



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

**FILED**

Order Instituting Rulemaking to Continue )  
Implementation and Administration, and Consider )  
Further Development, of California Renewables )  
Portfolio Standard Program. )  
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**DRAFT 2025 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN  
OF SONOMA CLEAN POWER**

**PUBLIC VERSION**

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Dated: June 30, 2025

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In accordance with the California Public Utilities Commission’s (“Commission”) April 17, 2025, *Assigned Commissioner and Assigned Administrative Law Judge’s Ruling Identifying Issues and Schedule of Review for 2025 Renewables Portfolio Standard Procurement Plans* (“ACR”) Sonoma Clean Power Authority (“SCPA”) hereby submits this Draft 2025 Renewables Portfolio Standard Procurement Plan (“Draft RPS Procurement Plan”). As directed by the ACR, this Draft RPS Procurement Plan includes responses for the issues expressed in ACR sections 6.1-6.15.

SCPA notes that certain issues and requests in the April 17, 2025 ACR sections apply to the other retail sellers (electrical corporations and electric service providers), and do not extend to Community Choice Aggregators (“CCAs”). SCPA is nevertheless voluntarily responding to these ACR sections in the interest of transparency and in order to collaborate with the Commission. However, the submission of this Draft RPS Procurement Plan pursuant to the ACR, should not be construed as a waiver of the right to assert that components of the 2015 Senate Bill (“SB”) 350 or Commission decisions and rulings on RPS Procurement Plan submittals do not extend to CCAs. SCPA reserves the right to challenge any such assertion of jurisdiction over these matters.

## I. Summary of Major Changes to RPS Plan

This Section describes the most significant changes between SCPA’s Draft 2025 RPS Procurement Plan and its Final 2024 RPS Procurement Plan. Importantly, SCPA’s Draft 2024 RPS Procurement Plan was accepted as its Final 2024 RPS Procurement Plan as well. A redline of this Draft 2025 RPS Plan against SCPA’s Final 2024 RPS Plan is included as Appendix A. The table below provides a list of key differences between the Draft 2025 and Final 2024 RPS Procurement Plans:

<b>Plan Reference</b>	<b>Plan Section</b>	<b>Summary/Justification of Change</b>
Draft 2025 RPS Procurement Plan Section II	Executive Summary	Updated to reflect significant procurement completed in the past year
Draft 2025 RPS Procurement Plan Section IV	Assessment of RPS Portfolio Supplies and Demand	Updated to align better with revised structure and prompts in ACR. Revised calculations and IRP alignment based on updates to SCPA’s supply portfolio.
Draft 2025 RPS Procurement Plan Section V	Project Development Status Update	Disaggregated Ormat Portfolio contract, replaced Twin Pine with Fern Creek, provided updates to other in-development RPS contracts.
Draft 2025 RPS Procurement Plan Section VII	Risk Assessment	Added tax credit eligibility and replaced permitting risk with construction and interconnection delay risk. Updated assessed impact of independent risks in Table 9.
Draft 2025 RPS Procurement Plan Section IX	MMoP	Adjusted deterministic risk scenario composition and factors to better align with latest portfolio. Updated resulting MMoP.
Draft 2025 RPS Procurement Plan Section X	Bid Solicitation Protocol	Added detail on SCPA’s new board-adopted project selection criteria policy.

## **II. Executive Summary Key Issues**

SCPA has continued to expand its long-term RPS position, with significant progress made over the last year. Construction is well underway for the two largest RPS projects in SCPA's development portfolio: the 60 megawatt ("MW") Azalea solar and storage project in Kern County is expected to be online September 2025 and the 3,500 MW SunZia wind project in New Mexico is expected to be online in September 2026 (SCPA's contract is for 100 MW of SunZia output). Construction has also started on SCPA's 4 MW local Redemeyer solar and storage project in Mendocino County, with an expected online date at the end of 2025. Meanwhile, SCPA signed a 10-year contract for offtake of an existing 2.6 MW RPS-eligible hydropower facility that began delivery in February 2025. Development work continues to progress on maturing SCPA's two contracts for new geothermal resources—both of which have updated scopes and timelines in this Draft 2025 RPS Plan. With SCPA's diverse and expanded portfolio of RPS resources, it is well-positioned to maintain its long-term and overall RPS compliance targets.

SCPA is in the early stages of exploring expansion into Lake County. An expansion to Lake County is dependent on the approval of Lake County jurisdictions and the SCPA Board of Directors. This expansion is not included in its 2025 RPS Procurement Plan given the tentative state. However, SCPA has included its ability to continue meeting RPS compliance requirements as a key criterion in assessing the feasibility of proceeding with expansion.

SCPA's load continues to exhibit minimal growth, as load growth from electrification has been offset by growth in behind-the-meter solar and energy efficiency over the last few years. However, SCPA expects this trend to change starting in 2028 as electrification of the transportation and building sectors continues to grow and outpace behind-the-meter solar and

energy efficiency.

SCPA's Draft 2025 RPS Procurement Plan includes a robust discussion of risks to its portfolio, including tax credit eligibility, uncertainty on the timing of electrification adoption, construction and permitting delays, and [REDACTED]. SCPA expects it will need to plan for a 2.9% to 4.5% margin of retail sales of additional procurement to manage these risks.

SCPA's Draft 2025 Procurement Plan is well aligned with its Integrated Resource Plan ("IRP"). This includes the types and timing of contracted resources, as well as hourly emissions targets adopted by SCPA's Board of Directors. The Draft 2025 Procurement Plan focuses on only contracted resources to avoid overstating SCPA's compliance position.

### **III. Compliance with Recent Legislation and Impact of Regulatory Changes**

This Final RPS Procurement Plan addresses the requirements of all relevant legislation and the Commission's regulatory framework. This Section describes the relevant statutory and regulatory requirements and demonstrates that this Draft RPS Procurement Plan meets or exceeds all requirements.

