38119	ALMDACT2	13.8	23.50	1	Bay Area	Oakland		MUNI
3	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	1	Bay Area	Contra Costa	Pumps	MUNI
4	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	2	Bay Area	Contra Costa	Pumps	MUNI
5	PG&E	BANKPP_2_NSPIN	38820	DELTA A	13.2	11.55	3	Bay Area	Contra Costa	Pumps	MUNI
6	PG&E	BANKPP_2_NSPIN	38815	DELTA B	13.2	11.55	4	Bay Area	Contra Costa	Pumps	MUNI
7	PG&E	BANKPP_2_NSPIN	38815	DELTA B	13.2	11.55	5	Bay Area	Contra Costa	Pumps	MUNI
8	PG&E	BANKPP_2_NSPIN	38770	DELTA C	13.2	11.55	6	Bay Area	Contra Costa	Pumps	MUNI
9	PG&E	BANKPP_2_NSPIN	38770	DELTA C	13.2	11.55	7	Bay Area	Contra Costa	Pumps	MUNI
10	PG&E	BANKPP_2_NSPIN	38765	DELTA D	13.2	11.55	8	Bay Area	Contra Costa	Pumps	MUNI
11	PG&E	BANKPP_2_NSPIN	38765	DELTA D	13.2	11.55	9	Bay Area	Contra Costa	Pumps	MUNI
12	PG&E	BANKPP_2_NSPIN	38760	DELTA E	13.2	11.55	10	Bay Area	Contra Costa	Pumps	MUNI
13	PG&E	BANKPP_2_NSPIN	38760	DELTA E	13.2	11.55	11	Bay Area	Contra Costa	Pumps	MUNI
14	PG&E	BLKDIA_2_BDEBT1	365773	Q1111BES	0.69	200.00	1	Bay Area	Pittsburg		Battery
15	PG&E	BRDSLD_2_HIWIND	32172	HIGHWINDS	34.5	34.28	1	Bay Area	Contra Costa	Aug NQC	Wind
16	PG&E	BRDSLD_2_MTZUM2	32179	MONTEZUM	0.69	16.55	1	Bay Area	Contra Costa	Aug NQC	Wind
17	PG&E	BRDSLD_2_MTZUMA	32188	MONTEZUM	0.69	7.79	1	Bay Area	Contra Costa	Aug NQC	Wind
18	PG&E	BRDSLD_2_SHILO1	32181	SHILOH1W	34.5	31.74	1	Bay Area	Contra Costa	Aug NQC	Wind
19	PG&E	BRDSLD_2_SHILO2	365749	SHILOH2WIND	0.575	31.74	1	Bay Area	Contra Costa	Aug NQC	Wind
20	PG&E	BRDSLD_2_SHLO3A	32191	SHILOH3W	0.58	21.69	1	Bay Area	Contra Costa	Aug NQC	Wind
21	PG&E	BRDSLD_2_SHLO3B	32194	SHILOH4W	0.58	21.16	1	Bay Area	Contra Costa	Aug NQC	Wind
22	PG&E	CALPIN_1_AGNEW	35860	AGNEWCOG	13.8	21.71	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
23	PG&E	CALPIN_1_AGNEW	35860	AGNEWCOG	13.8	6.85	2	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
24	PG&E	CAYTNO_2_VASCO				4.30		Bay Area	Contra Costa	Aug NQC	Market
25	PG&E	CLRMTK_1_QF				0.00		Bay Area	Oakland	Not modeled	QF/Selfgen
26	PG&E	COCOPP_2_CTG1	33188	MARSHCT1	16.4	193.09	1	Bay Area	Contra Costa	Aug NQC	Market
27	PG&E	COCOPP_2_CTG2	33188	MARSHCT2	16.4	192.32	2	Bay Area	Contra Costa	Aug NQC	Market
28	PG&E	COCOPP_2_CTG3	33189	MARSHCT3	16.4	191.57	3	Bay Area	Contra Costa	Aug NQC	Market
29	PG&E	COCOPP_2_CTG4	33189	MARSHCT4	16.4	192.89	4	Bay Area	Contra Costa	Aug NQC	Market
30	PG&E	COCOSB_6_SOLAR				0.00		Bay Area	Contra Costa	Not modeled Energy Only	Solar
31	PG&E	CROKET_7_UNIT	32900	CRCKTCOG	18	223.00	1	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
32	PG&E	CSCCOG_1_UNIT 1				6.00		Bay Area	San Jose, South Bay-Moss Landing		MUNI
33	PG&E	CSCGNR_1_UNIT 1	36858	Gia100	13.8	24.00	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
34	PG&E	CSCGNR_1_UNIT 2	36895	Gia200	13.8	24.00	2	Bay Area	San Jose, South Bay-Moss Landing		MUNI
35	PG&E	CUMBIA_1_SOLAR	33102	COLUMBIA	0.38	2.36	1	Bay Area	Pittsburg	Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
36	PG&E	DELTA_2_PL1X4	33107	DEC STG1	24	289.49	1	Bay Area	Pittsburg	Aug NQC	Market
37	PG&E	DELTA_2_PL1X4	33108	DEC CTG1	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
38	PG&E	DELTA_2_PL1X4	33109	DEC CTG2	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
39	PG&E	DELTA_2_PL1X4	33110	DEC CTG3	18	194.50	1	Bay Area	Pittsburg	Aug NQC	Market
40	PG&E	DIXNLD_1_LNDFL				0.87		Bay Area		Not modeled Aug NQC	Market
41	PG&E	DUANE_1_PL1X3	36863	DVRaGT1	13.8	48.27	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
42	PG&E	DUANE_1_PL1X3	36864	DVRbGT2	13.8	48.27	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
43	PG&E	DUANE_1_PL1X3	36865	DVRaST3	13.8	46.96	1	Bay Area	San Jose, South Bay-Moss Landing		MUNI
44	PG&E	ELKHRN_1_EESX3	366107	Q1374BESS1	0.505	62.50	1	Bay Area	South Bay-Moss Landing		Battery
45	PG&E	ELKHRN_1_EESX3	366108	Q1374BESS2	0.505	60.00	2	Bay Area	South Bay-Moss Landing		Battery
46	PG&E	ELKHRN_1_EESX3	366109	Q1374BESS3	0.505	60.00	3	Bay Area	South Bay-Moss Landing		Battery
47	PG&E	GATWAY_2_PL1X3	33118	GATEWAY1	18	172.79	1	Bay Area	Contra Costa	Aug NQC	Market
48	PG&E	GATWAY_2_PL1X3	33119	GATEWAY2	18	163.61	1	Bay Area	Contra Costa	Aug NQC	Market
49	PG&E	GATWAY_2_PL1X3	33120	GATEWAY3	18	163.61	1	Bay Area	Contra Costa	Aug NQC	Market
50	PG&E	GILROY_1_UNIT	35850	GILROYEN	13.8	75.57	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
51	PG&E	GILROY_1_UNIT	35871	GILROYEN	13.8	39.43	2	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
52	PG&E	GILRPP_1_PL1X2	35851	GROYPKR1	13.8	47.60	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
53	PG&E	GILRPP_1_PL1X2	35852	GROYPKR2	13.8	47.60	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
54	PG&E	GILRPP_1_PL3X4	35853	GROYPKR3	13.8	46.20	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	Aug NQC	Market
55	PG&E	GRZZLY_1_BERKLY	32741	HILLSIDE_12	12.47	0.31	1	Bay Area		Aug NQC	Net Seller
56	PG&E	KELSO_2_UNITS	33813	MARIPCT1	13.8	49.51	1	Bay Area	Contra Costa	Aug NQC	Market
57	PG&E	KELSO_2_UNITS	33815	MARIPCT2	13.8	49.51	2	Bay Area	Contra Costa	Aug NQC	Market
58	PG&E	KELSO_2_UNITS	33817	MARIPCT3	13.8	49.51	3	Bay Area	Contra Costa	Aug NQC	Market
59	PG&E	KELSO_2_UNITS	33819	MARIPCT4	13.8	49.51	4	Bay Area	Contra Costa	Aug NQC	Market
60	PG&E	KIRKER_7_KELCYN				3.41		Bay Area	Pittsburg	Not modeled	Market
61	PG&E	LAWRNC_7_SUNYVL				0.15		Bay Area		Not modeled Aug NQC	Market
62	PG&E	LECEF_1_UNITS	35858	LECEFST1	13.8	112.13	1	Bay Area	San Jose, South Bay-Moss Landing		Market
63	PG&E	LECEF_1_UNITS	35854	LECEFGT1	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
64	PG&E	LECEF_1_UNITS	35855	LECEFGT2	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
65	PG&E	LECEF_1_UNITS	35856	LECEFGT3	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
66	PG&E	LECEF_1_UNITS	35857	LECEFGT4	13.8	46.72	1	Bay Area	San Jose, South Bay-Moss Landing	Aug NQC	Market
67	PG&E	LMBEPK_2_UNITA1	32173	LAMBIE	13.8	47.50	1	Bay Area	Contra Costa	Aug NQC	Market
68	PG&E	LMBEPK_2_UNITA2	32174	GOOSEHAV	13.8	47.60	3	Bay Area	Contra Costa	Aug NQC	Market
69	PG&E	LMBEPK_2_UNITA3	32175	CREED	13.8	47.75	2	Bay Area	Contra Costa	Aug NQC	Market
70	PG&E	LMEC_1_PL1X3	33113	LMECST1	18	246.03	1	Bay Area	Pittsburg	Aug NQC	Market
71	PG&E	LMEC_1_PL1X3	33111	LMECCT2	18	166.98	1	Bay Area	Pittsburg	Aug NQC	Market
72	PG&E	LMEC_1_PL1X3	33112	LMECCT1	18	166.98	1	Bay Area	Pittsburg	Aug NQC	Market
73	PG&E	MARTIN_1_SUNSET				0.56		Bay Area		Not modeled Aug NQC	QF/Selfgen
74	PG&E	METEC_2_PL1X3	35883	MEC STG1	18	223.24	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
75	PG&E	METEC_2_PL1X3	35881	MEC CTG1	18	186.90	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
76	PG&E	METEC_2_PL1X3	35882	MEC CTG2	18	186.90	1	Bay Area	South Bay-Moss Landing	Aug NQC	Market
77	PG&E	MISSIX_1_QF	33250	MISSON_D4	12.47	0.01	1	Bay Area	Ames	Aug NQC	QF/Selfgen
78	PG&E	MLPTAS_7_QFUNTS				0.00		Bay Area	San Jose, South Bay-Moss Landing	Not modeled Aug NQC	QF/Selfgen
79	PG&E	MOSSLD_2_PSP1	36223	DUKMOSS3	18	183.60	1	Bay Area	South Bay-Moss Landing		Market
80	PG&E	MOSSLD_2_PSP1	36221	DUKMOSS1	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
81	PG&E	MOSSLD_2_PSP1	36222	DUKMOSS2	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
82	PG&E	MOSSLD_2_PSP2	36226	DUKMOSS6	18	183.60	1	Bay Area	South Bay-Moss Landing		Market
83	PG&E	MOSSLD_2_PSP2	36224	DUKMOSS4	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
84	PG&E	MOSSLD_2_PSP2	36225	DUKMOSS5	18	163.20	1	Bay Area	South Bay-Moss Landing		Market
85	PG&E	NEWARK_1_QF				0.03		Bay Area		Not modeled Aug NQC	QF/Selfgen
86	PG&E	OAK C_1_EBMUD				1.70		Bay Area	Oakland	Not modeled Aug NQC	MUNI
87	PG&E	OAK C_7_UNIT 1	32901	OAKLND 1	13.8	55.00	1	Bay Area	Oakland	Could retire by 2026	Market
88	PG&E	OAK C_7_UNIT 3	32903	OAKLND 3	13.8	55.00	1	Bay Area	Oakland	Could retire by 2026	Market
89	PG&E	OAK L_1_GTG1				0.00		Bay Area	Oakland	Not modeled Energy Only	Market
90	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	1	Bay Area	Ames		Market
91	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	2	Bay Area	Ames		Market
92	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	3	Bay Area	Ames		Market
93	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	4	Bay Area	Ames		Market
94	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	5	Bay Area	Ames		Market
95	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	6	Bay Area	Ames		Market
96	PG&E	OXMTN_6_LNDFIL	33469	OX_MTN	4.16	1.47	7	Bay Area	Ames		Market
97	PG&E	PALALT_7_COBUG				4.50		Bay Area		Not modeled	MUNI
98	PG&E	RICHMN_1_CHVSR2				1.05		Bay Area		Not modeled Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
99	PG&E	RICHMN_1_SOLAR				0.25		Bay Area		Not modeled Aug NQC	Solar
100	PG&E	RICHMN_7_BAYENV				0.37		Bay Area		Not modeled Aug NQC	Market
101	PG&E	RUSCTY_2_UNITS	35306	RUSELST1	15	237.09	3	Bay Area	Ames	No NQC - Pmax	Market
102	PG&E	RUSCTY_2_UNITS	35304	RUSELCT1	15	180.15	1	Bay Area	Ames	No NQC - Pmax	Market
103	PG&E	RUSCTY_2_UNITS	35305	RUSELCT2	15	180.15	2	Bay Area	Ames	No NQC - Pmax	Market
104	PG&E	RVRVEW_1_UNITA1	33178	RVEC_GEN	13.8	47.60	1	Bay Area	Contra Costa	Aug NQC	Market
105	PG&E	SHELRF_1_UNITS	33141	SHELL 1	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
106	PG&E	SHELRF_1_UNITS	33142	SHELL 2	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
107	PG&E	SHELRF_1_UNITS	33143	SHELL 3	12.47	0.00	1	Bay Area	Pittsburg	Aug NQC	Net Seller
108	PG&E	SRINTL_6_UNIT	33468	SRI INTL	9.11	0.96	1	Bay Area		Aug NQC	QF/Selfgen
109	PG&E	STOILS_1_UNITS	32921	CHEVGEN1	13.8	3.83	1	Bay Area	Pittsburg	Aug NQC	Market
110	PG&E	STOILS_1_UNITS	32922	CHEVGEN2	13.8	3.83	1	Bay Area	Pittsburg	Aug NQC	Market
111	PG&E	STOILS_1_UNITS	32923	CHEVGEN3	13.8	1.77	3	Bay Area	Pittsburg	Aug NQC	Market
112	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	29.66	1	Bay Area	Pittsburg	Aug NQC	Net Seller
113	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	29.66	2	Bay Area	Pittsburg	Aug NQC	Net Seller
114	PG&E	TIDWTR_2_UNITS	33151	FOSTER W	12.47	22.57	3	Bay Area	Pittsburg	Aug NQC	Net Seller
115	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	1	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
116	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	2	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
117	PG&E	UNOCAL_1_UNITS	32910	UNOCAL	12	0.73	3	Bay Area	Pittsburg	Aug NQC	QF/Selfgen
118	PG&E	USWNDR_2_LABWD1	365729	LABRISAWIND	0.575	1.90	1	Bay Area	Contra Costa	Aug NQC	Wind
119	PG&E	USWNDR_2_SMUD	365574	SOLANO2W	1	18.38	2	Bay Area	Contra Costa	Aug NQC	Wind
120	PG&E	USWNDR_2_SMUD	365566	SOLANO1W	0.69	3.24	1	Bay Area	Contra Costa	Aug NQC	Wind
121	PG&E	USWNDR_2_SMUD2	365600	SOLANO3W	1	27.04	3	Bay Area	Contra Costa	Aug NQC	Wind
122	PG&E	USWPFK_6_FRICK	365608	FRICKWIND	0.69	2.12	1	Bay Area	Contra Costa	Aug NQC	Wind
123	PG&E	USWPJR_2_UNITS	39233	GRNRDG	0.69	16.55	1	Bay Area	Contra Costa	Aug NQC	Wind
124	PG&E	VISTRA_5_DALBT1	366711	DALLASBESS1	34.5	100.00	1	Bay Area	South Bay-Moss Landing		Battery
125	PG&E	VISTRA_5_DALBT2	366712	DALLASBESS2	34.5	100.00	2	Bay Area	South Bay-Moss Landing		Battery
126	PG&E	VISTRA_5_DALBT3	366713	DALLASBESS3	34.5	100.00	3	Bay Area	South Bay-Moss Landing		Battery
127	PG&E	VISTRA_5_DALBT4	366715	DALLASBESS4	34.5	100.00	4	Bay Area	South Bay-Moss Landing		Battery
128	PG&E	VISTRA_5_PLABT1	366244	PLANOBESS4	34.5	100.40	4	Bay Area	South Bay-Moss Landing		Battery
129	PG&E	VISTRA_5_PLABT2	366243	PLANOBESS3	34.5	100.40	3	Bay Area	South Bay-Moss Landing		Battery
130	PG&E	VISTRA_5_PLABT3	366242	PLANOBESS2	34.5	74.60	2	Bay Area	South Bay-Moss Landing		Battery
131	PG&E	VISTRA_5_PLABT4	366241	PLANOBESS1	34.5	74.60	1	Bay Area	South Bay-Moss Landing		Battery
132	PG&E	WNDMAS_2_UNIT 1	33173	BVISTAWND	0.6	8.04	1	Bay Area	Contra Costa	Aug NQC	Wind
133	PG&E	ZOND_6_UNIT				3.62		Bay Area	Contra Costa	Not modeled Aug NQC	Wind
134	PG&E	ZZ_FLOWD1_6_ALTPP1	35318	FLOWPTR	9.11	1.80	1	Bay Area	Contra Costa	No NQC - est. data	Wind

