

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop an
Electricity Integrated Resource Planning
Framework and to Coordinate and Refine Long-
Term Procurement Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

SAN JOSÉ CLEAN ENERGY 2018 INTEGRATED RESOURCE PLAN

August 1, 2018

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Pursuant to Decision 18-02-018, San José Clean Energy (“SJCE”) submits its 2018 Integrated Resource Plan (“IRP”).

Dated: August 1, 2018

Respectfully submitted,

/s/

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Standard LSE Plan

San José Clean Energy

2018 INTEGRATED RESOURCE PLAN

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1. EXECUTIVE SUMMARY

San José Clean Energy's (SJCE) 2018 Integrated Resource Plan (SJCE 2018 IRP) sets forth SJCE's plan to meet the electricity needs of its customers from 2018 to 2030 consistent with San José's policy goals, and applicable legislative and regulatory mandates. SJCE's 2018 IRP demonstrates that based on current market conditions, SJCE will be able to meet its aggressive GHG-reduction objectives at reasonable customer bills, and that it complies with State law and California Public Utilities Commission (CPUC) requirements.

SJCE is one of several key initiatives by San José to achieve the decarbonization goals of the United's Nations Climate Change Paris Agreement.¹ To achieve this goal, in February 2018, San José's City Council unanimously approved Climate Smart San José², a concrete plan that incorporates fresh, new thinking on urban sustainability and charts an economy-wide strategy.

San José's City Council adopted the criteria listed below for the SJCE 2018 IRP on June 26, 2018. These criteria derive from SJCE's September 18, 2017 Implementation Plan (the SJCE Implementation Plan) adopted by City Council on August 29, 2017 and from Climate Smart San José. Both the SJCE Implementation Plan and Climate Smart San José were developed with extensive public input. City Council authorized SJCE to file with the CPUC on August 1, 2018 an IRP that is consistent with these criteria.

SJCE 2018 IRP Criteria:

- SJCE will offer at least one power mix option with a rate equal to or less than Pacific Gas and Electric Company (PG&E)'s rates.
- SJCE will offer at least one power mix option at 10 percent or more renewables than PG&E.
- SJCE will offer at least one power mix option that is 100 percent renewable.
- SJCE's initial resource mix will include a proportion of renewable energy exceeding California's prevailing Renewable Portfolio Standard (RPS) procurement mandate.
- By 2021, SJCE's residents will have a base power mix that is 100 percent Greenhouse Gas emissions (GHG) free.
- SJCE will maintain, at minimum, low-income programs at the same level as PG&E.
- After becoming established, SJCE will develop local programs including energy efficiency, demand response, distributed generation and renewable energy.

¹ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

² February 2018, Climate Smart San José available at <http://www.sanJoseca.gov/cssj>

- SJCE will encourage distributed renewable generation in the local area through the offering of a net energy metering tariff; a standardized power purchase agreement or "Feed-In Tariff"; and other creative, customer-focused programs targeting increased access to local renewable energy sources.
- By 2030, SJCE's base offering will be at least 60 percent renewable.
- By 2030, San José will have 668MW of local renewables and by 2040, San José will be the world's first one GW solar city.
- By 2030, 60 percent of all passenger vehicles in the City will be electric.
- By 2020, 100 percent of new homes will be ZNE, and by 2030, 25 percent of existing homes will be energy efficient and all-electric.
- SJCE will comply with all applicable State Law including the Renewable Portfolio Standard (RPS), Resource Adequacy (RA) requirements, and GHG reduction requirements.
- SJCE will identify the disadvantaged communities SJCE will serve, describe the impacts of such service on the disadvantaged communities, and set forth SJCE's plans to benefit these communities.

Consistent with the CPUC's requirements, SJCE developed two portfolios, a Conforming and Preferred Portfolio. The key difference between the portfolios is the load forecast. Consistent with CPUC requirements, the Conforming Portfolio uses the load forecast prepared for SJCE by the California Energy Commission (CEC). The Preferred Portfolio adjusts the load forecast to correct the phase-in schedule (the CEC based its load forecast on a phase-in plan that was revised) and incorporate the opt out rate experienced by SJCE's neighboring Community Choice Aggregation (CCA) programs. In addition, the load is adjusted to reflect the City's aggressive goals for energy efficiency, distributed renewable generation and demand-response.

Both portfolios assume SJCE's the base portfolio will be 100 percent greenhouse gas (GHG) free no later than 2021. Both plans reflect annual RPS resources in an amount at least 10 percent more than required by California's Renewable Portfolio Standard. Both portfolios reflect that San José expects to use increasing amounts of new solar and wind coupled with large hydro to meet its needs. The SJCE 2018 IRP demonstrates that SJCE will meet its Resource Adequacy, Renewable Portfolio Standard, and GHG-reduction obligations.

Figures E-1 and E-2 summarize for the Conforming and Preferred Portfolios, the existing and new resource procurement in terms of both capacity and energy for four distinct years: 2018, 2022, 2026 and 2030.

Figure E-1: Resource Types Selected in Conforming IRP Portfolio in Years 2018, 2022, 2026 and 2030

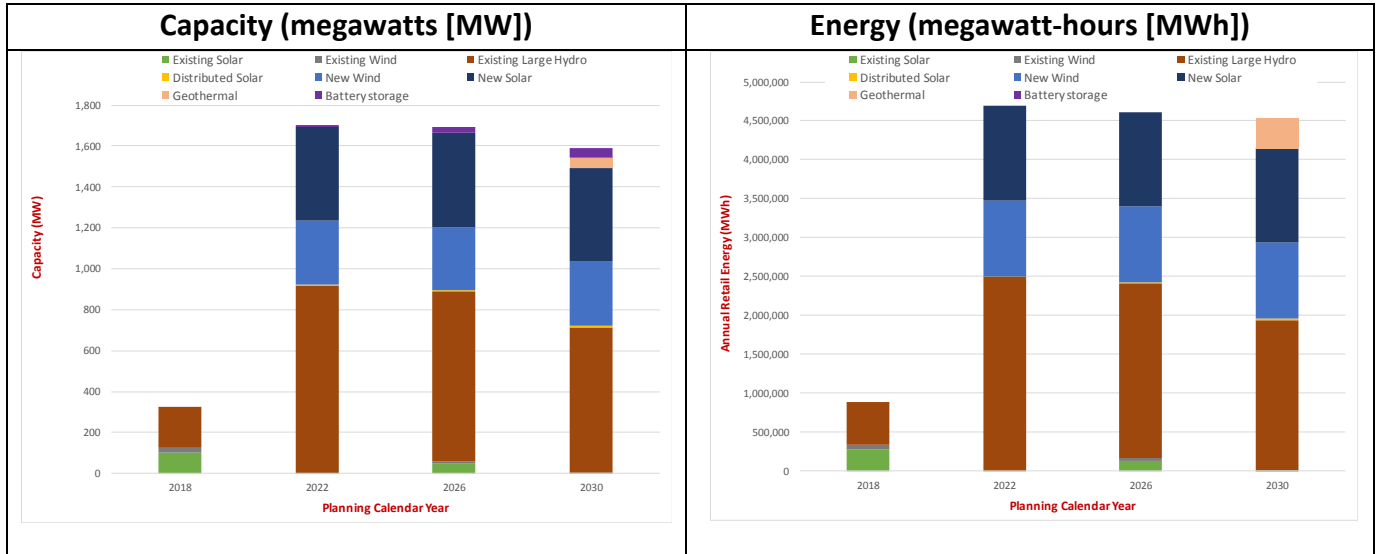
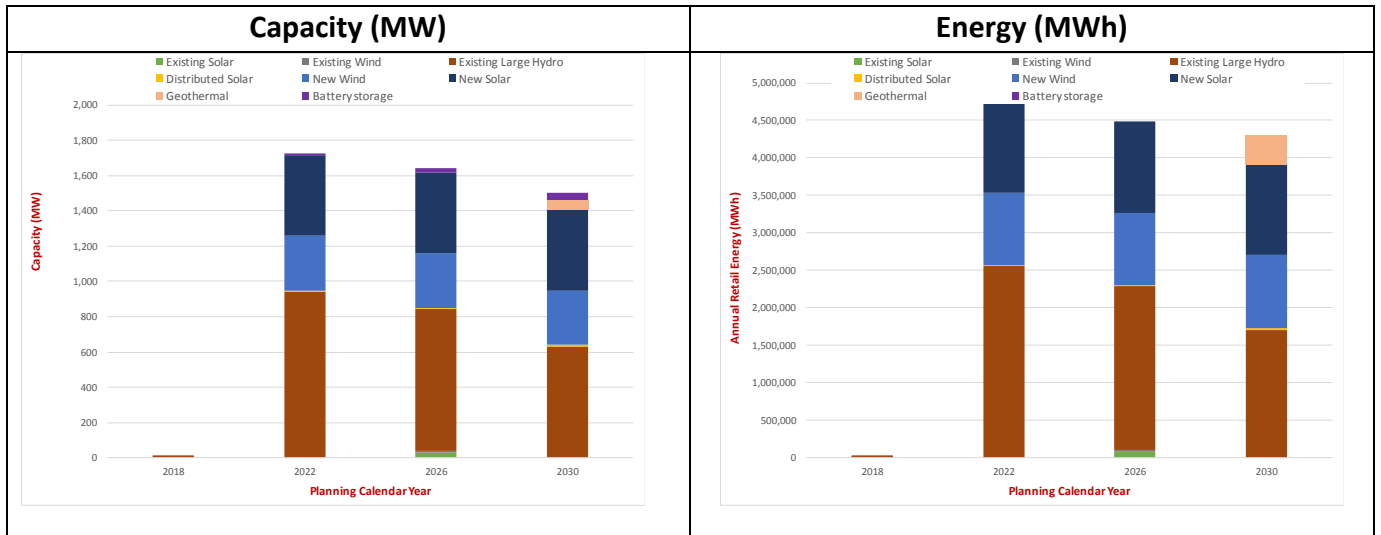


Figure E-2: Resource Types Selected in Preferred IRP Portfolio in Years 2018, 2022, 2026 and 2030



SJCE has committed to provide its Phase I customers 100 percent GHG-free power and to provide all SJCE customers 100 percent GHG free power beginning in 2021. Both the Conforming and the Preferred Portfolios do this on an annual basis. However, the CPUC’s GHG estimator does not give Load Service Entities (LSEs) full credit for GHG reductions during periods when the LSE’s

GHG-free resources exceed their load.³ Thus, using the CPUC GHG estimator both portfolios show GHG emissions, although these are well below the GHG emissions benchmark assigned to SJCE by the CPUC. The CPUC's GHG estimator tool uses an analysis that is more granular than the annual assessment that has been used to calculate portfolio GHG emissions in the past in California. The estimator ascribes to SJCE the GHG-profile of system power, including fossil generation, that operates to balance the resources procured by SJCE with its load profile within the year. This analysis does not credit SJCE for all its GHG-free procurement. In addition, the CPUC's GHG estimator does not recognize all California RPS compliant renewable energy as GHG-free.

For purposes of determining compliance with its goal by 2021 that SJCE's residents will have a base power mix that is 100 percent GHG emissions free, San José does not require that its GHG-free generation be matched with its load at the level of granularity required by the CPUC's GHG estimator. Instead, SJCE recognizes the GHG-free energy credit for all renewable energy that qualifies as renewable energy under the California RPS law. For an entity with 100% GHG-free targets such as SJCE, the CPUC's GHG estimator approach for estimating GHG emissions unnecessarily increases costs and eliminates the benefits of operating within a larger integrated electricity system.

Nevertheless, SJCE is aware that California is pushing the envelope on renewables penetration and that it is important to make progress on balancing renewables, including their operational profile, with resources that can operate when renewables are not available. Further, as it explores options for longer term commitments, SJCE intends to explore alternatives to large hydro to meet its GHG reduction commitments in a manner that maximizes GHG reduction benefits. SJCE intends to continue to work with other CCAs and State agencies to address these challenges and to maximize decarbonization and bang-for-the-buck for the San José community in a manner that is responsible and data-driven.

The SJCE 2018 IRP is necessarily prospective as SJCE will launch with only a small municipal load in September 2018. SJCE intends to extend service to San José's residents and businesses in March of 2019. SJCE is only now soliciting and procuring power for 2018, and developing its solicitations to procure power for 2019.

In addition, San José is in the process of operationalizing Climate Smart San José. Additional evaluation and modeling is necessary to convert the aspirational goals in the document into actionable quantitative initiatives. Accordingly, the SJCE 2018 IRP commences the process of

³ See Attachment A: Final Greenhouse Gas Accounting Methodology for use in Load-Serving Entity Portfolio Development in the 2017-18 Integrated Resource Planning Cycle to the May 25, 2018 ALJ Ruling, p. A-1.

incorporating the Climate Smart San José goals into San José’s procurement assumptions and plans, but is constrained by current financial and technological limitations.

While guided by the information set forth in this IRP, San José will develop and modify over time the composition of its portfolio based on the outcome of its competitive solicitations and the further work to operationalize Climate Smart San José while pursuing the policy objectives adopted by City Council and the needs and desires of SJCE customers. City Council directed SJCE to update its IRP every two years. SJCE expects that the next IRP will be considerably more detailed and robust as it will be based on actual procurement and will benefit from operational experience and more extensive community and customer input.

Finally, consistent with state law requirements and local objectives, the 2018 SJCE IRP includes a section on disadvantaged communities. San José is a very diverse city with a sizeable population living under the poverty threshold. A central message of Climate Smart San José is that San José aims to make a good life accessible to all its residents. The 2018 SJCE IRP section on disadvantaged communities identifies the disadvantaged communities in San José and sets forth San José’s commitment to adjust its procurement and target programs in a manner that benefits all customer segments. However, as in the case of procurement, this section is largely prospective as SJCE’s is only just beginning to plan its efforts to engage with and address the needs of San Jose communities.

As requested by the CPUC, SJCE’s Exhibit A includes six (6) attachments:

- Attachment BC: a completed *Excel* version of the CPUC’s Baseline Resource Data Template for the Conforming Portfolio;
- Attachment BP: a completed *Excel* version of the CPUC’s Baseline Resource Data Template for the Preferred Portfolio;
- Attachment NC: a completed *Excel* version of the CPUC’s New Resource Data Template for the Conforming Portfolio;
- Attachment NP: a completed *Excel* version of the CPUC’s New Resource Data Template for the Preferred Portfolio;
- Attachment GC: a completed *Excel Dashboard* workbook of the CPUC’s GHG Calculator for IRP v1.4.5 for the Conforming Portfolio; and
- Attachment GP: a completed *Excel Dashboard* workbook of the CPUC’s GHG Calculator for IRP v1.4.5 for the Preferred Portfolio

2. STUDY DESIGN

Load Assignments

In this IRP, SJCE submits two portfolios, a “Conforming Portfolio,” and a “Preferred Portfolio.” For projecting load across the IRP Planning Horizon (i.e., until 2030) for its “Conforming” IRP portfolio, SJCE used the Additional Achievable Energy Efficiency (AAEE) and Additional Achievable Photovoltaics (AAPV) levels assumed in the “mid Baseline mid AAEE mid AAPV” version of Form 1.1c of the CEC’s adopted 2017 IEPR forecast. SJCE’s “Preferred” IRP portfolio reflects SJCE’s actual customer phase-in, lower opt out rates (consistent with the recent experience of neighboring CCAs), and greater amounts of AAEE and AAPV than what was assumed under the Conforming Portfolio in order to reflect San José’s commitment to energy efficiency, distributed renewable generation and demand-response.

- In early 2018, SJCE adjusted its phase-in plans to two phases: September 2018 for Municipal Accounts, and March 2019 for the remainder of San José.⁴ The CEC’s load forecast appears to reflect an earlier phase-in schedule that has been changed.
- San José assumed an opt out rate of 3 percent consistent with the experience of neighboring CCAs.
- San José assumed an AAEE consistent with doubling of the 2015 AAEE level adopted in the 2015 CEC’s Integrated Energy Policy Report (IEPR) demand forecast, rather than 1.5 times 2015 AAEE level as assumed in the Conforming Portfolio. State law requires doubling of energy efficiency by 2030,⁵ and an aggressive level of energy efficiency is consistent with the SJCE 2018 criteria that “[a]fter becoming established, SJCE will develop local programs including energy efficiency, demand response, distributed generation and renewable energy.” Moreover, the reduction in load could also be achieved by demand-response and aggressive penetration of distributed behind-the-meter renewable generation consistent with the following two SJCE criteria: 1) SJCE will encourage distributed renewable generation in the local area through the offering of a net energy metering tariff; a standardized power purchase agreement or “Feed-In Tariff”; and other creative, customer-focused programs targeting increased access to local renewable energy sources; and 2) by 2030, San José will have 668MW of local renewables and by 2040, San José will be the world’s first one GW solar city.

The combined effect of these changes results in Preferred Portfolio load levels that, compared to the load in the Conforming Portfolio, are significantly lower in 2018 and 2019, slightly higher during the 2020 through 2023 period, and then somewhat lower thereafter.

⁴ <http://www.sanJoseca.gov/DocumentCenter/View/77610>

⁵ http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350

Required and Optional Portfolios

The Conforming Portfolio uses the assigned load forecast and is consistent with the Reference System Portfolio as follows:

- It uses the LSE-Specific 2030 GHG Emissions Benchmark assigned to SJCE in the Administrative Law Judge’s (ALJ) ruling seeking comment on greenhouse gas emissions accounting methods and addressing updated greenhouse gas benchmarks, dated April 3, 2018, Docket number R.16-02-007 (April 3, 2018 GHG Benchmark ALJ Ruling).
- It uses inputs and assumptions (e.g., baseline generating fleet, candidate resource cost assumptions, financial assumptions, etc.) matching those used in developing the Reference System Portfolio, with the following exceptions based on updated information:
 - SJCE used the “mid Baseline mid AAEE mid AAPV” version of Form 1.1c of the CEC’s adopted 2017 IEPR demand forecasts.
 - The LSE load modifier assumptions are consistent with the 2017 IEPR demand forecast projections for photovoltaic (PV) and non-PV self-generation, and load-modifying demand response included in the “mid Baseline mid AAEE mid AAPV” case.
 - SJCE did not perform any production cost simulations incorporating the 2017 IEPR burner-tip natural gas price projections, which are based on the April 2018 Updated Model.⁶ Instead, it utilized currently available forward price data through 2021 escalated by a constant escalation rate through 2030.

As described above, the Preferred Portfolio deviates from the Conforming Portfolio primarily with respect to load as described in Section 2 above. These changes are described in detail in Section 5: Data.

GHG Emissions Benchmark

Rather than using the GHG Planning Price, SJCE has elected to use the LSE-specific GHG Emissions Benchmark 2030 value assigned to SJCE in the April 3, GHG Benchmark ALJ Ruling. The annual GHG emissions associated with the Conforming Portfolio determined using the CPUC Clean Net Short (CNS) Methodology and GHG calculator tool are approximately 0.236 MMtCO₂ in 2030, which is well below SJCE’s GHG benchmark of 0.76 MMtCO₂.⁷ The annual GHG emissions associated with the Preferred Portfolio are approximately 0.190 MMtCO₂ in 2030, which is also

⁶ Available at: www.energy.ca.gov/assessments/ng_burner_tip.html.

⁷ Table 1 (Table 1. Load Projections and GHG Emissions Benchmarks by LSE, Updated Based on 2017 IEPR, Form 1.1c, Mid Demand Baseline, Mid AAEE and Mid AAPV Savings) of the April 3, GHG Benchmark ALJ Ruling.

well below the proportionally downwardly adjusted 2030 GHG Emissions Benchmark associated with the lower load of 0.722 MMtCO₂.

As described in the Executive Summary, for its Phase I customers, and by 2021 for its Phase II customers, San José will buy sufficient GHG-free power on an annual basis to match its annual load. The GHG-estimator nonetheless ascribes to San José GHG-emissions because the profile of the GHG-free generation does not precisely match the profile of San José's load. Over time, San José intends to work with the State and other CCAs to address California's need to better integrate a large proportion of renewables into the existing electric system in a manner that minimizes GHG-emissions and costs, and maintains system and local reliability, and to explore alternatives for procuring GHG-free power that maximize bang-for-the-buck.

GHG Accounting in IRP Planning

SJCE used the CNS Methodology and GHG calculator tool provided by the CPUC to determine the annual GHG emissions associated with both the Conforming and Preferred Portfolios.

a. Objectives

SJCE's goals for the analytical work documented in the IRP are to minimize the overall cost of power procurement while meeting the SJCE 2018 IRP criteria and the requirements of State law.

b. Methodology

i. Modeling Tool(s)

SJCE utilized internally developed spreadsheet models and information from RESOLVE and the CPUC GHG calculator to develop its IRP. These models include spreadsheet tools developed by SJCE for load forecasting, RA projections and costs, forward contracting costs, California Independent System Operator (CAISO) costs, etc. They also incorporate resource cost information from RESOLVE and the CPUC GHG calculator.

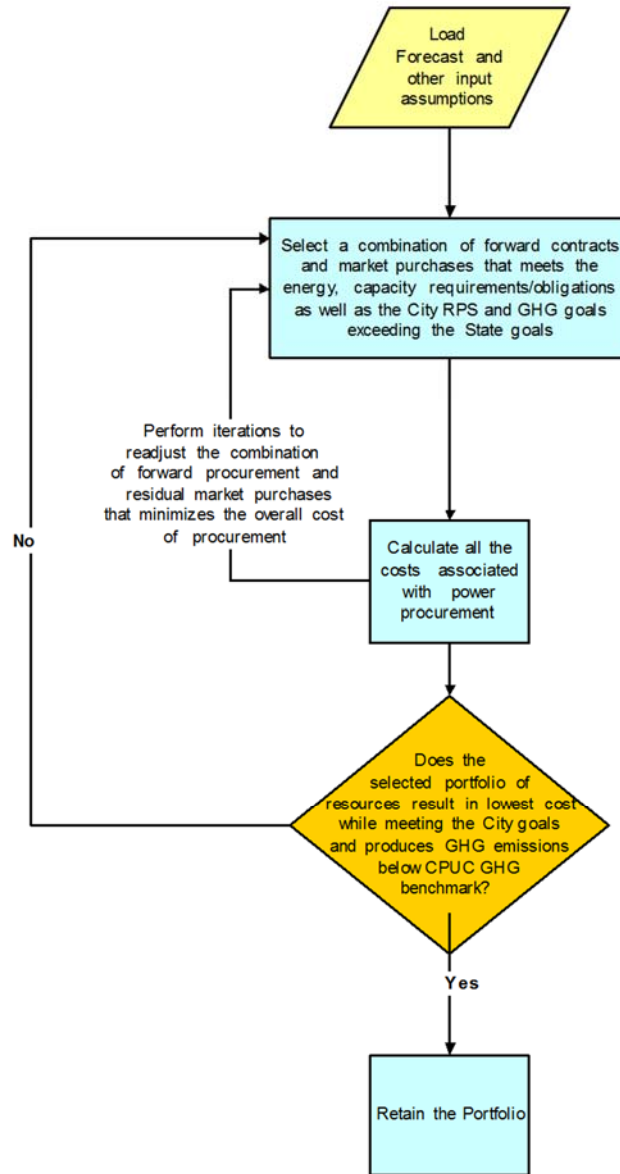
ii. Modeling Approach

Figure 1 includes the schematics for SJCE's overall approach to developing the portfolios it evaluated. As a first step, SJCE's IRP spreadsheet model used monthly and annual peak load and energy data. SJCE then input a combination of market purchases and long-term contracts that match SJCE's energy requirements. During the initial period of September

2018 through December 2020, SJCE included only short-term contracts and market purchases since SJCE is in the initial stages of forward contracting. SJCE intends to enter into long-term contracts as appropriate early in the process but expects that contracts for new resources will only result in resources coming on line within a year or two. Beginning in year 2021 and through 2030, SJCE included long-term forward contracts with the types of resources needed to meet SJCE's objectives. Because SJCE is only now commencing procurement, all such resources purchases are prospective and may change based on solicitation responses. The model includes metrics to ensure that the selected resource mix satisfies the SJCE 2018 IRP criteria and State law, and is under the GHG benchmark. The model allows the user to perform a number of iterations to change the resource capacity amounts and provides the overall cost and per unit cost (\$/MWh) associated with a given portfolio mix.

Once SJCE identified a resource mix that resulted in the lowest overall cost of procurement, it transferred the information into the CPUC CNS GHG accounting calculator to confirm that the selected portfolio mix resulted in annual GHG emissions below the benchmark for SJCE.

Figure 1: Schematics of SJCE’s Approach to Developing IRP Resource Portfolios and Perform Sensitivities

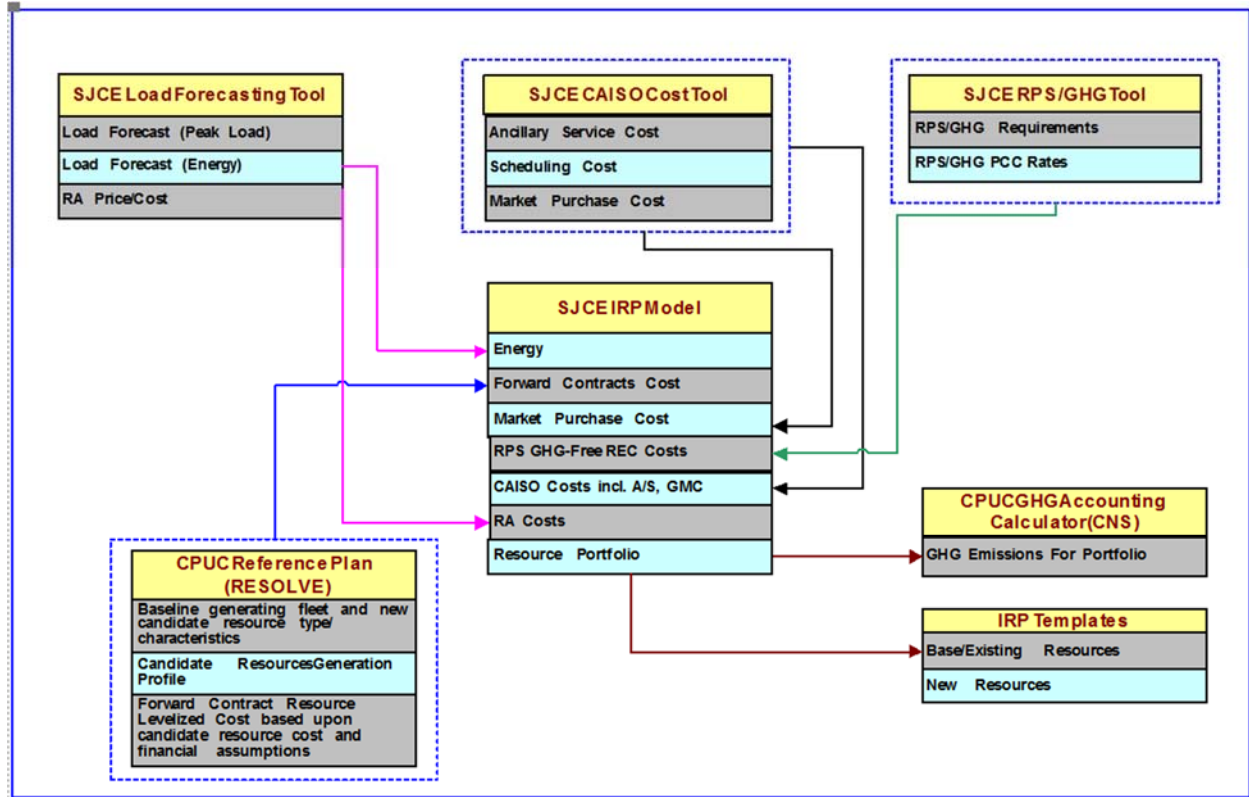


“Retained” portfolios were then tested for cost sensitivities, such as alternative levels of load, RA prices, market prices, forward contract prices, etc. SJCE ran additional portfolios seeking to reduce the GHG emissions reported in the CPUC CNS GHG accounting calculator without unduly raising costs.

iii. Assumptions

In Figure 2, we show the data sources utilized in the SJCE’s IRP model. For the development of the “Conforming” portfolio, SJCE aligned the loads and load modifiers data with the 2017 IEPR⁸ and relied on Reference System Plan inputs and assumptions for all other data (e.g., baseline generating fleet, candidate resource cost assumptions⁹, financial assumptions, etc.).

Figure 2: Data Sources Utilized in the Development of SJCE IRP Portfolios



1. Load

The primary difference between the Preferred and the Conforming Portfolios are the assumed retail load forecast as shown in Table 1 below.

⁸ Consistent with the 2017 IEPR mid-mid AAEE mid committed BTM PV plus mid AAPV case.

⁹ For example, resource prices for future generic resources, such as a new solar contract in 2026.

Table 1: A Comparison of Annual SJCE Retail Energy Consumption (MWh) Assumed Under the Conforming and Preferred Portfolios

Year	Annual Retail Energy (MWh)	
	Conforming Portfolio	Preferred Portfolio
2018	843,438	36,945
2019	4,497,574	3,766,464
2020	4,461,892	4,666,077
2021	4,441,062	4,544,936
2022	4,436,595	4,495,234
2023	4,414,014	4,416,390
2024	4,388,581	4,345,354
2025	4,376,721	4,298,993
2026	4,354,299	4,235,938
2027	4,335,083	4,187,488
2028	4,313,704	4,138,758
2029	4,296,343	4,099,695
2030	4,279,929	4,063,176

SJCE’s Conforming Portfolio is based on the load assignments and the 2017 IEPR demand forecast as specified in this CPUC template. The alternative Preferred Portfolio deviates from the Conforming Portfolio primarily with respect to load as described in Section 2 above, including higher AAEE amounts. Table 2 includes a comparison of AAEE amounts assumed in the Conforming and Preferred Portfolios.

Table 2: Assumed Annual AEE Savings Levels (MWh): Conforming vs. Preferred Portfolios

Year	Conforming Portfolio (MWh)	Preferred Portfolio (MWh)
2018	9,012	579
2019	93,207	114,858
2020	136,989	211,510
2021	182,777	277,151
2022	227,494	342,706
2023	280,001	418,233
2024	327,070	485,292
2025	372,803	550,752
2026	417,030	612,400
2027	460,140	673,336
2028	500,638	730,192
2029	537,940	782,799
2030	574,639	834,561

Other load modifiers, such as the PV Self-Generation (committed) and AAPV Generation for the SJCE area using the CEC 2017 IEPR Forecast (Mid Baseline-Mid AEE/AAPV) is shown in Table 3 below.¹⁰

Table 3: Assumed Annual PV Self-Generation (MW) and AAPV Generation (MW) Installed Capacity: Conforming vs. Preferred Portfolios

Year	PV Self-Generation Capacity (MW)		AAPV Generation Capacity (MW)		Total Installed Solar PV Capacity (MW)	
	Conforming Portfolio	Preferred Portfolio	Conforming Portfolio	Preferred Portfolio	Conforming Portfolio	Preferred Portfolio
2018	38	2	-	-	38	2
2019	235	198	-	-	235	198
2020	260	275	2	3	263	277
2021	287	297	7	7	294	305
2022	313	322	11	12	324	334
2023	337	345	16	16	353	361
2024	361	366	20	20	381	387
2025	383	387	25	25	408	412
2026	404	406	29	29	433	435

¹⁰ Since the CEC forecast assumes the Storage and Demand Response (DR) to have insignificant impacts on the energy side, they are not considered to adjust the SJCE load. Installed capacity amounts are developed by assuming ~17% annual capacity factor for the PV annual energy generation.