SB 350 enacted in 2015 set a new RPS procurement target of 50% by December 31, 2030. Following enactment, the Commission implemented SB 350 by establishing compliance periods with procurement quantity requirements, adopting minimum procurement requirements for long-term contracts and owned resources, and rules for banking, waivers, and the penalty scheme. SB 100 enacted in 2015 increased the RPS procurement requirements to 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 and codified a 65% minimum for long-term contracts.

SCPA's Renewable Net Short Calculation Table, described in Section VIII below and attached as Appendix B, incorporates current RPS procurement targets established by the

Commission’s implementation of SB 350 and SB 100. SCPA’s current and planned procurement is sufficient to exceed these targets, as reflected in SCPA’s Renewable Net Short Calculation Table. SCPA’s RPS procurement targets also include a minimum margin of over-procurement (“MMoP”) based on SCPA’s risk assessment described in Sections VII and IX. SCPA is also positioned to exceed the SB 350 long-term requirement, as described in Sections IV and VII.

SB 255 enacted in 2019 requires SCPA to annually submit a report to the Commission regarding procurement from women, minority, disabled veteran, persons with disabilities, and LGBT business enterprises in all categories. SB 255 also requires SCPA to include a methodology for ensuring procurement from local, small, and diverse business enterprises. SCPA has met all of its reporting obligations to fulfill SB 255 requirements.

**IV. Assessment of RPS Portfolio Supplies and Demand**

**IV.A. Portfolio Supply and Demand**

*(i) Assessment of Portfolio Supply and Demand through 2035*

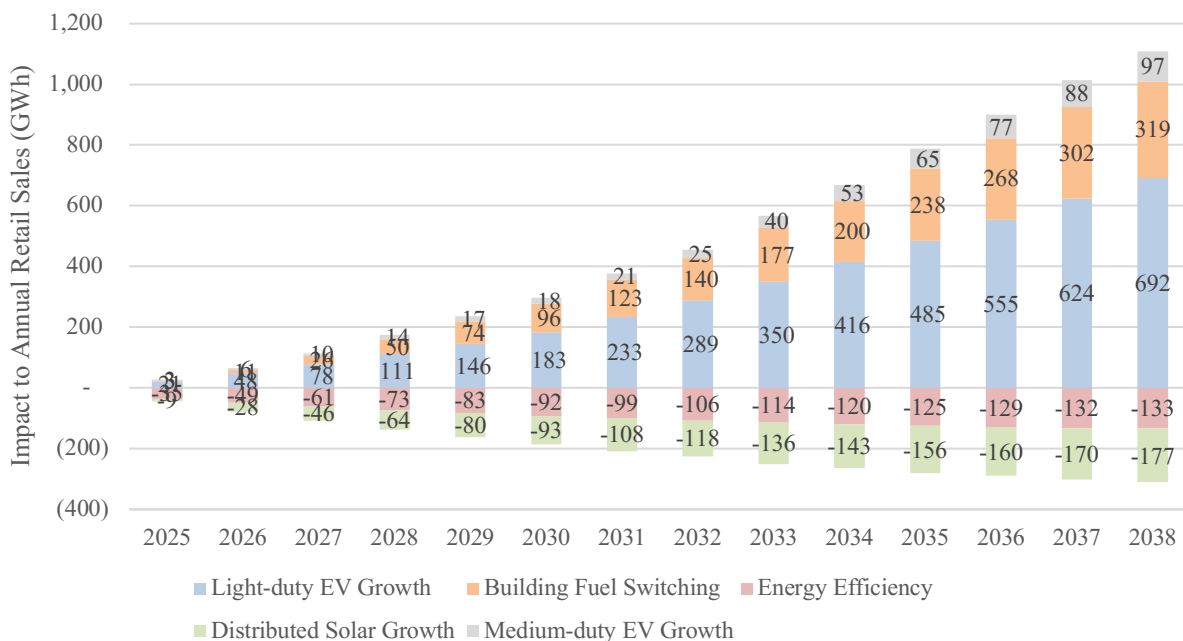
SCPA expects to exceed the Commission’s RPS compliance obligations. As demonstrated in Table 1, SCPA currently has enough RPS under contract to satisfy its 2025, 2026, and 2028 obligations and has a 2.5% of its load as an open position for 2027. SCPA anticipates filling its 2027 open position using short-term bilateral contracts with suppliers or other load-serving entities. Even under constrained market conditions, SCPA has had success in securing short-term contracts far above the expected near-term open position.

Table 1: SCPA’s RPS Open Position

<b>Compliance Measure (% of Retail Sales)</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>
RPS Obligation (% of Sales)	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
RPS Under Contract (% of Sales)	47.5%	55.1%	49.5%	56.2%	57.2%	55.8%	54.4%	52.6%	50.4%	47.1%	43.8%
RPS Open Position (% of Sales)	None	None	2.5%	None	0.1%	4.2%	5.6%	7.4%	9.6%	12.9%	16.2%

SCPA’s demand for RPS is driven by both increasing compliance requirements and anticipated load growth from electrification. Figure 1 illustrates the load modifiers SCPA has incorporated in its load forecast, including electrification and the effects of energy efficiency and growth in distributed solar. SCPA derives its expectations for energy efficiency and distributed solar from scaling forecasts from the 2024 Integrated Energy Policy Report (“IEPR”) using its load share of PG&E. SCPA’s forecast for the effects of transportation electrification are described in greater detail in Section IV.B.1 below. SCPA’s forecast for the effect of building electrification is based on applying an adoption rate of electrification technologies detailed in the California Air Resource Board’s (“CARB”) Final 2022 Scoping Plan to territory-specific residential natural gas usage. Absent the load modifiers in Figure 1, SCPA’s load is fairly static given minimal population growth and expectations for new industry. The net effect is that SCPA’s load remains relatively constant until electrification outpaces solar and energy efficiency beyond 2028.