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
135	PG&E	ZZ_IMHOFF_1_UNIT 1	33136	CCCSD	12.47	0.00	1	Bay Area	Pittsburg	No NQC - hist. data	QF/Selfgen
136	PG&E	ZZ_MOSSLD_1_QF				0.00		Bay Area		Not modeled Aug NQC	QF/Selfgen
137	PG&E	ZZ_NA	35861	SJ-SCL W	4.3	0.00	1	Bay Area	San Jose, South Bay-Moss Landing	No NQC - hist. data	QF/Selfgen
138	PG&E	ZZ_NA	36209	SLD ENRG	12.47	0.00	1	Bay Area	South Bay-Moss Landing		QF/Selfgen
139	PG&E	ZZ_ZANKER_1_UNIT 1	35861	SJ-SCL W	4.3	0.00	RN	Bay Area	San Jose, South Bay-Moss Landing	No NQC - hist. data	QF/Selfgen
140	PG&E	ZZZ_New Unit	366330	Q1349BESS	0.55	100.00	2	Bay Area	Contra Costa	No NQC - est. data	Battery
141	PG&E	ZZZ_New Unit	366394	Q1454B	0.69	75.00	1	Bay Area	San Jose, South Bay-Moss Landing	No NQC - est. data	Battery
142	PG&E	ZZZ_New Unit	365342	MRGNHILL_D1	21	20.00	1	Bay Area	Llagas, San Jose, South Bay-Moss Landing	No NQC - est. data	Battery
143	PG&E	ZZZ_New Unit	365348	HOLLISTER_D1	21	10.00	1	Bay Area	South Bay-Moss Landing	No NQC - est. data	Battery
144	PG&E	ZZZ_New Unit	365540	CHEVRONS	12.47	0.00	1	Bay Area		Energy Only	Market
145	PG&E	ZZZ_New Unit	365685	P66RODEO_1	12	0.00	1	Bay Area	Pittsburg	Energy Only	Market
146	PG&E	ZZZ_New Unit	38921	BESS_SVP	60	0.00	1	Bay Area	San Jose, South Bay-Moss Landing	Waiting TPD allocation	Battery
147	PG&E	ZZZ_New Unit	366328	Q1349SPV	0.55	0.00	1	Bay Area	Contra Costa	Energy Only	Solar
148	PG&E	ZZZ_New Unit	32741	HILLSIDE_12	12.47	0.00	2	Bay Area		Energy Only	Market
149	PG&E	ZZZ_New Unit	32172	HIGHWINDS	34.5	0.00	2	Bay Area	Contra Costa	Energy Only	Wind
150	PG&E	ZZZ_New Unit	365617	OAKLANDES3	13.8	0.00	3	Bay Area	Oakland	On Hold	Battery
151	PG&E	ZZZ_New Unit	32788	STATIN L	115	0.00	ES	Bay Area	Oakland	Energy Only	Battery
152	PG&E	ZZZ_New Unit	92296	2296-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
153	PG&E	ZZZ_New Unit	92154	2154-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
154	PG&E	ZZZ_New Unit	92849	2849-WD	115	0.00	EW	Bay Area		Energy Only	Solar
155	PG&E	ZZZ_New Unit	92848	2848-WD	115	0.00	EW	Bay Area		Energy Only	Solar
156	PG&E	ZZZ_New Unit	92598	2598-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
157	PG&E	ZZZ_New Unit	92333	2333-WD	230	0.00	EW	Bay Area	Contra Costa	Energy Only	Solar
158	PG&E	ZZZ_New Unit	33103	TASSAJARA_D1	21.6	0.00	RE	Bay Area	Pittsburg	Energy Only	Solar
159	PG&E	ZZZ_New Unit	36232	CAMPEVERS_D 1	21.6	0.00	RE	Bay Area	South Bay-Moss Landing	Energy Only	Solar
160	PG&E	ZZZ_New Unit	33450	FACEBOOKBH	12	0.00	RE	Bay Area	Ames	Energy Only	Solar
161	PG&E	ZZZ_New Unit	365688	2509-RD-SPV	0.63	0.00	RE	Bay Area	Pittsburg	Energy Only	Solar
162	PG&E	ZZZ_New Unit	35863	CATALYST	12.47	0.00	RE	Bay Area	San Jose, South Bay-Moss Landing	Energy Only	Solar
163	PG&E	ZZZ_New Unit	365338	GRANITEROCK	4.16	0.00	RE	Bay Area	South Bay-Moss Landing	Energy Only	Solar
164	PG&E	ZZZ_New Unit	32741	HILLSIDE_12	12.47	0.00	RN	Bay Area		Energy Only	Market
165	PG&E	ZZZ_New Unit	365559	STANFORD	12.47	0.00	RN	Bay Area		Energy Only	Market
166	PG&E	ZZZ_New Unit	35302	NUMMI-LV	12.56	0.00	RN	Bay Area		Energy Only	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
167	PG&E	ZZZ_New Unit	35859	HGST-LV	12.41	0.00	RN	Bay Area		Energy Only	Market
168	PG&E	ZZZ_New Unit	35307	A100US-L	12.56	0.00	RN	Bay Area		Energy Only	Market
169	PG&E	ZZZZZ_MARKHM_1_CATLST	35863	CATALYST	12.47	0.00	1	Bay Area	San Jose, South Bay-Moss Landing		QF/Selfgen
170	PG&E	ZZZZZ_STAUFF_1_UNIT	33139	STAUFER	9.11	0.00	1	Bay Area		Retired	QF/Selfgen
171	PG&E	ZZZZZ_UNCHEM_1_UNIT	32920	UNION CH	9.11	0.00	1	Bay Area	Pittsburg	Retired	QF/Selfgen
172	PG&E	ADERA_1_SOLAR1	34319	ADERASLR	0.48	0.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Energy Only	Solar
173	PG&E	ADMEST_6_SOLAR	34315	ADAMS_E	12.47	2.36	1	Fresno	Herndon		Solar
174	PG&E	AGRICO_6_PL3N5	34608	AGRICO	13.8	22.69	3	Fresno	Herndon		Market
175	PG&E	AGRICO_7_UNIT	34608	AGRICO	13.8	43.13	4	Fresno	Herndon		Market
176	PG&E	AGRICO_7_UNIT	34608	AGRICO	13.8	7.47	2	Fresno	Herndon		Market
177	PG&E	AKINGS_6_AMESR1	34688	AMRCNKNG	0.36	15.25	1	Fresno	Hanford	Aug NQC	Solar
178	PG&E	AVENAL_6_AVPARK	34265	AVENAL P	12	0.74	1	Fresno	Coalinga	Aug NQC	Solar
179	PG&E	AVENAL_6_AVSLR1	34691	AVENAL_D	21	0.00	1	Fresno	Coalinga	Energy Only	Solar
180	PG&E	AVENAL_6_AVSLR2	34691	AVENAL_D	21	0.00	1	Fresno	Coalinga	Energy Only	Solar
181	PG&E	AVENAL_6_SANDDG	34263	SANDDRAG	12	1.97	1	Fresno	Coalinga	Aug NQC	Solar
182	PG&E	AVENAL_6_SUNCTY	34257	SUNCTY D	12	2.48	1	Fresno	Coalinga	Aug NQC	Solar
183	PG&E	BALCHS_7_UNIT 1	34624	BALCH 1	13.2	31.00	1	Fresno	Herndon	Aug NQC	Market
184	PG&E	BALCHS_7_UNIT 2	34612	BLCH 2-3	13.8	52.50	1	Fresno	Herndon	Aug NQC	Market
185	PG&E	BALCHS_7_UNIT 3	34614	BLCH 2-3	13.8	54.60	1	Fresno	Herndon	Aug NQC	Market
186	PG&E	CABALO_2_M2BSR1	365524	MUSTANG4	0.36	6.20	2	Fresno		Aug NQC	Solar
187	PG&E	CABALO_2_M2WSR2	365523	MUSTANG3	0.36	12.40	1	Fresno		Aug NQC	Solar
188	PG&E	CANTUA_1_SOLAR	34349	CANTUA_D	12.47	1.24	1	Fresno	Panoche 115 kV	Aug NQC	Solar
189	PG&E	CANTUA_1_SOLAR	34349	CANTUA_D	12.47	1.24	2	Fresno	Panoche 115 kV	Aug NQC	Solar
190	PG&E	CHEVCO_6_UNIT 1	34652	CHV.COAL	9.11	2.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	QF/Selfgen
191	PG&E	CHEVCO_6_UNIT 2	34652	CHV.COAL	9.11	0.73	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	QF/Selfgen
192	PG&E	CHWCHL_1_UNIT	34301	CHOWCOGN	13.8	48.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV		Market
193	PG&E	CORCAN_1_SOLAR1	34690	CORCORAN_D3	12.47	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
194	PG&E	CORCAN_1_SOLAR2	34692	CORCORAN_D4	12.47	1.36	1	Fresno	Herndon, Hanford	Aug NQC	Solar
195	PG&E	CRESSY_1_PARKER	34140	CRESSEY	115	1.03		Fresno		Not modeled Aug NQC	MUNI
196	PG&E	CRNEVL_6_CRNVA	34634	CRANEVLY	12	0.00	1	Fresno	Borden	Aug NQC	Market
197	PG&E	CRNEVL_6_SJQN 2	34631	SJ2GEN	9.11	0.00	1	Fresno	Borden	Aug NQC	Market
198	PG&E	CURTIS_1_CANLCK				0.00		Fresno		Not modeled Aug NQC	Market
199	PG&E	CURTIS_1_FARFLD				0.28		Fresno		Not modeled Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
200	PG&E	DAIRLD_1_MD1SL1				0.00		Fresno		Not modeled Energy Only	Solar
201	PG&E	DAIRLD_1_MD2BM1				0.00		Fresno		Not modeled Energy Only	Market
202	PG&E	EEKTMN_6_SOLAR1	34629	KETTLEMN	8.0	0.00	1	Fresno		Energy Only	Solar
203	PG&E	ELCAP_1_SOLAR				0.00		Fresno		Not Modeled Aug NQC	Solar
204	PG&E	EXCHEC_7_UNIT 1	34306	EXCHQUER	13.8	94.50	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	MUNI
205	PG&E	EXCLSG_1_SOLAR	34623	EXCLSRSL	0.5	7.44	1	Fresno	Panoche 115 kV	Aug NQC	Solar
206	PG&E	FRESHW_1_SOLAR1	34699	FRSHWTRSLR	0.385	0.00	1	Fresno	Herndon	Energy Only	Solar
207	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	2.47	2	Fresno	Borden	Aug NQC	Net Seller
208	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	1.32	3	Fresno	Borden	Aug NQC	Net Seller
209	PG&E	FRIANT_6_UNITS	34636	FRIANTDAM	6.6	0.35	4	Fresno	Borden	Aug NQC	Net Seller
210	PG&E	GIFENS_6_BUGSL1	34644	BRFRDGFNSPV	0.55	2.48	1	Fresno		Aug NQC	Solar
211	PG&E	GIFFEN_6_SOLAR	34467	GIFFEN_DIST	12.47	1.24	1	Fresno	Herndon	Aug NQC	Solar
212	PG&E	GIFFEN_6_SOLAR1				0.00		Fresno	Herndon	Not modeled Energy Only	Solar
213	PG&E	GUERNS_6_HD3BM3				0.00		Fresno		Not modeled Energy Only	Market
214	PG&E	GUERNS_6_SOLAR	34463	GUERNSEY_D2	12.47	1.24	5	Fresno		Aug NQC	Solar
215	PG&E	GUERNS_6_SOLAR	34461	GUERNSEY_D1	12.47	1.24	8	Fresno		Aug NQC	Solar
216	PG&E	GUERNS_6_VH2BM1				0.00		Fresno		Not modeled Energy Only	Market
217	PG&E	GWFPWR_1_UNITS	34431	HANFORDPPCT 1	13.8	49.23	1	Fresno	Herndon, Hanford		Market
218	PG&E	GWFPWR_1_UNITS	34433	HANFORDPPCT 2	13.8	49.23	1	Fresno	Herndon, Hanford		Market
219	PG&E	HAASPH_7_PL1X2	34610	HAAS	13.8	72.00	1	Fresno	Herndon	Aug NQC	Market
220	PG&E	HAASPH_7_PL1X2	34610	HAAS	13.8	72.00	2	Fresno	Herndon	Aug NQC	Market
221	PG&E	HARDWK_6_STWBM1				0.00		Fresno		Not modeled Energy Only	Market
222	PG&E	HELMPG_7_UNIT 1	34600	HELMS	18	407.00	1	Fresno		Aug NQC	Market
223	PG&E	HELMPG_7_UNIT 2	34602	HELMS	18	407.00	2	Fresno		Aug NQC	Market
224	PG&E	HELMPG_7_UNIT 3	34604	HELMS	18	404.00	3	Fresno		Aug NQC	Market
225	PG&E	HENRTA_6_HDEBT1	34654	HENRIETT	12.47	10.00	1	Fresno			Battery
226	PG&E	HENRTA_6_SOLAR1				0.19		Fresno		Not modeled Aug NQC	Solar
227	PG&E	HENRTA_6_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
228	PG&E	HENRTA_6_UNITA1	34539	GWF_GT1	13.8	49.98	1	Fresno			Market
229	PG&E	HENRTA_6_UNITA2	34541	GWF_GT2	13.8	49.42	1	Fresno			Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
230	PG&E	HENRTS_1_SOLAR	34617	HRNTASLR	0.38	12.40	1	Fresno	Herndon	Aug NQC	Solar
231	PG&E	HURON_6_SOLAR	34557	HURON_DI	12.47	1.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
232	PG&E	HURON_6_SOLAR	34557	HURON_DI	12.47	1.24	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
233	PG&E	INTTRB_6_UNIT	34342	INT.TURB	9.11	3.89	1	Fresno		Aug NQC	Market
234	PG&E	JAVASR_1_JAVSR1	34649	JAVASLRSPV	0.6	1.67	1	Fresno	Herndon, Hanford	Aug NQC	Solar
235	PG&E	JAYNE_6_WLSLR	34639	WESTLNDS	0.48	2.23	1	Fresno	Coalinga	Energy Only	Solar
236	PG&E	KANSAS_6_SOLAR	34666	KANSASS_S	12.47	2.48	F	Fresno		Energy Only	Solar
237	PG&E	KERKH2_7_UNIT 1	34308	KERCKHOF	13.8	75.00	1	Fresno	Herndon, Wilson 115 kV	Aug NQC	Market
238	PG&E	KERMAN_6_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
239	PG&E	KERMAN_6_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
240	PG&E	KINGCO_1_KINGBR	34642	KINGSBUR	13.8	21.74	1	Fresno	Herndon, Hanford	Aug NQC	Net Seller
241	PG&E	KINGCO_1_KINGBR	34642	KINGSBUR	13.8	12.77	2	Fresno	Herndon, Hanford	Aug NQC	Net Seller
242	PG&E	KINGRV_7_UNIT 1	34616	KINGSRIV	13.8	40.80	1	Fresno	Herndon, Reedley	Aug NQC	Market
243	PG&E	KNGBRG_1_KBSLR1				0.00		Fresno		Not modeled Energy Only	Solar
244	PG&E	KNGBRG_1_KBSLR2				0.00		Fresno		Not modeled Energy Only	Solar
245	PG&E	KNTSTH_6_SOLAR	34694	KENT_S	8.0	2.48	1	Fresno		Energy Only	Solar
246	PG&E	LEPRFD_1_KANSAS	34680	KANSAS	12.47	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
247	PG&E	LOTUS_6_LSFSR1	34335	LOTUSSFS	0.315	6.20	1	Fresno	Borden	Aug NQC	Solar
248	PG&E	LTBEAR_1_LB3SR3	365663	LILBEAR3	0.36	2.48	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
249	PG&E	LTBEAR_1_LB4SR4	365673	LILBEAR4	0.36	6.20	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
250	PG&E	LTBEAR_1_LB4SR5	365675	LILBEAR5	0.36	6.20	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
251	PG&E	LTBERA_1_LB1SR1	365604	Q1028Q10	0.36	4.96	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
252	PG&E	MALAGA_1_PL1X2	34671	KRCDPCT1	13.8	48.31	1	Fresno	Herndon		Market
253	PG&E	MALAGA_1_PL1X2	34672	KRCDPCT2	13.8	48.31	1	Fresno	Herndon		Market
254	PG&E	MCCALL_1_QF	34219	MCCALL 4	12.47	0.20	QF	Fresno	Herndon	Aug NQC	QF/Selfgen
255	PG&E	MCSWAN_6_UNITS	34320	MCSWAIN	9.11	9.00	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	MUNI
256	PG&E	MENBIO_6_RENEW1	34339	CALRENEW	12.5	0.62	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Aug NQC	Net Seller
257	PG&E	MERCED_1_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
258	PG&E	MERCED_1_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
259	PG&E	MERCFL_6_UNIT	34322	MERCEDFL	9.11	3.50	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
260	PG&E	MNDOTA_1_SOLAR1	34313	NORTHSTA	0.2	7.44	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Solar
261	PG&E	MNDOTA_1_SOLAR2				0.00		Fresno		Not modeled Energy Only	Solar
262	PG&E	MSTANG_2_MTGBT1	34685	MUSTANGBES	0.8	75.00	2	Fresno			Battery
263	PG&E	MSTANG_2_SOLAR	34683	REMUSTANGS PV	0.36	0.00	1	Fresno		Aug NQC	Solar
264	PG&E	MSTANG_2_SOLAR3	34683	REMUSTANGS PV	0.36	1.85	1	Fresno		Aug NQC	Solar
265	PG&E	MSTANG_2_SOLAR4	34683	REMUSTANGS PV	0.36	3.72	1	Fresno		Aug NQC	Solar
266	PG&E	ONLLPP_6_UNITS	34316	ONEILPMP	9.11	0.63	1	Fresno		Aug NQC	MUNI
267	PG&E	OROLOM_1_SOLAR1	34689	OROLOMA_D3	12.47	0.00	1	Fresno	Panoche 115 kV	Energy Only	Solar
268	PG&E	OROLOM_1_SOLAR2	34689	OROLOMA_D3	12.47	0.00	1	Fresno	Panoche 115 kV	Energy Only	Solar
269	PG&E	ORTGA_6_ME1SL1				0.37		Fresno		Not modeled Energy Only	Solar
270	PG&E	PAIGES_6_SOLAR	34653	PAIGESLR	0.55	0.00	1	Fresno	Coalinga, Panoche 115 kV	Energy Only	Solar
271	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	1	Fresno	Herndon	Aug NQC	MUNI
272	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	2	Fresno	Herndon	Aug NQC	MUNI
273	PG&E	PINFLT_7_UNITS	38720	PINEFLAT	13.8	40.28	3	Fresno	Herndon	Aug NQC	MUNI
274	PG&E	PNCHPP_1_PL1X2	34328	STRWDPNC	13.8	59.96	1	Fresno	Panoche 115 kV		Market
275	PG&E	PNCHPP_1_PL1X2	34329	STRWDPNC	13.8	59.96	2	Fresno	Panoche 115 kV		Market
276	PG&E	PNOCHE_1_PL1X2	34142	WHD_PAN2	13.8	49.97	1	Fresno	Herndon, Panoche 115 kV		Market
277	PG&E	PNOCHE_1_UNITA1	34186	CALPEAKP	13.8	52.01	1	Fresno	Panoche 115 kV		Market
278	PG&E	REEDLY_6_SOLAR				0.00		Fresno	Herndon, Reedley	Not modeled Energy Only	Solar
279	PG&E	S_RITA_6_SOLAR1				0.00		Fresno		Not modeled Energy Only	Solar
280	PG&E	SCHNDR_1_FIVPTS	34353	SCHINDLER_D	12.47	1.24	1	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
281	PG&E	SCHNDR_1_FIVPTS	34353	SCHINDLER_D	12.47	0.62	2	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
282	PG&E	SCHNDR_1_WSTSDE	34353	SCHINDLER_D	12.47	1.24	3	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
283	PG&E	SCHNDR_1_WSTSDE	34353	SCHINDLER_D	12.47	0.62	4	Fresno	Coalinga, Panoche 115 kV	Aug NQC	Solar
284	PG&E	SGREGY_6_SANGER	34646	SANGERCG1	13.8	38.77	1	Fresno	Herndon	Aug NQC	Market
285	PG&E	SGREGY_6_SANGER	34646	SANGERCG2	13.8	9.31	2	Fresno	Herndon	Aug NQC	Market
286	PG&E	SLATE_2_SLASR1	365694	SLATESPV1	0.645	40.29	1	Fresno		Aug NQC	Hybrid
287	PG&E	SLATE_2_SLASR2	365695	SLATEBESS1	0.66	55.39	2	Fresno		Aug NQC	Hybrid
288	PG&E	SLATE_2_SLASR3				40.20		Fresno		Aug NQC	Hybrid
289	PG&E	SLATE_2_SLASR4	365698	SLATESPV2	0.645	54.97	3	Fresno		Aug NQC	Hybrid