Year	PV Self-Generation Capacity (MW)		AAPV Generation Capacity (MW)		Total Installed Solar PV Capacity (MW)	
	Conforming Portfolio	Preferred Portfolio	Conforming Portfolio	Preferred Portfolio	Conforming Portfolio	Preferred Portfolio
2027	424	424	33	33	457	458
2028	442	441	37	37	480	479
2029	461	459	41	41	502	500
2030	479	476	45	45	525	522

2. Costs

For both the Conforming and Preferred Portfolios, SJCE assumed forward contracting costs that are consistent with the CPUC Reference Plan. However, SJCE believes that the resource prices for certain resources and locations assumed in the CPUC Reference Plan are significantly higher than the currently available contract prices in the market. Because SJCE does not want to disclose its price expectations to potential suppliers during ongoing solicitations, SJCE has not made any changes to the forward contracting costs from the CPUC Reference Plan.

3. STUDY RESULTS

a. Portfolio Results

The selected resources under both the Conforming and the Preferred Portfolios are provided as part of the Data Template *Excel* workbooks referenced below.

- **Attachment BC_Data_SJCE_BaseRsrc_Conforming_20180801:** Contains the list of existing resources from which SJCE would make RA and energy purchases under the Conforming Portfolio. These are generic resources since SJCE has not yet contracted with any of the existing resources. During the period of September 2018 through December 2020, SJCE exclusively procures from these existing resources, because even if SJCE contracts with new resources early, SJCE assumed it would take a few years for new resources to be built. For the period 2021 through 2030 SJCE serves most of its load using long-term forward contracts with new RPS resources, with remaining amounts assumed to be procured from existing GHG-free resources.
- **Attachment NC_Data_SJCE_NewRsrc_Conforming_20180801:** Contains the list of new resources long-term forward contracts under the Conforming Portfolio for the period of 2021-2030. These are generic resources since SJCE has not yet contracted with any of the new resources.
- **Attachment BP_Data_SJCE_BaseRsrc_PREFERRED_20180801:** Contains the list of existing resources from which SJCE would make RA and energy purchases under the Preferred Portfolio. These are generic resources since SJCE has not yet contracted with any of the

existing resources. During the period of September 2018 through December 2020, SJCE exclusively procures from these existing resources. For the period 2021 through 2030 SJCE serves most of its load using long-term forward contracts with new resources, with remaining amounts assumed to be procured from existing resources.

- **Attachment NP_Data_SJCE_NewRsrc_PREFERRED_20180801:** Contains the list of new resources long-term forward contracts under the Preferred Portfolio for the period of 2021-2030. These are generic resources since SJCE has not yet contracted with any of the new resources.

Figures 3 and 4 summarize for the Conforming and Preferred Portfolios, respectively, the existing and new resource procurement in terms of both capacity and energy for four distinct years: 2018, 2022, 2026 and 2030. Tables 5 and 6 provide the underlying data for Figures 3 and 4 respectively.

Figure 3: Resource Types Selected in Conforming IRP Portfolio in Years 2018, 2022, 2026 and 2030

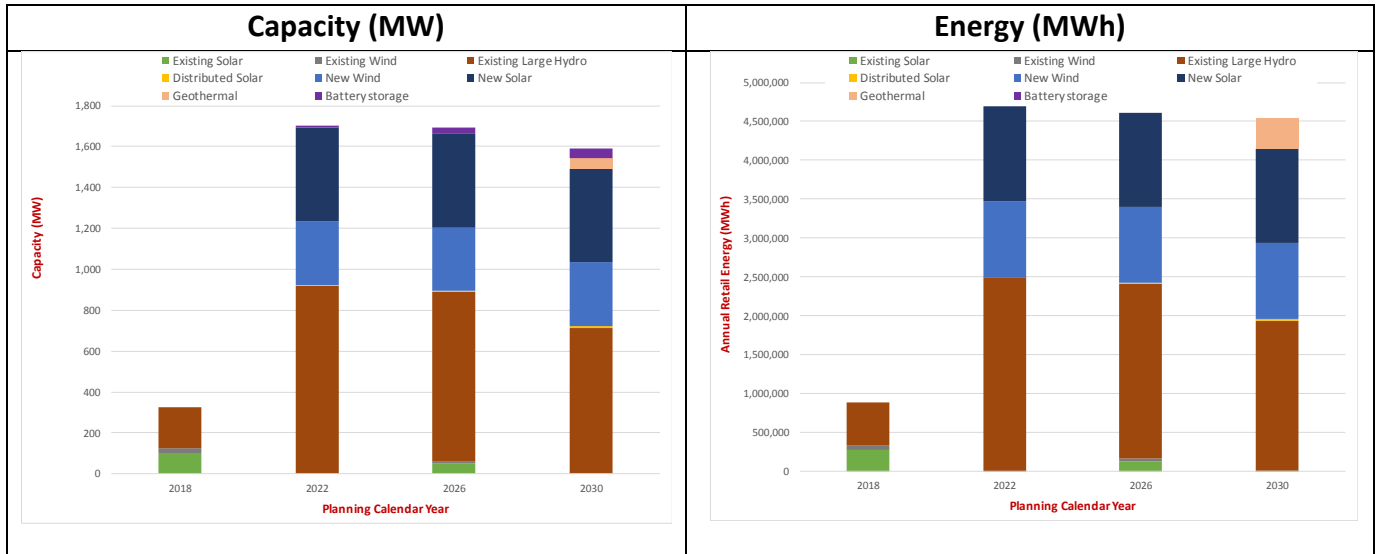


Figure 4: Resource Types Selected in Preferred IRP Portfolio in Years 2018, 2022, 2026 and 2030

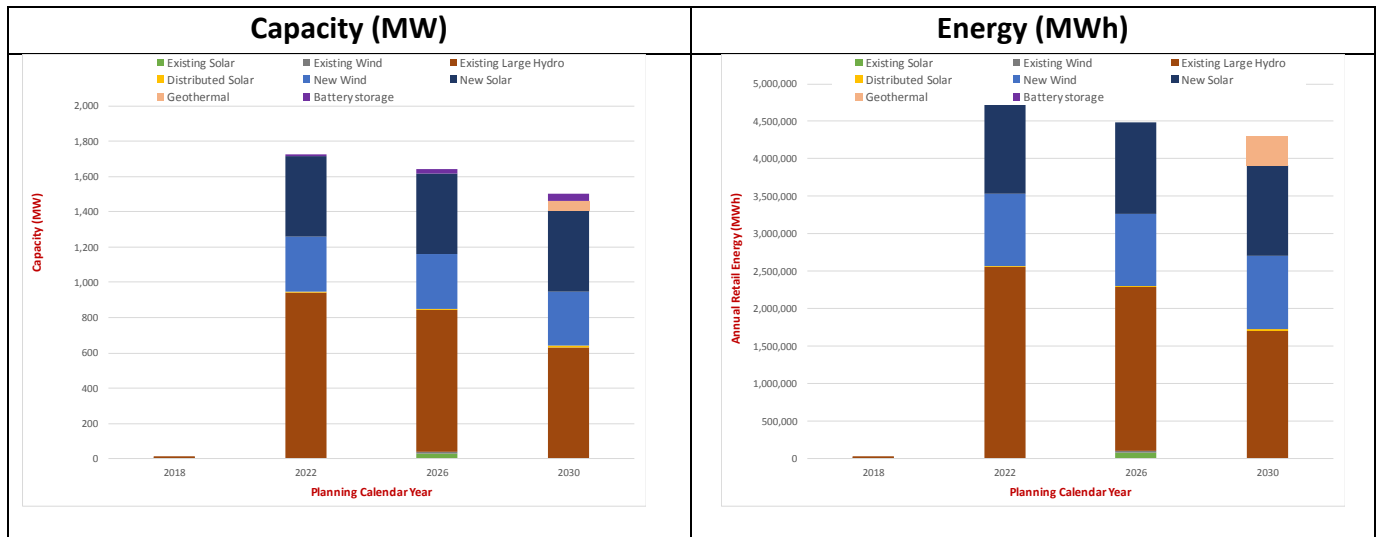


Table 5: Resource Capacity (MW) and Generation (MWh) Selected in Conforming IRP Portfolio in Years 2018, 2022, 2026 and 2030

Resources/Year	Resource Capacity (MW)				Resource Energy Generation (MWh)			
	2018	2022	2026	2030	2018	2022	2026	2030
New Solar	-	460	460	460	-	1,210,570	1,210,570	1,210,570
New Wind	-	310	310	310	-	973,820	973,820	973,820
Distributed Solar	-	5	5	10	-	9,840	9,840	19,680
Geothermal	-	-	-	50	-	-	-	394,200
Existing Solar	103	-	51	1	273,949	-	134,849	3,142
Existing Wind	22	-	11	0	68,487	-	33,712	785
Existing Large Hydro	202	919	827	713	548,235	2,494,664	2,246,682	1,935,974
Battery storage	-	10	29	47	-	(3,849)	(11,333)	(18,566)
Total	327	1,703	1,693	1,591	890,670	4,685,045	4,598,140	4,519,605

Table 6: Resource Capacity (MW) and Generation (MWh) Selected in Preferred IRP Portfolio in Years 2018, 2022, 2026 and 2030

Resources/Year	Resource Capacity (MW)				Resource Energy Generation (MWh)			
	2018	2022	2026	2030	2018	2022	2026	2030
New Solar	-	460	460	460	-	1,210,570	1,210,570	1,210,570
New Wind	-	310	310	310	-	973,820	973,820	973,820
Distributed Solar	-	5	5	10	-	9,840	9,840	19,680
Geothermal	-	-	-	50	-	-	-	394,200
Existing Solar	5	-	31	-	12,000	-	83,467	-
Existing Wind	1	-	7	-	3,000	-	20,867	-
Existing Large Hydro	9	941	805	629	24,014	2,556,369	2,184,962	1,708,999
Battery storage	-	9	26	42	-	(3,632)	(10,375)	(16,554)
Total	14	1,726	1,644	1,501	39,014	4,746,968	4,473,150	4,290,714

2030 GHG Results

SJCE’s estimated 2030 GHG emissions, calculated using the CPUC CNS Methodology and GHG calculator tool, are significantly less than the CPUC Benchmark for SJCE. As shown in Table 7, for the Conforming portfolio, they are approximately **0.236 MMtCO₂** in 2030, which is well below SJCE’s GHG benchmark of **0.76 MMtCO₂**.¹¹ For the Preferred Portfolio, the GHG-emissions are approximately **0.190 MMtCO₂** in 2030, which is also well below the proportionally downwardly adjusted 2030 GHG Emissions Benchmark associated with the lower load of **0.722 MMtCO₂**.

Table 7: Calculated GHG Emission (MMtCO₂) in the Conforming and Preferred Portfolios

Category	2030 GHG Emissions (MMtCO ₂)
CPUC Benchmark for SJCE, Per April 3, 2018 Order	0.760
SJCE Calculation, Using CPUC GHG Calculator for IRP v1.4.5 for the Conforming Portfolio	0.236
SJCE Calculation, Using CPUC GHG Calculator for IRP v1.4.5 for the Preferred Portfolio	0.190

For more detail, please refer to SJCE’s completed version of the CPUC’s GHG Calculator (Attachments GC and GP).

¹¹ Table 1 (Table 1. Load Projections and GHG Emissions Benchmarks by LSE, Updated Based on 2017 IEPR, Form 1.1c, Mid Demand Baseline, Mid AAEE and Mid AAPV Savings) of the April 3, 2018 GHG Benchmark ALJ Ruling.

b. Preferred and Conforming Portfolios

SJCE prefers to use the Preferred Portfolio for planning purposes. First, the Preferred Portfolio utilizes updated information, whereas the Conforming Portfolio is based upon outdated data that was provided to the CEC as part of the 2017 IEPR. The corrections to forecast have the greatest impact in the years 2018 and 2019, which have significantly lower load than what was assumed in the Reference System Plan due to changes to the program phase-in. Beyond 2019, the differences in loads and resources are relatively modest, as shown in Figures 3 and 4. In addition, the Preferred Portfolio incorporates San José's aggressive goals for energy efficiency, demand response and distributed generation.

i. Local Air Pollutant Minimization

As it is just starting up, SJCE has not yet undertaken a comprehensive review of impacts on disadvantaged and other communities and opportunities to reduce these. SJCE is exploring a number of initiatives in this regard including:

- Identifying the fleet of power plants that operate in San José and exploring opportunities to cost-effectively reduce emissions while maintaining reliability. SJCE hopes to engage with plant owners and use data to develop sensible long term plans to achieve these goals in a manner that maximizes benefits to the San José community.
- Exploring with the community opportunities to develop and target energy programs in a manner that maximizes benefits to the San José community, including potentially targeting electrification to reduce traffic emissions that disproportionately adversely impact disadvantaged communities.
- Use a data driven approach to develop a portfolio that maximizes emission reductions at a minimum cost.

These efforts are at their very inception. San José expects to have developed programs to address community needs by the time it prepares the next IRP.

SJCE will serve the entire population of San José. Known as the Capital of Silicon Valley, San José is the tenth largest city in the United States with a diverse population of over 1 million people. The median age is 36.3 and the median income is \$101,940. The population of San José is 34.2 percent Asian, 32.8 percent Hispanic, and 26.7 percent white¹². San José has the second highest population of Vietnamese persons in the world, second only to Vietnam.

¹² <http://www.sanJoseca.gov/DocumentCenter/View/780>

The City of San José has 14 census tracts that score within the top 25 percent of communities with the highest pollution burden¹³ using the CalEnviroScreen tool. Although the CalEnviroScreen tool only designates 14 census tracts as disadvantaged communities, AB 1550 passed on August 31, 2016 which amended California Health and Safety Code HSC § 39713¹⁴ designates an additional 53 census tracts within San José as low-income. These 67 census tracts are all represented in seven zip codes (95110, 95111, 95112, 95116, 95122, 95131, and 95133) and five Council districts (3, 4, 5, 7, and 8.) These areas are commonly referred to as East Willow Glen, Almaden, Seven Trees, Japantown, Spartan-Keyes, Little Portugal, King and Story, Berryessa, and Mabury. SJCE will explore with the rest of the City whether, for planning purposes, all seven of these zip codes in their entirety should be considered disadvantaged communities.

San José has a PM2.5 concentration of 10.370 micrograms per meter cubed (10.370 µg/m³). The PM2.5 concentration in San José is higher than it is in 53 percent of California. Because there is only one Air Resources Board (ARB) monitoring site for particulate matter 2.5 (PM2.5) in San José, San José does not have more granular information on PM2.5 concentrations in different parts of the city. In the time available, SJCE was not able to identify information on nitrogen oxide emissions in San José. However, nitrogen oxides are a precursor to ozone.¹⁵ San José has an ozone concentration of 0.035 parts per million (ppm). The ozone concentration in San José is higher than in 17 percent of California. Because there is only one Air Resources Board (ARB) ozone monitoring site in San José, San José does not have more granular information on ozone concentrations in different parts of the city.

San José has identified the following fossil fueled power plants within San José:¹⁶

Power Generating Facility	Plant Size (MW)
Metcalf Energy Center	600
Los Esteros Critical Energy Facility	320
Agnews Power Plant	28
San José/Santa Clara Regional Wastewater Facility Cogeneration	12
San José State University Cogeneration Power Plant	5.6
HGST San José Standby Generator Power Plant	4
UTS SJ1 LLC Power Plant	1.4
Adobe Systems Inc. Power Plant	1.2

¹³ Per CPUC direction, this data was gathered using California Environmental Protection Agency’s CalEnviroScreen 3.0 tool: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

¹⁴ https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1550

¹⁵ <https://www.epa.gov/ozone-pollution>

¹⁶ Information on the largest power generating facilities (above 50 MW) was gathered from the CEC website: http://www.energy.ca.gov/sitingcases/all_projects.html. However, the information on the smaller power plants was gathered from various sources. This information will be confirmed and further refined in the future.

Two of these plants are located within the disadvantaged communities described above: Adobe Systems Inc. Power Plant and San José State University Cogeneration Power Plant. As described above, SJCE intends to explore opportunities to minimize power plant emissions and to work with power plant owners to put into place sensible long term plans that maximize benefits to the San José community and maintain reliability.

The City of San José offers several programs to benefit disadvantaged areas within the City, including for example, the Silicon Valley Energy Watch program. Silicon Valley Energy Watch is a local government partnership between PG&E and the City of San José that offers assistance to small- and medium-sized business to upgrade their equipment and lower their energy consumption. As discussed above, SJCE intends to work with its communities to identify the best programs to maximize benefits for the community. For example, according to the data used in CalEnviroScreen, traffic conditions disproportionately negatively affect the disadvantaged communities in San José. SJCE will explore working with other City departments to pursue vehicle electrification and other types of programming that can reduce adverse environmental impacts and improve quality of life and housing in San José.

ii. Cost and Rate Analysis

SJCE has compared the results of the Conforming and Preferred Portfolios against its pro forma analyses and confirmed that based on current information and market forecasts, SJCE will be able to meet its regulatory requirements and the criteria adopted by City Council at reasonable costs for its customers. For this assessment, SJCE relied on the forward contracting costs from the CPUC Reference Plan and used its own market energy price forecasts for market purchases. SJCE intends to work closely with its community and policy makers to maximize value and benefits to the San José community in a manner that is responsible and data-driven. SJCE has accounted for resources subject to the cost allocation mechanism (CAM) and Reliability Must-Run (RMR) offset in the Conforming and Preferred Portfolios consistent with the CPUC's direction. SJCE used the allocations provided by CPUC in 2018, and applied SJCE's load ratio share of the most recent CAM/RMR offset program and extended it to all San José residents and businesses beginning March 2019 through December 2030. With other CCAs, SJCE intends to monitor CPUC CAM decisions and allocations and adjust its procurement accordingly. The risk of unexpected sizable allocations must be considered by SJCE and other CCAs as they develop a prudent mix of short-, mid- and long-term resources, and, until there is greater certainty, it may deter some of the long-term contracting that SJCE would otherwise wish to undertake in accordance with City energy and risk mitigation policies.

c. Deviations from Current Resource Plans

This section is not applicable to SJCE as SJCE has no existing IRP.

d. Local Needs Analysis

SJCE serves loads within a CAISO-defined Greater Bay Area (GBA) local capacity area (i.e. transmission-constrained load pockets). SJCE has performed its own assessment of how it will meet the local capacity needs projected in the most recent CAISO Transmission Plan. To identify the local needs of its Conforming Portfolio, SJCE used the Local Capacity Technical Analysis (LCT) reports for years 2018 and 2022 associated with the CAISO board-approved 2017-18 Transmission Plan. SJCE’s analysis indicates that local capacity resources equaling approximately 52 percent of SJCE’s annual peak load need to be procured each month during 2018 through 2021. Beginning 2022, the local capacity needs drop to 49 percent of the annual peak load. SJCE anticipates that 40 percent of the local capacity will be procured in the GBA local area, with the remainder procured in the other PG&E local areas.¹⁷ SJCE used the 2017 IEPR-based final LCT reports for 2019 and 2023 to develop a local needs analysis in its Preferred Portfolio. SJCE’s analysis indicates that SJCE needs to procure local capacity resources equaling approximately 52 percent and 49 percent of the SJCE’s annual peak load each month during 2018, and for the period of 2019 through 2022, respectively. Beginning 2022, the local capacity needs drop to 45 percent of the annual peak load. SJCE anticipates that 40 percent of the local capacity will be procured in the GBA local area, with the remainder procured in the other PG&E local areas.

e. Compliance with SJCE 2018 IRP Criteria

San José City Council authorized SJCE to file an IRP that is consistent with the SJCE 2018 IRP criteria. This section describes how the Conforming and Preferred Portfolios meet the 14 City Council criteria.

1. *SJCE will offer at least one power mix option with a rate equal to or less than Pacific Gas and Electric Company (PG&E)’s rates.*

As a CCA, SJCE is not required to file cost and rate information as part of its IRP. Moreover, data underlying the cost projections is confidential and its disclosure at this time would adversely affect the solicitation processes that are underway. San José did develop cost estimates and incorporated these into its pro forma. SJCE confirmed that, barring significant adverse changes in

¹⁷ SJCE has used the CPUC’s resource adequacy program’s definition of local capacity areas for the purposes of the local needs analysis. These areas are: Greater Bay Area, Big Creek Ventura, CAISO System, LA Basin, San Diego IV, and Other PG&E.

the PCIA and the market, SJCE will be able to use the Preferred Portfolio as the base product at rates equal to or less than PG&E's current rates.

2. *SJCE will offer at least one power mix option at 10 percent or more renewables than PG&E.*

Both the Preferred and the Conforming Portfolios include 10 percent more renewables than mandated by State law. Moreover, SJCE will offer a 100 percent renewable option that will likely significantly exceed the renewables in PG&E's portfolio by more than 10 percent. SJCE cannot predict whether or to what extent the renewable resources in PG&E's portfolio will exceed the proportion mandated by state law.

3. *SJCE will offer at least one power mix option that is 100 percent renewable.*

Both the Preferred and Conforming Portfolios include 10 percent more renewables than mandated by State law. SJCE will offer a 100 percent renewable option. Because participation rates in 100 percent renewable offerings is limited, the assumption that SJCE's overall portfolio will be 10 percent more renewable than required by State law will accommodate a small proportion of customers that opt for 100 percent renewable energy.

4. *SJCE's initial resource mix will include a proportion of renewable energy exceeding California's prevailing Renewable Portfolio Standard (RPS) procurement mandate.*

Both the Preferred and the Conforming portfolios include 10 percent more renewables than mandated by State law.

5. *By 2021, SJCE's residents will have a base power mix that is 100 percent Greenhouse Gas emissions (GHG) free.*

Both the Preferred and the Conforming Portfolios provide for procurement of 100 percent GHG-free energy on an annual basis as of 2021. As described above, the CPUC CNS GHG estimator does not credit SJCE for 100 percent of its GHG-free purchases. For this criterion, SJCE recognizes the GHG-free energy credit for all renewable energy that qualifies as renewable energy under the California RPS law. Within financial limitations, SJCE endeavored to match the profile of the RPS and other GHG-free resources to the profile of its load, and will continue to review alternatives to maximize GHG reductions while maintaining reliability.

6. *SJCE will maintain, at minimum, low-income programs at the same level as PG&E.*

SJCE will comply with this requirement and is reviewing other alternatives to benefit disadvantaged communities and vulnerable customers.

7. *After becoming established, SJCE will develop local programs including energy efficiency, demand response, distributed generation and renewable energy.*

As described above, the Preferred Portfolio load forecast assumes an AAEE consistent with doubling of the 2015 AAEE level adopted in the 2015 CEC's Integrated Energy Policy Report (IEPR) demand forecast, rather than 1.5 times 2015 AAEE level as assumed in the Conforming Portfolio. This aggressive reduction in load can be achieved by aggressive energy efficiency, demand response, and penetration of distributed behind-the-meter renewable generation.

8. *SJCE will encourage distributed renewable generation in the local area through the offering of a net energy metering tariff; a standardized power purchase agreement or "Feed-In Tariff"; and other creative, customer-focused programs targeting increased access to local renewable energy sources.*

See criteria #7 above.

9. *By 2030, SJCE's base offering will be at least 60 percent renewable.*

Both the Conforming and Preferred Portfolios are 60 percent renewable by 2030.

10. *By 2030, San José will have 668MW of local renewables and by 2040, San José will be the world's first one GW solar city.*

The CEC load forecast used to prepare the Conforming Portfolio assumes 525 MW of behind-the-meter generation. SJCE scaled this proportion of behind-the-meter generation to the lower load in the Preferred Portfolio, to 522 MW. In addition, for both portfolios, SJCE assumed 10 MW of utility scale distributed generation. Finally, to reflect San José's aggressive energy efficiency, demand-response and distributed generation goals, in the Preferred Portfolio, SJCE increased energy efficiency to double the 2015 level (from 1.5 times the 2015 level used by the CEC for its load forecast). Thus, the Preferred Portfolio has approximately 260 GWh more of annual energy savings than the Conforming Portfolio which easily accommodates an extra 136 MW of distributed solar PV generation. (136 MW of distributed solar PV generation translates to about 203 GWh of annual energy savings using a capacity factor of 17 percent.)

11. *By 2030, 60 percent of all passenger vehicles in the City will be electric.*

SJCE did not increase or decrease its load forecast to incorporate electrification (including vehicle electrification) or progress in encouraging zero net energy homes. Initial estimates of the combined impact of these goals are extremely preliminary and require further assessment and verification. This is because complex interactions can be expected that include additional electrification load offset by increased equipment efficiency. SJCE will work with other City departments to achieve the City's electrification goals and will modify its load forecast in the future as additional information and analysis becomes available about the impact of these initiatives on the SJCE load forecast.

12. *By 2020, 100 percent of new homes will be ZNE, and by 2030, 25 percent of existing homes will be energy efficient and all-electric.*

See criteria #11 above.

13. *SJCE will comply with all applicable State Law including the Renewable Portfolio Standard, Resource Adequacy requirements, and GHG reduction requirements.*

See the following section, “Compliance with State Law.”

14. *SJCE will identify the disadvantaged communities SJCE will serve, describe the impacts of such service on the disadvantaged communities, and set forth SJCE’s plans to benefit these communities.*

See section SJCE 2018 IRP Section 3.b.i on disadvantaged communities.

f. Compliance with State Law

Renewable Portfolio Standard¹⁸: Senate Bill 2(1X) and Senate Bill 350 requires Load Serving Entities under Public Utilities Code § 399.15(b) to achieve the following levels of qualifying renewable energy within their portfolio:

Year	Procurement Requirement (percent of retail sales)
2018	29%
2019	31%
2020	33%
2024	40%
2027	45%
2030	50%

For the 2018 IRP, SJCE assumed all renewables will be PCC-1 renewables. While maintaining compliance with the State RPS, SJCE will make determinations about the level of PCC-1, PCC-2, and PCC-3 in its portfolio, based on the responses it receives to its solicitations, balancing cost, GHG-reduction benefits, benefits to the local community and other City policies.

Senate Bill 350 (SB 350)¹⁹: SB 350 established California’s 2030 GHG reduction target of 40% below 1990 levels by 2030. Requirements that specifically pertain to CCAs are as follows:

¹⁸ http://www.cpuc.ca.gov/RPS_Homepage/

¹⁹ https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350

- GHG reductions: Consistent with CARB and CPUC requirements implementing SB 350, SJCE must demonstrate in its IRP that its GHG emissions are below the GHG benchmark developed by SJCE by the CPUC (or use the GHG price developed by the CPUC).
- Integrated Resource Plans: LSEs are required to submit IRPs to the CPUC [Section 454.52(b)(3)] SJCE is filing this IRP in compliance with this requirement.
- Long term contracting: Starting in 2021, LSEs must procure at least 65 percent of their required RPS amounts using contracts with a term of at least ten years [Section 399.13(b)] SJCE will meet this requirement. Long-term contracts will also help SJCE mitigate price risk and provide price stability to its customers.

Assembly Bill 1110 (AB 1110)²⁰: AB 1110 was signed into law to improve transparency of the Power Content Label and to inform customers of GHG emissions of their electricity. Regulators are required to adopt a methodology for calculating GHG emissions intensities for electricity sources, calculating California’s overall GHG emissions intensity, and adopting guidelines for reporting GHG emissions intensities. SJCE will comply with power content label and GHG reporting requirements.

Resource Adequacy²¹: California Public Utilities Code Section 380 requires Load Serving Entities to meet applicable RA requirements, including procuring three types of RA products: system RA, local RA, and flexible RA. The templates set forth the RA amounts SJCE will procure to comply with this requirement.

AB 2514²²: California Public Utilities Code Section 9620 states an energy storage procurement target for LSEs equal to one percent of their 2020 forecasted peak load. Contracts for this procurement must be in place by 2020 and projects must be installed by 2024. SJCE intends to comply with this requirement. In both the Conforming and the Preferred Portfolios, SJCE has at least 1 percent of its forecasted demand met by energy storage by 2024 and, by 2030, SJCE plans to meet at least 5 percent of its forecast demand with energy storage.

²⁰https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1110

²¹ <http://www.cpuc.ca.gov/RA/>

²² https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920100AB2514

4. ACTION PLAN

a. Proposed Activities

SJCE is currently undertaking procurement in accordance with City energy and risk management policies. This IRP will inform that procurement, but actual procurement will be determined based on City policies and solicitation responses.

SJCE intends to continue the process of operationalizing Climate Smart San José, undertaking additional evaluation and modeling to convert the aspirational goals into actionable quantitative initiatives that are consistent with San José's financial and technological limitations.

Particularly as it explores options for longer term commitments, SJCE intends to investigate and develop data on opportunities to meet its GHG reduction commitments, and to complement renewables with reliability products in a manner that delivers the maximum decarbonization and other benefits and minimum cost to the San José community.

Also, as described above in the section on disadvantaged communities, SJCE plans to work with power plant owners to put into place sensible long term plans to minimize power plant emissions and maximize benefits to the San José community and maintain reliability. Moreover, as discussed above, SJCE intends to work with its communities to identify the best programs to maximize benefits for the community.

b. Barrier Analysis

SJCE, like other CCAs, faces two important risks that do not apply in the case of the investor owned utilities (IOUs). First, SJCE faces the risk that the Commission will allow PG&E to enter into additional procurement subject to the CAM. In addition, in the face of the IOUs' Power Charge Indifference Adjustment (PCIA) proposal, SJCE faces the further risk that the CPUC will decide to allocate large volumes of renewable and RA products to it, potentially on an ongoing basis with limited information about the amount that will be allocated from year to year. This risk is a significant factor SJCE must consider as SJCE pursues building a portfolio of resources that achieves San José's policy objectives. SJCE's risk management policies provide that "SJCE shall not engage in activities that expose SJCE to speculative trading risks, and shall only utilize approved products and transaction parameters as approved by the [Risk Oversight Committee], and as defined in these Regulations."²³ Thus, SJCE must attempt to predict

²³ <http://www.sanJoseca.gov/DocumentCenter/View/77620>

volumes of products that will be assigned to it to avoid holding extensive excess resources that it must then seek to monetize in the market, contrary to its risk management program.

Also, SJCE must address the risk of changing nonbypassable charges. Unlike the IOUs which are in control of their portfolios and have opportunities to sell excess products in a way that maximizes their value rather than dumping them in short term markets, CCAs have little ability to minimize nonbypassable charges. The IOU portfolios are 35-40 percent above market, or, according to the IOUs, even higher. To avoid adverse rate impacts to its customers, SJCE must provide power at three fourths the cost of PG&E's bundled generation rate and faces the potential for significant fluctuations in the PCIA, particularly over the life of its long-term contracts.