Figure 1. Load Modifiers in SCPA’s Draft 2025 RPS Procurement Plan Load Forecast



Starting in 2029, SCPA's open position for RPS grows from 0.1% of sales to 16.2% of sales in 2035. Although Section IV.A.1 details how SCPA's long-term RPS position is sufficient to meet the 65% requirement without additional long-term procurement, SCPA anticipates satisfying a portion of the long-term open position through long-term power purchase agreements with new or existing resources.

*(ii) Assessment of Need for RPS Resources with Specific Deliverability Characteristics*

SCPA's need for specific deliverability characteristics is identified in developing its IRP and reviewing both near-term and long-term compliance requirements. The change in the Resource Adequacy ("RA") program to Slice-of-Day ("SOD") has increased the need for both baseload and winter resources in SCPA's portfolio, such as geothermal and wind. SCPA has excess battery storage capacity in all months, and procuring RPS generation in non-summer months enables SCPA to increase utilization of its battery storage in satisfying RA requirements and reduce its dependency on RA from natural gas resources. Geothermal and wind resources also address SCPA's monthly open position and provide a more effective hedge against load costs.

SCPA is only considering new solar development that is either small-scale and local or paired with battery energy storage. Without battery energy storage, the market risk of exposure to curtailment and negative prices is too high. SCPA includes economic curtailment rights in its RPS contracts.

In evaluating new potential projects, SCPA has increased its focus on understanding grid constraints. SCPA has hired a full-time employee with expertise in transmission operations and planning and reviews constraints and transmission upgrades that impact candidate resources.

*(iii) Experience Managing Exposure to Negative Market Prices*

SCPA's experience in managing exposure to negative market prices is discussed in detail in Section IV.B.2.

*(iv) Renewable Net Short Quantitative Analysis Support of Supply and Demand*

The Renewable Net Short Calculation Table described in Section VIII and included as Appendix B is consistent with the description of supply and demand in this section. Appendix B provides the Renewable Net Short calculation for the un-risked RPS currently under contract by SCPA. The retail sales used in the quantitative assessment includes the effect of load growth described above. The annual net RPS position shown in the quantitative template matches the results shown in Table 1—with values exceeding the compliance requirement through 2028 except for the year 2027, which will require additional short-term procurement. The quantitative template incorporates the additional effects of SCPA's voluntary 50% RPS target and a calibrated MMoP described in Section IX. The result of these additional requirements in the quantitative analysis leads to a negative net RPS position in all future years except for 2026. The resulting net position is sufficiently small through 2030 for SCPA to address through short-term contracting.

*(v) Effect of RPS Procurement, Allocation, or Sales*

SCPA includes only contracted resources in the 2025 RPS Procurement Plan to avoid overstating its compliance position. SCPA does not sell RPS unless it is confident that its compliance position is satisfied with a high degree of uncertainty. SCPA does not currently receive any allocations of RPS resources. Although SCPA anticipates receiving RPS allocations from resources procured from the Department of Water Resources ("DWR") as the Central Procurement Entity, SCPA will not incorporate any allocations until DWR is under contract.

#### IV.A.1. Long-term Procurement

SCPA’s existing portfolio has historically aligned with the 65% requirement and the ramp from 25% to 65% has not introduced significant risk of noncompliance. After completing significant contracting activities described in last year’s 2024 RPS Procurement Plan, including long-term contracts extending offtake from the Geysers, offtake from an existing small hydropower facility, and new power purchase agreements with out-of-state wind, SCPA’s currently contracted procurement achieves the 65% long-term RPS requirement through 2035, as demonstrated in Table 2 below.

Table 2: SCPA’s Long-term RPS Compliance

Compliance Measure (% of Retail Sales)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
RPS Obligation (% of Sales)	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
RPS Obligation Long-term (x 65%)	30.3%	32.1%	33.8%	35.5%	37.3%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%
Contracted Long-term RPS (% of Sales)	45.7%	55.1%	49.5%	56.2%	57.2%	55.8%	54.4%	52.6%	50.4%	47.1%	43.8%
RPS Obligation Long-term GWh	655	701	746	797	851	911	933	961	995	1,031	1,070
Contracted Long-term RPS GWh											
Deficiency	No Deficiency										

SCPA’s long-term portfolio currently includes 961 GWh of online long-term RPS from online solar, wind, small hydropower, and geothermal facilities, representing 44.6% of its load in 2025, or 95.5% of its overall 2025 RPS obligation. SCPA’s long-term RPS position will decrease slightly in 2027 as the existing Geysers contract rolls-off but then grow before the next year with the commissioning of SunZia. The in-development contracts support SCPA’s long-term position are described in detail in Section V and include SunZia, paired solar and storage, and new geothermal resources. Due to successful completion of risk mitigation measures described in past RPS Procurement Plan filings, SCPA has greatly reduced its compliance risk for satisfying its long-term obligation.

## **IV.B. Portfolio Diversity and Reliability**

### *(i) Description of How Portfolio Diversity is Considered.*

SCPA seeks to procure resources that align with its requirements to serve load—which requires a diverse set of resources that provide energy and capacity throughout the year. A key function of SCPA’s RPS portfolio is to provide a hedge against load costs. Given SCPA’s monthly energy requirements peak in winter, SCPA has sought to build an RPS portfolio that includes non-solar resources such as wind, geothermal, and small hydropower. The new SOD RA framework further strengthens the value of non-solar resources that can be used in tandem with SCPA’s large battery storage fleet to satisfy RA obligations.

SCPA prefers resources that are in Northern California, which are a more direct hedge against its cost to serve load. SCPA also adopted Project Selection Criteria C.6 in April 2025<sup>1</sup>, which prioritized procurement of local resources. However, interconnection constraints and the scarcity of new local wind and geothermal resources have also led to SCPA procuring more distant resources—including out-of-state wind and geothermal. Although these resources have reduced hedging benefits, they do diversify SCPA’s RPS portfolio by reducing exposure to localized risk such as curtailment, transmission outages, and weather.