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
290	PG&E	SLATE_2_SLASR5	365699	SLATEBESS2	0.66	12.66	4	Fresno		Aug NQC	Hybrid
291	PG&E	STOREY_2_MDRCH2				0.04		Fresno		Not modeled Aug NQC	Market
292	PG&E	STOREY_2_MDRCH3				0.02		Fresno		Not modeled Aug NQC	Market
293	PG&E	STOREY_2_MDRCH4				0.01		Fresno		Not modeled Aug NQC	Market
294	PG&E	STOREY_7_MDRCHW	34209	STOREY D	12.47	0.06	1	Fresno		Aug NQC	Net Seller
295	PG&E	STROUD_6_SOLAR	34563	STROUD_D	12.47	1.24	1	Fresno	Herndon	Aug NQC	Solar
296	PG&E	STROUD_6_SOLAR	34563	STROUD_D	12.47	1.24	2	Fresno	Herndon	Aug NQC	Solar
297	PG&E	STROUD_6_WWHSR1				0.00		Fresno	Herndon	Energy Only	Solar
298	PG&E	SUMWHT_6_SWSSR1				2.29		Fresno		Aug NQC	Solar
299	PG&E	TRNQL8_2_AMASR1	365514	Q1032G1	0.55	2.48	1	Fresno		Aug NQC	Solar
300	PG&E	TRNQL8_2_AZUSR1	365517	Q1032G2	0.55	2.48	2	Fresno		Aug NQC	Solar
301	PG&E	TRNQL8_2_ROJSR1	365520	Q1032G3	0.55	12.40	3	Fresno		Aug NQC	Solar
302	PG&E	TRNQL8_2_VERSR1	365520	Q1032G3	0.55	7.44	3	Fresno		Aug NQC	Solar
303	PG&E	TRNQLT_2_RETBT1	34343	Q643XBES	0.8	72.00	2	Fresno			Battery
304	PG&E	TRNQLT 2 SOLAR	34340	Q643X	0.8	20.42	1	Fresno		Aug NQC	Solar
305	PG&E	TVYVLY_6_KRSHY1				0.32		Fresno		Not modeled Aug NQC	Market
306	PG&E	ULTPFR_1_UNIT 1	34640	RIOBRVOF	12.47	16.10	1	Fresno	Herndon	Aug NQC	Market
307	PG&E	VEGA_6_SOLAR1	34314	VEGA	34.5	0.00	1	Fresno		Energy Only	Solar
308	PG&E	WAUKNA_1_SOLAR	34696	CORCORANPV _S	0.41	2.48	1	Fresno	Herndon, Hanford	Aug NQC	Solar
309	PG&E	WAUKNA_1_SOLAR2	34677	CORCORAN2S PV	0.41	2.45	1	Fresno	Herndon, Hanford	No NQC - Pmax	Solar
310	PG&E	WFRESN_1_SOLAR				0.00		Fresno		Not modeled Energy Only	Solar
311	PG&E	WHITNY_6_SOLAR	34673	WHTNYPTSPV	0.55	0.00	1	Fresno	Coalinga, Panoche 115 kV	Energy Only	Solar
312	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	1	Fresno	Borden	Aug NQC	Market
313	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	2	Fresno	Borden	Aug NQC	Market
314	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	3	Fresno	Borden	Aug NQC	Market
315	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	4	Fresno	Borden	Aug NQC	Market
316	PG&E	WISHON_6_UNITS	34658	WISHON	2.3	0.00	SJ	Fresno	Borden	Aug NQC	Market
317	PG&E	WOODWR_1_HYDRO				0.00		Fresno	Herndon	Not modeled Energy Only	Market
318	PG&E	ZZ_BORDEN_2_QF	34253	BORDEN D	12.47	0.00	QF	Fresno		No NQC - hist. data	Net Seller
319	PG&E	ZZ_BULLRD_7_SAGNES	34213	BULLD 12	12.47	0.00	1	Fresno	Herndon	Aug NQC	QF/Selfgen
320	PG&E	ZZ_CHWCHL_1_BIOMAS	34305	CHWCHLA2	13.8	0.00	1	Fresno	Herndon, Panoche 115 kV, Wilson 115 kV	Aug NQC	Market
321	PG&E	ZZ_DINUBA_6_UNIT	34648	DINUBA E	13.8	0.00	MB	Fresno	Herndon, Reedley	Mothballed	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
322	PG&E	ZZ_ELNIDP_6_BIOMAS	34330	ELNIDOBM	13.8	0.00	1	Fresno	Panoche 115 kV, Wilson 115 kV	Aug NQC	Market
323	PG&E	ZZ_KERKH1_7_UNIT 2	34343	KERCK1-2	6.6	0.00	2	Fresno	Herndon, Wilson 115 kV	No NQC - hist. data	Market
324	PG&E	ZZ_NA	34485	FRESNOWW	12.5	0.00	RE	Fresno		No NQC - hist. data	QF/Selfgen
325	PG&E	ZZ_NA	34651	JACALITO	0.55	0.00	RN	Fresno	Coalinga	No NQC - hist. data	Market
326	PG&E	ZZ_SCHNDR_1_OS2BM2				0.00		Fresno	Coalinga	Energy Only	Market
327	PG&E	ZZ_WRGHTP_7_AMENGY	34207	WRIGHT D	12.47	0.00	QF	Fresno			QF/Selfgen
328	PG&E	ZZZ_New Unit	366342	Q1378BESS	0.69	50.00	2	Fresno		No NQC - est. data	Battery
329	PG&E	ZZZ_New Unit	365341	MERCED_D1	21	20.00	1	Fresno		No NQC - est. data	Battery
330	PG&E	ZZZ_New Unit	366340	Q1378WIND	0.75	16.93	1	Fresno		No NQC - est. data	Wind
331	PG&E	ZZZ_New Unit	365706	FSNOCGNBESS 2	6.9	16.40	5	Fresno	Herndon	No NQC - est. data	Battery
332	PG&E	ZZZ_New Unit	92484	2484-WD	21	9.90	FW	Fresno	Coalinga	No NQC - est. data	Battery
333	PG&E	ZZZ_New Unit	365327	MUSTANGSPV4	0.36	4.10	4	Fresno		No NQC - est. data	Solar
334	PG&E	ZZZ_New Unit	365325	MUSTANGSPV3	0.36	3.70	3	Fresno		No NQC - est. data	Solar
335	PG&E	ZZZ_New Unit	365504	SCULINS	0.55	2.34	1	Fresno		No NQC - est. data	Solar
336	PG&E	ZZZ_New Unit	365679	WSTALMONDS PV	0.63	2.28	1	Fresno		No NQC - est. data	Solar
337	PG&E	ZZZ_New Unit	34668	KEARNEY_D1	12.47	0.90	1	Fresno		No NQC - hist. data	Solar
338	PG&E	ZZZ_New Unit	92142	2142-WD	70	0.08	FW	Fresno		No NQC - est. data	Solar
339	PG&E	ZZZ_New Unit	92799	2799-WD	115	0.00	EW	Fresno	Panoche 115 kV	Energy Only	Solar
340	PG&E	ZZZ_New Unit	92007	2007-RD	70	0.00	RN	Fresno	Borden	Energy Only	Market
341	PG&E	ZZZ_New Unit	365340	LEPRINOFDLM R	21	0.00	RN	Fresno	Herndon, Hanford	Energy Only	Market
342	PG&E	ZZZ_New Unit	34603	JGBSWLT	12.47	0.00	ST	Fresno	Herndon	Energy Only	Market
343	PG&E	ZZZZ_New Unit	34500	DINUBA	70	0.00	TA	Fresno	Reedley	Transmission Asset	Battery
344	PG&E	ZZZZZ_CRNEVL_6_SJQN 3	34633	SJ3GEN	9.11	0.00	1	Fresno	Borden	Retired	Market
345	PG&E	ZZZZZ_GATES_6_PL1X2	34553	WHD_GAT2	13.8	0.00	RT	Fresno	Coalinga	Retired	Market
346	PG&E	ZZZZZ_KERKH1_7_UNIT 3	34345	KERCK1-3	6.6	0.00	3	Fresno	Herndon, Wilson 115 kV	Retired	Market
347	PG&E	BRDGVL_7_BAKER				0.00		Humboldt		Not modeled Aug NQC	Net Seller
348	PG&E	FTSWRD_6_TRFORK				0.11		Humboldt		Not modeled Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
349	PG&E	FTSWRD_7_QFUNTS				0.00		Humboldt		Not modeled Aug NQC	QF/Selfgen
350	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.69	7	Humboldt			Market
351	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.32	6	Humboldt			Market
352	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	16.22	5	Humboldt			Market
353	PG&E	HUMBPP_1_UNITS3	31180	HMBOBAYPPB	13.8	15.85	4	Humboldt			Market
354	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	16.62	8	Humboldt			Market
355	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.33	3	Humboldt			Market
356	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	16.33	9	Humboldt			Market
357	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.24	2	Humboldt			Market
358	PG&E	HUMBPP_6_UNITS	31181	HMBOBAYPPA	13.8	16.14	1	Humboldt			Market
359	PG&E	HUMBPP_6_UNITS	31182	HMBOBAYPPC	13.8	15.95	10	Humboldt			Market
360	PG&E	KEKAWK_6_UNIT	31166	KEKAWAK	9.1	0.00	1	Humboldt		Aug NQC	Net Seller
361	PG&E	PACLUM_6_UNIT	31152	HRCGENSAB	13.8	4.87	1	Humboldt		Aug NQC	Net Seller
362	PG&E	PACLUM_6_UNIT	31152	HRCGENSAB	13.8	4.87	2	Humboldt		Aug NQC	Net Seller
363	PG&E	PACLUM_6_UNIT	31153	HRCGENC	2.4	2.92	3	Humboldt		Aug NQC	Net Seller
364	PG&E	ZZ_BLULKE_6_BLUELK	31156	BLUELKPP	12.5	0.00	MB	Humboldt		Mothballed	Market
365	PG&E	ZZ_FAIRHV_6_UNIT	31150	FAIRHAVN	13.8	0.00	1	Humboldt		No NQC - hist. data	Net Seller
366	PG&E	ZZ_LAPAC_6_UNIT	31158	LP SAMOA	12.5	0.00	1	Humboldt			Market
367	PG&E	7STDRD_1_SOLAR1	35065	7STNDRD_D1	21.6	2.48	1	Kern	South Kern PP, Kern Oil	Aug NQC	Solar
368	PG&E	BDGRCK_1_UNITS	35029	BADGERCK	13.8	48.08	1	Kern	South Kern PP	Aug NQC	Net Seller
369	PG&E	BEARMT_1_UNIT	35066	PSE-BEAR	13.8	49.21	1	Kern	South Kern PP, Westpark	Aug NQC	Net Seller
370	PG&E	BKRFLD_2_SOLAR1				0.17		Kern	South Kern PP	Not modeled Aug NQC	Solar
371	PG&E	DEXZEL_1_UNIT	35024	DEXZEL	13.8	20.00	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller
372	PG&E	DISCOV_1_CHEVRN	35062	DISCOVRY	13.8	6.33	1	Kern	South Kern PP, Kern Oil	Aug NQC	QF/Selfgen
373	PG&E	DOUBLC_1_UNITS	35023	DOUBLE C	13.8	26.12	1	Kern	South Kern PP	Aug NQC	Net Seller
374	PG&E	DOUBLC_1_UNITS	35023	DOUBLE C	13.8	26.12	2	Kern	South Kern PP	Aug NQC	Net Seller
375	PG&E	KERNFT_1_UNITS	35026	KERNFRNT	13.8	26.20	1	Kern	South Kern PP	Aug NQC	Net Seller
376	PG&E	KERNFT_1_UNITS	35026	KERNFRNT	13.8	26.20	2	Kern	South Kern PP	Aug NQC	Net Seller
377	PG&E	LAMONT_1_SOLAR1	35019	REGULUS	0.4	7.44	1	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
378	PG&E	LAMONT_1_SOLAR2	35092	REDWOODSPV	0.6	2.48	4	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
379	PG&E	LAMONT_1_SOLAR3	35087	WOODMERESP V	0.4	1.86	3	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
380	PG&E	LAMONT_1_SOLAR4	35059	HAYWORTHSP V	0.4	17.37	2	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
381	PG&E	LAMONT_1_SOLAR5	35054	REDCRESTSPV	0.4	2.07	1	Kern	South Kern PP, Kern PWR- Tevis	Aug NQC	Solar
382	PG&E	LIVOAK_1_UNIT 1	35058	PSE-LVOK	9.1	49.70	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
383	PG&E	MAGUND_1_BKISR1				0.12		Kern	South Kern PP, Kern Oil	Not modeled Aug NQC	Solar
384	PG&E	MAGUND_1_BKSSR2				0.65		Kern	South Kern PP, Kern Oil	Not modeled Aug NQC	Solar
385	PG&E	MTNPOS_1_UNIT	35036	MT POSO	13.8	40.55	1	Kern	South Kern PP, Kern Oil	Aug NQC	Net Seller
386	PG&E	OLDRIV_6_BIOGAS				1.75		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
387	PG&E	OLDRIV_6_CESDBM				0.93		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
388	PG&E	OLDRIV_6_LKVBM1				0.93		Kern	South Kern PP, Kern 70 kV	Not modeled Aug NQC	Market
389	PG&E	OLDRV1_6_SOLAR	35091	OLDRIVER1SPV	0.69	2.48	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
390	PG&E	SIERRA_1_UNITS	35027	HISIERRA	13.8	26.22	1	Kern	South Kern PP	Aug NQC	Market
391	PG&E	SIERRA_1_UNITS	35027	HISIERRA	13.8	26.22	2	Kern	South Kern PP	Aug NQC	Market
392	PG&E	SKERN_6_SOLAR1	35089	S_KERN	0.48	2.48	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
393	PG&E	SKERN_6_SOLAR2	365563	SKICSPV	0.4	1.24	1	Kern	South Kern PP, Kern 70 kV	Aug NQC	Solar
394	PG&E	VEDDER_1_SEKERN	35046	SEKR	9.11	3.04	1	Kern	South Kern PP, Kern Oil	Aug NQC	QF/Selfgen
395	PG&E	ZZZ_New Unit	365347	TEVIS_D1	21	20.00	1	Kern	South Kern PP, Kern PWR- Tevis	No NQC - est. data	Battery
396	PG&E	ZZZ_New Unit	365597	Q744P5G5	0.6	1.48	5	Kern	South Kern PP, Kern PWR- Tevis	No NQC - est. data	Solar
397	PG&E	ZZZ_New Unit	366955	2446-RD-SPV	0.645	0.00	RE	Kern	South Kern PP, Kern Oil	Energy Only	Solar
398	PG&E	ZZZ_New Unit	35068	EANDB_D1	12.47	0.00	RE	Kern	South Kern PP	Energy Only	Solar
399	PG&E	ADLIN_1_UNITS	31435	AIDLINGYSR1	13.8	11.00	1	NCNB	Eagle Rock, Fulton		Market
400	PG&E	ADLIN_1_UNITS	31437	AIDLINGYSR2	13.8	11.00	2	NCNB	Eagle Rock, Fulton		Market
401	PG&E	CLOVDL_1_SOLAR				0.19		NCNB	Eagle Rock, Fulton	Not modeled Aug NQC	Solar
402	PG&E	CSTOGA_6_LNDFIL				0.00		NCNB	Fulton	Not modeled Energy Only	Market
403	PG&E	FULTON_1_QF				0.02		NCNB	Fulton	Not modeled Aug NQC	QF/Selfgen
404	PG&E	GEYS11_7_UNIT11	31412	GEYSER11	13.8	68.00	1	NCNB	Eagle Rock, Fulton		Market
405	PG&E	GEYS12_7_UNIT12	31414	GEYSER12	13.8	50.00	1	NCNB	Fulton		Market
406	PG&E	GEYS13_7_UNIT13	31416	GEYSER13	13.8	56.00	1	NCNB			Market
407	PG&E	GEYS14_7_UNIT14	31418	GEYSER14	13.8	70.00	1	NCNB	Fulton		Market
408	PG&E	GEYS16_7_UNIT16	31420	GEYSER16	13.8	63.00	1	NCNB	Fulton		Market
409	PG&E	GEYS17_7_UNIT17	31422	GEYSER17	13.8	75.50	1	NCNB	Fulton		Market
410	PG&E	GEYS18_7_UNIT18	31424	GEYSER18	13.8	72.00	1	NCNB			Market
411	PG&E	GEYS20_7_UNIT20	31426	GEYSER20	13.8	50.00	1	NCNB			Market
412	PG&E	GYS5X6_7_UNITS	31406	GEYSR5-6	13.8	42.50	1	NCNB	Eagle Rock, Fulton		Market
413	PG&E	GYS5X6_7_UNITS	31406	GEYSR5-6	13.8	42.50	2	NCNB	Eagle Rock, Fulton		Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
414	PG&E	GYS7X8_7_UNITS	31408	GEYSER78	13.8	47.90	1	NCNB	Eagle Rock, Fulton		Market
415	PG&E	GYS7X8_7_UNITS	31408	GEYSER78	13.8	47.90	2	NCNB	Eagle Rock, Fulton		Market
416	PG&E	GYSRVL_7_WSPRNG				0.00		NCNB	Fulton	Not modeled Aug NQC	QF/Selfgen
417	PG&E	HILAND_7_YOLOWD				0.00		NCNB	Eagle Rock, Fulton	Not Modeled. Energy Only	Market
418	PG&E	IGNACO_1_QF				0.01		NCNB		Not modeled Aug NQC	QF/Selfgen
419	PG&E	INDVLY_1_UNITS	31436	INDIAN V	9.1	0.61	1	NCNB	Eagle Rock, Fulton	Aug NQC	Net Seller
420	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	2.96	1	NCNB	Fulton	Aug NQC	Market
421	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	2.96	2	NCNB	Fulton	Aug NQC	Market
422	PG&E	MONTPH_7_UNITS	32700	MONTICLO	9.1	0.89	3	NCNB	Fulton	Aug NQC	Market
423	PG&E	NCPA_7_GP1UN1	38106	NCPA1GY1	13.8	38.85	1	NCNB		Aug NQC	MUNI
424	PG&E	NCPA_7_GP1UN2	38108	NCPA1GY2	13.8	39.94	1	NCNB		Aug NQC	MUNI
425	PG&E	NCPA_7_GP2UN3	38110	NCPA2GY1	13.8	0.00	1	NCNB	Fulton	Aug NQC	MUNI
426	PG&E	NCPA_7_GP2UN4	38112	NCPA2GY2	13.8	52.73	1	NCNB	Fulton	Aug NQC	MUNI
427	PG&E	NOVATO_6_LNDFL				2.87		NCNB		Not modeled Aug NQC	Market
428	PG&E	POTTER_7_VECINO				0.00		NCNB	Eagle Rock, Fulton	Not modeled Aug NQC	QF/Selfgen
429	PG&E	SANTFG_7_UNITS	31400	SANTA FE	13.8	36.00	1	NCNB			Market
430	PG&E	SANTFG_7_UNITS	31401	SANTA FE	13.8	36.00	2	NCNB			Market
431	PG&E	SMUDGO_7_UNIT 1	31430	SONOMAPPGE O	13.8	47.00	1	NCNB			Market
432	PG&E	SNMALF_6_UNITS	31446	SONMA LF	9.1	3.05	1	NCNB	Fulton	Aug NQC	QF/Selfgen
433	PG&E	UKIAH_7_LAKEMN	38020	CITY UKH	115	1.21	2	NCNB	Eagle Rock, Fulton	Aug NQC	MUNI
434	PG&E	UKIAH_7_LAKEMN	38020	CITY UKH	115	0.49	1	NCNB	Eagle Rock, Fulton	Aug NQC	MUNI
435	PG&E	ZZ_GEYS17_2_BOTRCK	31421	BOTTLERK	13.8	0.00	1	NCNB	Fulton	Energy Only and Mothballed	Market
436	PG&E	ZZZ_New Unit	366061	Q1700BESS	0.385	0.00	1	NCNB		Energy Only	Battery
437	PG&E	ZZZ_New Unit	92287	2287-WD	60	0.00	EW	NCNB		Energy Only	Solar
438	PG&E	ZZZ_New Unit	92606	2606-WD	115	0.00	EW	NCNB		Energy Only	Battery
439	PG&E	ZZZ_New Unit	93077	3077-WD	115	0.00	EW	NCNB		Energy Only	Solar
440	PG&E	ZZZ_New Unit	92365	2365-WD	60	0.00	EW	NCNB	Fulton	Energy Only	Solar
441	PG&E	ZZZZZ_BEARCN_2_UNITS	31402	BEAR CAN	13.8	0.00	1	NCNB	Fulton	Retired	Market
442	PG&E	ZZZZZ_BEARCN_2_UNITS	31402	BEAR CAN	13.8	0.00	2	NCNB	Fulton	Retired	Market
443	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	1	NCNB	Eagle Rock, Fulton	Retired	Market
444	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	3	NCNB	Eagle Rock, Fulton	Retired	Market
445	PG&E	ZZZZZ_POTTER_6_UNITS	31433	POTTRVLY	2.4	0.00	4	NCNB	Eagle Rock, Fulton	Retired	Market
446	PG&E	ZZZZZ_WDFRDF_2_UNITS	31404	WEST FOR	13.8	0.00	1	NCNB	Fulton	Retired	Market
447	PG&E	ZZZZZ_WDFRDF_2_UNITS	31404	WEST FOR	13.8	0.00	2	NCNB	Fulton	Retired	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
448	PG&E	ALLGNY_6_HYDRO1				0.00		Sierra		Not modeled Aug NQC	Market
449	PG&E	APLHIL_1_SFKHY1				0.00		Sierra	South of Rio Oso, South of Palermo	Not modeled Energy Only	Market
450	PG&E	BELDEN_7_UNIT 1	31784	BELDEN	13.8	93.95	1	Sierra	South of Palermo	Aug NQC	Market
451	PG&E	BIOMAS_1_UNIT 1	32156	WOODLAND	13.8	8.07	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Net Seller
452	PG&E	BNNIEN_7_ALTAPH	32376	BONNIE N	60	0.61		Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
453	PG&E	BOGUE_1_UNITA1	32451	FREC	13.8	47.38	1	Sierra	Bogue, Drum-Rio Oso	Aug NQC	Market
454	PG&E	BOWMN_6_HYDRO	32480	BOWMAN	9.11	2.00	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
455	PG&E	BUCKCK_2_HYDRO				0.08		Sierra	South of Palermo	Not modeled Aug NQC	Market
456	PG&E	BUCKCK_7_OAKFLT				0.38		Sierra	South of Palermo	Not modeled Aug NQC	Market
457	PG&E	BUCKCK_7_PL1X2	31820	BCKS CRK	11	25.04	1	Sierra	South of Palermo	Aug NQC	Market
458	PG&E	BUCKCK_7_PL1X2	31820	BCKS CRK	11	21.76	2	Sierra	South of Palermo	Aug NQC	Market
459	PG&E	CAMPFW_7_FARWST	32470	CMP.FARW	9.11	2.94	1	Sierra		Aug NQC	MUNI
460	PG&E	CHICPK_7_UNIT 1	32462	CHI.PARK	11.5	28.04	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	MUNI
461	PG&E	COLGAT_7 UNIT 1	32450	COLGATE1	13.8	176.72	1	Sierra		Aug NQC	MUNI
462	PG&E	COLGAT 7 UNIT 2	32452	COLGATE2	13.8	175.67	1	Sierra		Aug NQC	MUNI
463	PG&E	CRESTA 7 PL1X2	31812	CRESTA	11.5	26.14	2	Sierra	South of Palermo	Aug NQC	Market
464	PG&E	CRESTA 7 PL1X2	31812	CRESTA	11.5	25.64	1	Sierra	South of Palermo	Aug NQC	Market
465	PG&E	DAVIS_1_SOLAR1				0.00		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Energy Only	Solar
466	PG&E	DAVIS_1_SOLAR2				0.00		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	Solar
467	PG&E	DAVIS_7_MNMETH				2.26		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	Market
468	PG&E	DEADCK_1_UNIT	31862	DEADWOOD	9.11	0.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
469	PG&E	DEERCR_6_UNIT 1	32474	DEER CRK	2.4	3.41	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
470	PG&E	DRUM_7_PL1X2	32504	DRUMPHU1U2	6.6	5.20	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
471	PG&E	DRUM_7_PL1X2	32504	DRUMPHU1U2	6.6	5.20	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
472	PG&E	DRUM_7_PL3X4	32506	DRUMPHU3U4	6.6	6.93	4	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
473	PG&E	DRUM_7_PL3X4	32506	DRUMPHU3U4	6.6	5.87	3	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
474	PG&E	DRUM_7_UNIT 5	32454	DRUM 5	13.8	47.74	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
475	PG&E	DUTCH1_7_UNIT 1	32464	DTCHFLT1	11	20.78	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
476	PG&E	DUTCH2_7_UNIT 1	32502	DTCHFLT2	6.9	16.76	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
477	PG&E	ELDORO_7_UNIT 1	32513	ELDRADO1	21.6	4.10	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo		Market
478	PG&E	ELDORO_7_UNIT 2	32514	ELDRADO2	21.6	5.19	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo		Market
479	PG&E	FMEADO_6_HELLHL	32486	HELLHOLE	9.11	0.40	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
480	PG&E	FMEADO_7_UNIT	32508	FRNCH MD	4.2	16.00	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
481	PG&E	FORBST_7_UNIT 1	31814	FORBSTWN	11.5	37.50	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
482	PG&E	GRIDLY_6_SOLAR	38054	GRIDLEY	60	0.00	1	Sierra	Pease	Energy Only	Solar
483	PG&E	GRIZLY_1_UNIT 1	31900	GRIZZLYG	6.9	5.82	1	Sierra	South of Palermo	Aug NQC	MUNI
484	PG&E	GRNLF2_1_UNIT	32492	GRNLEAF2	13.8	49.20	1	Sierra	Pease, Drum-Rio Oso	Aug NQC	QF/Selfgen
485	PG&E	HALSEY_6_UNIT	32478	HALSEY F	6.6	5.52	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
486	PG&E	HAYPRS_6_HAYHD1	32488	HAYPRES+	9.11	1.21	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
487	PG&E	HAYPRS_6_HAYHD2	32488	HAYPRES+	9.11	1.40	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
488	PG&E	HIGGNS_1_COMBIE				0.01		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
489	PG&E	HIGGNS_7_QFUNTS				0.24		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	QF/Selfgen
490	PG&E	KELYRG_6_UNIT	31834	KELLYRDG	4.16	11.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
491	PG&E	LIVEOK_6_SOLAR				0.06		Sierra	Pease	Not modeled Aug NQC	Solar
492	PG&E	LODIEC_2_PL1X2	38123	LODIECCT	18	199.03	1	Sierra	South of Rio Oso, South of Palermo		MUNI
493	PG&E	LODIEC_2_PL1X2	38124	LODIECST	18	103.55	1	Sierra	South of Rio Oso, South of Palermo		MUNI
494	PG&E	MDFKRL_2_PROJCT	32458	RALSTON	13.8	82.13	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
495	PG&E	MDFKRL_2_PROJCT	32456	MIDLFORK	13.8	63.94	1	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
496	PG&E	MDFKRL_2_PROJCT	32456	MIDLFORK	13.8	63.94	2	Sierra	South of Rio Oso, South of Palermo	Aug NQC	MUNI
497	PG&E	NAROW1_2_UNIT	32466	NARROWS1	11	12.00	1	Sierra		Aug NQC	Market
498	PG&E	NAROW2_2_UNIT	32468	NARROWSPH2	13.8	55.00	1	Sierra		Aug NQC	MUNI
499	PG&E	NWCSTL_7_UNIT 1	32460	NEWCSTLE	13.2	0.00	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
500	PG&E	OROVIL_6_UNIT	31888	OROVLENRG	4.16	7.50	1	Sierra	Drum-Rio Oso	Aug NQC	Market
501	PG&E	OXBOW_6_DRUM	32484	OXBOW F	9.11	2.41	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
502	PG&E	PEASE_1_TBEBT1	91902	1902-WD	115	5.00	FW	Sierra	Pease, Drum-Rio Oso		Battery
503	PG&E	PLACVL_1_CHILIB	32510	CHILIBAR	4.2	1.89	1	Sierra	Gold Hill-Drum, South of Rio Oso, South of Palermo	Aug NQC	Market
504	PG&E	PLACVL_1_RCKCRE				0.00		Sierra	South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
505	PG&E	PLSNTG_7_LNCLND	32408	PLSNT GR	60	3.78		Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Not modeled Aug NQC	Market
506	PG&E	POEPH_7_UNIT 1	31790	POE 1	13.8	45.18	1	Sierra	South of Palermo	Aug NQC	Market
507	PG&E	POEPH_7_UNIT 2	31792	POE 2	13.8	42.64	1	Sierra	South of Palermo	Aug NQC	Market
508	PG&E	RCKCRK_7_UNIT 1	31786	ROCK CK1	13.8	32.00	1	Sierra	South of Palermo	Aug NQC	Market
509	PG&E	RCKCRK_7_UNIT 2	31788	ROCK CK2	13.8	40.00	1	Sierra	South of Palermo	Aug NQC	Market
510	PG&E	RIOOSO_1_QF				0.30		Sierra	Drum-Rio Oso, South of Palermo	Not modeled Aug NQC	QF/Selfgen
511	PG&E	ROLLIN_6_UNIT	32476	ROLLINSF	6.6	6.20	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	MUNI
512	PG&E	SLYCRK_1_UNIT 1	31832	SLY.CR.	6.6	13.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI
513	PG&E	SPAULD_6_UNIT 3	32472	SPAULDG	9.11	3.53	3	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
514	PG&E	SPAULD_6_UNIT12	32472	SPAULDG	9.11	2.22	1	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
515	PG&E	SPAULD_6_UNIT12	32472	SPAULDG	9.11	1.40	2	Sierra	Drum-Rio Oso, South of Palermo	Aug NQC	Market
516	PG&E	SPI LI_2_UNIT 1	32498	SPILINCF	12.5	9.55	1	Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Net Seller
517	PG&E	STIGCT_2_LODI	38114	STIG CC	13.8	49.50	1	Sierra	South of Rio Oso, South of Palermo		MUNI
518	PG&E	ULTRCK_2_UNIT	32500	RBROCKLI	12.47	23.38	1	Sierra	Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
519	PG&E	WDLEAF_7_UNIT 1	31794	WOODLEAF	13.8	60.00	1	Sierra	Drum-Rio Oso	Aug NQC	MUNI