In addition, SJCE faces the risks faced by other power suppliers including volume risk, price risk, counterparty credit risk, regulatory and political risk, operational risk, market risk, legal risk, concentration risk, liquidity risk, custodial credit risk and business risk. SJCE has risk management policies in place to address these risks.

Finally, SJCE has been disadvantaged by the timing of this proceeding. Although the Commission issued its decision requiring LSEs to file IRPs in February, the Commission issued important determinations such as the ruling on the clean net short calculation relatively close to the deadline for submission.²⁴ The Energy Division continued to discuss requirements with parties and to make changes to the IRP template through June 21, 2018.²⁵ As a public, governmental entity, SJCE requires time in order to provide for a robust public discussion and to present documents to City Council for their review and approval. The August 1 deadline exacerbated problems because San José City Council is in recess during July.

In order to meet the CPUC's deadline, SJCE was obligated to obtain City Council approval for criteria and authority to file a plan consistent with these criteria. This process was suboptimal. SJCE looks forward to working with the CPUC in future IRP cycles in a manner that provides for more thorough and timely public comment and participation by City policymakers.

In addition, the CPUC's requirement that even CCAs that have not commenced to serve load must file an IRP, resulted in the need to prepare a plan that is entirely prospective and is not informed by real data about market prices and supply availability. SJCE did its best to anticipate portfolios that meet San José's objectives and requirements, and State law. However, SJCE's actual procurement may diverge substantially from the plan as SJCE

²⁴<http://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/UtilitiesIndustries/Energy/EnergyPrograms/ElectPowerProcurementGeneration/irp/2018/Update%20to%20the%20CNS%20Calculator%202018-06-21.pdf>

²⁵ Energy Division staff emailed Parties of the IRP proceeding (R.16-02-007) June 21, 2018 with changes to the IRP template.

commences transacting in the market and undertakes the further assessments and consultations described in other sections of this document.

c. Proposed Commission Direction

At this time, SJCE does not seek direction from the CPUC. SJCE intends to undertake procurement in accordance with San José City policy and State law. SJCE urges the CPUC to work to provide greater certainty with respect to allocation to CCAs of resources procured by the IOUs and nonbypassable charges.

5. DATA

a. Baseline Resource Data Template

Attached *Excel* spreadsheets:

- *Attachment BC_Data_SJCE_BaseRsrc_Conforming_20180801; and*
- *Attachment BP_Data_SJCE_BaseRsrc_PREFERRED_20180801.*

b. New Resource Data Template

Attached *Excel* spreadsheets:

- *Attachment NC_Data_SJCE_NewRsrc_Conforming_20180801; and*
- *Attachment NP_Data_SJCE_NewRsrc_PREFERRED_20180801.*

SJCE has included CEC 2017 IEPR Form 7.2 as a separate tab, titled, “CEC 2017 IEPR Form 7.2” within the New Resource Data Template, i.e., *Attachment NP_Data_SJCE_NewRsrc_PREFERRED_20180801*. Below we describe SJCE’s Load Forecasting methodology as required by the CEC 2017 IEPR Form 4.

SJCE Forecasting Methodology Used to Develop Alternative Updated (Preferred) Load Forecast (CEC IEPR Form 4 Requirement)

SJCE’s load forecast is aggregated from an hourly model which starts by combining the PG&E monthly, hourly and 15-minute account level data in calendar year 2017. The hourly and 15-minute data is used to shape the customer account monthly data that has been aggregated to rate class and phase-in category. Once the 2017 hourly PG&E data is shaped and aggregated

by rate-class and phase-in, this data set was saved. The hourly 2017 PG&E data was then weather normalized using a simple econometric heating degree days (HDD), cooling degree days (CDD), month and day-type model. A five-year average of HDD and CDD was used to derive 2017 weather adjusted PG&E Retail hourly MWh for the commercial and residential customer class data. The 2017 hourly data was then mapped to 2018, 2019, 2020, 2021 calendar years by month, week of month, day of week, holiday, and hour. Once the forecast hourly data was mapped to calendar years, SJCE hourly retail energy becomes a function of the SJCE phase-in schedule. Phase 0 was applied to accounts that were direct access or where the account billing address was PG&E. The initial Phase 1 was applied to only San José City accounts, whereas Phase 2 was applied to all other accounts assuming a 3 percent opt out.²⁶ The total consumption amounts beginning calendar year 2021 were escalated at an annual load growth rate of 0.7 percent.

SJCE then applied the load modifiers as used in the CEC 2017 IEPR to adjust the total consumption including the production from the committed self-generation (behind the meter PV and Other Private generation), AAEE savings and AAPV generation. As explained earlier, SJCE used all the load modifiers that are consistent with the 2017 IEPR used in the CPUC Reference Plan, except for the AAEE savings levels. Table 8 below provides SJCE's updated demand forecast (CEC 2017 Form 7.2) assumed in the development of the Preferred Portfolio.²⁷

²⁶ Phase 0 customers are never served by SJCE. Phase 1 customers' load start rolling in on September 4 through October 3, 2018. Phase 2 customers' load start rolling in on March 1 through March 29, 2019. The forecast is developed for a period of 2018 through 2020. All eligible customers are phased in by March 29 of 2019. Once the phase-in is complete, the forecast assumes no growth for the remainder of 2019 and 2020. A 0.7 percent annual escalation is assumed for the period of 2013 through 2030.

²⁷ Table 8 is also included in the *CEC 2017 IEPR Form 7.2* tab of Attachment NP.

Table 8: SJCE Updated Demand Forecast (CEC 2017 IEPR Form 7.2 Requirement) Assumed in the Preferred Portfolio

Distribution Service Provider: San José Clean Energy								
YEAR	Retail Sales (MWh)	Peak Demand (MW)	Residential Retail Sales (MWh)	Residential Peak Demand (MW)	Non-Residential Retail Sales (MWh)	Non-Residential Peak Demand (MW)	Residential Customer Counts	Nonresidential Customer Counts
2018	36,945	26	26	0	36,919	26	5	1,508
2019	3,766,464	965	1,129,431	310	2,637,033	655	231,717	20,465
2020	4,666,077	946	1,434,607	304	3,231,471	642	290,961	25,236
2021	4,544,936	935	1,397,122	301	3,147,814	634	290,963	25,236
2022	4,495,234	921	1,381,843	296	3,113,391	625	287,781	24,960
2023	4,416,390	911	1,357,606	293	3,058,783	618	282,733	24,522
2024	4,345,354	892	1,335,770	287	3,009,584	605	278,186	24,128
2025	4,298,993	888	1,321,518	285	2,977,474	602	275,218	23,871
2026	4,235,938	877	1,302,135	282	2,933,803	595	271,181	23,520
2027	4,187,488	864	1,287,241	278	2,900,246	587	268,079	23,251
2028	4,138,758	850	1,272,262	273	2,866,496	577	264,960	22,981
2029	4,099,695	844	1,260,254	271	2,839,441	573	262,459	22,764
2030	4,063,176	840	1,249,028	270	2,814,148	570	260,121	22,561

SJCE’s CAISO-level (wholesale) load is developed by adding a 5.6 percent distribution loss factor to the retail Load. This distribution loss factor was developed by applying the PG&E historical distribution loss factors by voltage level to the SJCE retail loads.

c. Other Data Reporting Guidelines

SJCE has elected to use the LSE-specific GHG Emissions Benchmark—rather than the GHG Planning Price—2030 value assigned to SJCE in the April 3, 2018 GHG Benchmark ALJ Ruling. The annual GHG emissions associated with the Conforming Portfolio determined using the CPUC CNS Methodology and GHG calculator tool are approximately **0.236 MMtCO₂** in 2030, which is well below SJCE’s GHG benchmark of **0.76 MMtCO₂**.²⁸ The annual GHG emissions associated with the Preferred Portfolio are approximately **0.190 MMtCO₂** in 2030, which is also well below the proportionally downwardly adjusted 2030 GHG Emissions Benchmark associated with the lower load of **0.722 MMtCO₂**.

²⁸ Table 1 (Table 1. Load Projections and GHG Emissions Benchmarks by LSE, Updated Based on 2017 IEPR, Form 1.1c, Mid Demand Baseline, Mid AAEE and Mid AAPV Savings) of the April 3 2018, GHG Benchmark ALJ Ruling.

6. LESSONS LEARNED

As noted above, this plan is entirely prospective. San Jose will refine future IRPs based on actual experience with procurement.

Glossary of Terms

Alternative Portfolio – LSEs are permitted to submit “Alternative Portfolios” developed from scenarios using different assumptions from those used in the Reference System Plan. Any deviations from the Conforming Portfolio must be explained and justified.

Conforming Portfolio – Each LSE must produce a “Conforming Portfolio” that is demonstrated to be consistent with the Reference System Portfolio according to the following criteria: (1) use of either the GHG Planning Prices or the LSE-Specific 2030 GHG Emissions Benchmark, (2) use of input assumptions matching those used in developing the Reference System Portfolio, and (3) consistent with the 2017 IEPR “mid Baseline mid AAEE mid AAPV” forecast, unless superseded by Administrative Law Judge ruling.

Data Template – Data provided by the LSE should be reported in the “Baseline Resource Data Template” and the “New Resource Data Template” provided by the Commission. “Baseline” means existing resources and costs. “Existing” includes resources on the 3/15/2018 NQC List, or projects not yet online but that have secured a contract and may therefore be identified in the Commission’s RPS Contracts Database or an Application filed at the Commission, as of January 1, 2018. “New” means any new (incremental to the baseline) resources and costs associated with a particular LSE portfolio.

Disadvantaged Communities – For the purposes of IRP, and consistent with the results of the California Communities Environmental Health Screening Tool Version 3 (CalEnviroScreen 3.0), “disadvantaged communities” refer to the 25% highest scoring census tracts in the state along with the 22 census tracts that score in the highest 5% of CalEnviroScreen’s pollution burden, but which do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data.

GHG Emissions Benchmark – Each LSE filing a Standard LSE Plan must use either the GHG Emissions Benchmark or GHG Planning Price in developing its Conforming Portfolio. The LSE-specific benchmarks have been provided in an ALJ ruling. If the total emissions attributable to the LSE’s preferred portfolio exceed its GHG Emissions Benchmark for 2030, the LSE must explain the difference and describe additional measures it would take over the following 1 - 3 years to close the gap, along with the cost of those measures.

GHG Planning Price –The GHG Planning Price is equivalent to the marginal cost of GHG abatement associated with the 42 MMT Scenario for the years 2018 to 2026 (i.e., a curve that slopes upward from ~\$15/ton to ~\$23/ton), followed by a straight-line increase from ~\$23/ton in 2026 to \$150/ton in 2030, as shown in Table A. Each LSE must use either the GHG Planning Price or GHG Emissions Benchmark in developing its Conforming Portfolio.

IRP Planning Horizon – The IRP Planning Horizon will typically cover 20 years. However, for the purposes of this IRP 2017-18 cycle, the IRP Planning Horizon will cover only up to the year 2030.

Long term – 10 or more years (unless otherwise specified)

Portfolio – A portfolio is a set of supply and/or demand resources with certain attributes that together serve a particular level of load.

Preferred Portfolio – Among all the portfolios developed by the LSE, the LSE will identify one as the most suitable to its own needs, deemed its “Preferred Portfolio.” Any deviations from the Conforming Portfolio must be justified and explained.

Reference System Plan – The Reference System Plan refers to the Commission-approved integrated resource plan that includes an optimal portfolio (Reference System Portfolio) of future resources for serving load in the CAISO balancing authority area and meeting multiple state goals, including meeting GHG reduction and reliability targets at least cost.

Reference System Portfolio – The Reference System Plan refers to the Commission-approved portfolio that is responsive to statutory requirements per Pub. Util. Code 454.51; it is part of the Reference System Plan.

Scenario – A scenario is a portfolio together with a set of assumptions about future conditions.

Short term – 1 to 3 years (unless otherwise specified)

Standard LSE Plan – A Standard LSE Plan is the type of integrated resource plan that an LSE is required to file if its assigned load forecast is ≥ 700 GWh in any of the first five years of the IRP planning horizon.

Standard LSE Plan Template – Each LSE required to file a Standard LSE Plan must use the Standard LSE Plan Template according to the instructions provided herein.

VERIFICATION

I am the Deputy Director of Power Resources for San José Clean Energy (“SJCE”) and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 31, 2018, 2018 at San José, California.

Jeanne M. Solé by KM

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Exhibit A

- a. Attachment BC
- b. Attachment BP
- c. Attachment NC
- d. Attachment NP
- e. Attachment GC
- f. Attachment GP

<p>Data Template Instructions</p>	<p>On the "Baseline_Resources" tab, please report by month and year, the energy and system capacity amounts under contract to or owned by the Load Serving Entity (LSE). Report data for all resource types including conventional generation, wind, solar, demand response, storage, etc. that are owned by the LSE, or under contractual commitment to the LSE, in whole or in part. Include both online units with a CAISO Resource ID, as well as projects that are not yet online but have secured a contract and may therefore be identified in the Commission's RPS Contracts Database or an Application filed at the Commission. For situations where the LSE is reporting a current or future contract with unknown existing resource(s), report this information in this workbook, NOT the New Resource Data Template. Existing Feed In Tariff contracts (which do not have a CAISO Resource ID) are also reported in this workbook. Existing shares of CAM system capacity as assigned in CPUC's Resource Adequacy program and projected to future years are reported in this workbook. Report capacity data consistent with existing reporting obligations to the CPUC's Resource Adequacy program. Report data starting in January, 2018 through December 2030. Column heading definitions are below.</p> <p>On the "Baseline_Costs" tab, please report cost projections if applicable to the reporting entity. These are costs associated with the resources in the "Baseline_Resources" tab. Cost information associated with baseline demand-side programs, e.g. consistent with the LSE's portion of the 2017 IEPR mid demand mid-mid AAEE/AAPV case, would also be reported on the "Baseline_Costs" tab. Projected costs from new LSE investments are separately reported in the New Resource Data Template. Report all costs in 2016 dollars, using the IEPR dollar deflator series posted to the IRP Filing Materials and Templates webpage. Explain the composition of each cost category in the text body of the Standard LSE Plan Template. Revenue requirement should be the sum of the other components in this worksheet.</p> <p>Many cells include data validation that requires the LSE to populate cells with only the allowed values shown in the cell's drop down menu. Data entry may be done manually, with copy/paste, or with a script - but only allowed values for that cell must be entered - this is critical to ensuring clean and reconcilable data. Cells must contain only text or numerical data. Do not use the "Insert Comment" feature of Excel to comment on specific cells. Instead please comment on specific cells in the text body of the Standard LSE Plan Template.</p>
<p>Baseline Resources Column Heading</p>	<p>Instruction and Description</p>
<p>LSE_Name</p>	<p>Select from the drop-down menu the Load Serving Entity (LSE) name that the resource is under obligation to. This column must not be blank.</p>
<p>Resource_ID</p>	<p>Select from the drop-down menu the CAISO balancing area Resource ID for the resource. If the resource is not assigned a CAISO Resource ID, or represents an unknown group of resources, select "None_assigned". If the resource has a CAISO Resource ID not found in the drop-down menu, then copy/paste the value into the cell to bypass the drop-down menu data validation (an example of this situation would be a resource that was very recently assigned a CAISO Resource ID). When a single contract includes multiple resources, separate into multiple rows, one Resource_ID per row. For example, four rows will be entered for a contract that includes four Resource_IDs. This column must not be blank.</p> <p>For situations where the LSE is reporting a current or future contract with unknown existing resource(s), report this information in this workbook, NOT the New Resource Data Template. Examples include: a new RA contract with an existing unit that comes off its existing contract in a future year, or other contract types that do not specify a source. Existing Feed In Tariff contracts (which do not have a CAISO Resource ID) are also reported in this workbook. In these situations, select "None_assigned".</p>
<p>CPUC_ID</p>	<p>For large IOU RPS-eligible units, report the "CPUC ID" field that is specified in the IOU's monthly reporting to the CPUC's RPS Database. When a single Resource_ID is associated with more than one CPUC_ID at a time, separate into multiple rows, one CPUC_ID per row. For example, three rows will be entered for a single Resource_ID associated with three different CPUC_IDs. For situations where this does not apply, leave blank.</p>
<p>Contract_ID</p>	<p>For all LSEs, enter a Contract_ID, defined as an LSE's unique contract identifier. If the LSE is a large IOU and reporting a project that is within CPUC's RPS Database, then the IOU should report the "IOU Project ID" field that is specified in the IOU's monthly reporting to the CPUC's RPS Database. When a single Resource_ID is associated with more than one Contract_ID at a time, separate into multiple rows, one Contract_ID per row. For example, three rows will be entered for a single Resource_ID associated with three different Contract_IDs. For situations where this does not apply, leave blank.</p>
<p>Owner_Contract_Type</p>	<p>Select from the drop-down menu: LSE_Owned, RA_Only, Energy_Only, RA_and_Energy. This column must not be blank.</p>
<p>Pending_CPUC_Approval</p>	<p>Indicate the contract regulatory approval status:</p> <ul style="list-style-type: none"> • Select "Y" if the contract is awaiting CPUC approval (applies only to LSEs that must have contracts approved by the CPUC) • Otherwise leave blank
<p>Resource_Name</p>	<p>Enter the common name of the resource. Indicate specific units under contract if applicable (for example if one physical facility had some units contracted to different LSEs). For situations where the specific resource(s) are unknown, enter the contract name and brief description. This column must not be blank.</p>
<p>Resource_Type</p>	<p>If a CAISO Resource ID was identified in the Resource_ID column, select from the drop-down menu: "See_Resource_ID". Otherwise select a resource type from the remaining options. This column must not be blank. Explanation of options:</p> <ul style="list-style-type: none"> • Existing_CAM_Share (LSE's RA assigned share of CAM resources and projected forward using most recent year-ahead CAM list allocation) • Existing_CAISO_CHP (unknown unit(s) similar to RESOLVE's CAISO_CHP generator type) • Existing_CAISO_CCGT1 (unknown unit(s) similar to RESOLVE's CAISO_CCGT1 generator type) • Existing_CAISO_CCGT2 (unknown unit(s) similar to RESOLVE's CAISO_CCGT2 generator type) • Existing_CAISO_Peaker1 (unknown unit(s) similar to RESOLVE's CAISO_Peaker1 generator type) • Existing_CAISO_Peaker2 (unknown unit(s) similar to RESOLVE's CAISO_Peaker2 generator type) • Existing_CAISO_Biomass (unknown unit(s) similar to RESOLVE's Biomass generator type) • Existing_CAISO_Geothermal (unknown unit(s) similar to RESOLVE's Geothermal generator type) • Existing_CAISO_SmallHydro (unknown unit(s) similar to RESOLVE's Small Hydro generator type) • Existing_CAISO_SolarFixed (unknown unit(s) similar to RESOLVE's Solar Fixed-Tilt generator type) • Existing_CAISO_SolarTracking (unknown unit(s) similar to RESOLVE's Solar Tracking generator type) • Existing_CAISO_Wind (unknown unit(s) similar to RESOLVE's Wind generator type) • Existing_CAISO_Unspecified (with system unspecified power attributes) • Existing_CAISO_LargeHydro (unknown unit(s) of large hydro within CAISO) • Existing_Non-CAISO_CA_LargeHydro (no CAISO Resource ID or unknown unit(s) of large hydro outside CAISO but inside CA) • Existing_OOS_LargeHydro (no CAISO Resource ID or unknown unit(s) of large hydro outside CA)
<p>Nameplate_MW</p>	<p>Report the nameplate capacity (MW) of this Resource_ID. The nameplate capacity is the maximum rated AC output of the unit. If the specific-resource is not known, then leave this blank.</p>
<p>Year</p>	<p>Select a year from the drop-down menu. This column must not be blank.</p>
<p>Month</p>	<p>Select a month from the drop-down menu. This column must not be blank.</p>
<p>Contract_MW</p>	<p>Report the system capacity (MW) under contract by month. This is an actual or estimated Net Qualifying Capacity value. Per Resource Adequacy rules, a resource contracted for flexible capacity or local capacity will also count as system capacity. For energy only contracts, leave blank.</p>
<p>Contract_GWh</p>	<p>Report the expected energy production (GWh) associated with the energy portion of a contract, by month, when applicable. For RA only contracts, leave blank.</p>

LSE_Name	Resource_ID	CPUC_ID	Contract_ID	Owner_Contract_Type	Pending_CPUC_Approval	Resource_Name	Resource_Type	Nameplate_MW	Year	Month	Contract_MW	Contract_GWh
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	9		79.09
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	9		19.93
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	9		159.04
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	10		77.47
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	10		18.70
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	10		146.76
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	11		45.43
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	11		15.63
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	11		115.28
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	12		72.30
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	12		14.16
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	12		127.00
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	1		109.31
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	1		26.75
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	1		204.31
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	2		116.79
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	2		22.97
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	2		207.14
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	3		114.45
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	3		33.71
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	3		275.39
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	4		147.54
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	4		33.22
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	4		297.93
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	5		156.41
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	5		39.93
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	5		310.42
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	6		160.18
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	6		38.74
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	6		288.20
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	7		127.53
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	7		36.64
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	7		282.98
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	8		137.00
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	8		35.81
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	8		257.94
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	9		128.42
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	9		32.40
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	9		213.05
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	10		125.79
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	10		30.41

San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2019	10	196.60
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2019	11	73.77
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2019	11	25.41
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2019	11	154.44
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2019	12	117.40
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2019	12	23.02
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2019	12	170.13
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	1	112.27
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	1	27.48
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	1	197.95
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	2	119.95
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	2	23.60
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	2	200.69
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	3	117.55
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	3	34.63
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	3	266.82
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	4	151.53
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	4	34.12
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	4	288.65
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	5	160.64
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	5	41.01
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	5	300.75
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	6	164.51
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	6	39.78
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	6	279.23
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	7	130.98
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	7	37.63
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	7	274.17
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	8	140.71
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	8	36.78
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	8	249.91
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	9	131.90
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	9	33.28
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	9	206.42
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	10	129.19
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	10	31.23
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	10	190.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	11	75.77
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	11	26.09
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	11	149.63
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	12	120.58
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	12	23.64
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	12	164.84
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2021	1	0.00

San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	6	249.46
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	7	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	7	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	7	244.94
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	8	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	8	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	8	223.27
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	9	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	9	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	9	184.42
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	10	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	10	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	10	170.18
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	11	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	11	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	11	133.68
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	12	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	12	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	12	147.27
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	1	2.33
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	1	0.57
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	1	172.18
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	2	2.49
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	2	0.49
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	2	174.57
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	3	2.44
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	3	0.72
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	3	232.09
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	4	3.14
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	4	0.71
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	4	251.08
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	5	3.33
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	5	0.85
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	5	261.60
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	6	3.41
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	6	0.82
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	6	242.88
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	7	2.71
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	7	0.78
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	7	238.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	8	2.92
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	8	0.76
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	8	217.38
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	9	2.73

San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2024	9	0.69
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2024	9	179.55
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2024	10	2.68
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2024	10	0.65
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2024	10	165.69
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2024	11	1.57
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2024	11	0.54
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2024	11	130.15
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2024	12	2.50
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2024	12	0.49
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2024	12	143.38
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	1	6.21
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	1	1.52
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	1	166.61
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	2	6.63
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	2	1.30
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	2	168.92
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	3	6.50
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	3	1.91
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	3	224.58
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	4	8.38
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	4	1.89
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	4	242.96
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	5	8.88
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	5	2.27
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	5	253.14
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	6	9.10
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	6	2.20
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	6	235.02
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	7	7.24
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	7	2.08
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	7	230.77
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	8	7.78
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	8	2.03
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	8	210.35
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	9	7.29
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	9	1.84
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	9	173.74
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	10	7.14
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	10	1.73
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	10	160.33
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	11	4.19
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	11	1.44
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	11	125.94

San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2025	12	6.67
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2025	12	1.31
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2025	12	138.74
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	1	9.73
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	1	2.38
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	1	160.68
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	2	10.40
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	2	2.05
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	2	162.91
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	3	10.19
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	3	3.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	3	216.59
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	4	13.14
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	4	2.96
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	4	234.31
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	5	13.93
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	5	3.56
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	5	244.14
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	6	14.26
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	6	3.45
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	6	226.66
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	7	11.36
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	7	3.26
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	7	222.56
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	8	12.20
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	8	3.19
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	8	202.87
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	9	11.44
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	9	2.89
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	9	167.56
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	10	11.20
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	10	2.71
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	10	154.62
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	11	6.57
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	11	2.26
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	11	121.46
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2026	12	10.45
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2026	12	2.05
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2026	12	133.81
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2027	1	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2027	1	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2027	1	142.52
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2027	2	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2027	2	0.00

San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2029	8	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2029	8	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2029	8	176.57
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2029	9	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2029	9	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2029	9	145.84
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2029	10	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2029	10	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2029	10	134.58
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2029	11	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2029	11	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2029	11	105.72
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2029	12	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2029	12	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2029	12	116.46
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	1	0.23
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	1	0.06
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	1	138.46
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	2	0.24
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	2	0.05
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	2	140.38
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	3	0.24
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	3	0.07
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	3	186.64
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	4	0.31
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	4	0.07
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	4	201.91
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	5	0.32
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	5	0.08
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	5	210.37
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	6	0.33
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	6	0.08
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	6	195.32
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	7	0.26
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	7	0.08
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	7	191.78
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	8	0.28
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	8	0.07
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	8	174.81
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	9	0.27
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	9	0.07
San Jose City	None_assigned	Energy_Only	Large Hydro Existing_CAISO_LargeHydro	2030	9	144.39
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO Existing_CAISO_SolarTracking	2030	10	0.26
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO Existing_CAISO_Wind	2030	10	0.06

San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro		2030	10		133.24
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2030	11		0.15
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2030	11		0.05
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro		2030	11		104.67
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2030	12		0.24
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2030	12		0.05
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro		2030	12		115.30
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	9	111.60	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	10	124.50	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	11	100.35	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	12	107.34	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	1	20.51	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	2	20.25	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	3	545.92	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	4	641.01	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	5	737.60	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	6	843.15	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	7	824.21	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	8	833.01	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	9	873.86	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	10	647.81	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	11	590.59	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	12	667.67	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	1	693.97	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	2	722.18	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	3	610.63	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	4	635.93	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	5	731.75	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	6	836.46	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	7	817.67	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	8	826.40	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	9	866.93	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	10	642.67	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	11	585.91	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	12	662.37	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	1	725.06	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	2	754.53	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	3	637.98	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	4	664.42	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	5	764.54	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	6	873.94	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	7	854.31	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	8	863.43	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	9	905.77	

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	10	671.46
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	11	612.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	12	692.05
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	1	724.33
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	2	753.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	3	637.34
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	4	663.75
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	5	763.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	6	873.06
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	7	853.45
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	8	862.56
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	9	904.86
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	10	670.79
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	11	611.54
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	12	691.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	1	720.64
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	2	749.94
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	3	634.10
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	4	660.37
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	5	759.88
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	6	868.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	7	849.11
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	8	858.17
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	9	900.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	10	667.37
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	11	608.43
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	12	687.84
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	1	716.49
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	2	745.62
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	3	630.44
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	4	656.57
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	5	755.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	6	863.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	7	844.21
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	8	853.23
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	9	895.07
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	10	663.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	11	604.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	12	683.87
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	1	714.56
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	2	743.60
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	3	628.74
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	4	654.79
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	5	753.46

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	6	861.28
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	7	841.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	8	850.92
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	9	892.65
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	10	661.74
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	11	603.29
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	12	682.02
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	1	710.90
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	2	739.79
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	3	625.52
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	4	651.44
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	5	749.60
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	6	856.86
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	7	837.62
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	8	846.56
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	9	888.08
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	10	658.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	11	600.20
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	12	678.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	1	707.76
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	2	736.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	3	622.76
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	4	648.56
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	5	746.29
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	6	853.08
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	7	833.92
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	8	842.82
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	9	884.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	10	655.44
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	11	597.55
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	12	675.54
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	1	704.27
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	2	732.89
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	3	619.69
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	4	645.37
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	5	742.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	6	848.87
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	7	829.81
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	8	838.67
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	9	879.80
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	10	652.21
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	11	594.60
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	12	672.20
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	1	701.43

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	2	729.94
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	3	617.19
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	4	642.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	5	739.62
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	6	845.46
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	7	826.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	8	835.29
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	9	876.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	10	649.58
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	11	592.21
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	12	669.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	1	698.75
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	2	727.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	3	614.84
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	4	640.31
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	5	736.80
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	6	842.23
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	7	823.31
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	8	832.10
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	9	872.91
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	10	647.10
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	11	589.95
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	12	666.94