SCPA’s RPS portfolio is principally comprised of long-term power purchase agreements, which include energy market revenues, resource adequacy, and RPS attributes. SCPA has signed 10, 15, and 20-year agreements depending on the resource and counterparty and diversified contract end dates to avoid over-concentrating replacement procurement in a single year.

The technology and capacity requirements for SCPA’s RPS portfolio are defined in its IRP modeling. SCPA’s IRP optimization identifies the optimal set of resources needed to meet

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<sup>1</sup> See Policy C.6 in Sonoma Clean Power Authority’s Board Policies available at <https://sonomacleanpower.org/uploads/documents/00-SCPA-BOD-Policies-Effective-2025.04.24.pdf>

its compliance requirements, energy needs, and voluntary environmental targets. SCPA's procurement team uses the outputs of IRP modeling to prioritize their engagement with counterparties and focus on specific technologies and contracting dates. Ultimately, SCPA decides to move forward with contracting a candidate RPS resource after evaluating its compatibility with the IRP portfolio and cost-effectiveness based on pricing and forecasted market revenues. Resources needed to meet procurement mandates do not always create accretive value for SCPA's ratepayers, but SCPA still seeks to contract the best value resource.

*(ii) Description of How Planned RPS Portfolio Diversity will Contribute to System Reliability.*

The capacity contribution of RPS resources in supporting system reliability is a key consideration in the composition of SCPA's portfolio. As such, SCPA has prioritized procurement of resources like geothermal, which have a high capacity value throughout the year. SCPA has also focused on procuring resources with full capacity deliverability status ("FCDS") and sought maximum import capability ("MIC") for its resources outside CAISO to ensure they provide not only clean energy, but clean capacity for the California grid. To maximize its contribution to system reliability, SCPA also procures energy storage to pair with its large RPS solar resources, including contracting for a 75 MW battery that was co-located with a pre-existing solar contract in SCPA's portfolio. Installing battery allows solar output to be shaped to meet peak system reliability needs. In evaluating future portfolio decisions, SCPA uses the CPUC's technology-specific Effective Load Carrying Capability ("ELCC") values to validate its future portfolio is aligned with long-term system needs through 2035.

The implementation of SOD in the RA program has driven SCPA to build a portfolio that increasingly aligns with SCPA's monthly load curve and duration. Building a fleet of RPS resources that better aligns with SCPA's load across all 24 hours of a peak day each month

reduces the requirement to procure firm natural gas capacity—which has both affordability and climate benefits. SCPA’s peak summer load curve is growing less and less dependent on the system to serve given the increased size of SCPA’s battery and solar portfolio. SCPA currently has 1,003 MWh of battery storage under contract, which is sufficient to shift 17% of SCPA’s average daily load. SCPA’s peak winter load curve is more of a challenge—because there is often not enough solar to charge battery storage for meeting load across all hours of the day.

[REDACTED]

[REDACTED]

SCPA seeks to minimize negative system impacts and maximize use of existing RPS-eligible generation in two primary ways: by procuring local resources when possible and investing in battery storage. SCPA’s current fleet of RPS resources includes a large offtake from the Geysers resource, small solar, and small solar paired with storage all within SCPA’s territory. SCPA is also leading an initiative called the Geothermal Opportunity Zone (“GeoZone”) to partner with the geothermal industry in building 600 MW of new local geothermal capacity. By prioritizing local capacity that is closer to its load, SCPA is reducing the impact of its portfolio on transmission. This reduced impact improves local resiliency when public safety shut offs are required due to weather events and reduces curtailment due to congestion in other areas of the state overly saturated with renewable generation. By investing in battery storage alongside RPS resources, SCPA is contributing resources that provide ancillary services and reduce curtailment of existing RPS resources. SCPA’s focus on geothermal resources also contributes inertia to the grid that can be important in maintaining reliability.

*(iii) Description of How Portfolio Diversity will Maximize Ratepayer Value While Minimizing Costs and Risks.*

As discussed above, SCPA relies on IRP modeling that identifies the cost-optimal set of resources to meet SCPA's compliance requirements and voluntary environmental targets. By selecting resources that provide not only RPS, but also high capacity value and energy market revenues, SCPA seeks to maximize ratepayer value. SCPA sees advantages to a diverse portfolio that better aligns with its needs to serve load and reduces the need to buy energy and natural gas capacity separately. In addition to building a technologically diverse portfolio, SCPA also contracts with a diverse set of counterparties to reduce risk to its ratepayers. Counterparties and candidate projects are also heavily vetted for project development expertise, permitting risk, supply chain dependencies, and interconnection viability to minimize project development risk.

*(iv) Description of How Energy Storage and Emerging Technologies are Addressed in Reliability and Diversity Planning.*

As previously discussed, SCPA has a large portfolio of energy storage resources under contract. These energy storage resources are all lithium-ion. SCPA has actively explored other storage technologies, including thermal long-duration energy storage and pumped hydropower, but has not yet identified an economic energy storage project to contract beyond lithium-ion. SCPA expects the economics of other energy storage technologies to improve as regulatory processes increase the relative value of long-duration energy storage.