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
520	PG&E	WHEATL_6_LNDFIL	32350	WHEATLND	60	3.55		Sierra		Not modeled Aug NQC	Market
521	PG&E	WISE_1_UNIT 1	32512	WISE	12	8.85	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
522	PG&E	WISE_1_UNIT 2	32512	WISE	12	0.00	1	Sierra	Placer, Gold Hill-Drum, Drum-Rio Oso, South of Rio Oso, South of Palermo	Aug NQC	Market
523	PG&E	YUBACT_1_SUNSWT	32494	YUBA CTY	13.8	49.97	1	Sierra	Pease, Drum-Rio Oso	Aug NQC	Net Seller
524	PG&E	YUBACT_6_UNITA1	32496	YCEC	13.8	47.16	1	Sierra	Pease, Drum-Rio Oso		Market
525	PG&E	ZZ_GRNLF1_1_PL1X2	32490	GRNLEAF1	13.8	0.00	1	Sierra	Bogue, Drum-Rio Oso	Strategic Reserve	Market
526	PG&E	ZZ_GRNLF1_1_PL1X3	32491	GRNLEAF1	13.8	0.00	2	Sierra	Bogue, Drum-Rio Oso	Strategic Reserve	Market
527	PG&E	ZZ_NA	32162	RIV.DLTA	9.11	0.00	1	Sierra	Drum-Rio Oso, South of Palermo	No NQC - hist. data	QF/Selfgen
528	PG&E	ZZ_UCDAVS_1_UNIT	32166	UC DAVIS	9.11	0.00	RN	Sierra	Drum-Rio Oso, South of Palermo	No NQC - hist. data	QF/Selfgen
529	PG&E	ZZZ_New Unit	365936	Q653FSPV	0.12	0.00	1	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Solar
530	PG&E	ZZZ_New Unit	365940	Q653FSPV	0.12	0.00	2	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Solar
531	PG&E	ZZZ_New Unit	365938	Q653FC6B	0.48	0.00	3	Sierra	Drum-Rio Oso, South of Palermo	Energy Only	Battery
532	PG&E	ZZZZZ_GOLDHL_1_QF				0.00		Sierra	South of Rio Oso, South of Palermo	Retired	QF/Selfgen
533	PG&E	ZZZZZ_KANAKA_1_UNIT				0.00		Sierra	Drum-Rio Oso	Retired	MUNI
534	PG&E	ZZZZZ_PACORO_6_UNIT	31890	PO POWER	9.11	0.00	1	Sierra	Drum-Rio Oso	Retired	QF/Selfgen
535	PG&E	ZZZZZ_PACORO_6_UNIT	31890	PO POWER	9.11	0.00	2	Sierra	Drum-Rio Oso	Retired	QF/Selfgen
536	PG&E	BEARDS_7_UNIT 1	34074	BEARDSLY	6.9	5.94	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
537	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	1	Stockton	Tesla-Bellota	Aug NQC	MUNI
538	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	2	Stockton	Tesla-Bellota	Aug NQC	MUNI
539	PG&E	CAMCHE_1_PL1X3	33850	CAMANCHE	4.2	0.29	3	Stockton	Tesla-Bellota	Aug NQC	MUNI
540	PG&E	CENT40_1_C40SR1	365683	Q1103SPV	0.315	4.96	1	Stockton	Tesla-Bellota	Aug NQC	Solar
541	PG&E	CRWCKS_1_SOLAR1	34053	CRWCRKSLR1 G	0.8	0.00	1	Stockton	Tesla-Bellota	Energy Only	Solar
542	PG&E	DONNLS_7_UNIT	34058	DONNELLS	13.8	72.00	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
543	PG&E	FROGTN_1_UTICAA				0.23		Stockton	Tesla-Bellota, Stanislaus	Not Modeled Aug NQC	Market
544	PG&E	FROGTN_1_UTICAM				1.26		Stockton	Tesla-Bellota, Stanislaus	Not Modeled Aug NQC	Market
545	PG&E	LOCKFD_1_BEARCK				0.19		Stockton	Tesla-Bellota	Not Modeled Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
546	PG&E	LOCKFD_1_KSOLAR				0.12		Stockton	Tesla-Bellota	Not Modeled Aug NQC	Solar
547	PG&E	LODI25_2_UNIT 1	38120	LODI25CT	13.8	23.80	1	Stockton	Lockeford		MUNI
548	PG&E	MANTEC_1_ML1SR1				0.00		Stockton	Tesla-Bellota	Not modeled Energy Only	Solar
549	PG&E	NORCNV_1_NCVBT1	39343	Q1109	0.48	132.00	1	Stockton	Tesla-Bellota, Stanislaus		Battery
550	PG&E	PEORIA_1_SOLAR				0.19		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	Solar
551	PG&E	PHOENX_1_UNIT				1.02		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	Market
552	PG&E	SCHLTE_1_PL1X3	33811	GWFTRCY3	13.8	149.94	1	Stockton	Tesla-Bellota		Market
553	PG&E	SCHLTE_1_PL1X3	33805	GWFTRCY1	13.8	93.05	1	Stockton	Tesla-Bellota		Market
554	PG&E	SCHLTE_1_PL1X3	33807	GWFTRCY2	13.8	93.05	1	Stockton	Tesla-Bellota		Market
555	PG&E	SMPRIP_1_SMPSON	33810	SP CMPNY	13.8	46.05	1	Stockton	Tesla-Bellota	Aug NQC	Market
556	PG&E	SNDBAR_7_UNIT 1	34060	SANDBAR	13.8	3.57	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	MUNI
557	PG&E	SPIFBD_1_PL1X2	34055	SPISONOR	13.8	3.78	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
558	PG&E	SPRGAP_1_UNIT 1	34078	SPRNG GP	6	0.00	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
559	PG&E	STANIS_7_UNIT 1	34062	STANISLS	13.8	70.02	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
560	PG&E	STNRES_1_UNIT	34056	COVANTAS	13.8	19.79	1	Stockton	Tesla-Bellota	Aug NQC	Net Seller
561	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	7.13	2	Stockton	Tesla-Bellota	Aug NQC	MUNI
562	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	6.34	1	Stockton	Tesla-Bellota	Aug NQC	MUNI
563	PG&E	TULLCK_7_UNITS	34076	TULLOCH	6.9	4.68	3	Stockton	Tesla-Bellota	Aug NQC	MUNI
564	PG&E	ULTPCH_1_UNIT 1	34050	CHINESESTA	12.47	17.81	1	Stockton	Tesla-Bellota, Stanislaus	Aug NQC	Market
565	PG&E	VLYHOM_7_SSJID				0.29		Stockton	Tesla-Bellota, Stanislaus	Not modeled Aug NQC	MUNI
566	PG&E	ZZZ_New Unit	366130	Q1350BES	0.69	10.50	1	Stockton	Tesla-Bellota	No NQC - est. data	Battery
567	PG&E	ZZZ_New Unit	365769	Q1116BES	12.5	10.00	2	Stockton	Tesla-Bellota	No NQC - est. data	Battery
568	PG&E	ZZZ_New Unit	366966	Q1350SPV	0.66	1.76	2	Stockton	Tesla-Bellota	No NQC - est. data	Solar
569	PG&E	ZZZ_New Unit	365556	SAFEWAYB	12.5	0.00	RN	Stockton	Tesla-Bellota	Energy Only	Market
570	PG&E	ZZZZ_New Unit	365558	TESLAMTR	12.47	0.00	RN	Stockton	Tesla-Bellota	Energy Only	Market
571	PG&E	ZZZZZZ_NA	33830	GEN.MILL	9.11	0.00	1	Stockton	Lockeford	Retired	QF/Selfgen
572	PG&E	ZZZZZZ_NA	365339	SPICHINESEST	12.47	0.00	RE	Stockton	Tesla-Bellota, Stanislaus	Retired	QF/Selfgen
573	PG&E	ZZZZZZ_SANJOA_1_UNIT 1	33808	SJ COGEN	13.8	0.00	1	Stockton	Tesla-Bellota	Retired	QF/Selfgen
574	SCE	ACACIA_6_SOLAR	29878	ACACIA_G	0.48	2.48	EQ	BC/Ventura		Aug NQC	Solar
575	SCE	ALAMO_6_UNIT	25653	ALAMO SC	13.8	14.00	1	BC/Ventura		Aug NQC	MUNI
576	SCE	BGSKYN_2_AS2SR1	29773	ANT2_EXP	0.63	11.58	EQ	BC/Ventura		Aug NQC	Solar
577	SCE	BGSKYN_2_ASPSR2	29776	ANT2_SPA	0.6	11.03	EQ	BC/Ventura		Aug NQC	Solar
578	SCE	BGSKYN_2_ASSR1B				13.42		BC/Ventura		Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
579	SCE	BGSKYN_2_ASSR3A	29745	BSKY_G_DSR3	0.6	1.65	1	BC/Ventura		Aug NQC	Solar
580	SCE	BGSKYN_2_ASSR3B	29745	BSKY_G_DSR3	0.6	0.55	1	BC/Ventura		Aug NQC	Solar
581	SCE	BGSKYN_2_BS3SR3	29774	ANTLP2_P45_G	0.44	2.21	EQ	BC/Ventura		Aug NQC	Solar
582	SCE	BIGCRK_2_EXESWD	24317	MAMOTH1G	13.8	80.45	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
583	SCE	BIGCRK_2_EXESWD	24318	MAMOTH2G	13.8	80.45	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
584	SCE	BIGCRK_2_EXESWD	24308	B CRK2-1	13.8	44.74	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
585	SCE	BIGCRK_2_EXESWD	24308	B CRK2-1	13.8	43.71	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
586	SCE	BIGCRK_2_EXESWD	24314	B CRK 4	11.5	43.54	42	BC/Ventura	Rector, Vestal	Aug NQC	Market
587	SCE	BIGCRK_2_EXESWD	24314	B CRK 4	11.5	43.37	41	BC/Ventura	Rector, Vestal	Aug NQC	Market
588	SCE	BIGCRK_2_EXESWD	24315	B CRK 8	13.8	37.86	82	BC/Ventura	Rector, Vestal	Aug NQC	Market
589	SCE	BIGCRK_2_EXESWD	24313	B CRK3-3	13.8	31.41	5	BC/Ventura	Rector, Vestal	Aug NQC	Market
590	SCE	BIGCRK_2_EXESWD	24312	B CRK3-2	13.8	30.98	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
591	SCE	BIGCRK_2_EXESWD	24311	B CRK3-1	13.8	30.12	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
592	SCE	BIGCRK 2 EXESWD	24312	B CRK3-2	13.8	30.12	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
593	SCE	BIGCRK 2 EXESWD	24311	B CRK3-1	13.8	29.26	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
594	SCE	BIGCRK 2 EXESWD	24307	B CRK1-2	13.8	26.85	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
595	SCE	BIGCRK 2 EXESWD	24315	B CRK 8	13.8	21.00	81	BC/Ventura	Rector, Vestal	Aug NQC	Market
596	SCE	BIGCRK 2 EXESWD	24306	B CRK1-1	7.2	18.59	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
597	SCE	BIGCRK 2 EXESWD	24307	B CRK1-2	13.8	18.59	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
598	SCE	BIGCRK 2 EXESWD	24306	B CRK1-1	7.2	17.12	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
599	SCE	BIGCRK 2 EXESWD	24309	B CRK2-2	7.2	16.95	4	BC/Ventura	Rector, Vestal	Aug NQC	Market
600	SCE	BIGCRK 2 EXESWD	24309	B CRK2-2	7.2	16.09	3	BC/Ventura	Rector, Vestal	Aug NQC	Market
601	SCE	BIGCRK 2 EXESWD	24310	B CRK2-3	7.2	15.92	6	BC/Ventura	Rector, Vestal	Aug NQC	Market
602	SCE	BIGCRK 2 EXESWD	24310	B CRK2-3	7.2	14.63	5	BC/Ventura	Rector, Vestal	Aug NQC	Market
603	SCE	BIGCRK 2 EXESWD	24323	PORTAL	4.8	8.26	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
604	SCE	BIGCRK_7_DAM7			-	0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
605	SCE	BIGCRK_7_MAMRES				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
606	SCE	BIGSKY_2_AS2BT1				127.00		BC/Ventura			Battery
607	SCE	BIGSKY_2_ASLBT2				100.00		BC/Ventura			Battery
608	SCE	BIGSKY_2_BSKSR6	29736	BSKY_G_BA	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
609	SCE	BIGSKY_2_BSKSR7	29742	BSKY_G_BC	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
610	SCE	BIGSKY_2_BSKSR8	29739	BSKY_G_BB	0.645	2.21	1	BC/Ventura		Aug NQC	Solar
611	SCE	BIGSKY_2_SOLAR1	29724	BSKY_G_ABSR	0.42	2.48	1	BC/Ventura		Aug NQC	Solar
612	SCE	BIGSKY_2_SOLAR2				31.53		BC/Ventura		Not modeled Aug NQC	Solar
613	SCE	BIGSKY_2_SOLAR3	29727	BSKY_G_SMR	0.42	2.48	1	BC/Ventura		Aug NQC	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
614	SCE	BIGSKY_2_SOLAR4	29701	BSKY_G_ESWA	0.42	15.82	1	BC/Ventura		Aug NQC	Solar
615	SCE	BIGSKY_2_SOLAR5	29733	BSKY_G_DR12	0.44	0.55	1	BC/Ventura		Aug NQC	Solar
616	SCE	BIGSKY_2_SOLAR6	29730	BSKY_G_SOLV	0.42	9.37	1	BC/Ventura		Aug NQC	Solar
617	SCE	BIGSKY_2_SOLAR7	29733	BSKY_G_DSR1 2	0.44	6.20	1	BC/Ventura		Aug NQC	Solar
618	SCE	CEDUCR_2_SOLAR1	25049	DUCOR1	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
619	SCE	CEDUCR_2_SOLAR2	25052	DUCOR2	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
620	SCE	CEDUCR_2_SOLAR3	25055	DUCOR3	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
621	SCE	CEDUCR_2_SOLAR4	25058	DUCOR4	0.385	0.00	EQ	BC/Ventura	Vestal	Energy Only	Solar
622	SCE	CHARMN_2_PGONG1	24340	CHARMIN	13.8	19.61	1	BC/Ventura	S.Clara, Moorpark		QF/Selfgen
623	SCE	DELSUR_6_BSOLAR	25802	DEL SUR FD2	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
624	SCE	DELSUR_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
625	SCE	DELSUR_6_DRYFRB	25802	DEL SUR FD2	12.47	0.62	EQ	BC/Ventura		Aug NQC	Market
626	SCE	DELSUR_6_SOLAR1	25803	DEL SUR FD3	12.47	0.81	EQ	BC/Ventura		Aug NQC	Solar
627	SCE	DELSUR_6_SOLAR4				0.00		BC/Ventura		Not modeled Energy Only	Solar
628	SCE	DELSUR_6_SOLAR5				0.00		BC/Ventura		Not modeled Energy Only	Solar
629	SCE	EASTWD_7_UNIT	24319	EASTWOOD	13.8	199.00	1	BC/Ventura	Rector, Vestal		Market
630	SCE	EDMONS_2_NSPIN	25605	EDMON1AP	14.4	16.86	1	BC/Ventura		Pumps	MUNI
631	SCE	EDMONS_2_NSPIN	25606	EDMON2AP	14.4	16.86	2	BC/Ventura		Pumps	MUNI
632	SCE	EDMONS_2_NSPIN	25607	EDMON3AP	14.4	16.86	3	BC/Ventura		Pumps	MUNI
633	SCE	EDMONS_2_NSPIN	25607	EDMON3AP	14.4	16.86	4	BC/Ventura		Pumps	MUNI
634	SCE	EDMONS_2_NSPIN	25608	EDMON4AP	14.4	16.86	5	BC/Ventura		Pumps	MUNI
635	SCE	EDMONS_2_NSPIN	25608	EDMON4AP	14.4	16.86	6	BC/Ventura		Pumps	MUNI
636	SCE	EDMONS_2_NSPIN	25609	EDMON5AP	14.4	16.86	7	BC/Ventura		Pumps	MUNI
637	SCE	EDMONS_2_NSPIN	25609	EDMON5AP	14.4	16.86	8	BC/Ventura		Pumps	MUNI
638	SCE	EDMONS_2_NSPIN	25610	EDMON6AP	14.4	16.86	9	BC/Ventura		Pumps	MUNI
639	SCE	EDMONS_2_NSPIN	25610	EDMON6AP	14.4	16.86	10	BC/Ventura		Pumps	MUNI
640	SCE	EDMONS_2_NSPIN	25611	EDMON7AP	14.4	16.86	11	BC/Ventura		Pumps	MUNI
641	SCE	EDMONS_2_NSPIN	25611	EDMON7AP	14.4	16.86	12	BC/Ventura		Pumps	MUNI
642	SCE	EDMONS_2_NSPIN	25612	EDMON8AP	14.4	16.86	13	BC/Ventura		Pumps	MUNI
643	SCE	EDMONS_2_NSPIN	25612	EDMON8AP	14.4	16.86	14	BC/Ventura		Pumps	MUNI
644	SCE	GLDFGR_6_SOLAR1	25079	PRIDE B G	0.64	2.48	1	BC/Ventura		Aug NQC	Solar
645	SCE	GLDFGR_6_SOLAR2	25169	PRIDE C G	0.64	1.41	1	BC/Ventura		Aug NQC	Solar
646	SCE	GLOW_6_SOLAR	29896	APPINV	0.42	0.00	EQ	BC/Ventura		Energy Only	Solar
647	SCE	GOLETA_2_QF	25895	GOLETA EQFD	12.47	0.11	EQ	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
648	SCE	GOLETA_2_VALBT1	25726	WDT1492_G	0.6	10.00	EQ	BC/Ventura	S.Clara, Moorpark, Goleta		Battery
649	SCE	GOLETA_6_ELLWOD	29004	ELLWOOD	13.8	54.00	1	BC/Ventura	S.Clara, Moorpark, Goleta		Market
650	SCE	GOLETA_6_EXGEN	24362	EXGEN2	13.8	0.00	G1	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC - Currently out of service	QF/Selfgen
651	SCE	GOLETA_6_EXGEN	24326	EXGEN1	13.8	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Aug NQC - Currently out of service	QF/Selfgen
652	SCE	LEBECS_2_UNITS	29053	PSTRIAS1	18	176.14	S1	BC/Ventura		Aug NQC	Market
653	SCE	LEBECS_2_UNITS	29051	PSTRIAG1	18	171.10	G1	BC/Ventura		Aug NQC	Market
654	SCE	LEBECS_2_UNITS	29052	PSTRIAG2	18	171.10	G2	BC/Ventura		Aug NQC	Market
655	SCE	LEBECS_2_UNITS	29054	PSTRIAG3	18	171.10	G3	BC/Ventura		Aug NQC	Market
656	SCE	LEBECS_2_UNITS	29055	PSTRIAS2	18	85.55	S2	BC/Ventura		Aug NQC	Market
657	SCE	LITLRK_6_GBCSR1	25798	OASIS FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
658	SCE	LITLRK_6_SEPV01				0.00		BC/Ventura		Not moleded Energy Only	Market
659	SCE	LITLRK_6_SOLAR1	25840	LITLRCK FD	12.47	0.62	EQ	BC/Ventura		Aug NQC	Solar
660	SCE	LITLRK_6_SOLAR2	25840	LITLRCK FD	12.47	0.25	EQ	BC/Ventura		Aug NQC	Solar
661	SCE	LITLRK_6_SOLAR3	25840	LITLRCK FD	12.47	0.25	EQ	BC/Ventura		Aug NQC	Solar
662	SCE	LITLRK_6_SOLAR4	25840	LITLRCK FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
663	SCE	LNCSTR_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
664	SCE	LNCSTR_6_SOLAR2	25796	LANCSTR FD1	12.47	6.90	EQ	BC/Ventura		Aug NQC	Solar
665	SCE	MNDALY_6_MCGRTH	29306	MCGPKGEN	13.8	48.56	1	BC/Ventura	S.Clara, Moorpark		Market
666	SCE	MOORPK_2_ACOBT1				1.00		BC/Ventura	Moorpark	Not modeled	Battery
667	SCE	MOORPK_2_CALABS	25081	WDT251	13.8	3.44	EQ	BC/Ventura	Moorpark	Aug NQC	Market
668	SCE	MOORPK_6_QF	240111	MOORARK EQFD	16	0.28	HY	BC/Ventura	Moorpark	Aug NQC	Market
669	SCE	NEENCH_6_SOLAR	29900	ALPINE_G	0.48	8.18	EQ	BC/Ventura		Aug NQC	Solar
670	SCE	OASIS_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
671	SCE	OASIS_6_GBDSR4	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
672	SCE	OASIS_6_SOLAR1	25095	SOLARISG2	0.2	0.00	EQ	BC/Ventura		Energy Only	Solar
673	SCE	OASIS_6_SOLAR2	25075	SOLARISG	0.2	2.48	EQ	BC/Ventura		Aug NQC	Solar
674	SCE	OASIS_6_SOLAR3				0.00		BC/Ventura		Not modeled Energy Only	Solar
675	SCE	OMAR_2_UNIT 1	24102	OMAR 1G	13.8	72.67	1	BC/Ventura			Net Seller
676	SCE	OMAR_2_UNIT 2	24103	OMAR 2G	13.8	73.00	2	BC/Ventura			Net Seller
677	SCE	OMAR_2_UNIT 3	24104	OMAR 3G	13.8	73.00	3	BC/Ventura			Net Seller
678	SCE	OMAR_2_UNIT 4	24105	OMAR 4G	13.8	73.67	4	BC/Ventura			Net Seller