LSE_Type	LSE_Name_Long	LSE_Name_Short	Resource_ID	Owner_Contract_Ty	Pending_C	Resource_Type	Year	Month
ESP	3 Phases Renewables Inc	3PhasesRenewable	None_assigned	LSE_Owned	Y	See_Resource_ID	2018	1
ESP	Agera Energy LLC	AgeraEnergy	7STDRD_1_SOLAR1	RA_Only		Existing_CAM_Share	2019	2
ESP	American PowerNet Management	AmericanPowerNetM	ACACIA_6_SOLAR	Energy_Only		Existing_CAISO_CHP	2020	3
Co-op	Anza Electric Cooperative	AnzaElecCoop	ADERA_1_SOLAR1	RA_and_Energy		Existing_CAISO_CCGT1	2021	4
CCA	Apple Valley Choice Energy	AppleVlyChoiceEn	ADLIN_1_UNITS			Existing_CAISO_CCGT2	2022	5
Utility	Bear Valley Electric Service	BearValley	ADMEST_6_SOLAR			Existing_CAISO_Peaker1	2023	6
ESP	Calpine Energy Solutions LLC	CalpineEnergySoln	ADOBEE_1_SOLAR			Existing_CAISO_Peaker2	2024	7
ESP	Calpine Poweramerica-CA LLC	CalpinePowerAmCA	AGRICO_6_PL3N5			Existing_CAISO_Biomass	2025	8
CCA	Clean Power San Francisco	CleanPowerSF	AGRICO_7_UNIT			Existing_CAISO_Geothermal	2026	9
ESP	Commercial Energy of California	CommercialEnergyCA	AGUCAL_5_SOLAR1			Existing_CAISO_SmallHydro	2027	10
ESP	Constellation New Energy Inc	ConstellationNewEn	ALAMIT_7_UNIT 1			Existing_CAISO_SolarFixed	2028	11
CCA	Desert Community Energy	DesertCommunityEn	ALAMIT_7_UNIT 2			Existing_CAISO_SolarTracking	2029	12
ESP	Direct Energy Business	DirectEnergyBusiness	ALAMIT_7_UNIT 3			Existing_CAISO_Wind	2030	
CCA	East Bay Community Energy	EastBayCommunityEn	ALAMIT_7_UNIT 4			Existing_CAISO_Unspecified		
ESP	EDF Industrial Power Services CA LLC	EDFIndustrialPowerSrv	ALAMIT_7_UNIT 5			Existing_CAISO_LargeHydro		
ESP	Just Energy Solutions Inc	JustEnergySolutions	ALAMIT_7_UNIT 6			Existing_Non-CAISO_CA_LargeHydro		
CCA	King City CCA	KingCityCCA	ALAMO_6_UNIT			Existing_OOS_LargeHydro		
CCA	Lancaster Choice Energy	LancasterChoiceEn	ALLGNY_6_HYDRO1					
Utility	Liberty Utilities	LibertyUtilities	ALMEGT_1_UNIT 1					
CCA	Los Angeles Community Choice	LosAngelCommChoice	ALMEGT_1_UNIT 2					
CCA	Marin Clean Energy	MarinCleanEnergy	ALPSLR_1_NTHSLR					
CCA	Monterey Bay Community Power	MontereyBayCommPwr	ALPSLR_1_SPSLR					
Utility	Pacific Gas and Electric	PacificGasAndElectric	ALT6DN_2_WIND7					
Utility	PacifiCorp	PacifiCorp	ALT6DS_2_WIND9					
CCA	Peninsula Clean Energy	PeninsulaCleanEnAuth	ALTA3A_2_CPCE4					
CCA	Pico Rivera Innovative Municipal Energy	PicoRiveraInnovMuniEn	ALTA3A_2_CPCE5					
ESP	Pilot Power Group Inc	PilotPowerGroup	ALTA3A_2_CPCE8					
CCA	Pioneer Community Energy	PioneerCommunityEn	ALTA4A_2_CPCW1					
Co-op	Plumas Sierra Rural Elec Coop	PlumasSierraCoop	ALTA4B_2_CPCW2					
CCA	Rancho Mirage Energy Authority	RanchoMirageEnAuth	ALTA4B_2_CPCW3					
CCA	Redwood Coast Energy	RedwoodCoastEnergy	ALTA4B_2_CPCW6					
Utility	San Diego Gas and Electric	SanDiegoGasAndElectric	ALTA6B_2_WIND11					
CCA	San Jacinto Power	SanJacintoPower	ALTA6E_2_WIND10					
CCA	San Jose City	SanJoseCity	ALTWD_1_QF					
ESP	Shell Energy North America	ShellEnergyNorthAm	ANAHM_2_CANYN1					
CCA	Silicon Valley Clean Energy	SiliconVlyCleanEnAuth	ANAHM_2_CANYN2					
CCA	Solana Energy Alliance	SolanaEnergyAlliance	ANAHM_2_CANYN3					
CCA	Sonoma Clean Power	SonomaCleanPower	ANAHM_2_CANYN4					
Utility	Southern California Edison	SouthernCalEdison	ANAHM_7_CT					
Co-op	Surprise Valley Electric Corp	SurpriseValleyElectric	ANTLPE_2_QF					
ESP	The Regents of the University of California	TheRegentsUnivCA	APHLIL_1_SLABCK					
ESP	Tiger Natural Gas Inc	TigerNaturalGas	ARBWD_6_QF					
CCA	Valley Clean Energy Alliance	ValleyCleanEnAlliance	ARCOGN_2_UNITS					
Co-op	Valley Electric Association	ValleyElectricAssoc	ARVINN_6_ORION1					
			ARVINN_6_ORION2					
			ASTORA_2_SOLAR1					
			ASTORA_2_SOLAR2					
			ATWEL2_1_SOLAR1					
			ATWELL_1_SOLAR					
			AVENAL_6_AVPARK					
			AVENAL_6_AVSLR1					
			AVENAL_6_AVSLR2					
			AVENAL_6_SANDDG					
			AVENAL_6_SUNCTY					
			AVSOLR_2_SOLAR					
			BALCHS_7_UNIT 1					
			BALCHS_7_UNIT 2					
			BALCHS_7_UNIT 3					
			BANGOR_6_HYDRO					
			BANKPP_2_NSPIN					
			BARRE_2_QF					
			BARRE_6_PEAKEK					
			BASICE_2_UNITS					
			BDGRCK_1_UNITS					
			BEARDS_7_UNIT 1					
			BEARMT_1_UNIT					
			BELDEN_7_UNIT 1					
			BIGCRK_2_EXESWD					
			BIGCRK_7_DAM7					
			BIGCRK_7_MAMRES					
			BIGSKY_2_BSKSR6					
			BIGSKY_2_BSKSR7					
			BIGSKY_2_BSKSR8					
			BIGSKY_2_SOLAR1					
			BIGSKY_2_SOLAR2					
			BIGSKY_2_SOLAR3					
			BIGSKY_2_SOLAR4					
			BIGSKY_2_SOLAR5					
			BIGSKY_2_SOLAR6					
			BIGSKY_2_SOLAR7					
			BIOMAS_1_UNIT 1					
			BISHOP_1_ALAMO					
			BISHOP_1_UNITS					
			BKRFLD_2_SOLAR1					
			BLACK_7_UNIT 1					
			BLACK_7_UNIT 2					
			BLAST_1_WIND					
			BLCKBT_2_STONEY					
			BLCKWL_6_SOLAR1					

BLKCRK_2_SOLAR1
BLM_2_UNITS
BLYTHE_1_SOLAR1
BLYTHE_1_SOLAR2
BNNIEN_7_ALTAPH
BOGUE_1_UNITA1
BORDER_6_UNITA1
BOWMN_6_HYDRO
BOWMN_6_UNIT
BRDGLV_7_BAKER
BRDSL_2_HIWIND
BRDSL_2_MTZUM2
BRDSL_2_MTZUMA
BRDSL_2_SHILO1
BRDSL_2_SHILO2
BRDSL_2_SHLO3A
BRDSL_2_SHLO3B
BRDWAY_7_UNIT 3
BREGGO_6_DEGRSL
BREGGO_6_SOLAR
BRODIE_2_WIND
BUCKBL_2_PL1X3
BUCKCK_2_HYDRO
BUCKCK_7_OAKFLT
BUCKCK_7_PL1X2
BUCKWD_1_NPALM1
BUCKWD_1_QF
BUCKWD_7_WINTCV
BURNYF_2_UNIT 1
BUTTVL_7_UNIT 1
CABZON_1_WINDA1
CALFTN_2_SOLAR
CALGEN_1_UNITS
CALPIN_1_AGNEW
CAMCHE_1_PL1X3
CAMLOT_2_SOLAR1
CAMLOT_2_SOLAR2
CAMPFW_7_FARWST
CANTUA_1_SOLAR
CAPMAD_1_UNIT 1
CAPWD_1_QF
CARBOU_7_PL2X3
CARBOU_7_PL4X5
CARBOU_7_UNIT 1
CATLNA_2_SOLAR
CATLNA_2_SOLAR2
CAVLSR_2_BSOLAR
CAVLSR_2_RSOLAR
CAYTNO_2_VASCO
CBRILLO_6_PLSTP1
CCRITA_7_RPPCHF
CDWR07_2_GEN
CEDRCK_6_UNIT
CEDUCR_2_SOLAR1
CEDUCR_2_SOLAR2
CEDUCR_2_SOLAR3
CEDUCR_2_SOLAR4
CENTER_2_QF
CENTER_2_RHONDO
CENTER_2_SOLAR1
CENTER_6_PEAKEK
CENTRY_6_PL1X4
CHALK_1_UNIT
CHEVCD_6_UNIT
CHEVCO_6_UNIT 1
CHEVCO_6_UNIT 2
CHEVCY_1_UNIT
CHEVMN_2_UNITS
CHICPK_7_UNIT 1
CHILLS_1_SYCENG
CHILLS_7_UNITA1
CHINO_2_APEBT1
CHINO_2_JURUPA
CHINO_2_QF
CHINO_2_SASOLR
CHINO_2_SOLAR
CHINO_2_SOLAR2
CHINO_6_CIMGEN
CHINO_6_SMPPAP
CHINO_7_MILIKN
CHWCHL_1_BIOMAS
CHWCHL_1_UNIT
CLOVDL_1_SOLAR
CLOVER_2_UNIT
CLRKR_6_LIMESD
CLRMTK_1_QF
CNTNLA_2_SOLAR1
CNTNLA_2_SOLAR2
CNTRVL_6_UNIT
COCOPP_2_CTG1

COCOPP_2_CTG2
COCOPP_2_CTG3
COCOPP_2_CTG4
COCOSB_6_SOLAR
COGNAT_1_UNIT
COLEMN_2_UNIT
COLGA1_6_SHELLW
COLGAT_7_UNIT 1
COLGAT_7_UNIT 2
COLTON_6_AGUAM1
COLUSA_2_PL1X3
COLVIL_7_PL1X2
CONTAN_1_UNIT
CONTRL_1_CASAD1
CONTRL_1_CASAD3
CONTRL_1_LUNDY
CONTRL_1_OXBOW
CONTRL_1_POOLE
CONTRL_1_QF
CONTRL_1_RUSHCK
COPMT2_2_SOLAR2
COPMT4_2_SOLAR4
COPMTN_2_CM10
COPMTN_2_SOLAR1
CORCAN_1_SOLAR1
CORCAN_1_SOLAR2
CORONS_2_SOLAR
CORONS_6_CLRWTR
CORRAL_6_SJOAQN
COTTLE_2_FRNKNH
COVERD_2_HCKHY1
COVERD_2_MCKHY1
COVERD_2_QFUNTS
COVERD_2_RCKHY1
COWCRK_2_UNIT
CPSTNO_7_PRMADS
CPVERD_2_SOLAR
CRELMN_6_RAMON1
CRELMN_6_RAMON2
CRELMN_6_RAMSR3
CRESSY_1_PARKER
CRESTA_7_PL1X2
CRNEVL_6_CRNVA
CRNEVL_6_SJQN 2
CRNEVL_6_SJQN 3
CROKET_7_UNIT
CRSTWD_6_KUMYAY
CRWCKS_1_SOLAR1
CSCCOG_1_UNIT 1
CSCGNR_1_UNIT 1
CSCGNR_1_UNIT 2
CSLR4S_2_SOLAR
CSTOGA_6_LNDFIL
CSTRVL_7_PL1X2
CSTRVL_7_QFUNTS
CTNWDP_1_QF
CUMBIA_1_SOLAR
CURTIS_1_CANLCK
CURTIS_1_FARFLD
CUYAMS_6_CUYSR1
DAVIS_1_SOLAR1
DAVIS_1_SOLAR2
DAVIS_7_MNMETH
DEADCK_1_UNIT
DEERCR_6_UNIT 1
DELAMO_2_SOLAR1
DELAMO_2_SOLAR2
DELAMO_2_SOLAR3
DELAMO_2_SOLAR4
DELAMO_2_SOLAR5
DELAMO_2_SOLAR6
DELAMO_2_SOLRC1
DELAMO_2_SOLRD
DELSUR_6_CREST
DELSUR_6_DRYFRB
DELSUR_6_SOLAR1
DELTA_2_PL1X4
DEVERS_1_QF
DEVERS_1_SEPV05
DEVERS_1_SOLAR
DEVERS_1_SOLAR1
DEVERS_1_SOLAR2
DEVERS_2_DHSPG2
DEXZEL_1_UNIT
DIABLO_7_UNIT 1
DIABLO_7_UNIT 2
DINUBA_6_UNIT
DISCOV_1_CHEVRN
DIVSON_6_NSQF
DIXNLD_1_LNDFL

DMDVLY_1_UNITS
DONNLS_7_UNIT
DOSMGO_2_NSPIN
DOUBL_1_UNITS
DRACKR_2_SOLAR1
DRACKR_2_SOLAR2
DREWS_6_PL1X4
DRUM_7_PL1X2
DRUM_7_PL3X4
DRUM_7_UNIT 5
DSABLA_7_UNIT
DSRTSL_2_SOLAR1
DSRTSN_2_SOLAR1
DSRTSN_2_SOLAR2
DTCHWD_2_BT3WND
DTCHWD_2_BT4WND
DUANE_1_PL1X3
DUTCH1_7_UNIT 1
DUTCH2_7_UNIT 1
DVLCYN_1_UNITS
EASTWD_7_UNIT
EDMONS_2_NSPIN
EKTMTN_6_SOLAR1
ELCAJN_6_EB1BT1
ELCAJN_6_LM6K
ELCAJN_6_UNITA1
ELCAJN_7_GT1
ELCAP_1_SOLAR
ELDORO_7_UNIT 1
ELDORO_7_UNIT 2
ELECTR_7_PL1X3
ELKCRK_6_STONYG
ELKHIL_2_PL1X3
ELLIS_2_QF
ELNIDP_6_BIOMAS
ELSEGN_2_UN1011
ELSEGN_2_UN2021
ENCINA_7_EA1
ENCINA_7_EA2
ENCINA_7_EA3
ENCINA_7_EA4
ENCINA_7_EA5
ENCINA_7_GT1
ENERSJ_2_WIND
ENWIND_2_WIND1
ENWIND_2_WIND2
ESCND0_6_EB1BT1
ESCND0_6_EB2BT2
ESCND0_6_EB3BT3
ESCND0_6_PL1X2
ESCND0_6_UNITB1
ESCO_6_GLMQF
ESQUON_6_LNDFIL
ETIWND_2_CHMPNE
ETIWND_2_FONTNA
ETIWND_2_RTS010
ETIWND_2_RTS015
ETIWND_2_RTS017
ETIWND_2_RTS018
ETIWND_2_RTS023
ETIWND_2_RTS026
ETIWND_2_RTS027
ETIWND_2_SOLAR1
ETIWND_2_SOLAR2
ETIWND_2_SOLAR5
ETIWND_2_UNIT1
ETIWND_6_GRPLND
ETIWND_6_MWDETI
ETIWND_7_MIDVLY
ETIWND_7_UNIT 3
ETIWND_7_UNIT 4
EXCHEC_7_UNIT 1
EXCLSG_1_SOLAR
FAIRHV_6_UNIT
FELLOW_7_QFUNTS
FLOWD2_2_FPLWND
FLOWD2_2_UNIT 1
FLOWD_2_WIND1
FMEADO_6_HELLHL
FMEADO_7_UNIT
FORBST_7_UNIT 1
FORKBU_6_UNIT
FRESHW_1_SOLAR1
FRIANT_6_UNITS
FRITO_1_LAY
FROGTN_1_UTICAA
FROGTN_7_UTICA
FTSWRD_6_TRFORK
FTSWRD_7_QFUNTS
FULTON_1_QF

GALE_1_SR3SR3
GARLND_2_GASLR
GARLND_2_GASLRA
GARNET_1_SOLAR
GARNET_1_SOLAR2
GARNET_1_UNITS
GARNET_1_WIND
GARNET_1_WINDS
GARNET_1_WT3WND
GARNET_2_HYDRO
GARNET_2_WIND1
GARNET_2_WIND2
GARNET_2_WIND3
GARNET_2_WIND4
GARNET_2_WIND5
GASKW1_2_GW1SR1
GATES_2_SOLAR
GATES_2_WSOLAR
GATWAY_2_PL1X3
GENESI_2_STG
GEYS11_7_UNIT11
GEYS12_7_UNIT12
GEYS13_7_UNIT13
GEYS14_7_UNIT14
GEYS16_7_UNIT16
GEYS17_2_BOTRCK
GEYS17_7_UNIT17
GEYS18_7_UNIT18
GEYS20_7_UNIT20
GIFENS_6_BUGSL1
GIFFEN_6_SOLAR
GILROY_1_UNIT
GILRPP_1_PL1X2
GILRPP_1_PL3X4
GLDFGR_6_SOLAR1
GLDFGR_6_SOLAR2
GLDTWN_6_COLUM3
GLDTWN_6_SOLAR
GLNARM_2_UNIT 5
GLNARM_7_UNIT 1
GLNARM_7_UNIT 2
GLNARM_7_UNIT 3
GLNARM_7_UNIT 4
GLOW_6_SOLAR
GOLDHL_1_QF
GOLETA_2_QF
GOLETA_6_ELLWOD
GOLETA_6_EXGEN
GOLETA_6_GAVOTA
GOLETA_6_TAJIGS
GONZLS_6_UNIT
GOOSLK_1_SOLAR1
GRIDLY_6_SOLAR
GRIZLY_1_UNIT 1
GRNLF1_1_UNITS
GRNLF2_1_UNIT
GRNVLY_7_SCLAND
GRSCRK_6_BGCKWW
GRZZLY_1_BERKLY
GUERNS_6_SOLAR
GWFPWR_1_UNITS
GYSX6_7_UNITS
GYS7X8_7_UNITS
GYSRVL_7_WSPRNG
HAASPH_7_PL1X2
HALSEY_6_UNIT
HARBGN_7_UNITS
HATCR1_7_UNIT
HATCR2_7_UNIT
HATLOS_6_BWDHY1
HATLOS_6_LSCRK
HATLOS_6_QFUNTS
HATRDG_2_WIND
HAYPRS_6_QFUNTS
HELMPG_7_UNIT 1
HELMPG_7_UNIT 2
HELMPG_7_UNIT 3
HENRTA_6_SOLAR1
HENRTA_6_SOLAR2
HENRTA_6_UNITA1
HENRTA_6_UNITA2
HENRTS_1_SOLAR
HIDSRT_2_UNITS
HIGGNS_1_COMBIE
HIGGNS_7_QFUNTS
HILAND_7_YOLOWD
HINSON_6_CARBGN
HINSON_6_LBECH1
HINSON_6_LBECH2
HINSON_6_LBECH3

HINSON_6_LBECH4
HINSON_6_SERRGN
HMLTBR_6_UNITS
HNTGBH_7_UNIT 1
HNTGBH_7_UNIT 2
HOLGAT_1_BORAX
HOLSTR_1_SOLAR
HOLSTR_1_SOLAR2
HUMBPP_1_UNITS3
HUMBPP_6_UNITS
HUMBSB_1_QF
HURON_6_SOLAR
HYTTTHM_2_UNITS
IGNACO_1_QF
INDIGO_1_UNIT 1
INDIGO_1_UNIT 2
INDIGO_1_UNIT 3
INDVLY_1_UNITS
INLDEM_5_UNIT 1
INLDEM_5_UNIT 2
INSKIP_2_UNIT
INTKEP_2_UNITS
INTTRB_6_UNIT
IVANPA_1_UNIT1
IVANPA_1_UNIT2
IVANPA_1_UNIT3
IVSLRP_2_SOLAR1
IVWEST_2_SOLAR1
JACMSR_1_JACSR1
JAKVAL_6_UNITG1
JAWBNE_2_NSRWND
JAWBNE_2_SRWND
JAYNE_6_WLSLR
KANAKA_1_UNIT
KANSAS_6_SOLAR
KEARNY_7_KY3
KEKAWK_6_UNIT
KELSO_2_UNITS
KELYRG_6_UNIT
KERKH1_7_UNIT 1
KERKH1_7_UNIT 3
KERKH2_7_UNIT 1
KERMAN_6_SOLAR1
KERMAN_6_SOLAR2
KERNFT_1_UNITS
KERNRG_1_UNITS
KERRGN_1_UNIT 1
KILARC_2_UNIT 1
KINGCO_1_KINGBR
KINGRV_7_UNIT 1
KIRKER_7_KELCYN
KNGBRD_2_SOLAR1
KNGBRD_2_SOLAR2
KNGBRG_1_KBSLR1
KNGBRG_1_KBSLR2
KNGCTY_6_UNITA1
KNTSTH_6_SOLAR
KRAMER_1_KJ5SR5
KRAMER_1_SEGS37
KRAMER_1_SEGSR3
KRAMER_1_SEGSR4
KRAMER_2_SEGS89
KRNCNY_6_UNIT
LACIEN_2_VENICE
LAGBEL_2_STG1
LAGBEL_6_QF
LAKHDG_6_UNIT 1
LAKHDG_6_UNIT 2
LAMONT_1_SOLAR1
LAMONT_1_SOLAR2
LAMONT_1_SOLAR3
LAMONT_1_SOLAR4
LAMONT_1_SOLAR5
LAPAC_6_UNIT
LAPLMA_2_UNIT 1
LAPLMA_2_UNIT 2
LAPLMA_2_UNIT 3
LAPLMA_2_UNIT 4
LARKSP_6_UNIT 1
LARKSP_6_UNIT 2
LAROAA_2_UNITA1
LAROAA_2_UNITA1
LASSEN_6_UNITS
LAWRNC_7_SUNYVVL
LEBEC_2_UNITS
LECEF_1_UNITS
LEPRFD_1_KANSAS
LGHTHP_6_ICEGEN
LHILLS_6_SOLAR1
LILIAC_6_SOLAR

LITLRK_6_SEPV01
LITLRK_6_SOLAR1
LITLRK_6_SOLAR2
LITLRK_6_SOLAR3
LITLRK_6_SOLAR4
LIVEOK_6_SOLAR
LIVOAK_1_UNIT 1
LMBEPK_2_UNITA1
LMBEPK_2_UNITA2
LMBEPK_2_UNITA3
LMEC_1_PL1X3
LNCSTR_6_CREST
LOCKFD_1_BEARCK
LOCKFD_1_KSOLAR
LODI25_2_UNIT 1
LODIEC_2_PL1X2
LOWGAP_1_SUPHR
LOWGAP_7_QFUNTS
MAGUND_1_BKISR1
MAGUND_1_BKSSR2
MALAGA_1_PL1X2
MALCHQ_7_UNIT 1
MANTEC_1_ML1SR1
MANZNA_2_WIND
MARCPW_6_SOLAR1
MARTIN_1_SUNSET
MCARTH_6_FRIVRB
MCCALL_1_QF
MCSWAN_6_UNITS
MDFKRL_2_PROJECT
MENBIO_6_RENEW1
MENBIO_6_UNIT
MERCED_1_SOLAR1
MERCED_1_SOLAR2
MERCFL_6_UNIT
MESAP_1_QF
MESAS_2_QF
METCLF_1_QF
METEC_2_PL1X3
MIDSET_1_UNIT 1
MIDWD_2_WIND1
MIDWD_2_WIND2
MIDWD_6_WNDLND
MIDWD_7_CORAMB
MIRLOM_2_CORONA
MIRLOM_2_LNDFL
MIRLOM_2_MLBBTA
MIRLOM_2_MLBBTB
MIRLOM_2_ONTARO
MIRLOM_2_RTS032
MIRLOM_2_RTS033
MIRLOM_2_TEMESC
MIRLOM_6_DELGEN
MIRLOM_6_PEAKER
MIRLOM_7_MWDLKM
MISSIX_1_QF
MKTRCK_1_UNIT 1
MLPTAS_7_QFUNTS
MNDALY_6_MCGRTH
MNDALY_7_UNIT 1
MNDALY_7_UNIT 2
MNDALY_7_UNIT 3
MNDOTA_1_SOLAR1
MNDOTA_1_SOLAR2
MOJAVE_1_SIPHON
MOJAVW_2_SOLAR
MONLTH_6_BOREL
MONTPH_7_UNITS
MOORPK_2_CALABS
MOORPK_6_QF
MOORPK_7_UNITA1
MORWD_6_QF
MOSSLD_1_QF
MOSSLD_2_PSP1
MOSSLD_2_PSP2
MOSSLD_7_UNIT 6
MOSSLD_7_UNIT 7
MRCHNT_2_PL1X3
MRGT_6_MEF2
MRGT_6_MMAREF
MRGT_7_UNITS
MRLSDS_6_SOLAR1
MSHGTS_6_MMARLF
MSOLAR_2_SOLAR1
MSOLAR_2_SOLAR2
MSOLAR_2_SOLAR3
MSSION_2_QF
MSTANG_2_SOLAR
MSTANG_2_SOLAR3
MSTANG_2_SOLAR4

MTNPOS_1_UNIT
MTWIND_1_UNIT 1
MTWIND_1_UNIT 2
MTWIND_1_UNIT 3
MURRAY_6_UNIT
NAROW1_2_UNIT
NAROW2_2_UNIT
NAVYIL_2_UNITS
NCPA_7_GP1UN1
NCPA_7_GP1UN2
NCPA_7_GP2UN3
NCPA_7_GP2UN4
NEENCH_6_SOLAR
NEWARK_1_QF
NHOGAN_6_UNITS
NIMTG_6_NIQF
NOVATO_6_LNDFL
NWCSTL_7_UNIT 1
NZWIND_2_WDSTR5
NZWIND_6_CALWND
NZWIND_6_WDSTR
NZWIND_6_WDSTR2
NZWIND_6_WDSTR3
NZWIND_6_WDSTR4
OAK C_1_EBMUD
OAK C_7_UNIT 1
OAK C_7_UNIT 2
OAK C_7_UNIT 3
OAK L_1_GTG1
OAKWD_6_ZEPHWD
OASIS_6_CREST
OASIS_6_SOLAR1
OASIS_6_SOLAR2
OASIS_6_SOLAR3
OCTILO_5_WIND
OGROVE_6_PL1X2
OILFLD_7_QFUNTS
OLDRIV_6_BIOGAS
OLDRV1_6_SOLAR
OLINDA_2_COYCRK
OLINDA_2_LNDFL2
OLINDA_2_QF
OLINDA_7_LNDFIL
OLIVEP_1_SOLAR
OLIVEP_1_SOLAR2
OLSEN_2_UNIT
OMAR_2_UNIT 1
OMAR_2_UNIT 2
OMAR_2_UNIT 3
OMAR_2_UNIT 4
ONLLPP_6_UNITS
ORLND_6_HIGHLI
ORLND_6_SOLAR1
ORMOND_7_UNIT 1
ORMOND_7_UNIT 2
OROLOM_1_SOLAR1
OROLOM_1_SOLAR2
OROVIL_6_UNIT
OSO_6_NSPIN
OTAY_6_LNDFL5
OTAY_6_LNDFL6
OTAY_6_PL1X2
OTAY_6_UNITB1
OTAY_7_UNITC1
OTMESA_2_PL1X3
OXBOW_6_DRUM
OXMTN_6_LNDFIL
PACLUM_6_UNIT
PADUA_2_ONTARO
PADUA_2_SOLAR1
PADUA_6_MWSDSM
PADUA_6_QF
PADUA_7_SDIMAS
PAIGES_6_SOLAR
PALALT_7_COBUG
PALOMR_2_PL1X3
PANDOL_6_UNIT
PANSEA_1_PANARO
PARDEB_6_UNITS
PBLOSM_2_SOLAR
PEABDY_2_LNDFIL
PEABDY_2_LNDFL1
PEARBL_2_NSPIN
PEORIA_1_SOLAR
PGCC_1_PDRP01
PGCC_1_PDRP02
PGCC_1_PDRP04
PGCC_1_PDRP05
PGEB_2_PDRP01
PGEB_2_PDRP02

PGEB_2_PDRP03
PGEB_2_PDRP04
PGEB_2_PDRP05
PGEB_2_PDRP06
PGEB_2_PDRP07
PGEB_2_PDRP08
PGEB_2_PDRP09
PGEB_2_PDRP10
PGEB_2_PDRP11
PGEB_2_RDRR07
PGEB_2_RDRR08
PGF1_2_PDRP01
PGF1_2_PDRP02
PGF1_2_PDRP03
PGF1_2_PDRP04
PGF1_2_PDRP07
PGF1_2_PDRP08
PGF1_2_PDRP09
PGF1_2_PDRP10
PGF1_2_PDRP11
PGF1_2_RDRR05
PGF1_2_RDRR06
PGF1_2_RDRR07
PGFG_1_PDRP01
PGFG_1_PDRP02
PGFG_1_PDRP03
PGFG_1_PDRP04
PGFG_1_PDRP05
PGFG_1_PDRP06
PGFG_1_RDRR03
PGHB_6_PDRP01
PGHB_6_PDRP02
PGHB_6_PDRP04
PGKN_2_PDRP02
PGKN_2_RDRR03
PGLP_2_PDRP02
PGNB_2_PDRP01
PGNB_2_PDRP02
PGNB_2_PDRP03
PGNB_2_PDRP04
PGNB_2_PDRP05
PGNB_2_RDRR01
PGNC_1_PDRP01
PGNP_2_PDRP01
PGNP_2_PDRP02
PGNP_2_PDRP03
PGNP_2_RDRR01
PGNP_2_RDRR09
PGNV_1_PDRP01
PGP2_2_PDRP01
PGP2_2_PDRP04
PGP2_2_PDRP05
PGP2_2_PDRP06
PGP2_2_PDRP07
PGP2_2_PDRP08
PGP2_2_PDRP10
PGP2_2_PDRP17
PGSA_2_PDRP01
PGSA_2_PDRP02
PGSA_2_PDRP03
PGSB_1_PDRP02
PGSB_1_PDRP03
PGSB_1_PDRP04
PGSB_1_PDRP05
PGSB_1_PDRP06
PGSB_1_PDRP07
PGSB_1_PDRP08
PGSB_1_PDRP09
PGSB_1_PDRP10
PGSB_1_PDRP11
PGSB_1_PDRP12
PGSB_1_PDRP13
PGSB_1_PDRP14
PGSB_1_PDRP16
PGSB_1_RDRR04
PGSB_1_RDRR05
PGSF_2_PDRP01
PGSF_2_PDRP02
PGSF_2_PDRP03
PGSF_2_PDRP04
PGSF_2_PDRP06
PGSF_2_PDRP07
PGSF_2_PDRP08
PGSF_2_PDRP09
PGSF_2_PDRP10
PGSF_2_PDRP11
PGSF_2_PDRP12
PGSF_2_PDRP18
PGSI_1_PDRP01
PGSI_1_PDRP02

PGSI_1_PDRP03
PGSI_1_RDRR01
PGST_2_PDRP01
PGST_2_PDRP03
PGST_2_RDRR02
PGZP_2_PDRP02
PGZP_2_PDRP03
PGZP_2_RDRR01
PGZP_2_RDRR02
PGZP_2_RDRR03
PGZP_2_RDRR06
PHOENX_1_UNIT
PINFLT_7_UNITS
PIOPIC_2_CTG1
PIOPIC_2_CTG2
PIOPIC_2_CTG3
PIT1_6_FRIVRA
PIT1_7_UNIT 1
PIT1_7_UNIT 2
PIT3_7_PL1X3
PIT4_7_PL1X2
PITS_7_PL1X2
PITS_7_PL3X4
PITS_7_QFUNTS
PIT6_7_UNIT 1
PIT6_7_UNIT 2
PIT7_7_UNIT 1
PIT7_7_UNIT 2
PITTS_7_UNIT 5
PITTS_7_UNIT 6
PITTS_7_UNIT 7
PLACVL_1_CHILIB
PLACVL_1_RCKCRE
PLAINV_6_BSOLAR
PLAINV_6_DSOLAR
PLAINV_6_NLRSR1
PLAINV_6_SOLAR3
PLAINV_6_SOLAR4
PLSNTG_7_LNCLND
PMDLET_6_SOLAR1
PMPJCK_1_RB2SLR
PMPJCK_1_SOLAR1
PMPJCK_1_SOLAR2
PNCHEG_2_PL1X4
PNCHEG_2_PL1X2
PNCHEG_2_SOLAR
PNOCHE_1_PL1X2
PNOCHE_1_UNITA1
POEPH_7_UNIT 1
POEPH_7_UNIT 2
POTTER_6_UNITS
POTTER_7_VECINO
PRIMM_2_SOLAR1
PSWEET_1_STCRUZ
PSWEET_7_QFUNTS
PTLOMA_6_NTCCGN
PTLOMA_6_NTCQF
PUTHCR_1_SOLAR1
PWEST_1_UNIT
RCKCRK_7_UNIT 1
RCKCRK_7_UNIT 2
RDWAY_1_CREST
RECTOR_2_CREST
RECTOR_2_KAWEAH
RECTOR_2_KAWH 1
RECTOR_2_QF
RECTOR_7_TULARE
REDBLF_6_UNIT
REDMAN_2_SOLAR
REDOND_7_UNIT 5
REDOND_7_UNIT 6
REDOND_7_UNIT 7
REDOND_7_UNIT 8
REEDLY_6_SOLAR
RENWD_1_QF
RHONDO_2_QF
RHONDO_6_PUENTE
RICHMN_1_CHVSR2
RICHMN_1_SOLAR
RICHMN_7_BAYENV
RIOBRV_6_UNIT 1
RIOOSO_1_QF
RNDMTN_2_SLSPHY1
ROLLIN_6_UNIT
ROSMDW_2_WIND1
ROSMND_6_SOLAR
RSMSLR_6_SOLAR1
RSMSLR_6_SOLAR2
RTEDDY_2_SOLAR1
RTEDDY_2_SOLAR2