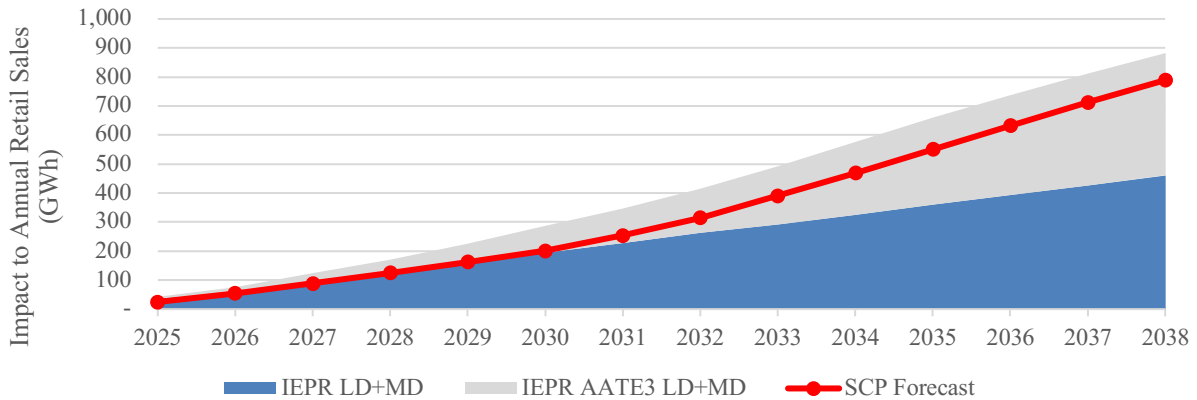
SCPA has invested heavily in advancing next-generation geothermal power. Through its GeoZone initiative, SCPA has signed cooperation agreements with industry to advance development of Enhanced Geothermal Systems ("EGS") and Advanced Closed Loop ("ACL") geothermal technologies in Sonoma and Mendocino counties. These cooperation agreements provide early commercial certainty to industry partners and support with community engagement

and legislative and regulatory advocacy. Although these projects are not yet sufficiently mature to contract and include in SCPA's RPS Procurement Plan, they are expected to play a large role in SCPA's future portfolio.

#### **IV.B.1. Forecasting for Increased Transportation Electrification**

SCPA's forecast for load impacts from increased transportation electrification is built internally based on local characteristics that are calibrated to match trends forecasted in CARB's Final 2022 Scoping Plan. Specifically, SCPA characterizes the existing fleet of light-duty and medium-duty vehicles in its territory using 2024 data on registrations from the Department of Motor Vehicles ("DMV") and applies an annual growth rate that varies each year depending on the adoption curve represented statewide in the CARB Final 2022 Scoping Plan. SCPA then uses locally-specific vehicle miles traveled ("VMT") data from CARB's 2025 EMFAC database and an estimate of electric vehicle efficiency for light and medium duty to arrive at a locally-calibrated forecast for load impacts from increased transportation electrification. SCPA's resulting forecast compares reasonably well with its load share of the PG&E territory estimate for light and medium duty vehicles in the Integrated Energy Policy Report ("IEPR") Planning Scenario. Figure 2 below shows that SCPA's forecast, which is included in the total load in this RPS Procurement Plan, lies between the base IEPR forecast and the Additional Achievable Transportation Electrification ("AATE") scenario.

Figure 2: Light-duty (“LD”) and Medium-duty (“MD”) Electric Vehicle Modifier Forecast – SCPA vs. 2024 IEPR Planning Scenario and AATE Scenario



#### IV.B.2. Curtailment Frequency, Cost, and Curtailment

*(i) Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours*

At a system level, CAISO continues to see increased renewable curtailment as the capacity of solar generation grows. In 2024, CAISO’s solar and wind curtailment was up 29% from its level in 2023<sup>2</sup>. Both growth in battery storage and CAISO’s increased integration with neighboring balancing authorities provide significant relief, but the scale and cost of curtailment is an important consideration in building and managing a portfolio of RPS resources. Curtailment is especially concentrated in the spring, when high solar output coincides with low load throughout the day.

SCPA sees local conditions as increasingly driving the frequency and magnitude of curtailment and negative pricing. Whereas SCPA’s resources in the Central Valley see significant levels of curtailment, local pricing nodes in SCPA’s territory are positive. Although the CAISO observes conditions with system-level curtailment, local transmission constraints can be the cause for a large share of curtailment and negative pricing. SCPA has invested in more

<sup>2</sup> <https://www.utilitydive.com/news/solar-wind-curtailments-increasing-california-caiso/749420/>

sophisticated tools for characterizing local pricing conditions, including the impact of future approved transmission upgrades, to aid in selecting resources with lower curtailment risk.

*(ii) Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years*

SCPA currently schedules its RPS resources into the CAISO market and is partially exposed to negative pricing at each resource’s pricing node. Negative pricing occurs in the Day Ahead market (“DA”), Fifteen Minute Market (“FMM”), and Real Time (“RT”) market typically as a result of local or systemwide negative congestion. Although SCPA can be exposed to negative pricing from imbalance between markets, the principal risk is in the market a resource is scheduled.

The average number of net negative pricing hours experienced per resource by all SCPA resources with market revenues from January 2019 through June 18, 2025 are shown in Table 3, broken down by the market schedule. The number of hours shown in Table 3 are the average across SCPA’s solar, wind, and small hydro resources scheduled in the market. After a decrease in 2021 after the installation of battery storage adjacent SCPA’s Mustang solar facility, SCPA is seeing a steady increase in negative pricing hours in the day-ahead and fifteen-minute market.