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
679	SCE	ORMOND_7_UNIT 1	24107	ORMOND1G	26	0.00	1	BC/Ventura	Moorpark	Strategic Reserve	Market
680	SCE	ORMOND_7_UNIT 2	24108	ORMOND2G	26	0.00	2	BC/Ventura	Moorpark	Strategic Reserve	Market
681	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	1	BC/Ventura		Pumps	MUNI
682	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	2	BC/Ventura		Pumps	MUNI
683	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	3	BC/Ventura		Pumps	MUNI
684	SCE	OSO_6_NSPIN	25614	OSO A P	13.2	2.25	4	BC/Ventura		Pumps	MUNI
685	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	5	BC/Ventura		Pumps	MUNI
686	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	6	BC/Ventura		Pumps	MUNI
687	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	7	BC/Ventura		Pumps	MUNI
688	SCE	OSO_6_NSPIN	25615	OSO B P	13.2	2.25	8	BC/Ventura		Pumps	MUNI
689	SCE	PIUTE_6_GNBSR1	25840	LITLRCK FD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
690	SCE	PLAINV_6_BSOLAR	29917	SSOLAR_GRW KS	0.8	0.00	1	BC/Ventura		Energy Only	Solar
691	SCE	PLAINV_6_DSOLAR	29914	WADR_PV	0.42	1.24	1	BC/Ventura		Aug NQC	Solar
692	SCE	PLAINV_6_NLRSR1	29921	NLR_INVTR	0.42	0.00	1	BC/Ventura		Energy Only	Solar
693	SCE	PLAINV_6_SOLAR3	25089	CNTRL ANT G	0.42	0.00	1	BC/Ventura		Energy Only	Solar
694	SCE	PLAINV_6_SOLARC	25086	SIRA SOLAR G	0.8	0.00	1	BC/Ventura		Energy Only	Solar
695	SCE	PMDLET_6_SOLAR1	29926	WDT404_G	0.8	1.24	EQ	BC/Ventura		AugNQC	Solar
696	SCE	RECTOR_2_CREST				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
697	SCE	RECTOR_2_IVANPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Solar
698	SCE	RECTOR_2_KAWEAH	25756	KAWEAH3G	2.4	0.02	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
699	SCE	RECTOR_2_KAWEAH	25755	KAWEAH1G	2.4	0.01	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
700	SCE	RECTOR_2_KAWEAH	25754	KAWEAH2G	2.4	0.01	2	BC/Ventura	Rector, Vestal	Aug NQC	Market
701	SCE	RECTOR_2_KAWH 1	24370	KAWGEN	13.8	0.03	1	BC/Ventura	Rector, Vestal	Aug NQC	Market
702	SCE	RECTOR_2_QF				0.00		BC/Ventura	Rector, Vestal	Aug NQC	Net Seller
703	SCE	RECTOR_2_TFDBM1				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
704	SCE	RECTOR_7_TULARE				0.00		BC/Ventura	Rector, Vestal	Not modeled Aug NQC	Market
705	SCE	REDMAN_2_SOLAR	25800	ANTLOPE EQFD	12.47	0.47	EQ	BC/Ventura		Aug NQC	Solar
706	SCE	REDMAN_6_AVSSR1	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
707	SCE	ROSMND_6_SOLAR	25800	ANTLOPE EQFD	12.47	0.37	EQ	BC/Ventura		Aug NQC	Solar
708	SCE	RSMSLR_6_SOLAR1	29884	DAWNGEN	0.8	2.48	EQ	BC/Ventura		Aug NQC	Solar
709	SCE	RSMSLR_6_SOLAR2	29888	TWILGHTG	8.0	2.48	EQ	BC/Ventura		Aug NQC	Solar
710	SCE	SAUGUS_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
711	SCE	SAUGUS_6_MWDFTH	25721	FOOTHILL	66	4.00	EQ	BC/Ventura		Aug NQC	MUNI
712	SCE	SAUGUS_6_QF	25891	SUAGUS EQFD	12.47	0.30	EQ	BC/Ventura		Aug NQC	QF/Selfgen
713	SCE	SAUGUS_6_QF	25865	SUAGUS EQFD	12.47	0.30	EQ	BC/Ventura		Aug NQC	QF/Selfgen
714	SCE	SAUGUS_7_CHIQCN	25722	LANDFILL	66	5.35	EQ	BC/Ventura		Aug NQC	Market
715	SCE	SHUTLE_6_CREST				0.00		BC/Ventura		Not modeled Energy Only	Market
716	SCE	SNCLRA_2_HOWLNG				5.03		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	Market
717	SCE	SNCLRA_2_SILBT1	25899	WDT1520_G	0.48	11.00	EQ	BC/Ventura	S.Clara, Moorpark		Battery
718	SCE	SNCLRA_2_SPRHYD				0.16		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	Market
719	SCE	SNCLRA_2_UNIT	29952	CAMGEN	13.8	27.50	D1	BC/Ventura	S.Clara, Moorpark		Market
720	SCE	SNCLRA_2_UNIT1	24159	WILLAMET	3.8	27.80	D1	BC/Ventura	S.Clara, Moorpark	Aug NQC	Market
721	SCE	SNCLRA_2_VESBT1	29824	WDT1519	66	100.00	1	BC/Ventura	S.Clara, Moorpark		Battery
722	SCE	SNCLRA_6_OXGEN	24110	OXGEN	13.8	47.70	D1	BC/Ventura	S.Clara, Moorpark		QF/Selfgen
723	SCE	SNCLRA_6_PROCGN	24119	PROCGEN	13.8	19.41	D1	BC/Ventura	S.Clara, Moorpark	Aug NQC	QF/Selfgen
724	SCE	SNCLRA_6_QF				0.31		BC/Ventura	S.Clara, Moorpark	Not modeled Aug NQC	QF/Selfgen
725	SCE	SPRGVL_2_CREST				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
726	SCE	SPRGVL_2_EXETPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
727	SCE	SPRGVL_2_LINDPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
728	SCE	SPRGVL_2_PORTPV				0.00		BC/Ventura	Rector, Vestal	Not modeled Energy Only	Market
729	SCE	SPRGVL_2_TULESC	25714	TULE	66	0.00	EQ	BC/Ventura	Rector, Vestal	Aug NQC	Market
730	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	1	BC/Ventura		Aug NQC	Market
731	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	2	BC/Ventura		Aug NQC	Market
732	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	3	BC/Ventura		Aug NQC	Market
733	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	4	BC/Ventura		Aug NQC	Market
734	SCE	SUNSHN_2_LNDFL	29954	SUNSHINE	13.66	3.15	5	BC/Ventura		Aug NQC	Market
735	SCE	SYCAMR_2_UNIT 1	24143	SYCCYN1G	13.8	74.00	1	BC/Ventura		Aug NQC	Net Seller
736	SCE	SYCAMR_2_UNIT 2	24144	SYCCYN2G	13.8	76.00	2	BC/Ventura		Aug NQC	Net Seller
737	SCE	SYCAMR_2_UNIT 3	24145	SYCCYN3G	13.8	74.00	3	BC/Ventura		Aug NQC	Net Seller
738	SCE	SYCAMR_2_UNIT 4	24146	SYCCYN4G	13.8	76.00	4	BC/Ventura		Aug NQC	Net Seller
739	SCE	TENGEN_2_PL1X2	24148	TENNGEN1	13.8	18.85	D1	BC/Ventura		Aug NQC	Net Seller
740	SCE	TENGEN_2_PL1X2	24149	TENNGEN2	13.8	18.85	D2	BC/Ventura		Aug NQC	Net Seller
741	SCE	TULARE_2_TULBM1	_			0.00		BC/Ventura		Not modeled Energy Only	Market
742	SCE	VESTAL_2_KERN	24372	KR 3-1	11	0.15	1	BC/Ventura	Vestal	Aug NQC	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
743	SCE	VESTAL_2_KERN	24373	KR 3-2	11	0.15	2	BC/Ventura	Vestal	Aug NQC	QF/Selfgen
744	SCE	VESTAL_2_RTS042	25874	VESTAL EQFC	12,47	0.00	HY	BC/Ventura	Vestal	Energy Only	Market
745	SCE	VESTAL_2_SOLAR1	25064	TULRESLR_1G	0.39	2.48	EQ	BC/Ventura	Vestal	Aug NQC	Solar
746	SCE	VESTAL_2_SOLAR2	25065	TULRESLR_2G	0.39	1.74	EQ	BC/Ventura	Vestal	Aug NQC	Solar
747	SCE	VESTAL_2_TS5SR1	25874	VESTAL EQFC	12.47	6.92	PV	BC/Ventura	Vestal	Aug NQC	Solar
748	SCE	VESTAL_2_UNIT1	25874	VESTAL EQFC	12.47	2.69	SY	BC/Ventura	Vestal	Aug NQC	Market
749	SCE	VESTAL_2_WELLHD	24116	WELLGEN	13.8	49.00	1	BC/Ventura	Vestal		Market
750	SCE	VESTAL_6_QF	29008	LAKEGEN	13.8	1.77	1	BC/Ventura	Vestal	Aug NQC	Market
751	SCE	VESTAL_6_QF	29008	LAKEGEN	13.8	0.72	2	BC/Ventura	Vestal	Aug NQC	Market
752	SCE	WARNE_2_UNIT	25651	WARNE1	13.8	19.54	1	BC/Ventura		Aug NQC	MUNI
753	SCE	WARNE_2_UNIT	25652	WARNE2	13.8	19.54	2	BC/Ventura		Aug NQC	MUNI
754	SCE	ZZZ_New Unit	102903	WDT1647_G	0.69	134.90	1	BC/Ventura	Moorpark	No NQC - est. data	Battery
755	SCE	ZZZ_New Unit	29561	ANTLP2_P1_G1	0.63	125.00	1	BC/Ventura		No NQC - est. data	Battery
756	SCE	ZZZ_New Unit	25967	TOT896_G2ST	0.55	109.50	1	BC/Ventura	Vestal	No NQC - Pmax	Battery
757	SCE	ZZZ_New Unit	25961	TOT896_G1ST	0.55	109.50	1	BC/Ventura	Vestal	No NQC - Pmax	Battery
758	SCE	ZZZ_New Unit	99064	WDT1649_G	0.385	80.00	1	BC/Ventura		No NQC - est. data	Battery
759	SCE	ZZZ_New Unit	29836	WDT1384_G	0.63	50.00	1	BC/Ventura	Vestal	No NQC - est. data	Hybrid
760	SCE	ZZZ_New Unit	29826	WDT1454	66	40.00	1	BC/Ventura	S.Clara, Moorpark	No NQC - Pmax	Battery
761	SCE	ZZZ_New Unit	698426	WDT1532_G	0.48	30.00	0	BC/Ventura	S.Clara, Moorpark	No NQC - est. data	Battery
762	SCE	ZZZ_New Unit	29830	WDT1454	66	20.00	1	BC/Ventura	S.Clara, Moorpark	No NQC - Pmax	Battery
763	SCE	ZZZ_New Unit	25959	TOT896_G1PV	0.55	19.01	1	BC/Ventura	Vestal	No NQC - est. data	Solar
764	SCE	ZZZ_New Unit	25965	TOT896_G2PV	0.55	18.76	1	BC/Ventura	Vestal	No NQC - est. data	Solar
765	SCE	ZZZ_New Unit	101801	WDT1710_G	66	14.00	1	BC/Ventura		No NQC - est. data	Battery
766	SCE	ZZZ_New Unit	29767	ANTLP2_P7B_G	0.69	12.88	1	BC/Ventura		No NQC - est. data	Battery
767	SCE	ZZZ_New Unit	29563	ANTLP2_P9_G2	0.69	10.23	2	BC/Ventura		No NQC - est. data	Solar
768	SCE	ZZZ_New Unit	25795	WDT1539_G	0.8	10.00	1	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Battery
769	SCE	ZZZ_New Unit	29566	ANTLP2_P1BG2	0.69	8.06	1	BC/Ventura		No NQC - est. data	Solar
770	SCE	ZZZ_New Unit	29782	ANTLP2_C2_G1	0.44	7.19	EQ	BC/Ventura		No NQC - est. data	Solar
771	SCE	ZZZ_New Unit	25069	WDT1490_PV	0.36	7.11	1	BC/Ventura	Vestal	No NQC - est. data	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
772	SCE	ZZZ_New Unit	240115	GOLETA EQFD	16	5.50	SC	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Market
773	SCE	ZZZ_New Unit	29771	ANT2_SPB	0.6	5.08	EQ	BC/Ventura		No NQC - est. data	Solar
774	SCE	ZZZ_New Unit	29565	ANTLP2_P10_G 2	0.69	3.65	2	BC/Ventura		No NQC - est. data	Solar
775	SCE	ZZZ_New Unit	25855	RECTOR EQFD	12.47	2.42	PV	BC/Ventura	Rector, Vestal	No NQC - est. data	Solar
776	SCE	ZZZ_New Unit	29775	ANTLP2_P8_G1	0.66	2.18	1	BC/Ventura		No NQC - est. data	Solar
777	SCE	ZZZ_New Unit	29774	ANTLP2_P4_G	0.63	1.88	1	BC/Ventura		No NQC - est. data	Solar
778	SCE	ZZZ_New Unit	240113	GOLETA EQFD	16	1.10	HY	BC/Ventura	S.Clara, Moorpark, Goleta	No NQC - Pmax	Market
779	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	1.00	HY	BC/Ventura	Rector, Vestal	No NQC - est. data	Market
780	SCE	ZZZ_New Unit	29569	ANTLP2_P5_G	0.66	0.63	1	BC/Ventura		No NQC - est. data	Solar
781	SCE	ZZZ_New Unit	240011	ANODE_G1	34.5	0.00	1	BC/Ventura	Rector, Vestal	Waiting TPD allocation	Battery
782	SCE	ZZZ_New Unit	240014	ANODE_G2	34.5	0.00	2	BC/Ventura	Rector, Vestal	Waiting TPD allocation	Battery
783	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	0.00	EN	BC/Ventura	Rector, Vestal	No NQC - est. data	Market
784	SCE	ZZZ_New Unit	29775	ANTLP2_P7_G1	0.44	0.00	EQ	BC/Ventura		No NQC - est. data	Solar
785	SCE	ZZZ_New Unit	25865	SUAGUS EQFD	12.47	0.00	PV	BC/Ventura		Energy Only	Solar
786	SCE	ZZZ_New Unit	25867	SPRNGVL	12.47	0.00	PV	BC/Ventura	Rector, Vestal	Energy Only	Solar
787	SCE	ZZZ_New Unit	25800	ANTLOPE EQFD	12.47	0.00	WD	BC/Ventura		Energy Only	Wind
788	SCE	ZZZZZ_APPGEN_6_UNIT 1	24009	APPGEN1G	13.8	0.00	1	BC/Ventura		Retired	Market
789	SCE	ZZZZZ_APPGEN_6_UNIT 1	24010	APPGEN2G	13.8	0.00	2	BC/Ventura		Retired	Market
790	SCE	ZZZZZ_APPGEN_6_UNIT 1	24361	APPGEN3G	13.8	0.00	3	BC/Ventura		Retired	Market
791	SCE	ZZZZZ_GOLETA_6_GAVOTA	25335	GOLETA_DIST	66	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Retired	Market
792	SCE	ZZZZZ_GOLETA_6_TAJIGS	25335	GOLETA_DIST	66	0.00	S1	BC/Ventura	S.Clara, Moorpark, Goleta	Retired	Market
793	SCE	ZZZZZ_MNDALY_7_UNIT 1	24089	MANDLY1G	13.8	0.00	1	BC/Ventura	S.Clara, Moorpark	Retired	Market
794	SCE	ZZZZZ_MNDALY_7_UNIT 2	24090	MANDLY2G	13.8	0.00	2	BC/Ventura	S.Clara, Moorpark	Retired	Market
795	SCE	ZZZZZ_MNDALY_7_UNIT 3	24222	MANDLY3G	16	0.00	3	BC/Ventura	S.Clara, Moorpark	Retired	Market
796	SCE	ZZZZZ_MOORPK_7_UNITA1	24098	MOORPARK	66	0.00		BC/Ventura	Moorpark	Retired	Market
797	SCE	ZZZZZ_PANDOL_6_UNIT	24113	PANDOL	13.8	0.00	1	BC/Ventura	Vestal	Retired	Market
798	SCE	ZZZZZ_PANDOL_6_UNIT	24113	PANDOL	13.8	0.00	2	BC/Ventura	Vestal	Retired	Market
799	SCE	ZZZZZ_SAUGUS_2_TOLAND	24135	SAUGUS	66	0.00		BC/Ventura		Retired	Market
800	SCE	ZZZZZ_SAUGUS_6_PTCHGN	24118	PITCHGEN	13.8	0.00	D1	BC/Ventura		Retired	MUNI

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
801	SCE	ZZZZZ_SAUGUS_7_LOPEZ	24135	SAUGUS	66	0.00		BC/Ventura		Retired	QF/Selfgen
802	SCE	ZZZZZ_SPRGVL_2_TULE	25334	SPRNGVL_DIST	66	0.00	S2	BC/Ventura	Rector, Vestal	Retired	Market
803	SCE	ZZZZZ_VESTAL_6_ULTRGN	24150	ULTRAGEN	13.8	0.00	1	BC/Ventura	Vestal	Retired	QF/Selfgen
804	SCE	ALAMIT_2_PL1X3	24577	ALMT STG	18	251.66	S1	LA Basin	Western		Market
805	SCE	ALAMIT_2_PL1X3	24575	ALMT CTG1	18	211.52	G1	LA Basin	Western		Market
806	SCE	ALAMIT_2_PL1X3	24576	ALMT CTG2	18	211.52	G2	LA Basin	Western		Market
807	SCE	ALAMIT_7_ES1	25523	ALMITOS B1_G	0.645	100.00	1	LA Basin	Western		Battery
808	SCE	ALAMIT_7_UNIT 3	24003	ALAMT3 G	18	0.00	3	LA Basin	Western	Strategic Reserve	Market
809	SCE	ALAMIT_7_UNIT 4	24004	ALAMT4 G	18	0.00	4	LA Basin	Western	Strategic Reserve	Market
810	SCE	ALAMIT_7_UNIT 5	24005	ALAMT5 G	20	0.00	5	LA Basin	Western	Strategic Reserve	Market
811	SCE	ALTWD_2_AT3WD3	29077	ALTWNDGEN2	0.6	1.07	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
812	SCE	ALTWD_2_COAWD1	29075	ALTWNDGEN1	0.65	5.49	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
813	SCE	ANAHM_2_CANYN1	25211	CanyonGT 1	13.8	49.21	1	LA Basin	Western		MUNI
814	SCE	ANAHM_2_CANYN2	25212	CanyonGT 2	13.8	48.04	2	LA Basin	Western		MUNI
815	SCE	ANAHM_2_CANYN3	25213	CanyonGT 3	13.8	46.49	3	LA Basin	Western		MUNI
816	SCE	ANAHM_2_CANYN4	25214	CanyonGT 4	13.8	49.80	4	LA Basin	Western		MUNI
817	SCE	ARCOGN_2_UNITS	24011	ARCO 1G	13.8	61.00	1	LA Basin	Western	Aug NQC	Net Seller
818	SCE	ARCOGN_2_UNITS	24012	ARCO 2G	13.8	61.00	2	LA Basin	Western	Aug NQC	Net Seller
819	SCE	ARCOGN_2_UNITS	24013	ARCO 3G	13.8	61.00	3	LA Basin	Western	Aug NQC	Net Seller
820	SCE	ARCOGN_2_UNITS	24014	ARCO 4G	13.8	61.00	4	LA Basin	Western	Aug NQC	Net Seller
821	SCE	ARCOGN_2_UNITS	24163	ARCO 5G	13.8	30.50	5	LA Basin	Western	Aug NQC	Net Seller
822	SCE	ARCOGN_2_UNITS	24164	ARCO 6G	13.8	30.50	6	LA Basin	Western	Aug NQC	Net Seller
823	SCE	BARRE_2_ALASB1				5.96		LA Basin	Western	Not modeled	Hybrid
824	SCE	BARRE_2_QF				0.00		LA Basin	Western	Not modeled	QF/Selfgen
825	SCE	BARRE_6_PEAKER	29309	BARPKGEN	13.8	49.00	1	LA Basin	Western		Market
826	SCE	BLAST_1_WIND	29049	BLAST_G	0.6	5.33	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
827	SCE	BUCKWD_1_NPALM1	240150	DEVERS FC	12.47	0.30	EQ	LA Basin	Eastern, Valley-Devers	Not modeled Aug NQC	Wind
828	SCE	BUCKWD_1_QF	25634	BUCKWIND	115	1.80	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
829	SCE	BUCKWD_7_WINTCV	25634	BUCKWIND	115	0.14	W5	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
830	SCE	CABZON_1_WINDA1	29290	CABAZON	33	4.46	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
831	SCE	CAPWD_1_QF	25633	CAPWIND	115	2.13	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
832	SCE	CENTER_2_RHONDO	25810	CENTER EQFD	12.47	0.00	EQ	LA Basin	Western		QF/Selfgen
833	SCE	CENTER_2_SOLAR1				0.00		LA Basin	Western	Not modeled Energy Only	Solar
834	SCE	CENTER_2_TECNG1				0.00		LA Basin	Western	Not modeled Energy Only	Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
835	SCE	CENTER_6_PEAKER	29308	CTRPKGEN	13.8	47.30	1	LA Basin	Western		Market
836	SCE	CENTER_6_PEAKER	25187	WDT1429_BATT	0.48	0.00	1	LA Basin	Western	Start-up/Back-up	Battery
837	SCE	CENTRY_6_PL1X4	25302	CLTNCTRY	13.8	40.00	1	LA Basin	Eastern	Aug NQC	MUNI
838	SCE	CHEVMN_2_UNITS	29009	CHEVGEN 5	13.8	2.66	1	LA Basin	Western, El Nido	Aug NQC	Net Seller
839	SCE	CHEVMN_2_UNITS	24022	CHEVGEN 1	13.8	2.39	1	LA Basin	Western, El Nido	Aug NQC	Net Seller
840	SCE	CHEVMN_2_UNITS	24023	CHEVGEN 2	13.8	2.39	2	LA Basin	Western, El Nido	Aug NQC	Net Seller
841	SCE	CHEVMN_2_UNITS	29009	CHEVGEN 5	13.8	0.48	2	LA Basin	Western, El Nido	Aug NQC	Net Seller
842	SCE	CHINO_2_APEBT1	25180	WDT1445BESS	0.48	20.00	1	LA Basin	Eastern	Aug NQC	Battery
843	SCE	CHINO_2_JURUPA				0.00		LA Basin	Eastern	Not modeled Energy Only	Market
844	SCE	CHINO_2_PESBT1				10.00		LA Basin	Eastern	Not modeled	Battery
845	SCE	CHINO_2_QF	25812	CHINO EQFC	12.47	0.00	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
846	SCE	CHINO_2_SASOLR				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
847	SCE	CHINO_2_SOLAR2				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
848	SCE	CHINO_6_CIMGEN	24026	CIMGEN	13.8	26.00	D1	LA Basin	Eastern	Aug NQC	QF/Selfgen
849	SCE	COLTON_6_AGUAM1	25303	CLTNAGUA	13.8	43.00	1	LA Basin	Eastern	Aug NQC	MUNI
850	SCE	CORONS_2_SOLAR				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
851	SCE	CORONS_6_CLRWTR	29338	CLRWTRCT	13.8	20.72	G1	LA Basin	Eastern		MUNI
852	SCE	CORONS_6_CLRWTR	29340	CLRWTRST	13.8	7.28	S1	LA Basin	Eastern		MUNI
853	SCE	DELAMO_2_ALASB2				5.96		LA Basin	Western	Not modeled	Hybrid
854	SCE	DELAMO_2_SOLAR1	25818	DELAMO EQFD	12.47	0.19	EQ	LA Basin	Western	Aug NQC	Solar
855	SCE	DELAMO_2_SOLAR2	25818	DELAMO EQFD	12.47	0.22	EQ	LA Basin	Western	Aug NQC	Solar
856	SCE	DELAMO_2_SOLAR3	25818	DELAMO EQFD	12.47	0.16	EQ	LA Basin	Western	Aug NQC	Solar
857	SCE	DELAMO_2_SOLAR4	25818	DELAMO EQFD	12.47	0.16	EQ	LA Basin	Western	Aug NQC	Solar
858	SCE	DELAMO_2_SOLAR5	25818	DELAMO EQFD	12.47	0.12	EQ	LA Basin	Western	Aug NQC	Solar
859	SCE	DELAMO_2_SOLAR6	25818	DELAMO EQFD	12.47	0.25	EQ	LA Basin	Western	Aug NQC	Solar
860	SCE	DELAMO_2_SOLRC1				0.00		LA Basin	Western	Not modeled Energy Only	Solar
861	SCE	DELAMO_2_SOLRD				0.00		LA Basin	Western	Not modeled Energy Only	Solar
862	SCE	DEVERS_1_SEPV05				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
863	SCE	DEVERS_1_SOLAR				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
864	SCE	DEVERS_1_SOLAR1				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
865	SCE	DEVERS_1_SOLAR2				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
866	SCE	DEVERS_2_CS2SR4				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
867	SCE	DEVERS_2_DHSPG2				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
868	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	2	LA Basin	Eastern	Aug NQC	QF/Selfgen
869	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	3	LA Basin	Eastern	Aug NQC	QF/Selfgen
870	SCE	DMDVLY_1_UNITS	25424	ESRP P1	6.9	0.07	4	LA Basin	Eastern	Aug NQC	QF/Selfgen
871	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	6	LA Basin	Eastern	Aug NQC	QF/Selfgen
872	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	7	LA Basin	Eastern	Aug NQC	QF/Selfgen
873	SCE	DMDVLY_1_UNITS	25425	ESRP P2	6.9	0.07	8	LA Basin	Eastern	Aug NQC	QF/Selfgen
874	SCE	DMDVLY_1_UNITS	25426	ESRP P3	6.9	0.07	10	LA Basin	Eastern	Aug NQC	QF/Selfgen
875	SCE	DMDVLY_1_UNITS	25425	ESRP P3	6.9	0.07	11	LA Basin	Eastern	Aug NQC	QF/Selfgen
876	SCE	DMDVLY_1_UNITS	25425	ESRP P3	6.9	0.07	12	LA Basin	Eastern	Aug NQC	QF/Selfgen
877	SCE	DREWS 6 PL1X4	25301	CLTNDREW	13.8	40.00	1	LA Basin	Eastern	Aug NQC	MUNI
878	SCE	DVLCYN_1_UNITS	25603	DVLCYN3G	13.8	40.03	3	LA Basin	Eastern	Aug NQC	MUNI
879	SCE	DVLCYN 1 UNITS	25604	DVLCYN4G	13.8	40.03	4	LA Basin	Eastern	Aug NQC	MUNI
880	SCE	DVLCYN_1_UNITS	25648	DVLCYN1G	13.8	30.02	1	LA Basin	Eastern	Aug NQC	MUNI
881	SCE	DVLCYN_1_UNITS	25649	DVLCYN2G	13.8	30.02	2	LA Basin	Eastern	Aug NQC	MUNI
882	SCE	ELLIS 2 QF	24325	ORCOGEN	13.8	0.76	1	LA Basin	Western	Aug NQC	QF/Selfgen
883	SCE	ELSEGN_2_UN1011	29904	ELSEG5GT	16.5	137.16	5	LA Basin	Western, El Nido	Aug NQC	Market
884	SCE	ELSEGN 2 UN1011	29903	ELSEG6ST	13.8	137.16	6	LA Basin	Western, El Nido	Aug NQC	Market
885	SCE	ELSEGN 2 UN2021	29902	ELSEG7GT	16.5	135.87	7	LA Basin	Western, El Nido	Aug NQC	Market
886	SCE	ELSEGN 2 UN2021	29901	ELSEG8ST	13.8	135.87	8	LA Basin	Western, El Nido	Aug NQC	Market
887	SCE	ESNHWR_2_WC1BT1	25632	EISNHOW EQFD	12.47	1.50	EQ	LA Basin	Eastern, Valley-Devers	J	Battery
888	SCE	ETIWND_2_CHMPNE				0.00		LA Basin	Eastern	Not modeled Energy Only	Market
889	SCE	ETIWND_2_FONTNA	25822	ETIWANDA EQFD	12.47	0.38	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
890	SCE	ETIWND_2_SOLAR1	25822	ETIWANDA EQFD	12.47	0.12	EQ	LA Basin	Eastern	Aug NQC	Solar
891	SCE	ETIWND_2_SOLAR2				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
892	SCE	ETIWND_2_SOLAR5				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
893	SCE	ETIWND_2_UNIT1	24071	INLAND	13.8	33.60	1	LA Basin	Eastern	Aug NQC	QF/Selfgen
894	SCE	ETIWND_6_GRPLND	29305	ETWPKGEN	13.8	45.64	1	LA Basin	Eastern		Market
895	SCE	ETIWND_6_GRPLND	25188	WDT1430_BES S	13.8	0.00	1	LA Basin	Eastern	Start-up/Back-up	Battery

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Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
896	SCE	ETIWND_6_MWDETI	25422	ETI MWDG	13.8	0.00	1	LA Basin	Eastern	Aug NQC	Market
897	SCE	GARNET_1_SOLAR				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Solar
898	SCE	GARNET_1_SOLAR2	25827	GARNET FD	34.5	0.50	EQ	LA Basin	Eastern, Valley-Devers	Aug NQC	Solar
899	SCE	GARNET_1_WIND	24815	GARNET	115	0.71	W3	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
900	SCE	GARNET_1_WINDS	24815	GARNET	115	2.45	W2	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
901	SCE	GARNET_1_WT3WND				0.00		LA Basin	Eastern, Valley-Devers	Not modeled Energy Only	Market
902	SCE	GARNET_2_COAWD2	24815	GARNET	115	1.18	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
903	SCE	GARNET_2_HYDRO	24815	GARNET	115	0.00	PC	LA Basin	Eastern, Valley-Devers	Aug NQC	Market
904	SCE	GARNET_2_WIND1	24815	GARNET	115	1.22	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
905	SCE	GARNET_2_WIND2	24815	GARNET	115	1.27	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
906	SCE	GARNET_2_WIND3	24815	GARNET	115	1.37	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
907	SCE	GARNET_2_WIND4	24815	GARNET	115	1.07	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
908	SCE	GARNET_2_WIND5	24815	GARNET	115	0.33	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
909	SCE	GLNARM_2_UNIT 5	29013	GLENARM5_CT	13.8	50.00	СТ	LA Basin	Western		MUNI
910	SCE	GLNARM_2_UNIT 5	29014	GLENARM5_ST	13.8	15.00	ST	LA Basin	Western		MUNI
911	SCE	GLNARM_7_UNIT 1	29005	PASADNA1	13.8	22.13	1	LA Basin	Western		MUNI
912	SCE	GLNARM_7_UNIT 2	29006	PASADNA2	13.8	22.38	1	LA Basin	Western		MUNI
913	SCE	GLNARM_7_UNIT 3	25042	PASADNA3	13.8	44.83	1	LA Basin	Western		MUNI
914	SCE	GLNARM_7_UNIT 4	25043	PASADNA4	13.8	42.42	1	LA Basin	Western		MUNI
915	SCE	HARBGN_7_UNITS	24062	HARBOR G	13.8	76.27	1	LA Basin	Western		Market
916	SCE	HARBGN_7_UNITS	24062	HARBOR G	13.8	11.86	HP	LA Basin	Western		Market
917	SCE	HARBGN_7_UNITS	25510	HARBORG4	4.16	11.86	LP	LA Basin	Western		Market
918	SCE	HINSON_6_LBECH1	24170	LBEACH12	13.8	63.00	1	LA Basin	Western		Market
919	SCE	HINSON_6_LBECH2	24170	LBEACH12	13.8	63.00	2	LA Basin	Western		Market
920	SCE	HINSON_6_LBECH3	24171	LBEACH34	13.8	63.00	3	LA Basin	Western		Market
921	SCE	HINSON_6_LBECH4	24171	LBEACH34	13.8	63.00	4	LA Basin	Western		Market
922	SCE	HINSON_6_SERRGN	24139	SERRFGEN	13.8	34.00	D1	LA Basin	Western	Aug NQC	Market
923	SCE	HNTGBH_2_PL1X3	24582	HUNTBCH STG	18	251.34	S1	LA Basin	Western		Market
924	SCE	HNTGBH_2_PL1X3	24580	HUNTBCH CTG1	18	211.23	G1	LA Basin	Western		Market
925	SCE	HNTGBH_2_PL1X3	24581	HUNTBCH CTG2	18	211.23	G2	LA Basin	Western		Market
926	SCE	HNTGBH_7_UNIT 2	24067	HUNT2 G	13.8	0.00	2	LA Basin	Western	Strategic Reserve	Market
927	SCE	INDIGO_1_UNIT 1	29190	INDIGO G4	13.8	45.30	4	LA Basin	Eastern, Valley-Devers		Market
928	SCE	INDIGO_1_UNIT 2	29191	INDIGO G5	13.8	45.30	5	LA Basin	Eastern, Valley-Devers		Market
929	SCE	INDIGO_1_UNIT 3	29180	INDIGO G3	13.8	45.30	3	LA Basin	Eastern, Valley-Devers		Market