RTREE_2_WIND1
RTREE_2_WIND2
RTREE_2_WIND3
RUSCTY_2_UNITS
RVRVEW_1_UNITA1
RVSIDE_2_RERCU3
RVSIDE_2_RERCU4
RVSIDE_6_RERCU1
RVSIDE_6_RERCU2
RVSIDE_6_SOLAR1
RVSIDE_6_SPRING
S_RITA_6_SOLAR1
SAURV_2_UNIT
SALTSP_7_UNITS
SAMPSN_6_KELCO1
SANDLT_2_SUNITS
SANITR_6_UNITS
SANLOB_1_LNDFIL
SANTFG_7_UNITS
SANTGO_2_LNDFL1
SANTGO_2_MABBT1
SANWD_1_QF
SARGNT_2_UNIT
SAUGUS_2_TOLAND
SAUGUS_6_MWDFTH
SAUGUS_6_PTCHGN
SAUGUS_6_QF
SAUGUS_7_CHIQCN
SAUGUS_7_LOPEZ
SBERDO_2_PSP3
SBERDO_2_PSP4
SBERDO_2_QF
SBERDO_2_REDLND
SBERDO_2_RTS005
SBERDO_2_RTS007
SBERDO_2_RTS011
SBERDO_2_RTS013
SBERDO_2_RTS016
SBERDO_2_RTS048
SBERDO_2_SNTANA
SBERDO_6_MILLCK
SCEC_1_PDRP03
SCEC_1_PDRP26
SCEC_1_PDRP27
SCEC_1_PDRP28
SCEC_1_PDRP29
SCEC_1_PDRP30
SCEC_1_PDRP31
SCEC_1_PDRP32
SCEC_1_PDRP33
SCEC_1_PDRP36
SCEC_1_PDRP37
SCEC_1_PDRP38
SCEC_1_PDRP39
SCEC_1_PDRP41
SCEC_1_PDRP42
SCEC_1_PDRP43
SCEC_1_PDRP44
SCEC_1_PDRP45
SCEC_1_PDRP46
SCEC_1_PDRP47
SCEN_6_PDRP01
SCEN_6_PDRP17
SCEN_6_PDRP18
SCEN_6_PDRP19
SCEN_6_PDRP20
SCEN_6_PDRP21
SCEN_6_PDRP22
SCEN_6_PDRP23
SCEN_6_PDRP24
SCEN_6_PDRP25
SCEN_6_PDRP27
SCEW_2_PDRP01
SCEW_2_PDRP04
SCEW_2_PDRP05
SCEW_2_PDRP15
SCEW_2_PDRP16
SCEW_2_PDRP17
SCEW_2_PDRP18
SCEW_2_PDRP19
SCEW_2_PDRP20
SCEW_2_PDRP21
SCEW_2_PDRP24
SCEW_2_PDRP25
SCEW_2_PDRP26
SCEW_2_PDRP27
SCEW_2_PDRP28
SCEW_2_PDRP29
SCEW_2_PDRP30
SCEW_2_PDRP31

SCEW_2_PDRP38
SCEW_2_PDRP39
SCHD_1_PDRP01
SCHD_1_PDRP02
SCHD_1_PDRP11
SCHD_1_PDRP12
SCHD_1_PDRP15
SCHD_1_PDRP16
SCHLTE_1_PL1X3
SCHNDR_1_FIVPTS
SCHNDR_1_WSTSDE
SCLD_1_PDRP08
SCLD_1_PDRP10
SCNW_6_PDRP01
SCNW_6_PDRP02
SCNW_6_PDRP10
SCNW_6_PDRP11
SCNW_6_PDRP12
SCNW_6_PDRP15
SCNW_6_PDRP17
SCNW_6_PDRP18
SCNW_6_PDRP19
SCNW_6_PDRP20
SDG1_1_PDRP01
SDG1_1_PDRP02
SDG1_1_PDRP03
SDG1_1_PDRP04
SDG1_1_PDRP05
SDG1_1_PDRP06
SDG1_1_PDRP07
SDG1_1_PDRP08
SDG1_1_PDRP09
SDG1_1_PDRP10
SDG1_1_PDRP11
SDG1_1_PDRP12
SDG1_1_PDRP14
SDG1_1_PDRP15
SDG1_1_PDRP16
SDG1_1_PDRP17
SDG1_1_PDRP18
SDG1_1_PDRP19
SDG1_1_PDRP30
SDG1_1_PDRP31
SDG1_1_PDRP32
SDG1_1_PDRP33
SDG1_1_PDRP34
SEARLS_7_ARGUS
SEGS_1_SR2SL2
SENTNL_2_CTG1
SENTNL_2_CTG2
SENTNL_2_CTG3
SENTNL_2_CTG4
SENTNL_2_CTG5
SENTNL_2_CTG6
SENTNL_2_CTG7
SENTNL_2_CTG8
SGREGY_6_SANGER
SHUTLE_6_CREST
SIERRA_1_UNITS
SISQUC_1_SMARIA
SKERN_6_SOLAR1
SKERN_6_SOLAR2
SLST13_2_SOLAR1
SLSTR1_2_SOLAR1
SLSTR2_2_SOLAR2
SLUISP_2_UNITS
SLYCRK_1_UNIT 1
SMPRIP_1_SMPSON
SMRCOS_6_LNDFIL
SMUDGO_7_UNIT 1
SMYRNA_1_DL1SR1
SNCLRA_2_HOWLNG
SNCLRA_2_SPRHYD
SNCLRA_2_UNIT1
SNCLRA_6_OXGEN
SNCLRA_6_PROCGN
SNCLRA_6_QF
SNCLRA_6_WILLMT
SNDBAR_7_UNIT 1
SNMALF_6_UNITS
SOUTH_2_UNIT
SPAULD_6_UNIT 3
SPAULD_6_UNIT12
SPBURN_2_UNIT 1
SPBURN_7_SNOWMT
SPLI_2_UNIT 1
SPIAND_1_ANDSN2
SPICER_1_UNITS
SPIFBD_1_PL1X2
SPQUIN_6_SRPCQU

SPRGAP_1_UNIT1
SPRGVL_2_CREST
SPRGVL_2_QF
SPRGVL_2_TULE
SPRGVL_2_TULESC
SRINTL_6_UNIT
STANIS_7_UNIT1
STAUFF_1_UNIT
STIGCT_2_LODI
STNRES_1_UNIT
STOILS_1_UNITS
STOREY_2_MDRCH2
STOREY_2_MDRCH3
STOREY_2_MDRCH4
STOREY_7_MDRCHW
STROUD_6_SOLAR
SUNRIS_2_PL1X3
SUNSET_2_UNITS
SUNSHN_2_LNDFL
SUTTER_2_PL1X3
SYCAMR_2_UNIT1
SYCAMR_2_UNIT2
SYCAMR_2_UNIT3
SYCAMR_2_UNIT4
TANHIL_6_SOLART
TBLMTN_6_QF
TEHAPL_2_WIND1
TEHAPL_2_WIND2
TENGEN_2_PL1X2
TERMEX_2_PL1X3
TESLA_1_QF
THMENG_1_UNIT1
TIDWTR_2_UNITS
TIFFNY_1_DILLON
TIGRCK_7_UNITS
TKOPWR_6_HYDRO
TMPLTN_2_SOLAR
TOADTW_6_UNIT
TOPAZ_2_SOLAR
TORTLA_1_SOLAR
TRNQLB_2_AZUSR1
TRNQLT_2_SOLAR
TRNSWD_1_QF
TULEWD_1_TULWD1
TULLCK_7_UNITS
TUPMAN_1_BIOGAS
TWISSL_6_SOLAR
TWISSL_6_SOLAR1
TX-ELK_6_SOLAR1
TXMCKT_6_UNIT
UKIAH_7_LAKEMN
ULTPCH_1_UNIT1
ULTPFR_1_UNIT1
ULTRCK_2_UNIT
UNCHEM_1_UNIT
UNOCAL_1_UNITS
UNVRSY_1_UNIT1
USWND2_1_WIND1
USWND2_1_WIND2
USWND2_1_WIND3
USWND4_2_UNITS
USWNRD_2_SMUD
USWNRD_2_SMUD2
USWNRD_2_UNITS
USWPJR_2_UNITS
VACADX_1_NAS
VACADX_1_SOLAR
VACADX_1_UNITA1
VALLEY_5_PERRIS
VALLEY_5_REDMTN
VALLEY_5_RTS044
VALLEY_5_SOLAR1
VALLEY_5_SOLAR2
VALLEY_7_BADLND
VALLEY_7_UNITA1
VEAVST_1_SOLAR
VEDDER_1_SEKERN
VEGA_6_SOLAR1
VENWD_1_WIND1
VENWD_1_WIND2
VENWD_1_WIND3
VERNON_6_GONZL1
VERNON_6_GONZL2
VERNON_6_MALBRG
VESTAL_2_KERN
VESTAL_2_RTS042
VESTAL_2_SOLAR1
VESTAL_2_SOLAR2
VESTAL_2_UNIT1
VESTAL_2_WELLHD

VESTAL_6_QF
VICTOR_1_CREST
VICTOR_1_EXSLRA
VICTOR_1_EXSLRB
VICTOR_1_LVSLR1
VICTOR_1_LVSLR2
VICTOR_1_SLRHES
VICTOR_1_SOLAR1
VICTOR_1_SOLAR2
VICTOR_1_SOLAR3
VICTOR_1_SOLAR4
VICTOR_1_VDRYFA
VICTOR_1_VDRYFB
VILLPK_2_VALLYV
VILLPK_6_MWDYOR
VINCNT_2_QF
VINCNT_2_WESTWD
VISTA_2_RIALTO
VISTA_2_RTS028
VISTA_6_QF
VLCNTR_6_VCCLR
VLCNTR_6_VCCLR1
VLCNTR_6_VCCLR2
VLYHOM_7_SSJID
VOLTA_2_UNIT 1
VOLTA_2_UNIT 2
VOLTA_6_BAILCK
VOLTA_6_DIGHYD
VOLTA_7_QFUNTS
WADHAM_6_UNIT
WALCRK_2_CTG1
WALCRK_2_CTG2
WALCRK_2_CTG3
WALCRK_2_CTG4
WALCRK_2_CTG5
WALNUT_2_SOLAR
WALNUT_6_HILLGEN
WALNUT_7_WCOVCT
WALNUT_7_WCOVST
WARNE_2_UNIT
WAUKNA_1_SOLAR
WAUKNA_1_SOLAR2
WDFRDF_2_UNITS
WDLEAF_7_UNIT 1
WEBER_6_FORWRD
WESTPT_2_UNIT
WFRESN_1_SOLAR
WHEATL_6_LNDFIL
WHITNY_6_SOLAR
WHTWTR_1_WINDA1
WISE_1_UNIT 1
WISE_1_UNIT 2
WISHON_6_UNITS
WLDWD_1_SOLAR1
WLDWD_1_SOLAR2
WNDMAS_2_UNIT 1
WINDSTR_2_WIND
WOLFSK_1_UNITA1
WOODWR_1_HYDRO
WRGHTP_7_AMENGY
WSENGY_1_UNIT 1
YUBACT_1_SUNSWT
YUBACT_6_UNITA1
ZOND_6_UNIT

Data Template Instructions	<p>On the "Baseline_Resources" tab, please report by month and year, the energy and system capacity amounts under contract to or owned by the Load Serving Entity (LSE). Report data for all resource types including conventional generation, wind, solar, demand response, storage, etc. that are owned by the LSE, or under contractual commitment to the LSE, in whole or in part. Include both online units with a CAISO Resource ID, as well as projects that are not yet online but have secured a contract and may therefore be identified in the Commission's RPS Contracts Database or an Application filed at the Commission. For situations where the LSE is reporting a current or future contract with unknown existing resource(s), report this information in this workbook, NOT the New Resource Data Template. Existing Feed In Tariff contracts (which do not have a CAISO Resource ID) are also reported in this workbook. Existing shares of CAM system capacity as assigned in CPUC's Resource Adequacy program and projected to future years are reported in this workbook. Report capacity data consistent with existing reporting obligations to the CPUC's Resource Adequacy program. Report data starting in January, 2018 through December 2030. Column heading definitions are below.</p> <p>On the "Baseline_Costs" tab, please report cost projections if applicable to the reporting entity. These are costs associated with the resources in the "Baseline_Resources" tab. Cost information associated with baseline demand-side programs, e.g. consistent with the LSE's portion of the 2017 IEPB mid demand mid-mid AAE/AAPV case, would also be reported on the "Baseline_Costs" tab. Projected costs from new LSE investments are separately reported in the New Resource Data Template. Report all costs in 2016 dollars, using the IEPB dollar deflator series posted to the IRP Filing Materials and Templates webpage. Explain the composition of each cost category in the text body of the Standard LSE Plan Template. Revenue requirement should be the sum of the other components in this worksheet.</p> <p>Many cells include data validation that requires the LSE to populate cells with only the allowed values shown in the cell's drop down menu. Data entry may be done manually, with copy/paste, or with a script - but only allowed values for that cell must be entered - this is critical to ensuring clean and reconcilable data. Cells must contain only text or numerical data. Do not use the "Insert Comment" feature of Excel to comment on specific cells. Instead please comment on specific cells in the text body of the Standard LSE Plan Template.</p>
Baseline_Resources Column Heading	Instruction and Description
LSE Name	Select from the drop-down menu the Load Serving Entity (LSE) name that the resource is under obligation to. This column must not be blank.
Resource_ID	Select from the drop-down menu the CAISO balancing area Resource ID for the resource. If the resource is not assigned a CAISO Resource ID, or represents an unknown group of resources, select "None_assigned". If the resource has a CAISO Resource ID not found in the drop-down menu, then copy/paste the value into the cell to bypass the drop-down menu data validation (an example of this situation would be a resource that was very recently assigned a CAISO Resource ID). When a single contract includes multiple resources, separate into multiple rows, one Resource_ID per row. For example, four rows will be entered for a contract that includes four Resource_IDs. This column must not be blank. For situations where the LSE is reporting a current or future contract with unknown existing resource(s), report this information in this workbook, NOT the New Resource Data Template. Examples include: a new RA contract with an existing unit that comes off its existing contract in a future year, or other contract types that do not specify a source. Existing Feed In Tariff contracts (which do not have a CAISO Resource ID) are also reported in this workbook. In these situations, select "None_assigned".
CPUC_ID	For large IOU RPS-eligible units, report the "CPUC ID" field that is specified in the IOU's monthly reporting to the CPUC's RPS Database. When a single Resource_ID is associated with more than one CPUC_ID at a time, separate into multiple rows, one CPUC_ID per row. For example, three rows will be entered for a single Resource_ID associated with three different CPUC_IDs. For situations where this does not apply, leave blank.
Contract_ID	For all LSEs, enter a Contract_ID, defined as an LSE's unique contract identifier. If the LSE is a large IOU and reporting a project that is within CPUC's RPS Database, then the IOU should report the "IOU Project ID" field that is specified in the IOU's monthly reporting to the CPUC's RPS Database. When a single Resource_ID is associated with more than one Contract_ID at a time, separate into multiple rows, one Contract_ID per row. For example, three rows will be entered for a single Resource_ID associated with three different Contract_IDs. For situations where this does not apply, leave blank.
Owner_Contract_Type	Select from the drop-down menu: LSE_Owned, RA_Only, Energy_Only, RA_and_Energy. This column must not be blank.
Pending_CPUC_Approval	Indicate the contract regulatory approval status: <ul style="list-style-type: none"> • Select "Y" if the contract is awaiting CPUC approval (applies only to LSEs that must have contracts approved by the CPUC) • Otherwise leave blank
Resource_Name	Enter the common name of the resource. Indicate specific units under contract if applicable (for example if one physical facility had some units contracted to different LSEs). For situations where the specific resource(s) are unknown, enter the contract name and brief description. This column must not be blank.
Resource_Type	If a CAISO Resource ID was identified in the Resource_ID column, select from the drop-down menu: "See_Resource_ID". Otherwise select a resource type from the remaining options. This column must not be blank. Explanation of options: <ul style="list-style-type: none"> • Existing_CAM_Share (LSE's RA assigned share of CAM resources and projected forward using most recent year-ahead CAM list allocation) • Existing_CAISO_CHP (unknown unit(s) similar to RESOLVE's CAISO_CHP generator type) • Existing_CAISO_CCGT1 (unknown unit(s) similar to RESOLVE's CAISO_CCGT1 generator type) • Existing_CAISO_CCGT2 (unknown unit(s) similar to RESOLVE's CAISO_CCGT2 generator type) • Existing_CAISO_Peaker1 (unknown unit(s) similar to RESOLVE's CAISO_Peaker1 generator type) • Existing_CAISO_Peaker2 (unknown unit(s) similar to RESOLVE's CAISO_Peaker2 generator type) • Existing_CAISO_Biomass (unknown unit(s) similar to RESOLVE's Biomass generator type) • Existing_CAISO_Geothermal (unknown unit(s) similar to RESOLVE's Geothermal generator type) • Existing_CAISO_SmallHydro (unknown unit(s) similar to RESOLVE's Small Hydro generator type) • Existing_CAISO_SolarFixed (unknown unit(s) similar to RESOLVE's Solar Fixed-Tilt generator type) • Existing_CAISO_SolarTracking (unknown unit(s) similar to RESOLVE's Solar Tracking generator type) • Existing_CAISO_Wind (unknown unit(s) similar to RESOLVE's Wind generator type) • Existing_CAISO_Unspecified (with system unspecified power attributes) • Existing_CAISO_LargeHydro (unknown unit(s) of large hydro within CAISO) • Existing_Non-CAISO_CA_LargeHydro (no CAISO Resource ID or unknown unit(s) of large hydro outside CAISO but inside CA) • Existing_OOS_LargeHydro (no CAISO Resource ID or unknown unit(s) of large hydro outside CA)
Nameplate_MW	Report the nameplate capacity (MW) of this Resource_ID. The nameplate capacity is the maximum rated AC output of the unit. If the specific-resource is not known, then leave this blank.
Year	Select a year from the drop-down menu. This column must not be blank.
Month	Select a month from the drop-down menu. This column must not be blank.
Contract_MW	Report the system capacity (MW) under contract by month. This is an actual or estimated Net Qualifying Capacity value. Per Resource Adequacy rules, a resource contracted for flexible capacity or local capacity will also count as system capacity. For energy only contracts, leave blank.
Contract_GWh	Report the expected energy production (GWh) associated with the energy portion of a contract, by month, when applicable. For RA only contracts, leave blank.

LSE_Name	Resource_ID	CPUC_ID	Contract_ID	Owner_Contract_Type	Pending_CPUC_Approval	Resource_Name	Resource_Type	Nameplate_MW	Year	Month	Contract_MW	Contract_GWh
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	9		3.46
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	9		0.87
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	9		6.97
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	10		3.39
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	10		0.82
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	10		6.43
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	11		1.99
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	11		0.68
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	11		5.05
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2018	12		3.17
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2018	12		0.62
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2018	12		5.56
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	1		91.54
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	1		22.40
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	1		171.10
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	2		97.80
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	2		19.24
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	2		173.47
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	3		95.85
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	3		28.23
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	3		230.63
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	4		123.56
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	4		27.82
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	4		249.50
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	5		130.98
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	5		33.44
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	5		259.96
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	6		134.14
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	6		32.44
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	6		241.35
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	7		106.80
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	7		30.69
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	7		236.98
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	8		114.73
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	8		29.99
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	8		216.01
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	9		107.55
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	9		27.14
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	9		178.42
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	10		105.34
San Jose City	None_assigned			Energy_Only		CAISO_Wind_for_CAISO	Existing_CAISO_Wind		2019	10		25.46
San Jose City	None_assigned			Energy_Only		Large Hydro	Existing_CAISO_LargeHydro		2019	10		164.64
San Jose City	None_assigned			Energy_Only		CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking		2019	11		61.78

San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2019	11	21.28
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2019	11	129.34
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2019	12	98.31
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2019	12	19.28
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2019	12	142.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	1	117.41
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	1	28.74
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	1	207.01
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	2	125.44
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	2	24.68
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	2	209.88
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	3	122.93
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	3	36.21
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	3	279.03
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	4	158.47
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	4	35.69
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	4	301.86
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	5	167.99
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	5	42.89
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	5	314.52
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	6	172.04
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	6	41.61
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	6	292.01
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	7	136.98
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	7	39.36
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	7	286.71
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	8	147.15
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	8	38.46
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	8	261.35
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	9	137.93
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	9	34.80
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	9	215.87
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	10	135.10
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	10	32.66
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	10	199.20
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	11	79.23
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	11	27.29
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	11	156.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2020	12	126.10
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2020	12	24.73
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2020	12	172.38
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2021	1	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2021	1	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2021	1	186.45
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2021	2	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2021	2	0.00

San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	9	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	9	184.54
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	10	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	10	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	10	170.29
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	11	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	11	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	11	133.77
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2023	12	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2023	12	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2023	12	147.36
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	1	1.06
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	1	0.26
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	1	170.40
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	2	1.13
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	2	0.22
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	2	172.76
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	3	1.11
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	3	0.33
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	3	229.69
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	4	1.42
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	4	0.32
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	4	248.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	5	1.51
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	5	0.39
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	5	258.90
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	6	1.55
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	6	0.37
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	6	240.37
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	7	1.23
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	7	0.35
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	7	236.01
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	8	1.32
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	8	0.35
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	8	215.13
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	9	1.24
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	9	0.31
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	9	177.69
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	10	1.21
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	10	0.29
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	10	163.97
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	11	0.71
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	11	0.25
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	11	128.81
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2024	12	1.13
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2024	12	0.22

San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2024	12	141.90
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	1	3.85
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	1	0.94
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	1	163.55
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	2	4.11
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	2	0.81
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	2	165.82
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	3	4.03
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	3	1.19
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	3	220.45
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	4	5.19
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	4	1.17
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	4	238.49
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	5	5.50
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	5	1.41
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	5	248.49
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	6	5.64
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	6	1.36
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	6	230.70
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	7	4.49
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	7	1.29
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	7	226.52
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	8	4.82
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	8	1.26
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	8	206.48
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	9	4.52
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	9	1.14
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	9	170.55
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	10	4.43
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	10	1.07
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	10	157.38
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	11	2.60
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	11	0.89
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	11	123.63
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2025	12	4.13
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2025	12	0.81
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2025	12	136.19
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	1	6.03
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	1	1.47
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	1	156.20
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	2	6.44
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	2	1.27
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	2	158.36
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	3	6.31
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	3	1.86
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	3	210.54

San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	4	8.13
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	4	1.83
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	4	227.77
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	5	8.62
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	5	2.20
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	5	237.32
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	6	8.83
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	6	2.14
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	6	220.33
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	7	7.03
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	7	2.02
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	7	216.34
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	8	7.55
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	8	1.97
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	8	197.20
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	9	7.08
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	9	1.79
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	9	162.88
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	10	6.93
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	10	1.68
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	10	150.30
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	11	4.07
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	11	1.40
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	11	118.07
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2026	12	6.47
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2026	12	1.27
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2026	12	130.07
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	1	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	1	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	1	131.20
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	2	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	2	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	2	133.02
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	3	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	3	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	3	176.85
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	4	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	4	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	4	191.32
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	5	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	5	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	5	199.34
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	6	0.00
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2027	6	0.00
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2027	6	185.07
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2027	7	0.00

San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	2	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	2	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	2	123.81	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	3	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	3	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	3	164.60	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	4	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	4	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	4	178.07	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	5	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	5	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	5	185.53	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	6	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	6	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	6	172.25	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	7	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	7	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	7	169.13	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	8	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	8	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	8	154.17	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	9	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	9	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	9	127.34	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	10	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	10	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	10	117.51	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	11	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	11	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	11	92.31	
San Jose City	None_assigned	Energy_Only	CAISO_Solar_for_CAISO	Existing_CAISO_SolarTracking	2030	12	0.00	
San Jose City	None_assigned	Energy_Only	CAISO_Wind_for_CAISO	Existing_CAISO_Wind	2030	12	0.00	
San Jose City	None_assigned	Energy_Only	Large Hydro	Existing_CAISO_LargeHydro	2030	12	101.69	
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	9	20.88
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	10	23.29
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	11	18.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2018	12	20.08
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	1	20.98
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	2	20.72
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	3	558.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	4	655.75
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	5	754.56
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	6	862.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	7	843.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	8	852.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	9	893.95

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	10	662.70
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	11	604.17
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2019	12	683.02
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	1	701.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	2	730.13
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	3	617.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	4	642.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	5	739.81
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	6	845.67
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	7	826.68
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	8	835.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	9	876.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	10	649.74
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	11	592.36
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2020	12	669.66
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	1	693.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	2	721.69
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	3	610.22
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	4	635.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	5	731.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	6	835.90
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	7	817.13
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	8	825.85
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	9	866.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	10	642.24
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	11	585.52
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2021	12	661.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	1	683.38
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	2	711.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	3	601.31
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	4	626.22
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	5	720.59
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	6	823.70
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	7	805.20
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	8	813.79
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	9	853.70
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	10	632.87
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	11	576.97
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2022	12	652.27
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	1	675.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	2	703.41
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	3	594.76
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	4	619.40
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	5	712.74
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	6	814.72
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	7	796.42

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	8	804.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	9	844.40
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	10	625.97
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	11	570.68
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2023	12	645.16
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	1	661.59
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	2	688.48
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	3	582.14
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	4	606.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	5	697.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	6	797.43
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	7	779.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	8	787.85
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	9	826.48
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	10	612.69
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	11	558.57
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2024	12	631.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	1	658.61
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	2	685.38
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	3	579.52
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	4	603.53
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	5	694.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	6	793.85
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	7	776.02
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	8	784.30
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	9	822.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	10	609.93
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	11	556.06
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2025	12	628.63
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	1	650.81
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	2	677.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	3	572.65
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	4	596.38
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	5	686.25
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	6	784.44
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	7	766.82
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	8	775.01
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	9	813.02
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	10	602.70
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	11	549.47
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2026	12	621.18
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	1	641.28
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	2	667.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	3	564.26
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	4	587.65
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	5	676.20

San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	6	772.95
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	7	755.59
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	8	763.66
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	9	801.11
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	10	593.88
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	11	541.42
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2027	12	612.08
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	1	630.71
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	2	656.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	3	554.97
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	4	577.96
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	5	665.05
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	6	760.22
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	7	743.14
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	8	751.08
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	9	787.91
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	10	584.09
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	11	532.50
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2028	12	602.00
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	1	626.20
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	2	651.65
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	3	550.99
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	4	573.82
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	5	660.29
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	6	754.77
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	7	737.82
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	8	745.70
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	9	782.27
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	10	579.91
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	11	528.69
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2029	12	597.69
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	1	623.03
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	2	648.35
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	3	548.21
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	4	570.92
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	5	656.95
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	6	750.95
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	7	734.09
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	8	741.92
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	9	778.31
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	10	576.97
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	11	526.01
San Jose City	None_assigned	RA_Only	TBD	See_Resource_ID	TBD	2030	12	594.66