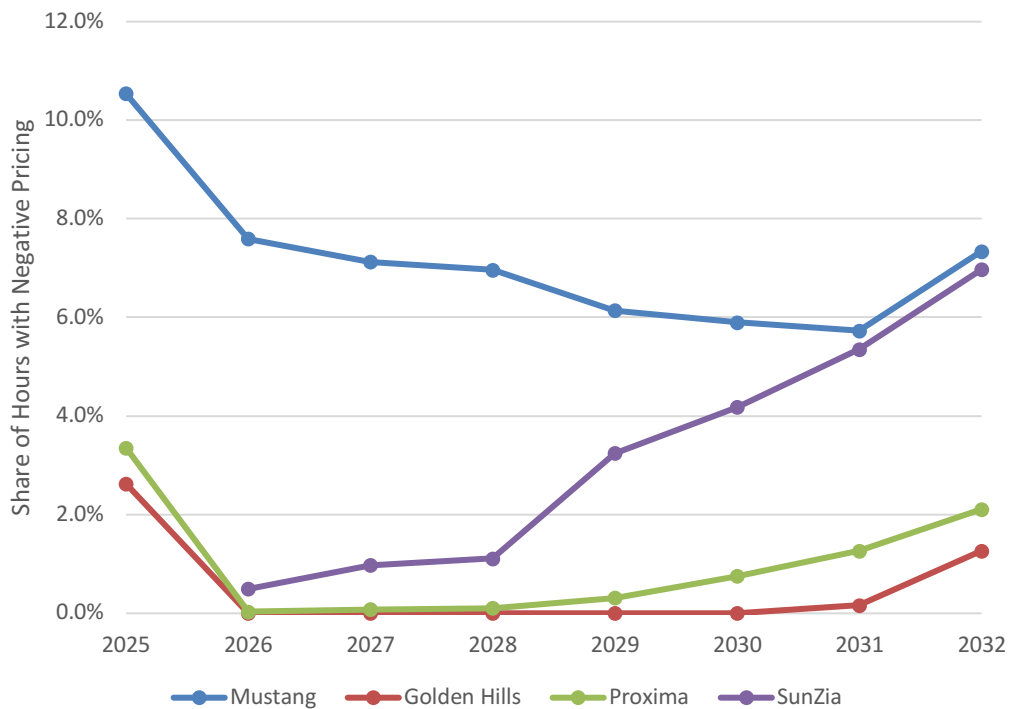
Table 3: Average Number of Negative Pricing Hours for SCPA Resources with Market Revenue

<b>Market Schedule</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>1/1/2025-6/18/2025</b>
DA	171	287	104	319	598	1,001	617
FMM	186	163	131	131	197	272	270

Negative prices and associated costs occurred mainly between March and May, during the Pacific Northwest freshet, when higher than normal water levels impact hydroelectric supply and consequently power prices across the Western Electricity Coordinating Council.

SCPA forecasts hourly pricing for each of its RPS resources using Ascend’s PowerSimm platform, which incorporates historical trends and a forecast of local transmission build-out and congestion. Figure 3 shows the latest forecast for negative pricing for four of SCPA’s key RPS resources through 2032. This forecast shows fairly steady levels of curtailment in SCPA’s Northern California resources, but growing curtailment for its SunZia resource. SCPA expects this trend to continue until transmission upgrades are approved to alleviate south to north congestion on Path 15, likely through the ten-year period evaluated in this RPS Procurement Plan. Importantly, this forecast is one deterministic realization and large uncertainties such as the impact of the Extended Day-ahead Market, reinstatement of production tax credits, and increased deployment of battery storage systems are difficult to characterize. Nonetheless, SCPA does not foresee negative pricing to be a major risk to its portfolio.

Figure 3: Forecast of Negative Pricing for SCPA RPS Resources



*(iii) Experience, to Date, With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers in California*

SCPA takes action to limit the impacts of curtailment on its ratepayers. SCPA pursues and implements contract terms that recognize and limit the potential financial impacts of negative pricing and give SCPA greater flexibility to direct economic curtailment. SCPA also evaluates new procurement opportunities by evaluating the proposed project location and nearby historical negative pricing and congestion. SCPA has contracted and is actively exploring battery storage systems at existing resources as well as new hybrid projects and has a particular focus on modeling the locational value of storage resources.

*(iv) Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices*

While not a result of CAISO incidences of overgeneration as defined by CAISO, SCPA incurred costs of approximately \$1,537,592 over a total of 78,664 MWh at negative pricing hours for all its RPS resources scheduled in the CAISO market in 2024. This represents a negligible amount of total energy costs for SCPA ratepayers over the same time period, even when considered specifically for intermittent resources. Negative pricing occurred for resources scheduled in the DA market and FMM as shown in Table 4.

Table 4: Costs from Negative Pricing in 2024

<b>Market Schedule</b>	<b>Volume Weighted Average Price (VWAP) during negative pricing hours only (\$/MWh)</b>	<b>Volume during negative pricing hours only (MWh)</b>
DA	-19.86	73,613
FMM	-14.93	5,052

*(v) Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices*

While curtailment is a viable renewable integration strategy that is generally more cost-effective than other options, there are potential negative consequences from excessive

curtailment. Curtailment of solar and wind represents a lost opportunity to renewable electricity, and excessive curtailment could impact the ability of California to meet its environmental and energy policy goals. Additionally, these over-supply situations expose ratepayers to increased costs – LSEs must either economically curtail the generating resource by often paying for the electricity that was not generated, or generate power and be exposed to negative prices. Because these conditions are largely driven by California policy, it is appropriate to consider macro-level mitigation measures through CAISO initiatives, Commission rulemakings, and possibly even legislation.

There are a number of measures and policies that have already been implemented or are currently being pursued that will have significant impacts on how substantial curtailment will be in the future. These include the expansion of the EIM, improvements to the CAISO market design and structure, enhanced forecasting capabilities, improved time-of-use rates, improved EV charging functionalities, and smart deployment of DERs. Recently, SCPA has experimented with promoted workplace EV charging. SCPA has learned this may have significant potential to address curtailment while simultaneously providing access to EVs for renters and drivers who have only street parking options. The Commission’s IRP proceeding will be an appropriate forum to measure the impact of these policies and the effect that they will have on future curtailment. These new measures will need to be modeled and incorporated into forecasts of future curtailment.

*(vi). Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices*

SCPA includes contract terms in its PPAs that allow rights to dispatch the resource, where applicable, which could lead to an economic curtailment of the resource in the event of significant negative pricing. However, SCPA is still obligated to pay for deemed energy. In

addition, SCPA includes contract language that requires the seller to use “commercially reasonable efforts to minimize the extent, amount and duration of any curtailments.” Finally, SCPA includes language in each of its PPAs for resources paired with storage that allows charging the storage resource from the grid.

#### **IV.C. Portfolio Optimization**

SCPA’s resource portfolio includes baseload renewable power (geothermal), intermittent resources with complementary profiles (solar, wind, and small hydro), and battery storage. SCPA examines the need to procure resources to meet its goals (which meet or exceed both state and local compliance obligations) and when significant change in load is expected to occur (*e.g.*, phasing in new territories).