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
930	SCE	JOANEC_2_ST3BT3	102869	SNTANSG3	0.55	40.00	3	LA Basin	Western		Battery
931	SCE	JOANEC_2_STABT1	102867	SNTANSG1	0.55	20.00	1	LA Basin	Western		Battery
932	SCE	JOANEC_2_STABT2	102868	SNTANSG2	0.55	20.00	2	LA Basin	Western		Battery
933	SCE	JOHANN_2_JOSBT1	698403	JOHANNA_PRP	66	10.00	EQ	LA Basin	Western		Battery
934	SCE	JOHANN_2_JOSBT2	698403	JOHANNA_PRP	66	10.00	EQ	LA Basin	Western		Battery
935	SCE	JOHANN_2_OCEBT2	698403	JOHANNA_PRP	66	9.00	EQ	LA Basin	Western		Battery
936	SCE	JOHANN_2_OCEBT3	698403	JOHANNA_PRP	66	6.00	EQ	LA Basin	Western		Battery
937	SCE	LACIEN_2_VENICE	24337	VENICE	13.8	0.00	1	LA Basin	Western, El Nido	Aug NQC	MUNI
938	SCE	LGHTHP_6_ICEGEN	24070	ICEGEN	13.8	37.80	GT	LA Basin	Western	Aug NQC	QF/Selfgen
939	SCE	LGHTHP_6_ICEGEN	24070	ICEGEN	13.8	10.20	ST	LA Basin	Western	Aug NQC	QF/Selfgen
940	SCE	MARVEL_2_MARBT3	25239	MARVEL_ES3	34.5	74.93	1	LA Basin	Eastern, Valley-Devers		Battery
941	SCE	MARVEL_2_MARBX2	25231	MARVEL_ES1	34.5	162.50	1	LA Basin	Eastern, Valley-Devers		Battery
942	SCE	MARVEL_2_MARBX2	25235	MARVEL_ES2	34.5	162.50	1	LA Basin	Eastern, Valley-Devers		Battery
943	SCE	MIRLOM_2_CORONA	25844	MIRALOMA EQFD	12.47	0.64	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
944	SCE	MIRLOM_2_CREST	25844	MIRALOMA EQFD	12.47	0.00	EQ	LA Basin	Eastern	Aug NQC	Market
945	SCE	MIRLOM_2_LNDFL	25844	MIRALOMA EQFD	12.47	0.37	EQ	LA Basin	Eastern	Aug NQC	Market
946	SCE	MIRLOM_2_MLBBTA	25185	WDT1425_G1	0.48	10.00	1	LA Basin	Eastern	Aug NQC	Battery
947	SCE	MIRLOM_2_MLBBTB	25186	WDT1426_G2	0.48	10.00	1	LA Basin	Eastern	Aug NQC	Battery
948	SCE	MIRLOM_2_TEMESC	25844	MIRALOMA EQFD	12.47	0.77	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
949	SCE	MIRLOM_6_PEAKER	29307	MRLPKGEN	13.8	47.18	1	LA Basin	Eastern		Market
950	SCE	MIRLOM_7_MWDLKM	24210	MIRALOMA	66	3.60		LA Basin	Eastern	Not modeled Aug NQC	MUNI
951	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	1	LA Basin	Eastern	Aug NQC	Market
952	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	2	LA Basin	Eastern	Aug NQC	Market
953	SCE	MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	3.28	3	LA Basin	Eastern	Aug NQC	Market
954	SCE	MTWIND_1_MVPWD1	29064	MOUNTWND_1 G	0.6	7.25	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
955	SCE	MTWIND_1_UNIT 3	29069	MOUNTWND_3 G	0.6	2.44	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
956	SCE	OLINDA_2_COYCRK				0.00		LA Basin	Western	Not modeled	QF/Selfgen
957	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	7.72	S1	LA Basin	Western	Aug NQC	Market
958	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C1	LA Basin	Western	Aug NQC	Market
959	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C2	LA Basin	Western	Aug NQC	Market
960	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C3	LA Basin	Western	Aug NQC	Market
961	SCE	OLINDA_2_LNDFL2	29011	BREAPWR2	13.8	4.32	C4	LA Basin	Western	Aug NQC	Market

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Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
962	SCE	OLINDA_7_BLKSND				0.25		LA Basin	Western	Not modeled Aug NQC	Market
963	SCE	PADUA_2_ONTARO	25851	PADUA EQFC	12.47	0.64	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
964	SCE	PADUA_2_SOLAR1				0.00		LA Basin	Eastern	Not modeled Energy Only	Solar
965	SCE	PADUA_6_MWDSDM	25851	PADUA EQFC	12.47	0.80	EQ	LA Basin	Eastern	Aug NQC	MUNI
966	SCE	PADUA_6_QF	25851	PADUA EQFC	12.47	0.34	EQ	LA Basin	Eastern	Aug NQC	QF/Selfgen
967	SCE	PADUA_7_SDIMAS	25851	PADUA EQFC	12.47	1.05	EQ	LA Basin	Eastern	Aug NQC	Market
968	SCE	PWEST_1_UNIT	24815	GARNET	115	0.23	PC	LA Basin	Western	Aug NQC	Market
969	SCE	RENWD_1_QF	25636	RENWIND	115	0.55	Q1	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
970	SCE	RENWD_1_QF	25636	RENWIND	115	0.55	Q2	LA Basin	Eastern, Valley-Devers	Aug NQC	QF/Selfgen
971	SCE	RVSIDE_2_RERCU3	24299	RERC2G3	13.8	49.00	1	LA Basin	Eastern		MUNI
972	SCE	RVSIDE_2_RERCU4	24300	RERC2G4	13.8	49.00	1	LA Basin	Eastern		MUNI
973	SCE	RVSIDE_6_RERCU1	24242	RERC1G	13.8	48.35	1	LA Basin	Eastern		MUNI
974	SCE	RVSIDE_6_RERCU2	24243	RERC2G	13.8	48.50	1	LA Basin	Eastern		MUNI
975	SCE	RVSIDE_6_SOLAR1				0.93		LA Basin	Eastern	Not modeled Aug NQC	Solar
976	SCE	RVSIDE_6_SPRING	24240	SPRINGS1	13.8	9.00	1	LA Basin	Eastern		Market
977	SCE	RVSIDE_6_SPRING	24241	SPRINGS3	13.8	9.00	1	LA Basin	Eastern		Market
978	SCE	RVSIDE_6_SPRING	24240	SPRINGS1	13.8	9.00	2	LA Basin	Eastern		Market
979	SCE	RVSIDE_6_SPRING	24241	SPRINGS3	13.8	9.00	2	LA Basin	Eastern		Market
980	SCE	SANITR_6_UNITS	24324	SANIGEN	13.8	1.11	D1	LA Basin	Eastern	Aug NQC	QF/Selfgen
981	SCE	SANTGO_2_LNDFL1	24341	COYGEN	13.8	18.64	1	LA Basin	Western	Aug NQC	Market
982	SCE	SANTGO_2_MABBT1	25192	WDT1406_G	0.48	2.00	1	LA Basin	Western	Aug NQC	Battery
983	SCE	SANWD_1_QF	29072	SANWIND_G	0.48	3.37	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
984	SCE	SBERDO_2_PSP3	24923	MNTV-ST3	18	257.82	1	LA Basin	Eastern, West of Devers		Market
985	SCE	SBERDO_2_PSP3	24921	MNTV-G3A	18	148.59	1	LA Basin	Eastern, West of Devers		Market
986	SCE	SBERDO_2_PSP3	24922	MNTV-G3B	18	148.59	1	LA Basin	Eastern, West of Devers		Market
987	SCE	SBERDO_2_PSP4	24926	MNTV-ST4	18	257.82	1	LA Basin	Eastern, West of Devers		Market
988	SCE	SBERDO_2_PSP4	24924	MNTV-G4A	18	148.59	1	LA Basin	Eastern, West of Devers		Market
989	SCE	SBERDO_2_PSP4	24925	MNTV-G4B	18	148.59	1	LA Basin	Eastern, West of Devers		Market
990	SCE	SBERDO_2_SNTANA	25861	SNBRDNO FD	12.47	0.00	EQ	LA Basin	Eastern, West of Devers	Aug NQC	QF/Selfgen
991	SCE	SBERDO_6_MILLCK	25861	SNBRDNO FD	12.47	0.57	EQ	LA Basin	Eastern, West of Devers	Aug NQC	QF/Selfgen
992	SCE	SENTNL_2_CTG1	29101	SENTINEL_G1	13.8	107.68	1	LA Basin	Eastern, Valley-Devers		Market
993	SCE	SENTNL_2_CTG2	29102	SENTINEL_G2	13.8	103.98	1	LA Basin	Eastern, Valley-Devers		Market
994	SCE	SENTNL_2_CTG3	29103	SENTINEL_G3	13.8	105.69	1	LA Basin	Eastern, Valley-Devers		Market
995	SCE	SENTNL_2_CTG4	29104	SENTINEL_G4	13.8	106.55	1	LA Basin	Eastern, Valley-Devers		Market
996	SCE	SENTNL_2_CTG5	29105	SENTINEL_G5	13.8	107.52	1	LA Basin	Eastern, Valley-Devers		Market
997	SCE	SENTNL_2_CTG6	29106	SENTINEL_G6	13.8	105.00	1	LA Basin	Eastern, Valley-Devers		Market
998	SCE	SENTNL_2_CTG7	29107	SENTINEL_G7	13.8	106.73	1	LA Basin	Eastern, Valley-Devers		Market

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999	SCE	SENTNL_2_CTG8	29108	SENTINEL_G8	13.8	106.85	1	LA Basin	Eastern, Valley-Devers		Market
1000	SCE	STANTN_2_SBEBX2	25675	WH_STN_5	0.55	34.40	1	LA Basin	Western		Battery
1001	SCE	STANTN_2_SBEBX2	25677	WH_STN_7	0.55	34.40	1	LA Basin	Western		Battery
1002	SCE	STANTN_2_STAGT1	25670	WH_STN_1	13.8	49.65	1	LA Basin	Western		Market
1003	SCE	STANTN_2_STAGT2	25671	WH_STN_2	13.8	49.65	1	LA Basin	Western		Market
1004	SCE	TIFFNY_1_DILLON	29021	WINTEC6	115	4.90	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1005	SCE	TRNSWD_1_QF	25746	TRANWND_1G	0.4	2.12	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1006	SCE	TRNSWD_1_QF	25749	TRANWND_2G	0.4	2.12	QF	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1007	SCE	TULEWD_1_TULWD1				14.21		LA Basin	Eastern, Valley-Devers	Not modeled Aug NQC	Wind
1008	SCE	VALLEY_5_PERRIS	25872	VALLEYS EQFD	12.47	2.40	EQ	LA Basin	Eastern, Valley, Valley- Devers	Not modeled Aug NQC	QF/Selfgen
1009	SCE	VALLEY_5_REDMTN	25872	VALLEYS EQFD	12.47	1.21	EQ	LA Basin	Eastern, Valley, Valley- Devers	Not modeled Aug NQC	QF/Selfgen
1010	SCE	VALLEY_5_SOLAR1				0.00		LA Basin	Eastern, Valley, Valley- Devers	Not modeled Energy Only	Solar
1011	SCE	VALLEY_5_SOLAR2	25846	WDT786G	34.5	2.48	EQ	LA Basin	Eastern, Valley, Valley- Devers	Aug NQC	Solar
1012	SCE	VENWD_1_WIND3	25645	VENWIND	115	4.85	EU	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1013	SCE	VERNON_6_GONZL1				5.75		LA Basin	Western	Not modeled	MUNI
1014	SCE	VERNON_6_GONZL2				5.75		LA Basin	Western	Not modeled	MUNI
1015	SCE	VERNON_6_MALBRG	24241	MALBRG3G	13.8	51.10	S3	LA Basin	Western		MUNI
1016	SCE	VERNON_6_MALBRG	24239	MALBRG1G	13.8	43.95	C1	LA Basin	Western		MUNI
1017	SCE	VERNON_6_MALBRG	24240	MALBRG2G	13.8	43.95	C2	LA Basin	Western		MUNI
1018	SCE	VILLPK_2_VALLYV				1.20		LA Basin	Western	Not modeled Aug NQC	QF/Selfgen
1019	SCE	VILLPK_6_MWDYOR				2.40		LA Basin	Western	Not modeled Aug NQC	MUNI
1020	SCE	VISTA_6_QF	25887	VSTA_EQFD	12.47	0.10	EQ	LA Basin	Eastern	Not modeled Aug NQC	QF/Selfgen
1021	SCE	WALCRK_2_CTG1	29201	WALCRKG1	13.8	96.43	1	LA Basin	Western		Market
1022	SCE	WALCRK_2_CTG2	29202	WALCRKG2	13.8	96.91	1	LA Basin	Western		Market
1023	SCE	WALCRK_2_CTG3	29203	WALCRKG3	13.8	96.65	1	LA Basin	Western		Market
1024	SCE	WALCRK_2_CTG4	29204	WALCRKG4	13.8	96.49	1	LA Basin	Western		Market
1025	SCE	WALCRK_2_CTG5	29205	WALCRKG5	13.8	96.65	1	LA Basin	Western		Market
1026	SCE	WALNUT_2_SOLAR				0.00		LA Basin	Western	Not modeled Energy Only	Solar
1027	SCE	WALNUT_6_HILLGEN				21.88		LA Basin	Western	Not modeled Aug NQC	Net Seller
1028	SCE	WALNUT_7_WCOVST				5.02		LA Basin	Western	Not modeled Aug NQC	Market
1029	SCE	WHTWTR_1_WINDA1	29061	WHITEWTR	33	6.69	1	LA Basin	Eastern, Valley-Devers	Aug NQC	Wind
1030	SCE	ZZ_DEVERS_1_QF	25632	TERAWND	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1031	SCE	ZZ_DEVERS_1_QF	25639	SEAWIND	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1032	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market
1033	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market
1034	SCE	ZZ_GARNET_1_UNITS	24815	GARNET	115	0.00	QF	LA Basin	Eastern, Valley-Devers	Mothballed	Market
1035	SCE	ZZ_MOBGEN_6_UNIT 1	24094	MOBGEN1	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1036	SCE	ZZ_MOBGEN_6_UNIT 1	24094	MOBGEN2	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1037	SCE	ZZ_MTWIND_1_UNIT 2	29066	MOUNTWND_2 G	0.6	0.00	1	LA Basin	Eastern, Valley-Devers	Mothballed	Wind
1038	SCE	ZZ_NA	25849	NEWARK FD1	16	4.39	EQ	LA Basin	Western	No NQC - est. data	Solar
1039	SCE	ZZ_NA	102902	HINSON EQDS	12.47	0.35	1	LA Basin	Western	No NQC - est. data	Solar
1040	SCE	ZZ_NA	25857	RIOHNDO EQFD	12.47	0.20	EQ	LA Basin	Western	No NQC - est. data	Solar
1041	SCE	ZZ_NA	25889	WALNUT EQFD	12.47	0.20	EQ	LA Basin	Western	No NQC - est. data	Solar
1042	SCE	ZZ_NA	25883	VILLAPK EQFD	12.47	0.14	EQ	LA Basin	Western	No NQC - est. data	Solar
1043	SCE	ZZ_NA	25820	EL NIDO EQFD	16	0.09	EQ	LA Basin	Western, El Nido	No NQC - est. data	Solar
1044	SCE	ZZ_NA	25838	LA FRSA EQFD	16	0.07	EQ	LA Basin	Western	No NQC - est. data	Solar
1045	SCE	ZZ_NA	25842	MESACAL EQFD	16	0.01	EQ	LA Basin	Western	No NQC - est. data	Solar
1046	SCE	ZZ_NA	24327	THUMSGEN	13.8	0.00	1	LA Basin	Western	No NQC - hist. data	QF/Selfgen
1047	SCE	ZZ_NA	24330	OUTFALL1	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1048	SCE	ZZ_NA	24331	OUTFALL2	13.8	0.00	1	LA Basin	Western, El Nido	No NQC - hist. data	QF/Selfgen
1049	SCE	ZZ_NA	29260	ALTAMSA4	115	0.00	1	LA Basin	Eastern, Valley-Devers	No NQC - hist. data	Wind
1050	SCE	ZZ_PANSEA_1_PANARO	25640	PANAERO	115	3.40	QF	LA Basin	Eastern, Valley-Devers		Wind
1051	SCE	ZZ_VENWD_1_WIND1	25645	VENWIND	115	0.00	Q1	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1052	SCE	ZZ_VENWD_1_WIND2	25645	VENWIND	115	0.00	Q2	LA Basin	Eastern, Valley-Devers	Mothballed	QF/Selfgen
1053	SCE	ZZZ_JOANEC_2_ST3BT4	102870	SNTANSG4	0.55	40.00	4	LA Basin	Western	No NQC - P max	Battery
1054	SCE	ZZZ_New Unit	100251	TOT934_G1	0.55	235.00	1	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1055	SCE	ZZZ_New Unit	100252	TOT934_G2	0.55	235.00	2	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1056	SCE	ZZZ_New Unit	100253	TOT934_G3	0.55	235.00	3	LA Basin	Eastern, Valley	No NQC - Pmax	Battery
1057	SCE	ZZZ_New Unit	99116	WDT1659_G	0.6	200.00	EQ	LA Basin	Eastern, West of Devers	No NQC - Pmax	Battery
1058	SCE	ZZZ_New Unit	102874	WDT1711_G	0.385	120.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1059	SCE	ZZZ_New Unit	99139	WDT1641_G	0.6	100.00	1	LA Basin	Western, El Nido	No NQC - P max	Battery
1060	SCE	ZZZ_New Unit	99511	WDT1652_G	0.6	100.00	1	LA Basin	Western	No NQC - P max	Battery

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1061	SCE	ZZZ_New Unit	98673	TOT913_G	0.6	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1062	SCE	ZZZ_New Unit	99615	WDT1669_G	0.69	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1063	SCE	ZZZ_New Unit	102866	WDT1719_G	0.385	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1064	SCE	ZZZ_New Unit	240008	SEPARATOR_G	34.5	100.00	1	LA Basin	Eastern	No NQC - Pmax	Battery
1065	SCE	ZZZ_New Unit	99035	WDT1648_G	0.385	100.00	1	LA Basin	Eastern, West of Devers	No NQC - Pmax	Battery
1066	SCE	ZZZ_New Unit	102675	ALMTES2	0.75	84.50	1	LA Basin	Western	No NQC - P max	Battery
1067	SCE	ZZZ_New Unit	100608	WDT1702_G	0.382	77.00	1	LA Basin	Western	No NQC - P max	Battery
1068	SCE	ZZZ_New Unit	698384	WDT1583	34.5	10.00	B1	LA Basin	Western	No NQC - P max	Battery
1069	SCE	ZZZ_New Unit	698385	WDT1582	34.5	10.00	B1	LA Basin	Western	No NQC - P max	Battery
1070	SCE	ZZZ_New Unit	240156	VALIEYS HYD	12.47	7.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	No NQC - est. data	Market
1071	SCE	ZZZ_New Unit	25834	HI DSRT	34.5	1.20	EQ	LA Basin	Eastern, Valley-Devers	No NQC - est. data	Market
1072	SCE	ZZZ_New Unit	240155	UNIMDGEN	12	1.00	1	LA Basin	Eastern, West of Devers	No NQC - est. data	Market
1073	SCE	ZZZ_New Unit	240157	VALLEYS GAS	12.47	1.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	No NQC - est. data	Market
1074	SCE	ZZZ_New Unit	240158	VSTA BIO	12.47	1.00	EQ	LA Basin	Eastern	No NQC - est. data	Market
1075	SCE	ZZZ_New Unit	240159	VSTA GAS	12.47	1.00	EQ	LA Basin	Eastern	No NQC - est. data	Market
1076	SCE	ZZZ_New Unit	240153	BOTTLE	34.5	0.60	W1	LA Basin	Eastern, Valley-Devers	No NQC - est. data	Wind
1077	SCE	ZZZ_New Unit	240002	CATHODE1_G	34.5	0.00	1	LA Basin	Western	Waiting TPD allocation	Battery
1078	SCE	ZZZ_New Unit	114201	WDT1510G	0.69	0.00	1	LA Basin	Eastern	Energy Only	Battery
1079	SCE	ZZZ_New Unit	698380	WDT1558_G	0.55	0.00	1	LA Basin	Eastern, West of Devers	Energy Only	Battery
1080	SCE	ZZZ_New Unit	240002	CATHODE2_G	34.5	0.00	2	LA Basin	Western	Waiting TPD allocation	Battery
1081	SCE	ZZZ_New Unit	25833	WDT458G	0.2	0.00	EQ	LA Basin	Eastern, Valley-Devers	Energy Only	Solar
1082	SCE	ZZZ_New Unit	25832	WDT334G	0.2	0.00	EQ	LA Basin	Eastern, Valley-Devers	Energy Only	Solar
1083	SCE	ZZZ_New Unit	98956	WDT1635_G	0.6	0.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	Energy Only	Battery
1084	SCE	ZZZ_New Unit	99213	WDT1636_G	0.6	0.00	EQ	LA Basin	Eastern, Valley, Valley- Devers	Energy Only	Battery
1085	SCE	ZZZ_New Unit	698384	WDT1583	34.5	0.00	PV	LA Basin	Western	No NQC - est. data	Solar
1086	SCE	ZZZ_New Unit	698385	WDT1582	34.5	0.00	PV	LA Basin	Western	No NQC - est. data	Solar
1087	SCE	ZZZZZ_ALAMIT_7_UNIT 1	24001	ALAMT1 G	18	0.00	1	LA Basin	Western	Retired	Market
1088	SCE	ZZZZZ_ALAMIT_7_UNIT 2	24002	ALAMT2 G	18	0.00	2	LA Basin	Western	Retired	Market
1089	SCE	ZZZZZ_ALAMIT_7_UNIT 6	24161	ALAMT6 G	20	0.00	6	LA Basin	Western	Retired	Market
1090	SCE	ZZZZZ_ANAHM_7_CT	25208	DowlingCTG	13.8	0.00	1	LA Basin	Western	Retired	MUNI