LSE_Type	LSE_Name_Long	LSE_Name_Short	Resource_ID	Owner_Contract_Ty	Pending_C	Resource_Type	Year	Month
ESP	3 Phases Renewables Inc	3PhasesRenewable	None_assigned	LSE_Owned	Y	See_Resource_ID	2018	1
ESP	Agera Energy LLC	AgeraEnergy	7STDOR_1_SOLAR1	RA_Only		Existing_CAM_Share	2019	2
ESP	American Powernet Management	AmericanPowerNetM	ACACIA_6_SOLAR	Energy_Only		Existing_CAISO_CHP	2020	3
Co-op	Anza Electric Cooperative	AnzaElecCoop	ADERA_1_SOLAR1	RA_and_Energy		Existing_CAISO_CCGT1	2021	4
CCA	Apple Valley Choice Energy	AppleVlyChoiceEn	ADLUN_1_UNITS			Existing_CAISO_CCGT2	2022	5
Utility	Bear Valley Electric Service	BearValley	ADMEST_6_SOLAR			Existing_CAISO_Peaker1	2023	6
ESP	Calpine Energy Solutions LLC	CalpineEnergySoln	ADOBEE_1_SOLAR			Existing_CAISO_Peaker2	2024	7
ESP	Calpine Poweramerica-CA LLC	CalpinePowerAmCA	AGRICO_6_PL3N5			Existing_CAISO_Biomass	2025	8
CCA	Clean Power San Francisco	CleanPowerSF	AGRICO_7_UNIT			Existing_CAISO_Geothermal	2026	9
ESP	Commercial Energy of California	CommercialEnergyCA	AGUCAL_5_SOLAR1			Existing_CAISO_SmallHydro	2027	10
ESP	Constellation New Energy Inc	ConstellationNewEn	ALAMIT_7_UNIT 1			Existing_CAISO_SolarFixed	2028	11
CCA	Desert Community Energy	DesertCommunityEn	ALAMIT_7_UNIT 2			Existing_CAISO_SolarTracking	2029	12
ESP	Direct Energy Business	DirectEnergyBusiness	ALAMIT_7_UNIT 3			Existing_CAISO_Wind	2030	
CCA	East Bay Community Energy	EastBayCommunityEn	ALAMIT_7_UNIT 4			Existing_CAISO_Unspecified		
ESP	EDF Industrial Power Services CA LLC	EDFIndustrialPowerSrv	ALAMIT_7_UNIT 5			Existing_CAISO_LargeHydro		
ESP	Just Energy Solutions Inc	JustEnergySolutions	ALAMIT_7_UNIT 6			Existing_Non-CAISO_CA_LargeHydro		
CCA	King City CCA	KingCityCCA	ALAMO_6_UNIT			Existing_OOS_LargeHydro		
CCA	Lancaster Choice Energy	LancasterChoiceEn	ALLGNY_6_HYDRO1					
Utility	Liberty Utilities	LibertyUtilities	ALMEGT_1_UNIT 1					
CCA	Los Angeles Community Choice	LosAngelCommChoice	ALMEGT_1_UNIT 2					
CCA	Marin Clean Energy	MarinCleanEnergy	ALPSLR_1_NTHSLR					
CCA	Monterey Bay Community Power	MontereyBayCommPwr	ALPSLR_1_SPSLR					
Utility	Pacific Gas and Electric	PacificGasAndElectric	ALT6DN_2_WIND7					
Utility	PacifiCorp	PacifiCorp	ALT6DS_2_WIND9					
CCA	Peninsula Clean Energy	PeninsulaCleanEnAuth	ALTA3A_2_CPCE4					
CCA	Pico Rivera Innovative Municipal Energy	PicoRiveraInnovMuniEn	ALTA3A_2_CPCE5					
ESP	Pilot Power Group Inc	PilotPowerGroup	ALTA3A_2_CPCE8					
CCA	Pioneer Community Energy	PioneerCommunityEn	ALTA4A_2_CPCW1					
Co-op	Plumas Sierra Rural Elec Coop	PlumasSierraCoop	ALTA4B_2_CPCW2					
CCA	Rancho Mirage Energy Authority	RanchoMirageEnAuth	ALTA4B_2_CPCW3					
CCA	Redwood Coast Energy	RedwoodCoastEnergy	ALTA4B_2_CPCW6					
Utility	San Diego Gas and Electric	SanDiegoGasAndElectric	ALTA6B_2_WIND11					
CCA	San Jacinto Power	SanJacintoPower	ALTA6E_2_WIND10					
CCA	San Jose City	SanJoseCity	ALTWD_1_QF					
ESP	Shell Energy North America	ShellEnergyNorthAm	ANAHM_2_CANYN1					
CCA	Silicon Valley Clean Energy	SiliconVlyCleanEnAuth	ANAHM_2_CANYN2					
CCA	Solana Energy Alliance	SolanaEnergyAlliance	ANAHM_2_CANYN3					
CCA	Sonoma Clean Power	SonomaCleanPower	ANAHM_2_CANYN4					
Utility	Southern California Edison	SouthernCalEdison	ANAHM_7_CT					
Co-op	Surprise Valley Electric Corp	SurpriseValleyElectric	ANTLPE_2_QF					
ESP	The Regents of the University of California	TheRegentsUnivCA	APHLIL_1_SLABCK					
ESP	Tiger Natural Gas Inc	TigerNaturalGas	ARBWD_6_QF					
CCA	Valley Clean Energy Alliance	ValleyCleanEnAlliance	ARCOGN_2_UNITS					
Co-op	Valley Electric Association	ValleyElectricAssoc	ARVINN_6_ORION1					
			ARVINN_6_ORION2					
			ASTORA_2_SOLAR1					
			ASTORA_2_SOLAR2					
			ATWEL2_1_SOLAR1					
			ATWELL_1_SOLAR					
			AVENAL_6_AVPAK					
			AVENAL_6_AVSLR1					
			AVENAL_6_AVSLR2					
			AVENAL_6_SANDDG					
			AVENAL_6_SUNCTY					
			AVSOLR_2_SOLAR					
			BALCHS_7_UNIT 1					
			BALCHS_7_UNIT 2					
			BALCHS_7_UNIT 3					
			BANGOR_6_HYDRO					
			BANKPP_2_NSPIN					
			BARRE_2_QF					
			BARRE_6_PEAKE					
			BASICE_2_UNITS					
			BDGRCK_1_UNITS					
			BEARDS_7_UNIT 1					
			BEARMT_1_UNIT					
			BELDEN_7_UNIT 1					
			BIGCRK_2_EXESWD					
			BIGCRK_7_DAM7					
			BIGCRK_7_MAMRES					
			BIGSKY_2_BSKSR6					
			BIGSKY_2_BSKSR7					
			BIGSKY_2_BSKSR8					
			BIGSKY_2_SOLAR1					
			BIGSKY_2_SOLAR2					
			BIGSKY_2_SOLAR3					
			BIGSKY_2_SOLAR4					
			BIGSKY_2_SOLAR5					
			BIGSKY_2_SOLAR6					
			BIGSKY_2_SOLAR7					
			BIOMAS_1_UNIT 1					
			BISHOP_1_ALAMO					
			BISHOP_1_UNITS					
			BKRFLD_2_SOLAR1					
			BLACK_7_UNIT 1					
			BLACK_7_UNIT 2					
			BLAST_1_WIND					
			BLCKBT_2_STONEY					
			BLCKWL_6_SOLAR1					
			BLKCRK_2_SOLAR1					
			BLM_2_UNITS					
			BLYTHE_1_SOLAR1					
			BLYTHE_1_SOLAR2					
			BNNIEN_7_ALTAPH					
			BOGUE_1_UNITA1					
			BORDER_6_UNITA1					
			BOWMN_6_HYDRO					
			BOWMN_6_UNIT					
			BRDGLV_7_BAKER					
			BRDSLID_2_HIWIND					
			BRDSLID_2_MTZUM2					
			BRDSLID_2_MTZUMA					
			BRDSLID_2_SHILO1					
			BRDSLID_2_SHILO2					
			BRDSLID_2_SHLO3A					
			BRDSLID_2_SHLO3B					
			BRDWAY_7_UNIT 3					
			BREGGO_6_DEGRSL					
			BREGGO_6_SOLAR					
			BRODIE_2_WIND					
			BUCKBL_2_PL1X3					
			BUCKCK_2_HYDRO					
			BUCKCK_7_OAKFLT					
			BUCKCK_7_PL1X2					
			BUCKWD_1_NPALM1					
			BUCKWD_1_QF					
			BUCKWD_7_WINTCV					

BURNYF_2_UNIT 1
 BUTTVL_7_UNIT 1
 CABZON_1_WINDA1
 CALFTN_2_SOLAR
 CALGEN_1_UNITS
 CALPIN_1_AGNEW
 CAMCHE_1_PL1X3
 CAMLOT_2_SOLAR1
 CAMLOT_2_SOLAR2
 CAMPFW_7_FARWST
 CANTUA_1_SOLAR
 CAPMAD_1_UNIT 1
 CAPWD_1_QF
 CARBOU_7_PL2X3
 CARBOU_7_PL4X5
 CARBOU_7_UNIT 1
 CATLNA_2_SOLAR
 CATLNA_2_SOLAR2
 CAVLSR_2_BSOLAR
 CAVLSR_2_RSOLAR
 CAYTNO_2_VASCO
 CBRLO_6_PLSTP1
 CCRITA_7_RPPCHF
 CDWRO7_2_GEN
 CEDRCK_6_UNIT
 CEDUCR_2_SOLAR1
 CEDUCR_2_SOLAR2
 CEDUCR_2_SOLAR3
 CEDUCR_2_SOLAR4
 CENTER_2_QF
 CENTER_2_RHONDO
 CENTER_2_SOLAR1
 CENTER_6_PEAKER
 CENTRY_6_PL1X4
 CHALK_1_UNIT
 CHEVCD_6_UNIT
 CHEVCO_6_UNIT 1
 CHEVCO_6_UNIT 2
 CHEVCY_1_UNIT
 CHEVMN_2_UNITS
 CHICPK_7_UNIT 1
 CHILLS_1_SYCENG
 CHILLS_7_UNITA1
 CHINO_2_APEBT1
 CHINO_2_JURUPA
 CHINO_2_QF
 CHINO_2_SASOLR
 CHINO_2_SOLAR
 CHINO_2_SOLAR2
 CHINO_6_CIMGEN
 CHINO_6_SMPPAP
 CHINO_7_MILIKN
 CHWCHL_1_BIOMAS
 CHWCHL_1_UNIT
 CLOVDL_1_SOLAR
 CLOVER_2_UNIT
 CLRKRD_6_LIMESD
 CLRMTK_1_QF
 CNTNLA_2_SOLAR1
 CNTNLA_2_SOLAR2
 CNTRVL_6_UNIT
 COCOPP_2_CTG1
 COCOPP_2_CTG2
 COCOPP_2_CTG3
 COCOPP_2_CTG4
 COCOSB_6_SOLAR
 COGNAT_1_UNIT
 COLEMN_2_UNIT
 COLGA1_6_SHELLW
 COLGAT_7_UNIT 1
 COLGAT_7_UNIT 2
 COLTON_6_AGUAM1
 COLUSA_2_PL1X3
 COLVIL_7_PL1X2
 CONTAN_1_UNIT
 CONTRL_1_CASAD1
 CONTRL_1_CASAD3
 CONTRL_1_LUNDY
 CONTRL_1_OXBOW
 CONTRL_1_POOLE
 CONTRL_1_QF
 CONTRL_1_RUSHCK
 COPMT2_2_SOLAR2
 COPMT4_2_SOLAR4
 COPMTN_2_CM10
 COPMTN_2_SOLAR1
 CORCAN_1_SOLAR1
 CORCAN_1_SOLAR2
 CORONS_2_SOLAR
 CORONS_6_CLRWTR
 CORRAL_6_SJOAQN
 COTTLE_2_FRNKNH
 COVERD_2_HCKHY1
 COVERD_2_MCKHY1
 COVERD_2_QFUNTS
 COVERD_2_RCKHY1
 COWCRK_2_UNIT
 CPSTNO_7_PRMADS
 CPVERD_2_SOLAR
 CRELMN_6_RAMON1
 CRELMN_6_RAMON2
 CRELMN_6_RAMSR3
 CRESSY_1_PARKER
 CRESTA_7_PL1X2
 CRNEVL_6_CRNVA
 CRNEVL_6_SJQN 2
 CRNEVL_6_SJQN 3
 CROKET_7_UNIT
 CRSTWD_6_KUMYAY
 CRWCKS_1_SOLAR1
 CSCCOG_1_UNIT 1
 CSCGNR_1_UNIT 1
 CSCGNR_1_UNIT 2
 CSLR45_2_SOLAR
 CSTOGA_6_LNDFIL
 CSTRVL_7_PL1X2
 CSTRVL_7_QFUNTS
 CTNWDP_1_QF

CUMBIA_1_SOLAR
 CURTIS_1_CANLCK
 CURTIS_1_FARFLD
 CUYAMS_6_CUYSR1
 DAVIS_1_SOLAR1
 DAVIS_1_SOLAR2
 DAVIS_7_MNMETH
 DEADCK_1_UNIT
 DEERCR_6_UNIT 1
 DELAMO_2_SOLAR1
 DELAMO_2_SOLAR2
 DELAMO_2_SOLAR3
 DELAMO_2_SOLAR4
 DELAMO_2_SOLAR5
 DELAMO_2_SOLAR6
 DELAMO_2_SOLRC1
 DELAMO_2_SOLRD
 DELSUR_6_CREST
 DELSUR_6_DRYFRB
 DELSUR_6_SOLAR1
 DELTA_2_PL1X4
 DEVERS_1_QF
 DEVERS_1_SEPV05
 DEVERS_1_SOLAR
 DEVERS_1_SOLAR1
 DEVERS_1_SOLAR2
 DEVERS_2_DHSFG2
 DEKZEL_1_UNIT
 DIABLO_7_UNIT 1
 DIABLO_7_UNIT 2
 DINUBA_6_UNIT
 DISCOV_1_CHEVRN
 DIVSON_6_NSQF
 DIXNLD_1_LNDFL
 DMDVLY_1_UNITS
 DONNLS_7_UNIT
 DOSMGO_2_NSPIN
 DOUBLC_1_UNITS
 DRACKR_2_SOLAR1
 DRACKR_2_SOLAR2
 DREWS_6_PL1X4
 DRUM_7_PL1X2
 DRUM_7_PL3X4
 DRUM_7_UNIT 5
 DSABLA_7_UNIT
 DSRTSL_2_SOLAR1
 DSRTSN_2_SOLAR1
 DSRTSN_2_SOLAR2
 DTCHWD_2_BT3WND
 DTCHWD_2_BT4WND
 DUANE_1_PL1X3
 DUTCH1_7_UNIT 1
 DUTCH2_7_UNIT 1
 DVLCYN_1_UNITS
 EASTWD_7_UNIT
 EDMONS_2_NSPIN
 EEKTMN_6_SOLAR1
 ELCAJN_6_EB1BT1
 ELCAJN_6_LM6K
 ELCAJN_6_UNITA1
 ELCAJN_7_GT1
 ELCAP_1_SOLAR
 ELDORO_7_UNIT 1
 ELDORO_7_UNIT 2
 ELECTR_7_PL1X3
 ELKCRK_6_STONYG
 ELKHIL_2_PL1X3
 ELLIS_2_QF
 ELNIDP_6_BIOMAS
 ELSEGN_2_UN1011
 ELSEGN_2_UN2021
 ENCINA_7_EA1
 ENCINA_7_EA2
 ENCINA_7_EA3
 ENCINA_7_EA4
 ENCINA_7_EA5
 ENCINA_7_GT1
 ENERSJ_2_WIND
 ENWIND_2_WIND1
 ENWIND_2_WIND2
 ESCNDO_6_EB1BT1
 ESCNDO_6_EB2BT2
 ESCNDO_6_EB3BT3
 ESCNDO_6_PL1X2
 ESCNDO_6_UNITB1
 ESCO_6_GLMQF
 ESQUON_6_LNDFIL
 ETIWND_2_CHMPNE
 ETIWND_2_FONTNA
 ETIWND_2_RTS010
 ETIWND_2_RTS015
 ETIWND_2_RTS017
 ETIWND_2_RTS018
 ETIWND_2_RTS023
 ETIWND_2_RTS026
 ETIWND_2_RTS027
 ETIWND_2_SOLAR1
 ETIWND_2_SOLAR2
 ETIWND_2_SOLAR5
 ETIWND_2_UNIT1
 ETIWND_6_GRPOND
 ETIWND_6_MWDETI
 ETIWND_7_MIDVLY
 ETIWND_7_UNIT 3
 ETIWND_7_UNIT 4
 EXCHEC_7_UNIT 1
 EXCLSG_1_SOLAR
 FAIRHV_6_UNIT
 FELLOW_7_QFUNTS
 FLOWD2_2_FPLWND
 FLOWD2_2_UNIT 1
 FLOWD_2_WIND1
 FMEADO_6_HELLHL
 FMEADO_7_UNIT
 FORBST_7_UNIT 1
 FORKBU_6_UNIT
 FRESHW_1_SOLAR1
 FRIANT_6_UNITS

FRITO_1_LAY
 FROGTN_1_UTICAA
 FROGTN_7_UTICA
 FTSWRD_6_TRFORK
 FTSWRD_7_QFUNTS
 FULTON_1_QF
 GALE_1_SR3SR3
 GARLND_2_GASLR
 GARLND_2_GASLRA
 GARNET_1_SOLAR
 GARNET_1_SOLAR2
 GARNET_1_UNITS
 GARNET_1_WIND
 GARNET_1_WINDS
 GARNET_1_WT3WIND
 GARNET_2_HYDRO
 GARNET_2_WIND1
 GARNET_2_WIND2
 GARNET_2_WIND3
 GARNET_2_WIND4
 GARNET_2_WIND5
 GASKW1_2_GW1SR1
 GATES_2_SOLAR
 GATES_2_WSOLAR
 GATWAY_2_PL1X3
 GENESI_2_STG
 GEYS11_7_UNIT11
 GEYS12_7_UNIT12
 GEYS13_7_UNIT13
 GEYS14_7_UNIT14
 GEYS16_7_UNIT16
 GEYS17_2_BOTRCK
 GEYS17_7_UNIT17
 GEYS18_7_UNIT18
 GEYS20_7_UNIT20
 GIFENS_6_BUGSL1
 GIFFEN_6_SOLAR
 GILROY_1_UNIT
 GILRPP_1_PL1X2
 GILRPP_1_PL3X4
 GLDFGR_6_SOLAR1
 GLDFGR_6_SOLAR2
 GLDTWN_6_COLUM3
 GLDTWN_6_SOLAR
 GLNARM_2_UNIT 5
 GLNARM_7_UNIT 1
 GLNARM_7_UNIT 2
 GLNARM_7_UNIT 3
 GLNARM_7_UNIT 4
 GLOW_6_SOLAR
 GOLDHL_1_QF
 GOLETA_2_QF
 GOLETA_6_ELLWOD
 GOLETA_6_EXGEN
 GOLETA_6_GAVOTA
 GOLETA_6_TAJIGS
 GONZLS_6_UNIT
 GOOSLK_1_SOLAR1
 GRIDLY_6_SOLAR
 GRIZLY_1_UNIT 1
 GRNLF1_1_UNITS
 GRNLF2_1_UNIT
 GRNVLY_7_SCLAND
 GRSCRK_6_BGCKWW
 GRZZLY_1_BERKLY
 GUERNS_6_SOLAR
 GWFPPWR_1_UNITS
 GYS5X6_7_UNITS
 GYS7X8_7_UNITS
 GYSRVL_7_WSPRNG
 HAASPH_7_PL1X2
 HALSEY_6_UNIT
 HARBGN_7_UNITS
 HATCR1_7_UNIT
 HATCR2_7_UNIT
 HATLOS_6_BWDHY1
 HATLOS_6_LSCRK
 HATLOS_6_QFUNTS
 HATRDG_2_WIND
 HAYPRS_6_QFUNTS
 HELMPG_7_UNIT 1
 HELMPG_7_UNIT 2
 HELMPG_7_UNIT 3
 HENRTA_6_SOLAR1
 HENRTA_6_SOLAR2
 HENRTA_6_UNITA1
 HENRTA_6_UNITA2
 HENRTS_1_SOLAR
 HIDSRT_2_UNITS
 HIGGNS_1_COMBIE
 HIGGNS_7_QFUNTS
 HILAND_7_YOLOWD
 HINSON_6_CARBGN
 HINSON_6_LBECH1
 HINSON_6_LBECH2
 HINSON_6_LBECH3
 HINSON_6_LBECH4
 HINSON_6_SERRGN
 HMLTBR_6_UNITS
 HNTGBH_7_UNIT 1
 HNTGBH_7_UNIT 2
 HOLSAT_1_BORAX
 HOLSTR_1_SOLAR
 HOLSTR_1_SOLAR2
 HUMBPP_1_UNITS3
 HUMBPP_6_UNITS
 HUMBSB_1_QF
 HURON_6_SOLAR
 HYTTM_2_UNITS
 IGNACO_1_QF
 INDIGO_1_UNIT 1
 INDIGO_1_UNIT 2
 INDIGO_1_UNIT 3
 INDVLY_1_UNITS
 INLDEM_5_UNIT 1
 INLDEM_5_UNIT 2
 INSKIP_2_UNIT
 INTKEP_2_UNITS

INTTRB_6_UNIT
 IVANPA_1_UNIT1
 IVANPA_1_UNIT2
 IVANPA_1_UNIT3
 IVSLRP_2_SOLAR1
 IVWEST_2_SOLAR1
 JACMSR_1_JACSR1
 JAKVAL_6_UNITG1
 JAWBNE_2_NSRWND
 JAWBNE_2_SRWND
 JAYNE_6_WLSLR
 KANAKA_1_UNIT
 KANSAS_6_SOLAR
 KEARNY_7_KY3
 KEKAWK_6_UNIT
 KELSO_2_UNITS
 KELYRG_6_UNIT
 KERKH1_7_UNIT 1
 KERKH1_7_UNIT 3
 KERKH2_7_UNIT 1
 KERMAN_6_SOLAR1
 KERMAN_6_SOLAR2
 KERNFT_1_UNITS
 KERNRG_1_UNITS
 KERRGN_1_UNIT 1
 KILARC_2_UNIT 1
 KINGCO_1_KINGBR
 KINGRV_7_UNIT 1
 KIRKER_7_KELCYN
 KNGBRD_2_SOLAR1
 KNGBRD_2_SOLAR2
 KNGBRG_1_KBSLR1
 KNGBRG_1_KBSLR2
 KNGCTY_6_UNITA1
 KNTSTH_6_SOLAR
 KRAMER_1_KJ5SR5
 KRAMER_1_SEGS37
 KRAMER_1_SEGS3
 KRAMER_1_SEGS4
 KRAMER_2_SEGS89
 KRNCNY_6_UNIT
 LACIEN_2_VENICE
 LAGBEL_2_STG1
 LAGBEL_6_QF
 LAKHDG_6_UNIT 1
 LAKHDG_6_UNIT 2
 LAMONT_1_SOLAR1
 LAMONT_1_SOLAR2
 LAMONT_1_SOLAR3
 LAMONT_1_SOLAR4
 LAMONT_1_SOLAR5
 LAPAC_6_UNIT
 LAPLMA_2_UNIT 1
 LAPLMA_2_UNIT 2
 LAPLMA_2_UNIT 3
 LAPLMA_2_UNIT 4
 LARKSP_6_UNIT 1
 LARKSP_6_UNIT 2
 LAROA1_2_UNITA1
 LAROA2_2_UNITA1
 LASSEN_6_UNITS
 LAWRNC_7_SUNYVL
 LEBECS_2_UNITS
 LECEF_1_UNITS
 LEPRFD_1_KANSAS
 LGHTHP_6_JCEGEN
 LHILLS_6_SOLAR1
 LILIAC_6_SOLAR
 LITLRK_6_SEPV01
 LITLRK_6_SOLAR1
 LITLRK_6_SOLAR2
 LITLRK_6_SOLAR3
 LITLRK_6_SOLAR4
 LIVEOK_6_SOLAR
 LIVOAK_1_UNIT 1
 LMBEPK_2_UNITA1
 LMBEPK_2_UNITA2
 LMBEPK_2_UNITA3
 LMEC_1_PL1X3
 LNCSTR_6_CREST
 LOCKFD_1_BEARCK
 LOCKFD_1_KSOLAR
 LODI25_2_UNIT 1
 LODIEC_2_PL1X2
 LOWGAP_1_SUPHR
 LOWGAP_7_QFUNTS
 MAGUND_1_BKISR1
 MAGUND_1_BKSSR2
 MALAGA_1_PL1X2
 MALCHO_7_UNIT 1
 MANTEC_1_ML1SR1
 MANZNA_2_WIND
 MARCPW_6_SOLAR1
 MARTIN_1_SUNSET
 MCARTH_6_FRIVRB
 MCCALL_1_QF
 MCSWAN_6_UNITS
 MDFKRL_2_PROJECT
 MENBIO_6_RENEW1
 MENBIO_6_UNIT
 MERCED_1_SOLAR1
 MERCED_1_SOLAR2
 MERCFL_6_UNIT
 MESAP_1_QF
 MESAS_2_QF
 METCLF_1_QF
 METEC_2_PL1X3
 MIDSET_1_UNIT 1
 MIDWD_2_WIND1
 MIDWD_2_WIND2
 MIDWD_6_WNDLND
 MIDWD_7_CORAMB
 MIRLOM_2_CORONA
 MIRLOM_2_LNDFL
 MIRLOM_2_MLBBTA
 MIRLOM_2_MLBBTB
 MIRLOM_2_ONTARO
 MIRLOM_2_RTS032

MIRLOM_2_RTS033
 MIRLOM_2_TEMESC
 MIRLOM_6_DELGEN
 MIRLOM_6_PEAKEK
 MIRLOM_7_MWDLKM
 MISSIX_1_QF
 MKTRCK_1_UNIT 1
 MLPTAS_7_QFUNTS
 MNDALY_6_MCGRTH
 MNDALY_7_UNIT 1
 MNDALY_7_UNIT 2
 MNDALY_7_UNIT 3
 MNDOTA_1_SOLAR1
 MNDOTA_1_SOLAR2
 MOJAVE_1_SIPHON
 MOJAVW_2_SOLAR
 MONLTH_6_BOREL
 MONTPH_7_UNITS
 MOORPK_2_CALABS
 MOORPK_6_QF
 MOORPK_7_UNITA1
 MORWD_6_QF
 MOSSLD_1_QF
 MOSSLD_2_PSP1
 MOSSLD_2_PSP2
 MOSSLD_7_UNIT 6
 MOSSLD_7_UNIT 7
 MRCHNT_2_PL1X3
 MRGT_6_MEF2
 MRGT_6_MMAREF
 MRGT_7_UNITS
 MRLSDS_6_SOLAR1
 MSHGTS_6_MMARLF
 MSOLAR_2_SOLAR1
 MSOLAR_2_SOLAR2
 MSOLAR_2_SOLAR3
 MSSION_2_QF
 MSTANG_2_SOLAR
 MSTANG_2_SOLAR3
 MSTANG_2_SOLAR4
 MTNPOS_1_UNIT
 MTWIND_1_UNIT 1
 MTWIND_1_UNIT 2
 MTWIND_1_UNIT 3
 MURRAY_6_UNIT
 NAROW1_2_UNIT
 NAROW2_2_UNIT
 NAVYII_2_UNITS
 NCPA_7_GP1UN1
 NCPA_7_GP1UN2
 NCPA_7_GP2UN3
 NCPA_7_GP2UN4
 NEENCH_6_SOLAR
 NEWARK_1_QF
 NHOGAN_6_UNITS
 NIMTG_6_NIQF
 NOVATO_6_LNDFL
 NWCSTL_7_UNIT 1
 NZWIND_2_WDSTR5
 NZWIND_6_CALWND
 NZWIND_6_WDSTR
 NZWIND_6_WDSTR2
 NZWIND_6_WDSTR3
 NZWIND_6_WDSTR4
 OAK C_1_EBMUD
 OAK C_7_UNIT 1
 OAK C_7_UNIT 2
 OAK C_7_UNIT 3
 OAK L_1_GTG1
 OAKWD_6_ZEPHWD
 OASIS_6_CREST
 OASIS_6_SOLAR1
 OASIS_6_SOLAR2
 OASIS_6_SOLAR3
 OCTILO_5_WIND
 OGROVE_6_PL1X2
 OILFLD_7_QFUNTS
 OLDRIV_6_BIOGAS
 OLDRV1_6_SOLAR
 OLINDA_2_COYCRK
 OLINDA_2_LNDFL2
 OLINDA_2_QF
 OLINDA_7_LNDFIL
 OLIVEP_1_SOLAR
 OLIVEP_1_SOLAR2
 OLSEN_2_UNIT
 OMAR_2_UNIT 1
 OMAR_2_UNIT 2
 OMAR_2_UNIT 3
 OMAR_2_UNIT 4
 ONLLPP_6_UNITS
 ORLND_6_HIGHLI
 ORLND_6_SOLAR1
 ORMOND_7_UNIT 1
 ORMOND_7_UNIT 2
 OROLOM_1_SOLAR1
 OROLOM_1_SOLAR2
 OROVIL_6_UNIT
 OSO_6_NSPIN
 OTAY_6_LNDFL5
 OTAY_6_LNDFL6
 OTAY_6_PL1X2
 OTAY_6_UNITB1
 OTAY_7_UNITC1
 OTMESA_2_PL1X3
 OXBOW_6_DRUM
 OXMTN_6_LNDFIL
 PACLUM_6_UNIT
 PADUA_2_ONTARO
 PADUA_2_SOLAR1
 PADUA_6_MWDSDM
 PADUA_6_QF
 PADUA_7_SDIMAS
 PAIGES_6_SOLAR
 PALALT_7_COBUG
 PALOMR_2_PL1X3
 PANDOL_6_UNIT
 PANSEA_1_PANARO

PARDEB_6_UNITS
PBLOSM_2_SOLAR
PEABDY_2_LNDFIL
PEABDY_2_LNDFL1
PEARBL_2_NSPIN
PEORIA_1_SOLAR
PGCC_1_PDRP01
PGCC_1_PDRP02
PGCC_1_PDRP04
PGCC_1_PDRP05
PGEB_2_PDRP01
PGEB_2_PDRP02
PGEB_2_PDRP03
PGEB_2_PDRP04
PGEB_2_PDRP05
PGEB_2_PDRP06
PGEB_2_PDRP07
PGEB_2_PDRP08
PGEB_2_PDRP09
PGEB_2_PDRP10
PGEB_2_PDRP11
PGEB_2_RDRR07
PGEB_2_RDRR08
PGF1_2_PDRP01
PGF1_2_PDRP02
PGF1_2_PDRP03
PGF1_2_PDRP04
PGF1_2_PDRP07
PGF1_2_PDRP08
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PGF1_2_RDRR07
PGFG_1_PDRP01
PGFG_1_PDRP02
PGFG_1_PDRP03
PGFG_1_PDRP04
PGFG_1_PDRP05
PGFG_1_PDRP06
PGFG_1_RDRR03
PGHB_6_PDRP01
PGHB_6_PDRP02
PGHB_6_PDRP04
PGKN_2_PDRP02
PGKN_2_RDRR03
PGLP_2_PDRP02
PGNB_2_PDRP01
PGNB_2_PDRP02
PGNB_2_PDRP03
PGNB_2_PDRP04
PGNB_2_PDRP05
PGNB_2_RDRR01
PGNC_1_PDRP01
PGNP_2_PDRP01
PGNP_2_PDRP02
PGNP_2_PDRP03
PGNP_2_RDRR01
PGNP_2_RDRR09
PGNV_1_PDRP01
PGP2_2_PDRP01
PGP2_2_PDRP04
PGP2_2_PDRP05
PGP2_2_PDRP06
PGP2_2_PDRP07
PGP2_2_PDRP08
PGP2_2_PDRP10
PGP2_2_PDRP17
PGSA_2_PDRP01
PGSA_2_PDRP02
PGSA_2_PDRP03
PGSB_1_PDRP02
PGSB_1_PDRP03
PGSB_1_PDRP04
PGSB_1_PDRP05
PGSB_1_PDRP06
PGSB_1_PDRP07
PGSB_1_PDRP08
PGSB_1_PDRP09
PGSB_1_PDRP10
PGSB_1_PDRP11
PGSB_1_PDRP12
PGSB_1_PDRP13
PGSB_1_PDRP14
PGSB_1_PDRP16
PGSB_1_RDRR04
PGSB_1_RDRR05
PGSF_2_PDRP01
PGSF_2_PDRP02
PGSF_2_PDRP03
PGSF_2_PDRP04
PGSF_2_PDRP06
PGSF_2_PDRP07
PGSF_2_PDRP08
PGSF_2_PDRP09
PGSF_2_PDRP10
PGSF_2_PDRP11
PGSF_2_PDRP12
PGSF_2_PDRP18
PGSI_1_PDRP01
PGSI_1_PDRP02
PGSI_1_PDRP03
PGSI_1_RDRR01
PGST_2_PDRP01
PGST_2_PDRP03
PGST_2_RDRR02
PGZP_2_PDRP02
PGZP_2_PDRP03
PGZP_2_RDRR01
PGZP_2_RDRR02
PGZP_2_RDRR03
PGZP_2_RDRR06
PHOENX_1_UNIT
PINFLT_7_UNITS
PIOPIC_2_CTG1
PIOPIC_2_CTG2
PIOPIC_2_CTG3