Starting in 2021, SCPA contracted with Ascend Analytics to provide advanced portfolio optimization capabilities. Using Ascend’s PowerSimm platform, SCPA is building a portfolio that is co-optimized for reliability, environmental performance, and cost, while meeting compliance obligations. The underlying stochastic engine, storage dispatch logic, and locational price modeling provide the foundation for robust decisions to minimize cost and risk for SCPA customers.

Reducing greenhouse gas emissions is one of SCPA’s cornerstone objectives. SCPA has established an hourly emissions target that reflects the relative contribution of different resource types to mitigating grid emissions. By 2026, SCPA is contracting a supply portfolio that aims to provide 85% of the hourly marginal emissions mitigation as incurred by its load. Meanwhile, SCPA is increasingly focused on planning a portfolio that can maintain affordability and reliability as electrification of the transportation and building sectors ramp-up.

Although SCPA has invested considerable effort in the capability to optimize its portfolio for cost and carbon mitigation, procurement activity is also heavily influenced by the Commission’s reliability requirements and market constraints. One example is the Mid-term Reliability (“MTR”) requirement established in D.21-06-035 and expanded in D.23-02-040 which requires SCPA to procure 186 megawatts (“MW”) of incremental capacity.

SCPA primarily relies on bilateral agreements through its extensive network with project developers to contract resources and did not issue any solicitations for RPS resources in the past year. In evaluating candidate resources, SCPA focuses on not just low pricing, but also developer experience, interconnection risk, and permitting timelines. SCPA also contracts resources through California Community Power (“CC Power”), a joint powers authority comprised of nine CCAs that coordinates joint procurement of large or strategic resources for its members.

#### **IV.C.1. Conformance with the IRP Proceeding**

SCPA is including resources in the Draft 2025 RPS Procurement Plan that are currently contracted. SCPA’s 2025 IRP portfolio will contain additional RPS that are not yet contracted and thus not included in the Draft 2025 RPS Procurement Plan to avoid over-representing SCPA’s procurement commitment. Table 5 below describes how SCPA’s Draft 2025 RPS Procurement Plan conforms with the determinations made in the IRP Proceedings. Because the 2025 IRP portfolio is currently under development and final guidance has not yet been given to LSEs, many of the responses in Table 5 are prospective.

Table 5: Conformity with the IRP

IRP Section Subsection	RPS Alignment in IRPs	
<p><b>III. Study Results</b></p> <p><b>A. Conforming and Alternative Portfolios</b></p>	<p><i>1. Existing RPS resources that the retail seller owns or contracts.</i></p> <p><i>2. Existing RPS resources that the retail seller plans to contract with in the future.</i></p> <p><i>3. New RPS resources that the retail seller plans to invest in.</i></p> <p><i>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035.</i></p>	<p><i>1. Existing RPS resources that the retail seller owns or contracts.</i></p> <p>SCPA’s 2025 IRP portfolio and this 2025 RPS Procurement Plan will share the following existing RPS resources under contract:</p> <ul style="list-style-type: none"> <li>- Geysers geothermal (50 MW through 2026, 9 MW in 2027, 20 MW through 2037)</li> <li>- 40 MW Mustang Solar</li> <li>- 30 MW Mustang Solar 3</li> <li>- 46 MW Golden Hills North Wind</li> <li>- 6 MW local solar feed-in-tariff projects</li> <li>- 70 MW Proxima solar project (paired with storage)</li> <li>- 14.5 MW Forks of Butte small RPS-eligible hydropower</li> <li>- 2.6 MW Montgomery Creek small RPS-eligible hydropower</li> </ul> <p><i>2. Existing RPS resources that the retail seller plans to contract with in the future</i></p> <p>The 2025 RPS Procurement Plan does not explicitly contain any resources that are not already under contract to avoid overstating SCPA’s RPS position. However, SCPA continues to plan on contracting with existing RPS resources to satisfy its compliance needs and necessary margin of over-procurement.</p> <p>The 2025 IRP will contain at least one placeholder for short-term RPS contracts (volume varies by year).</p> <p><i>3. New RPS resources that the retail seller plans to invest in</i></p> <p>The 2025 IRP and this Draft 2025 RPS Procurement Plan will share the following new</p>