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1091	SCE	ZZZZZ_BRDWAY_7_UNIT 3	29007	BRODWYSC	13.8	0.00		LA Basin	Western	Retired	MUNI
1092	SCE	ZZZZZ_CENTER_2_QF	29953	SIGGEN	13.8	0.00	D1	LA Basin	Western	Retired	QF/Selfgen
1093	SCE	ZZZZZ_CHINO_6_SMPPAP	24140	SIMPSON	13.8	0.00	R1	LA Basin	Eastern	Retired	QF/Selfgen
1094	SCE	ZZZZZ_ETIWND_7_MIDVLY	24055	ETIWANDA	66	0.00		LA Basin	Eastern	Retired	QF/Selfgen
1095	SCE	ZZZZZ_ETIWND_7_UNIT 3	24052	MTNVIST3	18	0.00	3	LA Basin	Eastern	Retired	Market
1096	SCE	ZZZZZ_ETIWND_7_UNIT 4	24053	MTNVIST4	18	0.00	4	LA Basin	Eastern	Retired	Market
1097	SCE	ZZZZZ_GARNET_2_DIFWD1	24815	GARNET	115	0.00		LA Basin	Eastern, Valley-Devers	Retired	Market
1098	SCE	ZZZZZ_HINSON_6_CARBGN	24020	CARBGEN1	13.8	0.00	1	LA Basin	Western	Retired	Market
1099	SCE	ZZZZZ_HINSON_6_CARBGN	24328	CARBGEN2	13.8	0.00	1	LA Basin	Western	Retired	Market
1100	SCE	ZZZZZ_HNTGBH_7_UNIT 1	24066	HUNT1 G	13.8	0.00	1	LA Basin	Western	Retired	Market
1101	SCE	ZZZZZ_INLDEM_5_UNIT 1	29041	IEEC-G1	19.5	0.00	1	LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1102	SCE	ZZZZZ_INLDEM_5_UNIT 2	29042	IEEC-G2	19.5	0.00	1	LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1103	SCE	ZZZZZ_LAGBEL_2_STG1				0.00		LA Basin	Western	Retired	Market
1104	SCE	ZZZZZ_LAGBEL_6_QF	29951	REFUSE	13.8	0.00	D1	LA Basin	Western	Retired	QF/Selfgen
1105	SCE	ZZZZZ_MESAS_2_QF	24209	MESA CAL	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1106	SCE	ZZZZZ_MIRLOM_6_DELGEN	29339	DELGEN	13.8	0.00	1	LA Basin	Eastern	Retired	QF/Selfgen
1107	SCE	ZZZZZ_OLINDA_2_QF	24211	OLINDA	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1108	SCE	ZZZZZ_OLINDA_7_LNDFIL	24211	OLINDA	66	0.00		LA Basin	Western	Retired	QF/Selfgen
1109	SCE	ZZZZZ_REDOND_7_UNIT 5	24121	REDON5 G	18	0.00	5	LA Basin	Western	Retired	Market
1110	SCE	ZZZZZ_REDOND_7_UNIT 6	24122	REDON6 G	18	0.00	6	LA Basin	Western	Retired	Market
1111	SCE	ZZZZZ_REDOND_7_UNIT 7	24123	REDON7 G	20	0.00	7	LA Basin	Western	Retired	Market
1112	SCE	ZZZZZ_REDOND_7_UNIT 8	24124	REDON8 G	20	0.00	8	LA Basin	Western	Retired	Market
1113	SCE	ZZZZZ_RHONDO_2_QF	24213	RIOHONDO	66	0.00	DG	LA Basin	Western	Retired	QF/Selfgen
1114	SCE	ZZZZZ_RHONDO_6_PUENTE	24213	RIOHONDO	66	0.00		LA Basin	Western	Retired	Net Seller
1115	SCE	ZZZZZ_SBERDO_2_QF	24214	SANBRDNO	66	0.00		LA Basin	Eastern, West of Devers	Retired	QF/Selfgen
1116	SCE	ZZZZZ_VALLEY_5_RTS044	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1117	SCE	ZZZZZ_VALLEY_7_BADLND	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1118	SCE	ZZZZZ_VALLEY_7_UNITA1	24160	VALLEYSC	115	0.00		LA Basin	Eastern, Valley, Valley- Devers	Retired	Market
1119	SCE	ZZZZZ_WALNUT_7_WCOVCT	24157	WALNUT	66	0.00		LA Basin	Western	Retired	Market
1120	SCE	ZZZZZZ_ELSEGN_7_UNIT 4	24048	ELSEG4 G	18	0.00	4	LA Basin	Western, El Nido	Retired	Market
1121	SDG&E	BORDER_6_UNITA1	22149	CALPK_BD	13.8	51.25	1	SD-IV	San Diego, Border		Market
1122	SDG&E	BREGGO_6_DEGRSL	22085	BORREGO	12.5	0.78	6	SD-IV	San Diego	Aug NQC	Solar
1123	SDG&E	BREGGO_6_SOLAR	22082	BR GEN1	0.21	3.22	1	SD-IV	San Diego	Aug NQC	Solar
1124	SDG&E	CARLS1_2_CARCT1	22783	EA GEN1 U8	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1125	SDG&E	CARLS1_2_CARCT1	22784	EA GEN1 U9	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1126	SDG&E	CARLS1_2_CARCT1	22786	EA GEN1 U6	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1127	SDG&E	CARLS1_2_CARCT1	22787	EA GEN1 U7	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1128	SDG&E	CARLS2_1_CARCT1	22789	EA GEN1 U10	13.8	105.50	1	SD-IV	San Diego	Aug NQC	Market
1129	SDG&E	CHILLS_1_SYCENG	22120	CARLTNHS	138	1.00	1	SD-IV	San Diego	Aug NQC	QF/Selfgen
1130	SDG&E	CHILLS_7_UNITA1	22120	CARLTNHS	138	1.52	2	SD-IV	San Diego	Aug NQC	QF/Selfgen
1131	SDG&E	CNTNLA_2_SOLAR1	23401	DW GEN3 G1	0.33	15.50	1	SD-IV		Aug NQC	Solar
1132	SDG&E	CNTNLA_2_SOLAR2	23402	DW GEN3 G2	0.33	5.65	2	SD-IV		Aug NQC	Solar
1133	SDG&E	CPVERD_2_SOLAR	23309	IV GEN3 G1	0.31	9.58	1	SD-IV		Aug NQC	Solar
1134	SDG&E	CPVERD_2_SOLAR	23301	IV GEN3 G2	0.31	7.66	1	SD-IV		Aug NQC	Solar
1135	SDG&E	CRELMN_6_RAMON1	22152	CREELMAN	69	0.25	27	SD-IV	San Diego	Aug NQC	Solar
1136	SDG&E	CRELMN_6_RAMON2	22152	CREELMAN	69	0.62	27	SD-IV	San Diego	Aug NQC	Solar
1137	SDG&E	CRELMN_6_RAMSR3	22152	CREELMAN	69	0.43	35	SD-IV	San Diego	Aug NQC	Solar
1138	SDG&E	CRSTWD_6_KUMYAY	22915	KUMEYAAY	0.69	5.44	1	SD-IV	San Diego	Aug NQC	Wind
1139	SDG&E	CSLR4S_2_SOLAR	23298	DW GEN1 G1	0.315	8.06	1	SD-IV		Aug NQC	Solar
1140	SDG&E	CSLR4S_2_SOLAR	23299	DW GEN1 G2	0.315	8.06	1	SD-IV		Aug NQC	Solar
1141	SDG&E	ELCAJN_6_EB1BT1	22208	EL CAJON	69	7.50	1	SD-IV	San Diego, El Cajon		Battery
1142	SDG&E	ELCAJN_6_LM6K	23320	EC GEN2	13.8	48.10	1	SD-IV	San Diego, El Cajon		Market
1143	SDG&E	ELCAJN_6_UNITA1	22150	EC GEN1	13.8	45.42	1	SD-IV	San Diego, El Cajon		Market
1144	SDG&E	ENERSJ_2_WIND	23100	ECO GEN1 G1	0.69	16.44	G1	SD-IV		Aug NQC	Wind
1145	SDG&E	ENERSJ_5_ESJWD2				11.43		SD-IV		Aug NQC	Wind
1146	SDG&E	ESCNDO_6_EB1BT1	22256	ESCNDIDO	69	10.00	10	SD-IV	San Diego		Battery
1147	SDG&E	ESCNDO_6_EB2BT2	22256	ESCNDIDO	69	10.00	11	SD-IV	San Diego		Battery
1148	SDG&E	ESCNDO_6_EB3BT3	22256	ESCNDIDO	69	10.00	12	SD-IV	San Diego		Battery
1149	SDG&E	ESCNDO_6_PL1X2	22257	ES GEN	13.8	48.71	1	SD-IV	San Diego		Market
1150	SDG&E	ESCNDO_6_UNITB1	22153	CALPK_ES	13.8	48.04	1	SD-IV	San Diego		Market
1151	SDG&E	ESCO_6_GLMQF	22333	GOALLINE	13.8	41.15	1	SD-IV	San Diego	Aug NQC	Net Seller
1152	SDG&E	ESCO_6_GLMQF	22333	GOALLINE	13.8	8.75	2	SD-IV	San Diego	Aug NQC	Net Seller
1153	SDG&E	FALBRK_6_FESBT1	23544	AV GEN1_BESS	0.64	40.00	1	SD-IV	San Diego		Battery
1154	SDG&E	GATEWY_2_GESBT1	23710	OM GEN4_BESS	0.508	175.00	1	SD-IV	San Diego		Battery
1155	SDG&E	IVSLR2_2_SM2SR1	23441	DW GEN6	0.42	18.60	1	SD-IV		Aug NQC	Solar
1156	SDG&E	IVSLRP_2_SOLAR1	23440	DW GEN2	0.36	24.80	1	SD-IV		Aug NQC	Solar
1157	SDG&E	IVWEST_2_SOLAR1	23155	DU GEN1 G1	0.2	10.06	1	SD-IV		Aug NQC	Solar
1158	SDG&E	IVWEST_2_SOLAR1	23156	DU GEN1 G2	0.2	8.54	1	SD-IV		Aug NQC	Solar
1159	SDG&E	JACMSR_1_JACSR1	23352	ECO GEN2	0.55	2.48	1	SD-IV		Aug NQC	Solar
1160	SDG&E	KEARNY_6_NESBT1	22372	KEARNY	60	10.00	25	SD-IV	San Diego	Aug NQC	Battery
1161	SDG&E	KEARNY_6_SESBT2	22372	KEARNY	60	10.00	26	SD-IV	San Diego	Aug NQC	Battery
1162	SDG&E	KYCORA_6_KMSBT1				0.00		SD-IV	San Diego	Not modeled Energy Only	Battery

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1163	SDG&E	LAKHDG_6_UNIT 1	22625	LKHODG1	13.8	20.00	1	SD-IV	San Diego		Market
1164	SDG&E	LAKHDG_6_UNIT 2	22626	LKHODG2	13.8	20.00	2	SD-IV	San Diego		Market
1165	SDG&E	LARKSP_6_UNIT 1	22074	LRKSPBD1	13.8	49.00	1	SD-IV	San Diego, Border		Market
1166	SDG&E	LARKSP_6_UNIT 2	22075	LRKSPBD2	13.8	49.00	1	SD-IV	San Diego, Border		Market
1167	SDG&E	LAROA2_2_UNITA1	22997	INTBCT	16	176.81	1	SD-IV			Market
1168	SDG&E	LAROA2_2_UNITA1	22996	INTBST	18	145.19	1	SD-IV			Market
1169	SDG&E	LECONT_2_LESBT1	23597	BW GEN8_BESS	0.69	40.00	1	SD-IV		PCDS	Battery
1170	SDG&E	LILIAC_6_SOLAR	22404	LILIAC	69	0.37	67	SD-IV	San Diego		Solar
1171	SDG&E	MRGT_6_MEF2	22487	MEF MR2	13.8	44.00	1	SD-IV	San Diego		Market
1172	SDG&E	MRGT_6_MMAREF	22486	MEF MR1	13.8	45.00	1	SD-IV	San Diego		Market
1173	SDG&E	MRGT_6_TGEBT1	23412	MRGT GEN	0.64	30.00	1	SD-IV	San Diego		Battery
1174	SDG&E	MSHGTS_6_MMARLF	22448	MESAHGTS	69	4.08	1	SD-IV	San Diego	Aug NQC	Market
1175	SDG&E	MSSION_2_QF	22496	MISSION	69	0.32	1	SD-IV	San Diego	Aug NQC	Market
1176	SDG&E	MURRAY_6_UNIT	22532	MURRAY	69	0.00		SD-IV	San Diego	Not modeled Energy Only	Market
1177	SDG&E	OCTILO_5_WIND	23314	OCO GEN G1	0.69	14.43	1	SD-IV		Aug NQC	Wind
1178	SDG&E	OCTILO_5_WIND	23318	OCO GEN G2	0.69	14.43	1	SD-IV		Aug NQC	Wind
1179	SDG&E	OGROVE_6_PL1X2	22628	PA GEN1	13.8	48.00	1	SD-IV	San Diego		Market
1180	SDG&E	OGROVE_6_PL1X2	22629	PA GEN2	13.8	48.00	1	SD-IV	San Diego		Market
1181	SDG&E	OTAY_6_PL1X2	22617	OY GEN	13.8	37.20	1	SD-IV	San Diego		Market
1182	SDG&E	OTMESA_2_PL1X3	22607	OTAYMST1	16	272.27	1	SD-IV	San Diego		Market
1183	SDG&E	OTMESA_2_PL1X3	22606	OTAYMGT2	18	166.17	1	SD-IV	San Diego		Market
1184	SDG&E	OTMESA_2_PL1X3	22605	OTAYMGT1	18	165.16	1	SD-IV	San Diego		Market
1185	SDG&E	PALOMR_2_PL1X3	22265	PEN_ST	18	234.24	1	SD-IV	San Diego		Market
1186	SDG&E	PALOMR_2_PL1X3	22262	PEN_CT1	18	176.98	1	SD-IV	San Diego		Market
1187	SDG&E	PALOMR_2_PL1X3	22263	PEN_CT2	18	176.98	1	SD-IV	San Diego		Market
1188	SDG&E	PIOPIC_2_CTG1	23162	PIO PICO CT1	13.8	111.30	1	SD-IV	San Diego	No NQC - Pmax	Market
1189	SDG&E	PIOPIC_2_CTG2	23163	PIO PICO CT2	13.8	112.70	1	SD-IV	San Diego	No NQC - Pmax	Market
1190	SDG&E	PIOPIC_2_CTG3	23164	PIO PICO CT3	13.8	112.00	1	SD-IV	San Diego	No NQC - Pmax	Market
1191	SDG&E	PRCTVY_1_MIGBT1	22672	PRCTRVLY	138	0.00	4	SD-IV	San Diego	Aug NQC	Battery
1192	SDG&E	SAMPSN_6_KELCO1	22704	SAMPSON	12.5	1.59	1	SD-IV	San Diego	Aug NQC	Net Seller
1193	SDG&E	SLRMS3_2_SRMSR1	23442	DW GEN4 G1	0.6	18.60	1	SD-IV		Aug NQC	Solar
1194	SDG&E	SLRMS3_2_SRMSR1	23443	DW GEN4 G2	0.6	12.40	1	SD-IV		Aug NQC	Solar
1195	SDG&E	SMRCOS_6_LNDFIL	22724	SANMRCOS	69	1.50	1	SD-IV	San Diego	Aug NQC	Market
1196	SDG&E	TERMEX_2_PL1X3	22981	IV GEN1 STG	21	280.13	1	SD-IV			Market
1197	SDG&E	TERMEX_2_PL1X3	22982	IV GEN1 CTG2	18	156.44	1	SD-IV			Market
1198	SDG&E	TERMEX_2_PL1X3	22983	IV GEN1 CTG3	18	156.44	1	SD-IV			Market
1199	SDG&E	VLCNTR_6_VCEBT1	23627	VC GEN1_GEN1	34.5	54.00	1	SD-IV	San Diego		Battery

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA NAME	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1200	SDG&E	VLCNTR_6_VCEBT1	22991	VC GEN1_GEN3	34.5	0.00	1	SD-IV	San Diego	Energy Only	Battery
1201	SDG&E	VLCNTR_6_VCEBT2	23628	VC GEN1_GEN2	34.5	50.00	1	SD-IV	San Diego		Battery
1202	SDG&E	VLCNTR_6_VCSLR	22870	VALCNTR	69	0.29	59	SD-IV	San Diego	Aug NQC	Solar
1203	SDG&E	VLCNTR_6_VCSLR1	22870	VALCNTR	69	0.31	28	SD-IV	San Diego	Aug NQC	Solar
1204	SDG&E	VLCNTR_6_VCSLR2	22870	VALCNTR	69	0.62	28	SD-IV	San Diego	Aug NQC	Solar
1205	SDG&E	VSTAES_6_VESBT1	23541	ME GEN 1_BS1	0.64	5.00	1	SD-IV	San Diego		Battery
1206	SDG&E	VSTAES_6_VESBT1	23216	ME GEN 1_BS2	0.48	5.00	1	SD-IV	San Diego		Battery
1207	SDG&E	WESCAN_2_BDSBT1	23421	Q1531_ES1	0.55	65.50	1	SD-IV			Battery
1208	SDG&E	WESCAN_2_BDSBT1	23425	Q1531_ES2	0.55	65.50	1	SD-IV			Battery
1209	SDG&E	WISTRA_2_WRSSR1	23287	DW GEN5 G1	0.418	12.40	1	SD-IV		Aug NQC	Solar
1210	SDG&E	ZZ_CBRLLO_6_PLSTP1	22092	CABRILLO	69	2.70	1	SD-IV	San Diego		Market
1211	SDG&E	ZZ_CCRITA_7_RPPCHF	22124	CHCARITA	138	2.00	1	SD-IV	San Diego		Market
1212	SDG&E	ZZ_LAROA1_2_UNITA1	20187	LRP-U1	16	0.00	1	SD-IV		Connect to CENACE/CFE grid for the summer – not available for ISO BAA RA purpose	Market
1213	SDG&E	ZZ_NA	22604	OTAY	69	2.80	1	SD-IV	San Diego	No NQC - hist. data	Market
1214	SDG&E	ZZ_NA	22604	OTAY	69	2.20	3	SD-IV	San Diego	No NQC - hist. data	Market
1215	SDG&E	ZZ_NA	22204	EASTGATE	69	0.20	1	SD-IV	San Diego	No NQC - hist. data	Market
1216	SDG&E	ZZ_NA	22916	PFC-AVC	0.6	0.00	1	SD-IV	San Diego	No NQC - hist. data	QF/Selfgen
1217	SDG&E	ZZZ_New Unit	23959	Q1673_ES1	0.6	300.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1218	SDG&E	ZZZ_New Unit	23933	Q1670_ES	0.6	200.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1219	SDG&E	ZZZ_New Unit	23929	Q1669_ES	0.6	100.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1220	SDG&E	ZZZ_New Unit	23416	Q1166_ES_G1	0.63	87.00	1	SD-IV		No NQC - PCDS	Battery
1221	SDG&E	ZZZ_New Unit	23438	Q1166_ES_G2	0.63	87.00	1	SD-IV		No NQC - PCDS	Battery
1222	SDG&E	ZZZ_New Unit	23710	Q1170_BESS	0.508	75.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1223	SDG&E	ZZZ_New Unit	23871	Q1662_ES	34.5	50.00	12	SD-IV	San Diego, El Cajon	No NQC - Pmax	Battery
1224	SDG&E	ZZZ_New Unit	23253	Q1432_ES	0.48	17.40	1	SD-IV	San Diego	No NQC - Pmax	Battery
1225	SDG&E	ZZZ_New Unit	22440	MELROSE	69	10.00	22	SD-IV	San Diego	No NQC - Pmax	Battery
1226	SDG&E	ZZZ_New Unit	22440	MELROSE	69	10.00	23	SD-IV	San Diego	No NQC - Pmax	Battery
1227	SDG&E	ZZZ_New Unit	22088	BOULEVRD	69	10.00	27	SD-IV		No NQC - Pmax	Battery
1228	SDG&E	ZZZ_New Unit	22136	CLAIRMNT	69	10.00	28	SD-IV	San Diego	No NQC - Pmax	Battery
1229	SDG&E	ZZZ_New Unit	22216	ELLIOTT	69	10.00	29	SD-IV	San Diego	No NQC - Pmax	Battery

ATTACHMENT A - List of physical resources accounted for in the 2025 and 2029 Local Capacity Technical Studies
Physical Res. 2029 LCR

	РТО	MKT/SCHED RESOURCE ID	BUS#	BUS NAME	kV	NQC	UNIT ID	LCR AREA	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
1230	SDG&E	ZZZ_New Unit	22636	PARADISE	69	10.00	30	SD-IV	San Diego	No NQC - Pmax	Battery
1231	SDG&E	ZZZ_New Unit	22112	CAPSTRNO	138	5.65	1	SD-IV	San Diego	No NQC - Pmax	Market
1232	SDG&E	ZZZ_New Unit	22949	BUE GEN 1_G4	0.69	0.00	1	SD-IV		Energy Only	Wind
1233	SDG&E	ZZZ_New Unit	23475	Q1832_GEN	0.385	0.00	1	SD-IV	San Diego	Waiting TPD allocation	Battery
1234	SDG&E	ZZZ_New Unit	23231	Q1432_PV	0.385	0.00	1	SD-IV	San Diego	Energy Only	Solar
1235	SDG&E	ZZZ_New Unit	23414	Q1166_PV_G1	0.63	0.00	1	SD-IV		Energy Only	Solar
1236	SDG&E	ZZZ_New Unit	23436	Q1166_PV_G2	0.63	0.00	1	SD-IV		Energy Only	Solar
1237	SDG&E	ZZZ_New Unit	22624	PALA	69	0.00	88	SD-IV	San Diego	Waiting TPD allocation	Battery
1238	SDG&E	ZZZZ_New Unit	23042	Q1806_GEN	0.66	250.00	1	SD-IV	San Diego	No NQC - Pmax	Battery
1239	SDG&E	ZZZZ_New Unit	22969	Q1532_GEN	34.5	90.00	1	SD-IV		No NQC - Pmax	Hybrid
1240	SDG&E	ZZZZZ_PTLOMA_6_NTCQF	22660	POINTLMA	69	0.00	1	SD-IV	San Diego	Retired	QF/Selfgen

# Attachment B – Effectiveness factors for procurement guidance

Table - Eagle Rock.

Effectiveness factors to the Eagle Rock-Cortina 115 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
31406	GEYSR5-6	1	36
31406	GEYSR5-6	2	36
31408	GEYSER78	1	36
31408	GEYSER78	2	36
31412	GEYSER11	1	37
31435	GEO.ENGY	1	35
31435	GEO.ENGY	2	35
31433	POTTRVLY	1	34
31433	POTTRVLY	3	34
31433	POTTRVLY	4	34
38020	CITY UKH	1	32
38020	CITY UKH	2	32

**Table - Fulton** 

Effectiveness factors to the Lakeville-Petaluma-Cotati 60 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
31466	SONMA LF	1	52
31422	GEYSER17	1	12
31404	WEST FOR	1	12
31404	WEST FOR	2	12
31414	GEYSER12	1	12
31418	GEYSER14	1	12
31420	GEYSER16	1	12
31402	BEAR CAN	1	12
31402	BEAR CAN	2	12

Attachment B – Effectiveness factors for procurement guidance

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
38110	NCPA2GY1	1	12
38112	NCPA2GY2	1	12
32700	MONTICLO	1	10
32700	MONTICLO	2	10
32700	MONTICLO	3	10
31435	GEO.ENGY	1	6
31435	GEO.ENGY	2	6
31408	GEYSER78	1	6
31408	GEYSER78	2	6
31412	GEYSER11	1	6
31406	GEYSR5-6	1	6
31406	GEYSR5-6	2	6

#### Table – North Coast and North Bay

Effectiveness factors to the Vaca Dixon-Lakeville 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
31400	SANTA FE	2	38
31430	SMUDGEO1	1	38
31400	SANTA FE	1	38
31416	GEYSER13	1	38
31424	GEYSER18	1	38
31426	GEYSER20	1	38
38106	NCPA1GY1	1	38
38108	NCPA1GY2	1	38
31421	BOTTLERK	1	36
31404	WEST FOR	2	36
31402	BEAR CAN	1	36
31402	BEAR CAN	2	36
31404	WEST FOR	1	36
31414	GEYSER12	1	36
31418	GEYSER14	1	36
31420	GEYSER16	1	36

Attachment B – Effectiveness factors for procurement guidance

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
31422	GEYSER17	1	36
38110	NCPA2GY1	1	36
38112	NCPA2GY2	1	36
31446	SONMA LF	1	36
32700	MONTICLO	1	31
32700	MONTICLO	2	31
32700	MONTICLO	3	31
31406	GEYSR5-6	1	18
31406	GEYSR5-6	2	18
31405	RPSP1014	1	18
31408	GEYSER78	1	18
31408	GEYSER78	2	18
31412	GEYSER11	1	18
31435	GEO.ENGY	1	18
31435	GEO.ENGY	2	18
31433	POTTRVLY	1	15
31433	POTTRVLY	2	15
31433	POTTRVLY	3	15
38020	CITY UKH	1	15
38020	CITY UKH	2	15

Table – Rio Oso

Effectiveness factors to the Rio Oso-Atlantic 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
32498	SPILINCF	1	49
32500	ULTR RCK	1	49
32456	MIDLFORK	1	33
32456	MIDLFORK	2	33
32458	RALSTON	1	33
32513	ELDRADO1	1	32
32514	ELDRADO2	1	32
32510	CHILIBAR	1	32

Attachment B – Effectiveness factors for procurement guidance

32486	HELLHOLE	1	31
32508	FRNCH MD	1	30
32460	NEWCSTLE	1	26
32478	HALSEY F	1	24
32512	WISE	1	24
38114	Stig CC	1	14
38123	Q267CT	1	14
38124	Q267ST	1	14
32462	CHI.PARK	1	8
32464	DTCHFLT1	1	4

Table – Sierra Overall

Effectiveness factors to the Table Mountain – Pease 60 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
32492	GRNLEAF2	1	17
32494	YUBA CTY	1	17
32496	YCEC	1	17
31794	WOODLEAF	1	6
31814	FORBSTWN	1	6
31832	SLY.CR.	1	6
31834	KELLYRDG	1	6
31888	OROVLENRG	1	6
32451	FREC	1	5
32450	COLGATE1	1	5
32466	NARROWS1	1	5
32468	NARROWS2	1	5
32470	CMP.FARW	1	5
32452	COLGATE2	1	5
32156	WOODLAND	1	4
32498	SPILINCF	1	4
32502	DTCHFLT2	1	4
32454	DRUM 5	1	3
32474	DEER CRK	1	3