PIT1_6_FRIVRA
 PIT1_7_UNIT 1
 PIT1_7_UNIT 2
 PIT3_7_PL1X3
 PIT4_7_PL1X2
 PIT5_7_PL1X2
 PIT5_7_PL3X4
 PIT5_7_QFUNTS
 PIT6_7_UNIT 1
 PIT6_7_UNIT 2
 PIT7_7_UNIT 1
 PIT7_7_UNIT 2
 PITTS_7_UNIT 5
 PITTS_7_UNIT 6
 PITTS_7_UNIT 7
 PLACVL_1_CHILIB
 PLACVL_1_RCKCRE
 PLAINV_6_BSOLAR
 PLAINV_6_DSOLAR
 PLAINV_6_NLRSR1
 PLAINV_6_SOLAR3
 PLAINV_6_SOLARC
 PLSNTG_7_LNCLND
 PMDLET_6_SOLAR1
 PMPJCK_1_RB2SLR
 PMPJCK_1_SOLAR1
 PMPJCK_1_SOLAR2
 PNCHEG_2_PL1X4
 PNCHPP_1_PL1X2
 PNCHVS_2_SOLAR
 PNOCHE_1_PL1X2
 PNOCHE_1_UNITA1
 POEPH_7_UNIT 1
 POEPH_7_UNIT 2
 POTTER_6_UNITS
 POTTER_7_VECINO
 PRIMM_2_SOLAR1
 PSWEET_1_STCRUZ
 PSWEET_7_QFUNTS
 PTLOMA_6_NTCCGN
 PTLOMA_6_NTCQF
 PUTHCR_1_SOLAR1
 PWEST_1_UNIT
 RCKCRK_7_UNIT 1
 RCKCRK_7_UNIT 2
 RDWAY_1_CREST
 RECTOR_2_CREST
 RECTOR_2_KAWEAH
 RECTOR_2_KAWH 1
 RECTOR_2_QF
 RECTOR_7_TULARE
 REDBLF_6_UNIT
 REDMAN_2_SOLAR
 REDOND_7_UNIT 5
 REDOND_7_UNIT 6
 REDOND_7_UNIT 7
 REDOND_7_UNIT 8
 REEDLY_6_SOLAR
 RENWD_1_QF
 RHONDO_2_QF
 RHONDO_6_PUENTE
 RICHMN_1_CHVSR2
 RICHMN_1_SOLAR
 RICHMN_7_BAYENV
 RIOBRV_6_UNIT 1
 RIOOSO_1_QF
 RNDMTN_2_SLSPHY1
 ROLLIN_6_UNIT
 ROSMDW_2_WIND1
 ROSMND_6_SOLAR
 RSMSLR_6_SOLAR1
 RSMSLR_6_SOLAR2
 RTEDDY_2_SOLAR1
 RTEDDY_2_SOLAR2
 RTREE_2_WIND1
 RTREE_2_WIND2
 RTREE_2_WIND3
 RUSCTY_2_UNITS
 RVRVEV_1_UNITA1
 RVSIDE_2_RERCU3
 RVSIDE_2_RERCU4
 RVSIDE_6_RERCU1
 RVSIDE_6_RERCU2
 RVSIDE_6_SOLAR1
 RVSIDE_6_SPRING
 S_RITA_6_SOLAR1
 SALIRV_2_UNIT
 SALTSP_7_UNITS
 SAMPSN_6_KELCO1
 SANDLT_2_UNITS
 SANITR_6_UNITS
 SANLOB_1_LNDFIL
 SANTFG_7_UNITS
 SANTGO_2_LNDFL1
 SANTGO_2_MABBT1
 SANWD_1_QF
 SARGNT_2_UNIT
 SAUGUS_2_TOLAND
 SAUGUS_6_MWDFTH
 SAUGUS_6_PTCHGN
 SAUGUS_6_QF
 SAUGUS_7_CHIQCN
 SAUGUS_7_LOPEZ
 SBERDO_2_PSP3
 SBERDO_2_PSP4
 SBERDO_2_QF
 SBERDO_2_REDLND
 SBERDO_2_RTS005
 SBERDO_2_RTS007
 SBERDO_2_RTS011
 SBERDO_2_RTS013
 SBERDO_2_RTS016
 SBERDO_2_RTS048
 SBERDO_2_SNTANA
 SBERDO_6_MILLCK
 SCEC_1_PDRP03
 SCEC_1_PDRP26
 SCEC_1_PDRP27

SCEC_1_PDRP28
SCEC_1_PDRP29
SCEC_1_PDRP30
SCEC_1_PDRP31
SCEC_1_PDRP32
SCEC_1_PDRP33
SCEC_1_PDRP36
SCEC_1_PDRP37
SCEC_1_PDRP38
SCEC_1_PDRP39
SCEC_1_PDRP41
SCEC_1_PDRP42
SCEC_1_PDRP43
SCEC_1_PDRP44
SCEC_1_PDRP45
SCEC_1_PDRP46
SCEC_1_PDRP47
SCEN_6_PDRP01
SCEN_6_PDRP17
SCEN_6_PDRP18
SCEN_6_PDRP19
SCEN_6_PDRP20
SCEN_6_PDRP21
SCEN_6_PDRP22
SCEN_6_PDRP23
SCEN_6_PDRP24
SCEN_6_PDRP25
SCEN_6_PDRP27
SCEW_2_PDRP01
SCEW_2_PDRP04
SCEW_2_PDRP05
SCEW_2_PDRP15
SCEW_2_PDRP16
SCEW_2_PDRP17
SCEW_2_PDRP18
SCEW_2_PDRP19
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SCEW_2_PDRP21
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SCEW_2_PDRP26
SCEW_2_PDRP27
SCEW_2_PDRP28
SCEW_2_PDRP29
SCEW_2_PDRP30
SCEW_2_PDRP31
SCEW_2_PDRP38
SCEW_2_PDRP39
SCHD_1_PDRP01
SCHD_1_PDRP02
SCHD_1_PDRP11
SCHD_1_PDRP12
SCHD_1_PDRP15
SCHD_1_PDRP16
SCHLTE_1_PL1X3
SCHNDR_1_FIVPTS
SCHNDR_1_WSTSDE
SCLD_1_PDRP08
SCLD_1_PDRP10
SCNW_6_PDRP01
SCNW_6_PDRP02
SCNW_6_PDRP10
SCNW_6_PDRP11
SCNW_6_PDRP12
SCNW_6_PDRP15
SCNW_6_PDRP17
SCNW_6_PDRP18
SCNW_6_PDRP19
SCNW_6_PDRP20
SDG1_1_PDRP01
SDG1_1_PDRP02
SDG1_1_PDRP03
SDG1_1_PDRP04
SDG1_1_PDRP05
SDG1_1_PDRP06
SDG1_1_PDRP07
SDG1_1_PDRP08
SDG1_1_PDRP09
SDG1_1_PDRP10
SDG1_1_PDRP11
SDG1_1_PDRP12
SDG1_1_PDRP14
SDG1_1_PDRP15
SDG1_1_PDRP16
SDG1_1_PDRP17
SDG1_1_PDRP18
SDG1_1_PDRP19
SDG1_1_PDRP30
SDG1_1_PDRP31
SDG1_1_PDRP32
SDG1_1_PDRP33
SDG1_1_PDRP34
SEARLS_7_ARGUS
SEGS_1_SR2SL2
SENTNL_2_CTG1
SENTNL_2_CTG2
SENTNL_2_CTG3
SENTNL_2_CTG4
SENTNL_2_CTG5
SENTNL_2_CTG6
SENTNL_2_CTG7
SENTNL_2_CTG8
SGREGY_6_SANGER
SHUTLE_6_CREST
SIERRA_1_UNITS
SISQUC_1_SMARIA
SKERN_6_SOLAR1
SKERN_6_SOLAR2
SLST13_2_SOLAR1
SLSTR1_2_SOLAR1
SLSTR2_2_SOLAR2
SLUISP_2_UNITS
SLYCRK_1_UNIT 1
SMPRIP_1_SMPSON
SMRCOS_6_LNDFIL
SMUDGO_7_UNIT 1
SMYRNA_1_DL1SR1
SNCLRA_2_HOWLNG

SNCLRA_2_SPRHYD
 SNCLRA_2_UNIT1
 SNCLRA_6_OXGEN
 SNCLRA_6_PROCGN
 SNCLRA_6_QF
 SNCLRA_6_WILLMT
 SNDBAR_7_UNIT 1
 SNMALF_6_UNITS
 SOUTH_2_UNIT
 SPAULD_6_UNIT 3
 SPAULD_6_UNIT12
 SPBURN_2_UNIT 1
 SPBURN_7_SNOWMT
 SPI LI_2_UNIT 1
 SPIAND_1_ANDSN2
 SPICER_1_UNITS
 SPIFBD_1_PL1X2
 SPQUIN_6_SRPCQU
 SPRGAP_1_UNIT 1
 SPRGVL_2_CREST
 SPRGVL_2_QF
 SPRGVL_2_TULE
 SPRGVL_2_TULESC
 SRINTL_6_UNIT
 STANIS_7_UNIT 1
 STAUFF_1_UNIT
 STIGCT_2_LODI
 STNRES_1_UNIT
 STOILS_1_UNITS
 STOREY_2_MDRCH2
 STOREY_2_MDRCH3
 STOREY_2_MDRCH4
 STOREY_7_MDRCHW
 STROUD_6_SOLAR
 SUNRIS_2_PL1X3
 SUNSET_2_UNITS
 SUNSHN_2_LNDFL
 SUTTER_2_PL1X3
 SYCAMR_2_UNIT 1
 SYCAMR_2_UNIT 2
 SYCAMR_2_UNIT 3
 SYCAMR_2_UNIT 4
 TANHIL_6_SOLART
 TBLMTN_6_QF
 TEHAPI_2_WIND1
 TEHAPI_2_WIND2
 TENGEN_2_PL1X2
 TERMEX_2_PL1X3
 TESLA_1_QF
 THMENG_1_UNIT 1
 TIDWTR_2_UNITS
 TIFFNY_1_DILLON
 TIGRCK_7_UNITS
 TKOPWR_6_HYDRO
 TMPLTN_2_SOLAR
 TOADTW_6_UNIT
 TOPAZ_2_SOLAR
 TORTLA_1_SOLAR
 TRNQL8_2_AZUSR1
 TRNQLT_2_SOLAR
 TRNSWD_1_QF
 TULEWD_1_TULWD1
 TULLCK_7_UNITS
 TUPMAN_1_BIOGAS
 TWISSL_6_SOLAR
 TWISSL_6_SOLAR1
 TX-ELK_6_SOLAR1
 TXMCKT_6_UNIT
 UKIAH_7_LAKEMN
 ULTPCH_1_UNIT 1
 ULTPFR_1_UNIT 1
 ULTRCK_2_UNIT
 UNCHEM_1_UNIT
 UNOCAL_1_UNITS
 UNVRSY_1_UNIT 1
 USWND2_1_WIND1
 USWND2_1_WIND2
 USWND2_1_WIND3
 USWND4_2_UNITS
 USWNR_2_SMUD
 USWNR_2_SMUD2
 USWNR_2_UNITS
 USWPJR_2_UNITS
 VACADX_1_NAS
 VACADX_1_SOLAR
 VACADX_1_UNITA1
 VALLEY_5_PERRIS
 VALLEY_5_REDMTN
 VALLEY_5_RTS044
 VALLEY_5_SOLAR1
 VALLEY_5_SOLAR2
 VALLEY_7_BADLND
 VALLEY_7_UNITA1
 VEAVST_1_SOLAR
 VEDDER_1_SEKERN
 VEGA_6_SOLAR1
 VENWD_1_WIND1
 VENWD_1_WIND2
 VENWD_1_WIND3
 VERNON_6_GONZL1
 VERNON_6_GONZL2
 VERNON_6_MALBRG
 VESTAL_2_KERN
 VESTAL_2_RTS042
 VESTAL_2_SOLAR1
 VESTAL_2_SOLAR2
 VESTAL_2_UNIT1
 VESTAL_2_WELLHD
 VESTAL_6_QF
 VICTOR_1_CREST
 VICTOR_1_EXSLRA
 VICTOR_1_EXSLRB
 VICTOR_1_LVSLR1
 VICTOR_1_LVSLR2
 VICTOR_1_SLRHES
 VICTOR_1_SOLAR1
 VICTOR_1_SOLAR2
 VICTOR_1_SOLAR3

VICTOR_1_SOLAR4
VICTOR_1_VDRYFA
VICTOR_1_VDRYFB
VILLPK_2_VALLYV
VILLPK_6_MWDYOR
VINCNT_2_QF
VINCNT_2_WESTWD
VISTA_2_RIALTO
VISTA_2_RTS028
VISTA_6_QF
VLCNTR_6_VCSLR
VLCNTR_6_VCSLR1
VLCNTR_6_VCSLR2
VLYHOM_7_SSID
VOLTA_2_UNIT 1
VOLTA_2_UNIT 2
VOLTA_6_BAILCK
VOLTA_6_DIGHYD
VOLTA_7_QFUNTS
WADHAM_6_UNIT
WALCRK_2_CTG1
WALCRK_2_CTG2
WALCRK_2_CTG3
WALCRK_2_CTG4
WALCRK_2_CTG5
WALNUT_2_SOLAR
WALNUT_6_HILLGEN
WALNUT_7_WCOVCT
WALNUT_7_WCOVST
WARNE_2_UNIT
WAUKNA_1_SOLAR
WAUKNA_1_SOLAR2
WDFRDF_2_UNITS
WDLEAF_7_UNIT 1
WEBER_6_FORWRD
WESTPT_2_UNIT
WFRESN_1_SOLAR
WHEATL_6_LNDFIL
WHITNY_6_SOLAR
WHTWTR_1_WINDA1
WISE_1_UNIT 1
WISE_1_UNIT 2
WISHON_6_UNITS
WLDWD_1_SOLAR1
WLDWD_1_SOLAR2
WNDMAS_2_UNIT 1
WNDSTR_2_WIND
WOLFSK_1_UNITA1
WOODWR_1_HYDRO
WRGHTP_7_AMENGY
WSENGY_1_UNIT 1
YUBACT_1_SUNSWT
YUBACT_6_UNITA1
ZOND_6_UNIT

<p>Data Template Instructions</p>	<p>On the "New_Resources" tab, please report each new resource (chosen from among RESOLVE candidate resource types or indicate Other_New) that the LSE plans to invest in through the IRP planning horizon. These are analogous to "candidate" resources as defined in the RESOLVE model, and incremental to any resource that was reported in the Baseline Resource Data Template, i.e. "new steel in the ground." For situations where the LSE is reporting a future contract with unknown existing resource(s) (e.g. a new RA contract with an existing unit that comes off its existing contract in a future year), do NOT report it in this workbook, rather, report it in the Baseline Resource Data Template. On the "New_Resources" tab, also report the total fixed cost of each new resource. Column heading definitions are below.</p> <p>On the "New_Costs" tab, please report cost projections if applicable to the reporting entity. These are costs associated with the resources in the "New_Resources" tab and incremental to any costs reported in the Baseline Resource Data Template. Report all costs in 2016 dollars, using the IEPR dollar deflator series posted to the IRP Filing Materials and Templates webpage. Explain the composition of each cost category in the text body of the Standard LSE Plan Template. Incremental revenue requirement should be the sum of the other components in this worksheet.</p> <p>If including new load or load modifying resource information as part of a portfolio reported in the Standard LSE Plan Template, then follow the instructions on the "Instructions_IEPR_Forms" tab of this workbook to report that data.</p> <p>Many cells include data validation that requires the LSE to populate cells with only the allowed values shown in the cell's drop down menu. Data entry may be done manually, with copy/paste, or with a script - but only allowed values for that cell must be entered - this is critical to ensuring clean and reconciliable data. Cells must contain only text or numerical data. Do not use the "Insert Comment" feature of Excel to comment on specific cells. Instead please comment on specific cells in the text body of the Standard LSE Plan Template.</p>
<p><u>New Resources Column Heading</u></p>	<p><u>Instruction and Description</u></p>
<p>LSE_Name</p>	<p>Select from the drop-down menu the Load Serving Entity (LSE) name. This column must not be blank.</p>
<p>New_Resource_Type</p>	<p>Select a RESOLVE candidate resource type from the dropdown. Select "Other_New" if LSE's selected resource does not match any of the RESOLVE candidate resource types. This column must not be blank.</p>
<p>Other_New_Description</p>	<p>Default: leave blank. If LSE selects "Other_New" under column New_Resource_Type, then fill in this cell with a description of the resource technology and operational attributes.</p>
<p>Location</p>	<p>Select from the drop down menu the resource location. If the location is inside the CAISO balancing area, then select the local capacity area or select "CAISO_System" if not within any local capacity area. If the location is outside the CAISO balancing area, then select the appropriate non-CAISO location. This column must not be blank.</p>
<p>Year_Begin</p>	<p>Expected online year in yyyy format. This column must not be blank.</p>
<p>Year_End</p>	<p>Expected end of long-term contract or retirement year in yyyy format. Enter 2050 if no end date. This column must not be blank.</p>
<p>Nameplate_MW</p>	<p>Enter the resource's nameplate capacity value (MW). The nameplate capacity is the maximum rated AC output of the unit. This column must not be blank.</p>
<p>AnnualEnergy_GWh</p>	<p>Enter the resource's expected annual energy production (GWh). This column must not be blank.</p>
<p>Tech_Sub_Type</p>	<p>If applicable to the type of technology, select the sub-type from the dropdown (e.g. fixed vs. tracking solar). Otherwise leave blank.</p>
<p>SolarPV_InverterLoading</p>	<p>If resource is solar PV, enter the ratio of installed DC panel capacity to installed AC inverter capacity (unitless number between 2 and 1). Otherwise leave blank.</p>
<p>Storage_Depth_MWh</p>	<p>If resource is energy storage, enter the discharge capacity in MWh at max output. Otherwise leave blank.</p>
<p>Storage_Efficiency</p>	<p>If resource is energy storage, enter the round-trip efficiency (unitless number between 0 and 1). Otherwise leave blank.</p>
<p>FCDS</p>	<p>1 = This resource is fully deliverable; 0 = This resource is energy-only. This column must not be blank.</p>
<p>New_Rsrc_Total_Fixed_Costs</p>	<p>In 2016 \$, enter the total fixed cost of this new resource. This column must not be blank.</p>
<p>New_Tx_Name</p>	<p>If new transmission is required for this new resource, enter the new transmission project name/identifier. Otherwise leave blank.</p>
<p>New_Tx_LSE_Share_MW</p>	<p>If new transmission is required for this new resource, enter the LSE's share in MW of the total new transmission line capacity. Otherwise leave blank.</p>
<p>New_Tx_Total_MW</p>	<p>If new transmission is required for this new resource, enter the total new transmission line capacity in MW. Otherwise leave blank.</p>
<p>New_Tx_LSE_Share_Fixed_Costs</p>	<p>If new transmission is required for this new resource, enter in 2016 \$ the LSE's share of the total fixed cost of the new transmission triggered by this new resource. Otherwise leave blank.</p>
<p>New_Tx_Total_Fixed_Costs</p>	<p>If new transmission is required for this new resource, enter in 2016 \$ the total fixed cost of the new transmission triggered by this new resource. Otherwise leave blank.</p>

If LSEs use different load and load modifier assumptions as part of any Alternate portfolios, the LSE should report that information using the standard IEPR filing form templates associated with that information, included as additional tabs within this workbook, one tab per IEPR Form. The LSE should clearly identify the data that differs from the forms it submitted to the CEC in 2017 as part of the 2017 IEPR process. The table below indicates which standard IEPR filing forms apply to which entity. IEPR Forms may be downloaded here:

CEC IEPR Forms
CEC Instructions

http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN215680-1_20170131T142702_FINAL_2017_Electricity_Demand_Forecast_Forms.xlsx
http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN215675_20170131T111216_FINAL_Forms_and_Instructions_for_Submitting_Electricity_Demand.pdf

		IOU	CCA	ESP
Form 1.1a	RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled & Direct Access	X		
Form 1.1b	RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled Customers	X		
Form 1.2	DISTRIBUTION AREA NET ELECTRICITY FOR GENERATION LOAD (GWh)	X		
Form 1.3	LSE COINCIDENT PEAK DEMAND BY SECTOR (Bundled Customers)	X		
Form 1.4	DISTRIBUTION AREA COINCIDENT PEAK DEMAND	X		
Form 3.2	ENERGY EFFICIENCY - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 3.3	DISTRIBUTED GENERATION - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 3.4	DEMAND RESPONSE - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 4	REPORT ON FORECAST METHODS AND MODELS	X	X	
Form 6	UNCOMMITTED DEMAND-SIDE PROGRAM METHODOLOGY	X		
Form 7.1	ESP DEMAND FORECAST			X
Form 7.2	CCA DEMAND FORECAST		X	

LSE_Name	New_Resource_Type	Other_New_Description	Location	Year_Begin	Year_End	Nameplate_MW	AnnualEnergy_GWh	Tech_Sub_Type	SolarPV_InverterLoading	Storage_Depth_MWh	Storage_Efficiency	FCDS	New_Rsrc_Total_Fixed_Costs	New_Tx_Name	New_Tx_LSE_Share_MW	New_Tx_Total_MW	New_Tx_LSE_Share_Fixed_Costs	New_Tx_Total_Fixed_Costs
San Jose City	Westlands_Solar		Other_PGE	2021	2030	160.0	424.5	Solar_Track1axis	1.30				1 \$ 214,128,649					
San Jose City	Solano_Solar		GreaterBayArea	2021	2030	150.0	390.5	Solar_Track1axis	1.30				1 \$ 200,745,608					
San Jose City	Northern_California_Solar		Other_PGE	2021	2030	150.0	395.6	Solar_Track1axis	1.30				1 \$ 200,745,608					
San Jose City	Solano_Wind		GreaterBayArea	2021	2030	160.0	500.8						1 \$ 288,483,652					
San Jose City	SW_Ext_Tx_Wind		Out_Of_State	2021	2030	150.0	473.0						1 \$ 259,170,585					
San Jose City	Northern_California_Geothermal		Other_PGE	2027	2030	50.0	394.2						1 \$ 104,832,274					
San Jose City	Distributed_Solar		GreaterBayArea	2021	2026	5.0	9.8	Solar_Track1axis	1.10				1 \$ 7,234,867					
San Jose City	Distributed_Solar		GreaterBayArea	2026	2030	5.0	9.8	Solar_Track1axis	1.10				1 \$ 6,318,192					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2021	2021	4.9	-2			5	0.85		1 \$ 11,712,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2022	2022	4.9	-2			5	0.85		1 \$ 11,712,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2023	2023	4.8	-2			5	0.85		1 \$ 11,400,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2024	2024	4.8	-2			5	0.85		1 \$ 11,400,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2025	2025	4.7	-2			5	0.85		1 \$ 11,376,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2026	2026	4.8	-2			5	0.85		1 \$ 10,925,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2027	2027	4.6	-2			5	0.85		1 \$ 10,557,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2028	2028	4.6	-2			5	0.85		1 \$ 10,534,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2029	2029	4.6	-2			5	0.85		1 \$ 10,557,000					
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2030	2030	4.6	-2			5	0.85		1 \$ 10,557,000					

LSE_Type	LSE_Name_Long	LSE_Name_Short	New_Resource_Type	Location	Year_Begin	Year_End	Tech_Sub_Type	SolarPV_InverterLoading	Storage_Efficiency	FCDS
ESP	3 Phases Renewables Inc	3PhasesRenewable	CAISO_New_Advanced_CCGT	BigCreekVentura	yyyy	yyyy	Solar_FixedTilt	1 <= R <= 2	0 <= E <= 1	0 or 1
ESP	Agera Energy LLC	AgeraEnergy	CAISO_New_Aero_CT	GreaterBayArea		2018	2018 Solar_Track1axis		1	0 0
ESP	American Powernet Management	AmericanPowerNetM	CAISO_New_Conventional_DR	LABasin		2050	2050 Solar_Track2axis		2	1 1
Co-op	Anza Electric Cooperative	AnzaElecCoop	CAISO_New_Flexible_Load_Shift				Solar_Thermal			
CCA	Apple Valley Choice Energy	AppleVlyChoiceEn	CAISO_New_Flow_Battery	SanDiegoImperialValley						
Utility	Bear Valley Electric Service	BearValley	CAISO_New_Li_Battery	CAISO_System						
ESP	Calpine Energy Solutions LLC	CalpineEnergySoln	CAISO_New_Pumped_Storage	Non_CAIso_In_State						
ESP	Calpine Poweramerica-CA LLC	CalpinePowerAmCA	CAISO_New_Reciprocating_Engine	Out_Of_State						
CCA	Clean Power San Francisco	CleanPowerSF	CAISO_New_Small_Hydro							
ESP	Commercial Energy of California	CommercialEnergyCA	Northern_California_Solar							
ESP	Constellation New Energy Inc	ConstellationNewEn	Solano_Solar							
CCA	Desert Community Energy	DesertCommunityEn	Central_Valley_North_Los_Banos_Solar							
ESP	Direct Energy Business	DirectEnergyBusiness	Westlands_Solar							
CCA	East Bay Community Energy	EastBayCommunityEn	Greater_Carrizo_Solar							
ESP	EDF Industrial Power Services CA LLC	EDFIndustrialPowerSrv	Tehachapi_Solar							
ESP	Just Energy Solutions Inc	JustEnergySolutions	Kramer_Inyokern_Solar							
CCA	King City CCA	KingCityCCA	Mountain_Pass_El_Dorado_Solar							
CCA	Lancaster Choice Energy	LancasterChoiceEn	Southern_California_Desert_Solar							
Utility	Liberty Utilities	LibertyUtilities	Riverside_East_Palm_Springs_Solar							
CCA	Los Angeles Community Choice	LosAngelCommChoice	Greater_Imperial_Solar							
CCA	Marin Clean Energy	MarinCleanEnergy	Distributed_Solar							
CCA	Monterey Bay Community Power	MontereyBayCommPwr	Baja_California_Solar							
Utility	Pacific Gas and Electric	PacificGasAndElectric	Utah_Solar							
Utility	PacifiCorp	PacifiCorp	Southern_Nevada_Solar							
CCA	Peninsula Clean Energy	PeninsulaCleanEnAuth	Arizona_Solar							
CCA	Pico Rivera Innovative Municipal Energy	PicoRiveralInnovMuniEn	New_Mexico_Solar							
ESP	Pilot Power Group Inc	PilotPowerGroup	Northern_California_Wind							
CCA	Pioneer Community Energy	PioneerCommunityEn	Solano_Wind							
Co-op	Plumas Sierra Rural Elec Coop	PlumasSierraCoop	Central_Valley_North_Los_Banos_Wind							
CCA	Rancho Mirage Energy Authority	RanchoMirageEnAuth	Greater_Carrizo_Wind							
CCA	Redwood Coast Energy	RedwoodCoastEnergy	Tehachapi_Wind							
Utility	San Diego Gas and Electric	SanDiegoGasAndElectric	Kramer_Inyokern_Wind							
CCA	San Jacinto Power	SanJacintoPower	Southern_California_Desert_Wind							
CCA	San Jose City	SanJoseCity	Riverside_East_Palm_Springs_Wind							
ESP	Shell Energy North America	ShellEnergyNorthAm	Greater_Imperial_Wind							
CCA	Silicon Valley Clean Energy	SiliconVlyCleanEnAuth	Distributed_Wind							
CCA	Solana Energy Alliance	SolanaEnergyAlliance	Baja_California_Wind							
CCA	Sonoma Clean Power	SonomaCleanPower	Pacific_Northwest_Wind							
Utility	Southern California Edison	SouthernCalEdison	NW_Ext_Tx_WIND							
Co-op	Surprise Valley Electric Corp	SurpriseValleyElectric	Idaho_Wind							
ESP	The Regents of the University of California	TheRegentsUnivCA	Utah_Wind							
ESP	Tiger Natural Gas Inc	TigerNaturalGas	Wyoming_Wind							
CCA	Valley Clean Energy Alliance	ValleyCleanEnAlliance	Southern_Nevada_Wind							
Co-op	Valley Electric Association	ValleyElectricAssoc	Arizona_Wind							
			New_Mexico_Wind							
			SW_Ext_Tx_Wind							
			InState_Biomass							
			Greater_Imperial_Geothermal							
			Northern_California_Geothermal							
			Pacific_Northwest_Geothermal							
			Southern_Nevada_Geothermal							
			Other_New							

Data Template Instructions	<p>On the "New_Resources" tab, please report each new resource (chosen from among RESOLVE candidate resource types or indicate Other_New) that the LSE plans to invest in through the IRP planning horizon. These are analogous to "candidate" resources as defined in the RESOLVE model, and incremental to any resource that was reported in the Baseline Resource Data Template, i.e. "new steel in the ground." For situations where the LSE is reporting a future contract with unknown existing resource(s) (e.g. a new RA contract with an existing unit that comes off its existing contract in a future year), do NOT report it in this workbook, rather, report it in the Baseline Resource Data Template. On the "New_Resources" tab, also report the total fixed cost of each new resource. Column heading definitions are below.</p> <p>On the "New_Costs" tab, please report cost projections if applicable to the reporting entity. These are costs associated with the resources in the "New_Resources" tab and incremental to any costs reported in the Baseline Resource Data Template. Report all costs in 2016 dollars, using the IEPR dollar deflator series posted to the IRP Filing Materials and Templates webpage. Explain the composition of each cost category in the text body of the Standard LSE Plan Template. Incremental revenue requirement should be the sum of the other components in this worksheet.</p> <p>If including new load or load modifying resource information as part of a portfolio reported in the Standard LSE Plan Template, then follow the instructions on the "Instructions_IEPR_Forms" tab of this workbook to report that data.</p> <p>Many cells include data validation that requires the LSE to populate cells with only the allowed values shown in the cell's drop down menu. Data entry may be done manually, with copy/paste, or with a script - but only allowed values for that cell must be entered - this is critical to ensuring clean and reconciliable data. Cells must contain only text or numerical data. Do not use the "Insert Comment" feature of Excel to comment on specific cells. Instead please comment on specific cells in the text body of the Standard LSE Plan Template.</p>
<u>New Resources</u> <u>Column Heading</u>	<u>Instruction and Description</u>
LSE_Name	Select from the drop-down menu the Load Serving Entity (LSE) name. This column must not be blank.
New_Resource_Type	Select a RESOLVE candidate resource type from the dropdown. Select "Other_New" if LSE's selected resource does not match any of the RESOLVE candidate resource types. This column must not be blank.
Other_New_Description	Default: leave blank. If LSE selects "Other_New" under column New_Resource_Type, then fill in this cell with a description of the resource technology and operational attributes.
Location	Select from the drop down menu the resource location. If the location is inside the CAISO balancing area, then select the local capacity area or select "CAISO_System" if not within any local capacity area. If the location is outside the CAISO balancing area, then select the appropriate non-CAISO location. This column must not be blank.
Year_Begin	Expected online year in yyyy format. This column must not be blank.
Year_End	Expected end of long-term contract or retirement year in yyyy format. Enter 2050 if no end date. This column must not be blank.
Nameplate_MW	Enter the resource's nameplate capacity value (MW). The nameplate capacity is the maximum rated AC output of the unit. This column must not be blank.
AnnualEnergy_GWh	Enter the resource's expected annual energy production (GWh). This column must not be blank.
Tech_Sub_Type	If applicable to the type of technology, select the sub-type from the dropdown (e.g. fixed vs. tracking solar). Otherwise leave blank.
SolarPV_InverterLoading	If resource is solar PV, enter the ratio of installed DC panel capacity to installed AC inverter capacity (unitless number between 2 and 1). Otherwise leave blank.
Storage_Depth_MWh	If resource is energy storage, enter the discharge capacity in MWh at max output. Otherwise leave blank.
Storage_Efficiency	If resource is energy storage, enter the round-trip efficiency (unitless number between 0 and 1). Otherwise leave blank.
FCDS	1 = This resource is fully deliverable; 0 = This resource is energy-only. This column must not be blank.
New_Rsrc_Total_Fixed_Costs	In 2016 \$, enter the total fixed cost of this new resource. This column must not be blank.
New_Tx_Name	If new transmission is required for this new resource, enter the new transmission project name/identifier. Otherwise leave blank.
New_Tx_LSE_Share_MW	If new transmission is required for this new resource, enter the LSE's share in MW of the total new transmission line capacity. Otherwise leave blank.
New_Tx_Total_MW	If new transmission is required for this new resource, enter the total new transmission line capacity in MW. Otherwise leave blank.
New_Tx_LSE_Share_Fixed_Costs	If new transmission is required for this new resource, enter in 2016 \$ the LSE's share of the total fixed cost of the new transmission triggered by this new resource. Otherwise leave blank.
New_Tx_Total_Fixed_Costs	If new transmission is required for this new resource, enter in 2016 \$ the total fixed cost of the new transmission triggered by this new resource. Otherwise leave blank.

If LSEs use different load and load modifier assumptions as part of any Alternate portfolios, the LSE should report that information using the standard IEPR filing form templates associated with that information, included as additional tabs within this workbook, one tab per IEPR Form. The LSE should clearly identify the data that differs from the forms it submitted to the CEC in 2017 as part of the 2017 IEPR process. The table below indicates which standard IEPR filing forms apply to which entity. IEPR Forms may be downloaded here:

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 CEC Instructions http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN215675_20170131T111216_FINAL_Forms_and_Instructions_for_Submitting_Electricity_Demand.pdf

		IOU	CCA	ESP
Form 1.1a	RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled & Direct Access	X		
Form 1.1b	RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled Customers	X		
Form 1.2	DISTRIBUTION AREA NET ELECTRICITY FOR GENERATION LOAD (GWh)	X		
Form 1.3	LSE COINCIDENT PEAK DEMAND BY SECTOR (Bundled Customers)	X		
Form 1.4	DISTRIBUTION AREA COINCIDENT PEAK DEMAND	X		
Form 3.2	ENERGY EFFICIENCY - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 3.3	DISTRIBUTED GENERATION - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 3.4	DEMAND RESPONSE - CUMULATIVE INCREMENTAL IMPACTS	X		
Form 4	REPORT ON FORECAST METHODS AND MODELS	X	X	
Form 6	UNCOMMITTED DEMAND-SIDE PROGRAM METHODOLOGY	X		
Form 7.1	ESP DEMAND FORECAST			X
Form 7.2	CCA DEMAND FORECAST		X	

LSE_Name	New_Resource_Type	Other_New_Description	Location	Year_Begin	Year_End	Nameplate_MW	AnnualEnergy_GWh
San Jose City	Westlands_Solar		Other_PGE	2021	2030	160.0	424.5
San Jose City	Solano_Solar		GreaterBayArea	2021	2030	150.0	390.5
San Jose City	Northern_California_Solar		Other_PGE	2021	2030	150.0	395.6
San Jose City	Solano_Wind		GreaterBayArea	2021	2030	160.0	500.8
San Jose City	SW_Ext_Tx_Wind		Out_Of_State	2021	2030	150.0	473.0
San Jose City	Northern_California_Geothermal		Other_PGE	2027	2030	50.0	394.2
San Jose City	Distributed_Solar		GreaterBayArea	2021	2026	5.0	9.8
San Jose City	Distributed_Solar		GreaterBayArea	2026	2030	5.0	9.8
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2021	2021	4.6	-1.8
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2022	2022	4.6	-1.8
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2023	2023	4.3	-1.7
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2024	2024	4.3	-1.7
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2025	2025	4.3	-1.7
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2026	2026	4.3	-1.7
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2027	2027	3.9	-1.5
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2028	2028	3.9	-1.5
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2029	2029	3.9	-1.5
San Jose City	CAISO_New_Li_Battery		GreaterBayArea	2030	2030	3.9	-1.5

Tech_Sub_Type	SolarPV_InverterLoading	Storage_Depth_MWh	Storage_Efficiency	FCDS	New_Rsrc_Total_Fixed_Costs	New_Tx_Name	New_Tx_LSE_Share_MW	New_Tx_Total_MW	New_Tx_LSE_Share_Fixed_Costs	New_Tx_Total_Fixed_Costs
Solar_Track1axis	1.30			1	\$ 214,128,649					
Solar_Track1axis	1.30			1	\$ 200,745,608					
Solar_Track1axis	1.30			1	\$ 200,745,608					
				1	\$ 288,483,652					
				1	\$ 259,170,585					
				1	\$ 104,832,274					
Solar_Track1axis	1.10			1	\$ 7,234,867					
Solar_Track1axis	1.10			1	\$ 6,318,192					
		5	0.85	1	\$ 11,054,983					
		5	0.85	1	\$ 11,054,983					
		4	0.85	1	\$ 10,264,671					
		4	0.85	1	\$ 10,264,671					
		4	0.85	1	\$ 10,264,671					
		4	0.85	1	\$ 9,836,977					
		4	0.85	1	\$ 9,012,658					
		4	0.85	1	\$ 9,012,658					
		4	0.85	1	\$ 9,012,658					
		4	0.85	1	\$ 9,012,658					

FORM 7.2**San José Clean Energy****CCA Report of Loads and Resources under Contract**

Distribution Service Provider: San José Clean Energy								
YEAR	Retail Sales (MWh)	Peak Demand (MW)	Residential Retail Sales (MWh)	Residential Peak Demand (MW)	Non-Residential Retail Sales (MWh)	Non-Residential Peak Demand (MW)	Residential Customer Counts	Nonresidential Customer Counts
2015								
2016								
2017								
2018	36,945	26	26	0	36,919	26	5	1,508
2019	3,766,464	965	1,129,431	310	2,637,033	655	231,717	20,465
2020	4,666,077	946	1,434,607	304	3,231,471	642	290,961	25,236
2021	4,544,936	935	1,397,122	301	3,147,814	634	290,963	25,236
2022	4,495,234	921	1,381,843	296	3,113,391	625	287,781	24,960
2023	4,416,390	911	1,357,606	293	3,058,783	618	282,733	24,522
2024	4,345,354	892	1,335,770	287	3,009,584	605	278,186	24,128
2025	4,298,993	888	1,321,518	285	2,977,474	602	275,218	23,871
2026	4,235,938	877	1,302,135	282	2,933,803	595	271,181	23,520
2027	4,187,488	864	1,287,241	278	2,900,246	587	268,079	23,251
2028	4,138,758	850	1,272,262	273	2,866,496	577	264,960	22,981
2029	4,099,695	844	1,260,254	271	2,839,441	573	262,459	22,764
2030	4,063,176	840	1,249,028	270	2,814,148	570	260,121	22,561

LSE_Type	LSE_Name_Long	LSE_Name_Short	New_Resource_Type	Location	Year_Begin	Year_End	Tech_Sub_Type	SolarPV_InverterLoading	Storage_Efficiency	FCDS
ESP	3 Phases Renewables Inc	3PhasesRenewable	CAISO_New_Advanced_CCGT	BigCreekVentura	yyyy	yyyy	Solar_FixedTilt	1 <= R <= 2	0 <= E <= 1	0 or 1
ESP	Agera Energy LLC	AgeraEnergy	CAISO_New_Aero_CT	GreaterBayArea		2018	2018 Solar_Track1axis		1	0 0
ESP	American Powernet Management	AmericanPowerNetM	CAISO_New_Conventional_DR	LABasin		2050	2050 Solar_Track2axis		2	1 1
Co-op	Anza Electric Cooperative	AnzaElecCoop	CAISO_New_Flexible_Load_Shift	Other_PGE			Solar_Thermal			
CCA	Apple Valley Choice Energy	AppleVlyChoiceEn	CAISO_New_Flow_Battery	SanDiegoImperialValley						
Utility	Bear Valley Electric Service	BearValley	CAISO_New_Li_Battery	CAISO_System						
ESP	Calpine Energy Solutions LLC	CalpineEnergySoln	CAISO_New_Pumped_Storage	Non_CAISO_In_State						
ESP	Calpine Poweramerica-CA LLC	CalpinePowerAmCA	CAISO_New_Reciprocating_Engine	Out_Of_State						
CCA	Clean Power San Francisco	CleanPowerSF	CAISO_New_Small_Hydro							
ESP	Commercial Energy of California	CommercialEnergyCA	Northern_California_Solar							
ESP	Constellation New Energy Inc	ConstellationNewEn	Solano_Solar							
CCA	Desert Community Energy	DesertCommunityEn	Central_Valley_North_Los_Banos_Solar							
ESP	Direct Energy Business	DirectEnergyBusiness	Westlands_Solar							
CCA	East Bay Community Energy	EastBayCommunityEn	Greater_Carrizo_Solar							
ESP	EDF Industrial Power Services CA LLC	EDFIndustrialPowerSrv	Tehachapi_Solar							
ESP	Just Energy Solutions Inc	JustEnergySolutions	Kramer_Inyokern_Solar							
CCA	King City CCA	KingCityCCA	Mountain_Pass_El_Dorado_Solar							
CCA	Lancaster Choice Energy	LancasterChoiceEn	Southern_California_Desert_Solar							
Utility	Liberty Utilities	LibertyUtilities	Riverside_East_Palm_Springs_Solar							
CCA	Los Angeles Community Choice	LosAngelCommChoice	Greater_Imperial_Solar							
CCA	Marin Clean Energy	MarinCleanEnergy	Distributed_Solar							
CCA	Monterey Bay Community Power	MontereyBayCommPwr	Baja_California_Solar							
Utility	Pacific Gas and Electric	PacificGasAndElectric	Utah_Solar							
Utility	PacifiCorp	PacifiCorp	Southern_Nevada_Solar							
CCA	Peninsula Clean Energy	PeninsulaCleanEnAuth	Arizona_Solar							
CCA	Pico Rivera Innovative Municipal Energy	PicoRiveralInnovMuniEn	New_Mexico_Solar							
ESP	Pilot Power Group Inc	PilotPowerGroup	Northern_California_Wind							
CCA	Pioneer Community Energy	PioneerCommunityEn	Solano_Wind							
Co-op	Plumas Sierra Rural Elec Coop	PlumasSierraCoop	Central_Valley_North_Los_Banos_Wind							
CCA	Rancho Mirage Energy Authority	RanchoMirageEnAuth	Greater_Carrizo_Wind							
CCA	Redwood Coast Energy	RedwoodCoastEnergy	Tehachapi_Wind							
Utility	San Diego Gas and Electric	SanDiegoGasAndElectric	Kramer_Inyokern_Wind							
CCA	San Jacinto Power	SanJacintoPower	Southern_California_Desert_Wind							
CCA	San Jose City	SanJoseCity	Riverside_East_Palm_Springs_Wind							
ESP	Shell Energy North America	ShellEnergyNorthAm	Greater_Imperial_Wind							
CCA	Silicon Valley Clean Energy	SiliconVlyCleanEnAuth	Distributed_Wind							
CCA	Solana Energy Alliance	SolanaEnergyAlliance	Baja_California_Wind							
CCA	Sonoma Clean Power	SonomaCleanPower	Pacific_Northwest_Wind							
Utility	Southern California Edison	SouthernCalEdison	NW_Ext_Tx_WIND							
Co-op	Surprise Valley Electric Corp	SurpriseValleyElectric	Idaho_Wind							
ESP	The Regents of the University of California	TheRegentsUnivCA	Utah_Wind							
ESP	Tiger Natural Gas Inc	TigerNaturalGas	Wyoming_Wind							
CCA	Valley Clean Energy Alliance	ValleyCleanEnAlliance	Southern_Nevada_Wind							
Co-op	Valley Electric Association	ValleyElectricAssoc	Arizona_Wind							
			New_Mexico_Wind							
			SW_Ext_Tx_Wind							
			InState_Biomass							
			Greater_Imperial_Geothermal							
			Northern_California_Geothermal							
			Pacific_Northwest_Geothermal							

Southern_Nevada_Geothermal
Other_New

Attachment GC: Workbook of the CPUC's GHG Calculator for IRP v1.4.5 for the Conforming Portfolio

Cell Color Scheme

Yellow cells are inputs that can be changed by the user (only in the Dashboard and Custom Profiles tabs)
Orange cells contain drop down menus that allow the user to input custom values
Grey cells are intermediate calculations or results (should NOT be changed)
Green cells are final outputs

Tab Color Scheme

Light Orange tabs are where the user inputs values and views results
Blue tab contains LSE-specific data from the 2017 IEPR that the user should input into the "IEPR Managed Retail
Gray tab documents data sources
Yellow tabs are read-only tabs that contain inputs and calculations

INPUTS

Notes:

Input values (yellow cells) shown here are placeholders. Users should replace all inputs with values specific to their system. Inputs and results are included for the 2018, 2022, 2026, and 2030 modeling years. Any intermediate years should be interpolated outside of this tool.

General Inputs

Metric	Unit	2018	2022	2026	2030	Notes
Owned or contracted non-dispatchable GHG-emitting resources	MW					Perfect capacity - 100% CF; e.g. cogeneration
Emission Factor - Owned or contracted non-dispatchable GHG-emitting resources	tCO2/MWh	0.35	0.35	0.35	0.35	For multiple resources, input weighted average
Fraction of EV owners that can charge at work	%	6%	14%	22%	30%	Values shown are "Mid" from CPUC IRP RESOLVE User Interface

Demand Inputs

Assigned Load Forecast for IRP (i.e., Managed Retail Sales Forecast)	GWh	843	4,498	4,462	4,441	Includes effect of BTM PV, AAEE, etc.
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Default Demand Inputs (based on sales-weighted share of total from IEPR)		Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)		GWh	965	5,448	5,714	5,969	Grossed up for T&D losses; demand met by BTM CHP excluded
Electric Vehicle Load - Home Charging Only		GWh	7	91	146	186	Grossed up for T&D losses
Electric Vehicle Load - Home + Work Charging		GWh	0	15	41	80	Grossed up for T&D losses
Other Electrification		GWh	0	7	11	15	Grossed up for T&D losses
Building Electrification		GWh	-	-	-	-	Grossed up for T&D losses
Energy Efficiency		GWh	(9)	(244)	(463)	(667)	Grossed up for T&D losses
BTM PV		GWh	(53)	(465)	(637)	(796)	Grossed up for T&D losses
Custom Demand Inputs (OPTIONAL; overwrites Assigned Load Forecast for IRP)	Use Custom?	Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)	No	GWh					To overwrite, set "Use Custom" to "Yes" and input forecast. Custom demand values should be grossed up for T&D losses. User-specified load profiles should be input in the "Custom Profiles" tab. Energy efficiency and BTM PV subtract from demand and therefore should be entered as negative values.
Electric Vehicle Load - Home Charging Only	No	GWh					
Electric Vehicle Load - Home + Work Charging	No	GWh					
Other Electrification	No	GWh					
Building Electrification	No	GWh					
Energy Efficiency	No	GWh					
BTM PV	No	GWh					
Active Demand Inputs	Source	Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)	IEPR	GWh	965	5,448	5,714	5,969	
Electric Vehicle Load - Home Charging Only	IEPR	GWh	7	91	146	186	
Electric Vehicle Load - Home + Work Charging	IEPR	GWh	0	15	41	80	
Other Electrification	IEPR	GWh	0	7	11	15	
Building Electrification	IEPR	GWh	-	-	-	-	
Energy Efficiency	IEPR	GWh	(9)	(244)	(463)	(667)	
BTM PV	IEPR	GWh	(53)	(465)	(637)	(796)	

Attachment GC: Workbook of the CPUC's GHG Calculator for IRP v1.4.5 for the Conforming Portfolio

Capacity Inputs (MW)

Candidate Resource	Type	2018	2022	2026	2030	Notes
Battery Storage	Storage	-	10	29	47	Assumes 4-hr battery storage duration
Pumped Storage	Storage	-	-	-	-	Assumes at least 12-hr pumped storage duration
Large Hydro	Large Hydro	202	919	827	713	Assumes average dispatch based on RESOLVE
Nuclear	Nuclear	-	-	-	-	Perfect capacity - 100% CF
CAISO_Wind_for_CAISO	Wind	22	-	11	0	Existing wind located in CAISO
SW_Wind_for_CAISO	Wind	0	-	0	0	Existing wind located in SW and delivered to CAISO
Contracted_NW_Wind	Wind	-	-	-	-	Existing wind located in NW and delivered to CAISO
Northern_California_Wind	Wind	-	-	-	-	
Solano_Wind	Wind	-	160	160	160	
Central_Valley_North_Los_Banos_Wind	Wind	-	-	-	-	
Greater_Carrizo_Wind	Wind	-	-	-	-	
Tehachapi_Wind	Wind	-	-	-	-	
Kramer_Inyokern_Wind	Wind	-	-	-	-	
Southern_California_Desert_Wind	Wind	-	-	-	-	
Riverside_East_Palm_Springs_Wind	Wind	-	-	-	-	
Greater_Imperial_Wind	Wind	-	-	-	-	
Distributed_Wind	Wind	-	-	-	-	
Baja_California_Wind	Wind	-	-	-	-	
Pacific_Northwest_Wind	Wind	-	-	-	-	
NW_Ext_Tx_Wind	Wind	-	-	-	-	
Idaho_Wind	Wind	-	-	-	-	
Utah_Wind	Wind	-	-	-	-	
Wyoming_Wind	Wind	-	-	-	-	
Southern_Nevada_Northwest_Arizona_Wind	Wind	-	-	-	-	
Arizona_Wind	Wind	-	-	-	-	
New_Mexico_Wind	Wind	-	-	-	-	
SW_Ext_Tx_Wind	Wind	-	150	150	150	
BTM_Distributed_PV	Solar	26	231	316	395	Derived from demand inputs, grossed up for T&D losses. DO NOT EDIT
CAISO_Solar_for_CAISO	Solar	103	-	51	1	Existing solar located in CAISO
SW_Solar_for_CAISO	Solar	0	-	0	0	Existing solar located in SW and delivered to CAISO
IID_Solar_for_CAISO	Solar	-	-	-	-	Existing solar located in IID and delivered to CAISO
Northern_California_Solar	Solar	-	150	150	150	
Solano_Solar	Solar	-	150	150	150	
Central_Valley_North_Los_Banos_Solar	Solar	-	-	-	-	
Westlands_Solar	Solar	-	160	160	160	
Greater_Carrizo_Solar	Solar	-	-	-	-	
Tehachapi_Solar	Solar	-	-	-	-	
Kramer_Inyokern_Solar	Solar	-	-	-	-	
Mountain_Pass_El_Dorado_Solar	Solar	-	-	-	-	
Southern_California_Desert_Solar	Solar	-	-	-	-	
Riverside_East_Palm_Springs_Solar	Solar	-	-	-	-	
Greater_Imperial_Solar	Solar	-	-	-	-	
Baja_California_Solar	Solar	-	-	-	-	
Utah_Solar	Solar	-	-	-	-	
Southern_Nevada_Solar	Solar	-	-	-	-	
Arizona_Solar	Solar	-	-	-	-	
New_Mexico_Solar	Solar	-	-	-	-	
Northern_California_Geothermal	Geothermal	-	-	-	50	perfect capacity - 100% CF
Biomass	Biomass	-	-	-	-	perfect capacity - 100% CF
Small Hydro	Small Hydro	-	-	-	-	perfect capacity - 100% CF

Sales Forecast ¹ cells on the Dashboard

RESULTS

Energy Balance	Unit	2018	2022	2026	2030	Notes
Energy for Load (excluding BTM PV)	GWh	964	5,317	5,449	5,583	
Owned or contracted non-dispatchable GHG-emitting resources	GWh	-	-	-	-	
Large Hydro	GWh	535	2,435	2,192	1,890	
Nuclear	GWh	-	-	-	-	
Renewable Generation (including BTM PV)	GWh	379	2,551	2,884	3,324	Includes oversupply
User-specified GHG-free Power	GWh	-	-	-	-	
Storage Energy Imbalance	GWh	-	(3)	(11)	(19)	Due to storage losses and subhourly reserves.
Clean Net Short	GWh	49	335	383	388	

Emissions	Unit	2018	2022	2026	2030	Notes
Clean Net Short	MMtCO ₂ /yr.	0.02	0.20	0.24	0.30	Includes oversupply emissions credits
Owned or contracted non-dispatchable GHG-emitting resources	MMtCO ₂ /yr.	-	-	-	-	
Emissions offset for NW hydroelectric imports	MMtCO ₂ /yr.	(0.01)	(0.06)	(0.06)	(0.06)	Scaled to LSE load ratio share within CAISO
Total	MMtCO₂/yr.	0.008	0.139	0.176	0.236	
Average emission intensity	tCO ₂ /MWh	0.01	0.03	0.03	0.04	

Oversupply	Unit	2018	2022	2026	2030	Notes
Oversupply	GWh	112	464	553	567	Occurs when hourly supply exceeds hourly load
Oversupply Emission Credits	MMtCO ₂ /yr.	0.0	0.1	0.1	0.1	

Capacity/Peak	Unit	2018	2022	2026	2030	Notes
Profile Peak Load	MW	195	1,077	1,107	1,140	Peak of hourly load profile - not a 1:10 peak
Owned or contracted non-dispatchable GHG-emitting resources	MW	-	-	-	-	
Large Hydro	MW	202	919	827	713	
Nuclear	MW	-	-	-	-	
Total Baseload Renewables	MW	-	-	-	50	
Total Variable Renewables	MW	152	1,001	1,148	1,167	Includes BTM PV
User-specified GHG-free Power	MW	-	-	-	-	
Energy Storage	MW	-	10	29	47	
Maximum Clean Net Short	MW	92	579	661	663	

Attachment GP: Workbook of the CPUC's GHG Calculator for IRP v1.4.5 for the Preferred Portfolio

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Gray tab documents data sources
Yellow tabs are read-only tabs that contain inputs and calculations

INPUTS

Notes:

Input values (yellow cells) shown here are placeholders. Users should replace all inputs with values specific to their system.
 Inputs and results are included for the 2018, 2022, 2026, and 2030 modeling years. Any intermediate years should be interpolated outside of this tool.

General Inputs

Metric	Unit	2018	2022	2026	2030	Notes
Owned or contracted non-dispatchable GHG-emitting resources	MW					Perfect capacity - 100% CF; e.g. cogeneration
Emission Factor - Owned or contracted non-dispatchable GHG-emitting resources	tCO2/MWh	0.35	0.35	0.35	0.35	For multiple resources, input weighted average
Fraction of EV owners that can charge at work	%	6%	14%	22%	30%	Values shown are "Mid" from CPUC IRP RESOLVE User Interface

Demand Inputs

Assigned Load Forecast for IRP (i.e., Managed Retail Sales Forecast)	GWh	37	4,495	4,236	4,063	Includes effect of BTM PV, AAE, etc.
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Default Demand Inputs (based on sales-weighted share of total from IEPR)		Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)		GWh	42	5,445	5,425	5,461	Grossed up for T&D losses; demand met by BTM CHP excluded
Electric Vehicle Load - Home Charging Only		GWh	0	91	138	171	Grossed up for T&D losses
Electric Vehicle Load - Home + Work Charging		GWh	0	15	39	73	Grossed up for T&D losses
Other Electrification		GWh	0	7	11	14	Grossed up for T&D losses
Building Electrification		GWh	-	-	-	-	Grossed up for T&D losses
Energy Efficiency		GWh	(0)	(244)	(440)	(610)	Grossed up for T&D losses
BTM PV		GWh	(2)	(465)	(605)	(728)	Grossed up for T&D losses
Custom Demand Inputs (OPTIONAL; overwrites Assigned Load Forecast for IRP)	Use Custom?	Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)	No	GWh					To overwrite, set "Use Custom" to "Yes" and input forecast. Custom demand values should be grossed up for T&D losses. User-specified load profiles should be input in the "Custom Profiles" tab. Energy efficiency and BTM PV subtract from demand and therefore should be entered as negative values.
Electric Vehicle Load - Home Charging Only	No	GWh					
Electric Vehicle Load - Home + Work Charging	No	GWh					
Other Electrification	No	GWh					
Building Electrification	No	GWh					
Energy Efficiency	No	GWh					
BTM PV	No	GWh					
Active Demand Inputs	Source	Units	2018	2022	2026	2030	Notes
Baseline net energy for load (no BTM PV, EV, electrification, energy efficiency)	IEPR	GWh	42	5,445	5,425	5,461	
Electric Vehicle Load - Home Charging Only	IEPR	GWh	0	91	138	171	
Electric Vehicle Load - Home + Work Charging	IEPR	GWh	0	15	39	73	
Other Electrification	IEPR	GWh	0	7	11	14	
Building Electrification	IEPR	GWh	-	-	-	-	
Energy Efficiency	IEPR	GWh	(0)	(244)	(440)	(610)	
BTM PV	IEPR	GWh	(2)	(465)	(605)	(728)	

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Capacity Inputs (MW)

Candidate Resource	Type	2018	2022	2026	2030	Notes
Battery Storage	Storage	-	8	24	38	Assumes 4-hr battery storage duration
Pumped Storage	Storage	-	-	-	-	Assumes at least 12-hr pumped storage duration
Large Hydro	Large Hydro	9	941	804	629	Assumes average dispatch based on RESOLVE
Nuclear	Nuclear	-	-	-	-	Perfect capacity - 100% CF
CAISO_Wind_for_CAISO	Wind	1	-	7	-	Existing wind located in CAISO
SW_Wind_for_CAISO	Wind	0	-	-	-	Existing wind located in SW and delivered to CAISO
Contracted_NW_Wind	Wind	-	-	-	-	Existing wind located in NW and delivered to CAISO
Northern_California_Wind	Wind	-	-	-	-	
Solano_Wind	Wind	-	160	160	160	
Central_Valley_North_Los_Banos_Wind	Wind	-	-	-	-	
Greater_Carrizo_Wind	Wind	-	-	-	-	
Tehachapi_Wind	Wind	-	-	-	-	
Kramer_Inyokern_Wind	Wind	-	-	-	-	
Southern_California_Desert_Wind	Wind	-	-	-	-	
Riverside_East_Palm_Springs_Wind	Wind	-	-	-	-	
Greater_Imperial_Wind	Wind	-	-	-	-	
Distributed_Wind	Wind	-	-	-	-	
Baja_California_Wind	Wind	-	-	-	-	
Pacific_Northwest_Wind	Wind	-	-	-	-	
NW_Ext_Tx_Wind	Wind	-	-	-	-	
Idaho_Wind	Wind	-	-	-	-	
Utah_Wind	Wind	-	-	-	-	
Wyoming_Wind	Wind	-	-	-	-	
Southern_Nevada_Northwest_Arizona_Wind	Wind	-	-	-	-	
Arizona_Wind	Wind	-	-	-	-	
New_Mexico_Wind	Wind	-	-	-	-	
SW_Ext_Tx_Wind	Wind	-	150	150	150	
BTM_Distributed_PV	Solar	1	231	300	362	Derived from demand inputs, grossed up for T&D losses. DO NOT EDIT
CAISO_Solar_for_CAISO	Solar	5	-	31	-	Existing solar located in CAISO
SW_Solar_for_CAISO	Solar	0	-	-	-	Existing solar located in SW and delivered to CAISO
IID_Solar_for_CAISO	Solar	-	-	-	-	Existing solar located in IID and delivered to CAISO
Northern_California_Solar	Solar	-	150	150	150	
Solano_Solar	Solar	-	150	150	150	
Central_Valley_North_Los_Banos_Solar	Solar	-	-	-	-	
Westlands_Solar	Solar	-	160	160	160	
Greater_Carrizo_Solar	Solar	-	-	-	-	
Tehachapi_Solar	Solar	-	-	-	-	
Kramer_Inyokern_Solar	Solar	-	-	-	-	
Mountain_Pass_El_Dorado_Solar	Solar	-	-	-	-	
Southern_California_Desert_Solar	Solar	-	-	-	-	
Riverside_East_Palm_Springs_Solar	Solar	-	-	-	-	
Greater_Imperial_Solar	Solar	-	-	-	-	
Baja_California_Solar	Solar	-	-	-	-	
Utah_Solar	Solar	-	-	-	-	
Southern_Nevada_Solar	Solar	-	-	-	-	
Arizona_Solar	Solar	-	-	-	-	
New_Mexico_Solar	Solar	-	-	-	-	
Northern_California_Geothermal	Geothermal	-	-	-	50	perfect capacity - 100% CF
Biomass	Biomass	-	-	-	-	perfect capacity - 100% CF
Small Hydro	Small Hydro	-	-	-	-	perfect capacity - 100% CF

Sales Forecast ¹ cells on the Dashboard

RESULTS

Energy Balance	Unit	2018	2022	2026	2030	Notes
Energy for Load (excluding BTM PV)	GWh	42	5,314	5,173	5,108	
Owned or contracted non-dispatchable GHG-emitting resources	GWh	-	-	-	-	
Large Hydro	GWh	23	2,495	2,132	1,667	
Nuclear	GWh	-	-	-	-	
Renewable Generation (including BTM PV)	GWh	17	2,551	2,791	3,252	Includes oversupply
User-specified GHG-free Power	GWh	-	-	-	-	
Storage Energy Imbalance	GWh	-	(3)	(9)	(15)	Due to storage losses and subhourly reserves.
Clean Net Short	GWh	2	271	260	204	

Emissions	Unit	2018	2022	2026	2030	Notes
Clean Net Short	MMtCO ₂ /yr.	0.00	0.18	0.19	0.25	Includes oversupply emissions credits
Owned or contracted non-dispatchable GHG-emitting resources	MMtCO ₂ /yr.	-	-	-	-	
Emissions offset for NW hydroelectric imports	MMtCO ₂ /yr.	(0.00)	(0.06)	(0.06)	(0.06)	Scaled to LSE load ratio share within CAISO
Total	MMtCO₂/yr.	0.000	0.117	0.132	0.190	
Average emission intensity	tCO ₂ /MWh	0.01	0.02	0.03	0.04	

Oversupply	Unit	2018	2022	2026	2030	Notes
Oversupply	GWh	5	491	574	626	Occurs when hourly supply exceeds hourly load
Oversupply Emission Credits	MMtCO ₂ /yr.	0.0	0.1	0.1	0.1	

Capacity/Peak	Unit	2018	2022	2026	2030	Notes
Profile Peak Load	MW	9	1,077	1,051	1,043	Peak of hourly load profile - not a 1:10 peak
Owned or contracted non-dispatchable GHG-emitting resources	MW	-	-	-	-	
Large Hydro	MW	9	941	804	629	
Nuclear	MW	-	-	-	-	
Total Baseload Renewables	MW	-	-	-	50	
Total Variable Renewables	MW	7	1,001	1,108	1,132	Includes BTM PV
User-specified GHG-free Power	MW	-	-	-	-	
Energy Storage	MW	-	8	24	38	
Maximum Clean Net Short	MW	4	569	618	608	