Attachment B – Effectiveness factors for procurement guidance

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
32476	ROLLINSF	1	3
32484	OXBOW F	1	3
32504	DRUM 1-2	1	3
32504	DRUM 1-2	2	3
32506	DRUM 3-4	1	3
32506	DRUM 3-4	2	3
32464	DTCHFLT1	1	3
32480	BOWMAN	1	3
32488	HAYPRES+	1	3
32488	HAYPRES+	2	3
32472	SPAULDG	1	3
32472	SPAULDG	2	3
32472	SPAULDG	3	3
32462	CHI.PARK	1	3
32500	ULTR RCK	1	3
31784	BELDEN	1	3
31786	ROCK CK1	1	3
31788	ROCK CK2	1	3
31790	POE 1	1	3
31792	POE 2	1	3
31812	CRESTA	1	3
31812	CRESTA	2	3
31820	BCKS CRK	1	3
31820	BCKS CRK	2	3
32478	HALSEY F	1	2
32512	WISE	1	2
32460	NEWCSTLE	1	2
32510	CHILIBAR	1	2
32513	ELDRADO1	1	2
32514	ELDRADO2	1	2
32456	MIDLFORK	1	2
32456	MIDLFORK	2	2
32458	RALSTON	1	2

Attachment B – Effectiveness factors for procurement guidance

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
32486	HELLHOLE	1	2
32508	FRNCH MD	1	2
38114	STIG CC	1	1
38123	LODI CT1	1	1
38124	LODI ST1	1	1

**Table – San Jose**Effectiveness factors to the Metcalf 230/115 kV transformer #1:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
35850	GLRY COG	1	25
35850	GLRY COG	2	25
35851	GROYPKR1	1	25
35852	GROYPKR2	1	25
35853	GROYPKR3	1	25
35623	SWIFT	ВТ	21
35863	CATALYST	1	20
36863	DVRaGT1	1	9
36864	DVRbGt2	1	9
36865	DVRaST3	1	9
36859	Laf300	2	9
36859	Laf300	1	9
36858	Gia100	1	8
36895	Gia200	1	8
35861	SJ-SCL W	1	8
35854	LECEFGT1	1	7
35855	LECEFGT2	1	7
35856	LECEFGT3	1	7
35857	LECEFGT4	1	7
35858	LECEFST1	1	7
35860	OLS-AGNE	1	7

Table – South Bay-Moss Landing

Effectiveness factors to the Moss Landing-Las Aguillas 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
36209	SLD ENRG	1	20
36221	DUKMOSS1	1	20
36222	DUKMOSS2	1	20
36223	DUKMOSS3	1	20
36224	DUKMOSS4	1	20
36225	DUKMOSS5	1	20
36226	DUKMOSS6	1	20
36405	MOSSLND6	1	17
36406	MOSSLND7	1	17
35881	MEC CTG1	1	13
35882	MEC CTG2	1	13
35883	MEC STG1	1	13
35850	GLRY COG	1	12
35850	GLRY COG	2	12
35851	GROYPKR1	1	12
35852	GROYPKR2	1	12
35853	GROYPKR3	1	12
35623	SWIFT	BT	10
35863	CATALYST	1	10
36863	DVRaGT1	1	8
36864	DVRbGt2	1	8
36865	DVRaST3	1	8
36859	Laf300	2	8
36859	Laf300	1	8
36858	Gia100	1	7
36895	Gia200	1	7
35854	LECEFGT1	1	7
35855	LECEFGT2	1	7
35856	LECEFGT3	1	7
35857	LECEFGT4	1	7
35858	LECEFST1	1	7
35860	OLS-AGNE	1	7

Table – Ames/Pittsburg/Oakland

Effectiveness factors to the Ames-Ravenswood #1 115 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
35304	RUSELCT1	1	10
35305	RUSELCT2	2	10
35306	RUSELST1	3	10
33469	OX_MTN	1	10
33469	OX_MTN	2	10
33469	OX_MTN	3	10
33469	OX_MTN	4	10
33469	OX_MTN	5	10
33469	OX_MTN	6	10
33469	OX_MTN	7	10
33107	DEC STG1	1	3
33108	DEC CTG1	1	3
33109	DEC CTG2	1	3
33110	DEC CTG3	1	3
33102	COLUMBIA	1	3
33111	LMECCT2	1	3
33112	LMECCT1	1	3
33113	LMECST1	1	3
33151	FOSTER W	1	2
33151	FOSTER W	2	2
33151	FOSTER W	3	2
33136	CCCSD	1	2
33141	SHELL 1	1	2
33142	SHELL 2	1	2
33143	SHELL 3	1	2
32900	CRCKTCOG	1	2
32910	UNOCAL	1	2
32910	UNOCAL	2	2
32910	UNOCAL	3	2
32920	UNION CH	1	2

Attachment B – Effectiveness factors for procurement guidance

32921	ChevGen1	1	2
32922	ChevGen2	1	2
32923	ChevGen3	3	2
32741	HILLSIDE_12	1	2
32901	OAKLND 1	1	1
32902	OAKLND 2	2	1
32903	OAKLND 3	3	1
38118	ALMDACT1	1	1
38119	ALMDACT2	1	1

#### Effectiveness factors to the Moraga-Claremont #2 115 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
32921	ChevGen1	1	17
32922	ChevGen2	1	17
32923	ChevGen3	3	17
32901	OAKLND 1	1	16
32902	OAKLND 2	1	16
32903	OAKLND 3	1	16
38118	ALMDACT1	1	16
38119	ALMDACT2	1	16
32920	UNION CH	1	16
32910	UNOCAL	1	15
32910	UNOCAL	2	15
32910	UNOCAL	3	15
33141	SHELL 1	1	10
33142	SHELL 2	1	10
33143	SHELL 3	1	10
33136	CCCSD	1	9
32900	CRCKTCOG	1	8
33151	FOSTER W	1	6
33151	FOSTER W	2	6
33151	FOSTER W	3	6
33102	COLUMBIA	1	3
33111	LMECCT2	1	3
33112	LMECCT1	1	3
33113	LMECST1	1	3
33107	DEC STG1	1	3
33108	DEC CTG1	1	3

#### Attachment B – Effectiveness factors for procurement guidance

33109	DEC CTG2	1	3
33110	DEC CTG3	1	3

#### Table – Greater Bay Area

Effectiveness factors to the Metcalf 500/230 kV Transformer #13:

Gen Bus	Gen Name	Gen ID	Eff Factor (%)
35881	MEC CTG1	1	40
35882	MEC CTG2	1	40
35883	MEC STG1	1	40
35859	HGST-LV	RN	36
35850	GLRY COG	1	30
35850	GLRY COG	2	30
35851	GROYPKR1	1	30
35852	GROYPKR2	1	30
35853	GROYPKR3	1	30
35623	SWIFT	ВТ	29
35863	CATALYST	1	28
33469	OX_MTN	1	22
33469	OX_MTN	2	22
33469	OX_MTN	3	22
33469	OX_MTN	4	22
33469	OX_MTN	5	22
33469	OX_MTN	6	22
33469	OX_MTN	7	22
36863	DVRaGT1	1	21
36864	DVRbGt2	1	21
36865	DVRaST3	1	21
36859	Laf300	2	20
36859	Laf300	1	20
36858	Gia100	1	20
36895	Gia200	1	20
35861	SJ-SCL W	1	20
35854	LECEFGT1	1	20
35855	LECEFGT2	1	20
35856	LECEFGT3	1	20
35857	LECEFGT4	1	20
35858	LECEFST1	1	20
35860	OLS-AGNE	1	20
33468	SRI INTL	1	16

Attachment B – Effectiveness factors for procurement guidance

35304	RUSELCT1	1	12
35305	RUSELCT2	2	12
35306	RUSELST1	3	12
36209	SLD ENRG	1	9
36221	DUKMOSS1	1	7
36222	DUKMOSS2	1	7
36223	DUKMOSS3	1	7
36224	DUKMOSS4	1	7
36225	DUKMOSS5	1	7
36226	DUKMOSS6	1	7
30532	0162-WD	FW	7
39233	GRNRDG	1	6
33107	DEC STG1	1	6
33108	DEC CTG1	1	6
33109	DEC CTG2	1	6
33110	DEC CTG3	1	6
33102	COLUMBIA	1	6
33111	LMECCT2	1	6
33112	LMECCT1	1	6
33113	LMECST1	1	6
33136	CCCSD	1	6
33141	SHELL 1	1	6
33142	SHELL 2	1	6
33143	SHELL 3	1	6
33151	FOSTER W	1	6
33151	FOSTER W	2	6
33151	FOSTER W	3	6
32901	OAKLND 1	1	6
32902	OAKLND 2	1	6
32903	OAKLND 3	1	6
38118	ALMDACT1	1	6
38119	ALMDACT2	1	6
32910	UNOCAL	1	6
32910	UNOCAL	2	6
32910	UNOCAL	3	6
32920	UNION CH	1	5
33139	STAUFER	1	5
32741	HILLSIDE_12	1	5
32921	ChevGen1	1	5
32922	ChevGen2	1	5
32923	ChevGen3	3	5

Attachment B – Effectiveness factors for procurement guidance

32900	CRCKTCOG	1	5
33188	MARSHCT1	1	3
33189	MARSHCT2	2	3
33190	MARSHCT3	3	3
33191	MARSHCT4	4	3
33118	GATEWAY1	1	3
33119	GATEWAY2	1	3
33120	GATEWAY3	1	3
30522	0354-WD	EW	3
33178	RVEC_GEN	1	3
35310	PPASSWND	1	3

Table – Herndon

Effectiveness factors to the Herndon-Manchester 115 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
34624	BALCH 1	1	22
34616	KINGSRIV	1	21
34648	DINUBA E	1	20
34671	KRCDPCT1	1	19
34672	KRCDPCT2	1	19
34308	KERCKHOF	1	18
34344	KERCK1-1	1	18
34345	KERCK1-3	3	18
34677	Q558	1	15
34690	CORCORAN_3	FW	15
34692	CORCORAN_4	FW	15
34696	CORCORANPV_S	1	15
34610	HAAS	1	13
34610	HAAS	2	13
34612	BLCH 2-2	1	13
34614	BLCH 2-3	1	13
34431	GWF_HEP1	1	8
34433	GWF_HEP2	1	8
34617	Q581	1	5
34680	KANSAS	1	5

Attachment B – Effectiveness factors for procurement guidance

34467	GIFFEN_DIST	1	4
34563	STROUD_DIST	2	4
34563	STROUD_DIST	1	4
34608	AGRICO	2	4
34608	AGRICO	3	4
34608	AGRICO	4	4
34644	Q679	1	4
365502	Q632BC1	1	4

**Table – LA Basin**Effectiveness factors to the San Onofre – San Luis Rey #1 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff. Factor (%)
24067	HUNT2 G	LP	16
24067	HUNT2 G	HP	16
24580	HUNTBCH CTG1	G1	16
24581	HUNTBCH CTG2	G2	16
24582	HUNTBCH STG	S1	16
25671	WH_STN_2	1	14
25670	WH_STN_1	1	14
25883	VILLAPK EQFD	EQ	13
29952	CanyonGT 2	2	13
29952	CanyonGT 3	3	13
29952	CanyonGT 4	4	13
29952	CanyonGT 1	1	13
24005	ALAMT5 G	5	12
24003	ALAMT3 G	LP	12
24003	ALAMT3 G	HP	12
24004	ALAMT4 G	HP	12
24004	ALAMT4 G	LP	12
25812	CHINO EQFD	EQ	12
24575	ALAMT CTG1	G1	12
24576	ALAMT CTG2	G2	12
24577	ALAMT STG	S1	12
25818	DELAMO EQFD	EQ	12

Attachment B – Effectiveness factors for procurement guidance

25810	CENTER EQFD	EQ	12
25523	ALMITOS B1_G	1	12
24164	ARCO 6G	6	12
24171	LBEACH34	4	12
24171	LBEACH34	3	12
24170	LBEACH12	2	12
24170	LBEACH12	1	12
24139	SERRFGEN	D1	12
25844	MIRALOM EQFD	EQ	11
24337	VENICE	1	11
25820	EL NIDO EQFD	EQ	11
25838	LA FRSA EQFD	EQ	11
25889	WALNUT EQFD	EQ	11
24122	REDON6 G	6	11
24124	REDON8 G	8	11
29902	ELSEG7GT	7	11
29904	ELSEG5GT	5	11
24062	HARBOR G	1	11
24062	HARBOR G	HP	11
29903	ELSEG6ST	6	11
25510	HARBORG4	LP	11
29901	ELSEG8ST	8	11
24241	MALBRG3G	S3	11
24240	MALBRG2G	C2	11
24239	MALBRG1G	C1	11
25842	MESACAL EQFD	EQ	11
29205	WALCRKG5	1	11
29204	WALCRKG4	1	11
29203	WALCRKG3	1	11
29202	WALCRKG2	1	11
29201	WALCRKG1	1	11
25849	NEWMARK FD1	EQ	11
25857	RIOHNDO EQFD	EQ	11
25851	PADUA EQFD	EQ	11
25042	PASADNA3	1	10

Attachment B – Effectiveness factors for procurement guidance

25043	PASADNA4	1	10
25822	ETIWNDA EQFD	EQ	10
25422	ETI MWDG	1	10
29013	GLENARM5_CT	СТ	10
25885	VSTA EQFD	EQ	10
29014	GLENARM5_ST	ST	10
29594	VSTA_EQFD	EQ	10
25603	DVLCYN3G	3	9
25604	DVLCYN4G	4	9
25659	MJVSPHN3	3	9
25658	MJVSPHN2	2	9
25657	MJVSPHN1	1	9
24300	RERC2G4	1	9
24299	RERC2G3	1	9
24243	RERC2G	1	9
24242	RERC1G	1	9
25648	DVLCYN1G	1	9
25649	DVLCYN2G	2	9
25861	SNBRDNO EQFD	EQ	9
25863	SNBRDNO FD1	EQ	9
24921	MNTV-G3A	1	9
24922	MNTV-G3B	1	9
24923	MNTV-ST3	1	9
24924	MNTV-G4A	1	9
25872	VALLEYS EQFD	EQ	9
25846	WDT786G	EQ	9
100712	CABAZON_WND	1	8
25634	BUCKWND	W5	7
25634	BUCKWND	QF	7
25646	SANWIND	Q1	7
25645	VENWIND	EU	7
25645	VENWIND	Q2	7
25645	VENWIND	Q1	7
25646	SANWIND	Q2	7
25636	RENWIND	Q1	7

Attachment B – Effectiveness factors for procurement guidance

24815	GARNET	QF	7
24815	GARNET	W2	7
24815	GARNET	W3	7
24815	GARNET	G2	7
24815	GARNET	G3	7
24815	GARNET	G1	7
24815	GARNET	PC	7
25636	RENWIND	Q2	7
25639	SEAWIND	QF	7
25637	TRANWND	QF	7
25640	PANAERO	QF	7
25827	GARNET FD	EQ	7
29021	WINTEC6	1	7
25677	WHITEWTR	1	7
25834	HI DSRT FD	EQ	7
25833	WDT458G	EQ	7
698105	ALTWNDGEN1	1	7
29069	MOUNTWND_3G	1	7
29049	BLAST_G	1	7
29290	CABAZON_G	1	7
698106	ALTWNDGEN2	1	7
29066	MOUNTWND_2G	1	7
29107	SENTINEL_G7	1	7
29103	SENTINEL_G3	1	7
29102	SENTINEL_G2	1	7
29105	SENTINEL_G5	1	7
29106	SENTINEL_G6	1	7
29108	SENTINEL_G8	1	7
29104	SENTINEL_G4	1	7
29101	SENTINEL_G1	1	7
29064	MOUNTWND_1G	1	7
25633	CAPWIND	QF	6

Attachment B – Effectiveness factors for procurement guidance

Effectiveness factors to the Mesa – Laguna Bell #1 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
29951	REFUSE	D1	35
24239	MALBRG1G	C1	34
24240	MALBRG1G	C2	34
24241	MALBRG1G	S3	34
29903	ELSEG6ST	6	27
29904	ELSEG5GT	5	27
29902	ELSEG7ST	7	27
29901	ELSEG8GT	8	27
24337	VENICE	1	26
24094	MOBGEN1	1	26
24329	MOBGEN2	1	26
24332	PALOGEN	D1	26
24011	ARCO 1G	1	23
24012	ARCO 2G	2	23
24013	ARCO 3G	3	23
24014	ARCO 4G	4	23
24163	ARCO 5G	5	23
24164	ARCO 6G	6	23
24062	HARBOR G	1	23
24062	HARBOR G	HP	23
25510	HARBORG4	LP	23
24327	THUMSGEN	1	23
24020	CARBGEN1	1	23
24328	CARBGEN2	1	23
24139	SERRFGEN	D1	23
24070	ICEGEN	1	22
24001	ALAMT1 G	I	18
24002	ALAMT2 G	2	18
24003	ALAMT3 G	3	18
24004	ALAMT4 G	4	18
24005	ALAMT5 G	5	18
24161	ALAMT6 G	6	18
90000	ALMT-GT1	X1	18

Attachment B – Effectiveness factors for procurement guidance

ALMT-GT2	X2	18
ALMT-ST1	X3	18
CTRPKGEN	1	18
SIGGEN	D1	18
BARPKGEN	1	13
WALCRKG1	1	12
WALCRKG2	1	12
WALCRKG3	1	12
WALCRKG4	1	12
WALCRKG5	1	12
BREAPWR2	C1	12
BREAPWR2	C2	12
BREAPWR2	C3	12
BREAPWR2	C4	12
BREAPWR2	S1	12
ORCOGEN	I	12
COYGEN	I	11
WDT1406_G	I	11
DowlingCTG	1	10
CanyonGT 1	1	10
CanyonGT 2	2	10
CanyonGT 3	3	10
CanyonGT 4	4	10
VILLA PK	DG	9
	ALMT-ST1 CTRPKGEN SIGGEN BARPKGEN WALCRKG1 WALCRKG2 WALCRKG3 WALCRKG4 WALCRKG5 BREAPWR2 BREAPWR2 BREAPWR2 BREAPWR2 CORCOGEN COYGEN WDT1406_G DowlingCTG CanyonGT 1 CanyonGT 3 CanyonGT 4	ALMT-ST1 X3  CTRPKGEN 1  SIGGEN D1  BARPKGEN 1  WALCRKG1 1  WALCRKG2 1  WALCRKG3 1  WALCRKG4 1  WALCRKG5 1  BREAPWR2 C1  BREAPWR2 C2  BREAPWR2 C3  BREAPWR2 C4  BREAPWR2 C4  BREAPWR2 C1  CAUSTIN COYGEN I  WDT1406_G I  CanyonGT 1 1  CanyonGT 2 2  CanyonGT 3 3  CanyonGT 4 4

**Table – Rector**Effectiveness factors to the Rector-Vestal 230 kV line:

Gen Bus	Gen Name	Gen ID	MW Eff Factor (%)
24370	KAWGEN	1	51
24306	B CRK1-1	1	45
24306	B CRK1-1	2	45
24307	B CRK1-2	3	45
24307	B CRK1-2	4	45
24319	EASTWOOD	1	45

Attachment B – Effectiveness factors for procurement guidance

24323	PORTAL	1	45
24308	B CRK2-1	1	45
24308	B CRK2-1	2	45
24309	B CRK2-2	3	45
24309	B CRK2-2	4	45
24310	B CRK2-3	5	45
24310	B CRK2-3	6	45
24315	B CRK 8	81	45
24315	B CRK 8	82	45
24311	B CRK3-1	1	45
24311	B CRK3-1	2	45
24312	B CRK3-2	3	45
24312	B CRK3-2	4	45
24313	B CRK3-3	5	45
24317	MAMOTH1G	1	45
24318	MAMOTH2G	2	45
24314	B CRK 4	41	43
24314	B CRK 4	42	43

Table - San Diego

Effectiveness factors to the Sycamore – Suncrest 230 kV line:

Gen Bus	Gen Name	Gen ID	Eff. Factor (%)
23929	Q1669_ES	12	24
22124	CHCARITA	1	23
22487	MEF MR2	1	23
22486	MEF MR1	1	23
22120	CARLTNHS	1	23
22120	CARLTNHS	2	23
22915	KUMEYAAY	1	23
23871	Q1662_ES	12	22
22208	EL CAJON	1	22
23320	EC GEN2	1	22
23560	Q1047_BESS	1	22
23412	Q1434_G	10	22

Attachment B – Effectiveness factors for procurement guidance

22150	EC GEN1	1	22
22204	EASTGATE	1	22
22625	LkHodG1	1	22
22626	LkHodG2	1	22
22448	MESAHGTS	1	22
22496	MISSION	1	22
22092	CABRILLO	1	22
23933	Q1670_ES	12	22
22870	VALCNTR	59	22
22704	SAMPSON	1	22
22333	GOALLINE GEN	1	22
22333	GOALLINE GEN	2	22
23628	Q1191_G2	1	22
22074	LRKSPBD1	1	22
22075	LRKSPBD2	1	22
22604	OTAY	3	22
22604	OTAY	1	22
22617	OY GEN	1	22
22262	PEN_CT1	1	22
22149	CALPK_BD	1	21
22153	CALPK_ES	1	21
22257	ES GEN	1	21
22256	ESCNDIDO	12	21
22256	ESCNDIDO	11	21
22256	ESCNDIDO	10	21
23685	Q1045_GEN	C7	21
22263	PEN_CT2	1	21
22265	PEN_ST	1	21
23557	Q1048_BESS	C7	21
22724	SANMRCOS	1	21
22789	EA GEN1 U10	1	21
22783	EA GEN1 U8	1	20
22784	EA GEN1 U9	1	20
22786	EA GEN1 U6	1	20
22787	EA GEN1 U7	1	20
22628	PA GEN1	1	20

Attachment B – Effectiveness factors for procurement guidance

22629	PA GEN2	1	20
22606	OTAYMGT2	1	20
22605	OTAYMGT1	1	20
22607	OTAYMST1	1	20
23544	Q1169_BESS1	1	19
23162	PIO PICO 1A	1	19
23163	PIO PICO 1B	1	19
23164	PIO PICO 1C	1	19
23519	Q1169_BESS2	1	19
23841	Q1657_ES	12	17
22112	CAPSTRNO	1	17

Effectiveness factors to the Imperial Valley – El Centro 230 kV line (i.e., the "S" line):

Gen Bus	Gen Name	Gen ID	Eff Factor. (%)
22982	TDM CTG2	1	25
22983	TDM CTG3	1	25
22981	TDM STG	1	25
22997	INTBCT	1	25
22996	INTBST	1	25
23440	DW GEN2 G1	1	25
23298	DW GEN1 G1	G1	25
23156	DU GEN1 G2	G2	25
23299	DW GEN1 G2	G2	25
23155	DU GEN1 G1	G1	25
23441	DW GEN2 G2	1	25
23442	DW GEN2 G3A	1	25
23443	DW GEN2 G3B	1	25
23314	OCO GEN G1	G1	23
23318	OCO GEN G2	G2	23
23100	ECO GEN1 G	G1	22
23352	ECO GEN2 G	1	21
22605	OTAYMGT1	1	18
22606	OTAYMGT2	1	18
22607	OTAYMST1	1	18

Attachment B – Effectiveness factors for procurement guidance

23162	PIO PICO CT1	1	18
23163	PIO PICO CT2	1	18
23164	PIO PICO CT3	1	18
22915	KUMEYAAY	1	17
23320	EC GEN2	1	17
22150	EC GEN1	1	17
22617	OY GEN	1	17
22604	OTAY	1	17
22604	OTAY	3	17
22172	DIVISION	1	17
22576	NOISLMTR	1	17
22704	SAMPSON	1	17
22092	CABRILLO	1	17
22074	LRKSPBD1	1	17
22075	LRKSPBD2	1	17
22660	POINTLMA	1	17
22660	POINTLMA	2	17
22149	CALPK_BD	1	17
22448	MESAHGTS	1	16
22120	CARLTNHS	1	16
22120	CARLTNHS	2	16
22496	MISSION	1	16
22486	MEF MR1	1	16
22124	CHCARITA	1	16
22487	MEF MR2	1	16
22625	LkHodG1	1	16
22626	LkHodG2	2	16
22332	GOALLINE	1	15
22262	PEN_CT1	1	15
22153	CALPK_ES	1	15
22786	EA GEN1 U6	1	15
22787	EA GEN1 U7	1	15
22783	EA GEN1 U8	1	15
22784	EA GEN1 U9	1	15
22789	EA GEN1 U10	1	15
22257	ES GEN	1	15

Attachment B – Effectiveness factors for procurement guidance

22263	PEN_CT2	1	15
22265	PEN_ST	1	15
22724	SANMRCOS	1	15
22628	PA GEN1	1	14
22629	PA GEN2	1	14
22082	BR GEN1	1	14
22112	CAPSTRNO	1	12