	<p>RPS resources under contract:</p> <ul style="list-style-type: none"> <li>- 60 MW Azalea solar project (paired with storage) – now online</li> <li>- 4 MW Redemeyer solar project (paired with storage)</li> <li>- 15.5 MW of geothermal from Nevada and California (from two separate contracts)</li> <li>- 100 MW of out-of-state wind from New Mexico</li> <li>- 2 MW Fern Creek solar project</li> </ul> <p>The 2025 IRP will also contain non-specific plans for new resources including additional solar and storage, geothermal, and in-state wind to meet SCPA’s long-term portfolio requirements—including alignment with its emissions and reliability contributions for IRP. These resources are not included in the Draft 2025 RPS Procurement Plan because they are not under contract and SCPA wants to avoid overstating its RPS compliance position.</p> <p><i>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035 and the supplemental procurement ordered in D. 23-02-040.</i></p> <p>The 2025 RPS Procurement Plan includes 15.5 MW of new geothermal resources from Nevada and California, the Proxima project, and the Azalea solar project that are expected to be used to satisfy MTR obligations and contribute to SCPA’s RPS portfolio.</p> <p>Beyond the RPS contracts listed above, SCPA has executed contracts with battery storage resources and is currently in early stages of procuring additional new geothermal capacity to fulfill its Mid-Term and supplemental procurement obligations.</p>
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<p><b>IV. Action Plan</b></p> <p><b>A. Proposed Activities</b></p>	<p><i>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</i></p> <p><i>2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.</i></p>	<p>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</p> <p>The development of new RPS resources in the Draft 2025 RPS Procurement will be consistent with the Action Plan in the 2025 IRP. The 2025 IRP Action Plan and this Draft 2025 RPS Procurement Plan will include two geothermal contracts SCPA has executed for its share of 1 GW of new firm zero-emitting generation, and solar and storage resources executed to fulfill SCPA’s share of the 2.5 GW of zero-emission generation paired with storage.</p> <p>Although not mandated, the 2025 IRP Action Plan will include additional RPS procurement of wind, geothermal, and paired solar and storage, and new geothermal to achieve internal and CPUC targets for emissions and reliability.</p> <p>2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.</p> <p>Many of the same risks described in Section VII for SCPA’s development resources will create barriers for new RPS resources. SCPA is hopeful that issues such as supply chain constraints and transmission backlogs abate as the global market stabilizes and the MTR procurement order is satisfied. However, the effects of the Reliable and Clean Power Procurement Program (“RCPPP”) and the expected growth in load alongside rising compliance requirements will likely sustain a high level of demand for new RPS resources that will complicate procurement. Securing FCDS and MIC allocation is a concern for SCPA given the number of projects vying for the same designation.</p> <p>SCPA is not forecasting specific resource types in its Draft 2025 RPS Procurement Plan beyond projects currently under contract.</p>
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		<p>Details on the size and type of SCPA’s preferred resources to satisfy RPS obligations and IRP emissions targets will be described in the 2025 IRP filing.</p> <p>In its past IRP analysis, SCPA identified baseload renewables, out-of-state resources, and solar paired with storage as likely preferred resources. SCPA is gaining direct experience with these resource types through projects in development with risks thoroughly described in Section VII.</p>
<p><b>IV. Action Plan</b> <b>B. Procurement Activities</b></p>	<ol style="list-style-type: none"> <li>1. <i>The type of solicitation</i></li> <li>2. <i>The timeline for each solicitation.</i></li> <li>3. <i>Desired online dates.</i></li> <li>4. <i>Other relevant procurement planning information, such as solicitation goals and objectives.</i></li> </ol>	<p>The 2022 IRP Action Plan included specific RPS procurement activities for SCPA to build its preferred portfolio including contracting for out-of-state wind, local renewable projects, extending offtake at the Geysers, in-state solar paired with storage, in-state wind, and strategic local geothermal development. SCPA’s current portfolio reflects the success of many of these actions. The 2025 IRP Action Plan will identify incremental procurement requirements to meet the needs of its preferred portfolio and will likely include the need to solicit more geothermal, wind, and solar paired with storage. SCPA expects any newly contracted resources to likely come online in the early 2030s.</p> <p>Negotiations for procurement aligned with the 2022 IRP Action Plan originated from responses from SCPA’s solicitations for local resources or MTR-eligible capacity over the past few years, but SCPA is increasingly relying on its network of developer contacts to identify opportunities without the administrative burden of an open solicitation. Due to the scarcity of interconnection capacity and permitting risks, SCPA has also shifted its procurement focus to concentrate on project maturity and developer experience, which is better managed through bi-lateral networking with trusted developers rather than an open solicitation.</p> <p>SCPA will manage any remaining short position relative to compliance obligations and</p>

		<p>its TmoP target through short-term RPS contracts. SCPA has a strong track record of delivering RPS volumes through short-term contracts to meet internal RPS compliance targets.</p>
<p><b>IV. Action Plan</b> <b>C. Potential Barriers</b></p>	<p><i>1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in both retail sellers' Preferred Portfolios.</i></p> <p><i>2. Key risks associated with the potential retirement of existing RPS resources on which the retail seller intends to rely in the future.</i></p>	<p>The key barriers for resources under contract and in development are described in detail in Section VII. These resources are a good sample of the types of resources SCPA will include in its 2025 IRP preferred portfolio. Issues such as importing ex-CAISO generation, uncertainty on tax credits, permitting complexity, securing solar and battery modules, and geothermal exploration risk are shared between SCPA's current development queue and candidate IRP resources.</p> <p>SCPA's 2022 RPS Procurement Plan discussed potential challenges with the risk of existing geothermal retirements due to high operating costs and their ineligibility for the procurement mandate. However, this risk has reduced considerably in the past three years as the market value of existing geothermal has increased as LSEs prepare for hourly carbon accounting and slice-of-day resource adequacy. SCPA does not currently see any discrete risks with the retirement of existing RPS resources. Outside existing geothermal most of SCPA's planned RPS is procured from newer facilities.</p>

**IV.C.2. Responsiveness to Local and Regional Policies**

*(i) Responsiveness to Policies of SCPA Governing Board*

SCPA is a local governmental agency. SCPA is subject to the control and additional compliance mandates of its Board of Directors and is directly accountable to the community that it serves. SCPA strongly supports and is committed to meeting California's emissions reduction and renewable procurement goals. SCPA actively supported the passage of SB 100 and has fully incorporated the procurement requirements of California's RPS program into its overall

procurement strategy. Furthermore, SCPA’s planned procurement exceeded California’s GHG emissions goal by 82% in its 2022 IRP filing and SCPA expected to identify a portfolio for its 2025 IRP that also exceeds state goals. SCPA does not purchase Portfolio Content Category (“PCC”) 3 products to meet compliance requirements or Board of Directors-adopted targets.

*(ii) Responsiveness to Regional Policies*

SCPA’s Board of Directors sets most of the local policies relating to RPS targets and GHG emissions from SCPA customer electricity use in Sonoma and Mendocino Counties. SCPA’s Board of Directors consists of elected officials from each of the cities and counties served. SCPA’s Board of Directors coordinates its policies with all other local governments accordingly, including coordination on issues relating to long-term planning targets, local project development, zoning for renewable energy, streamlined permitting for electric vehicle charging stations, and dozens of similar related topics. In addition to the cities and counties of Sonoma and Mendocino Counties, SCPA works closely with its members’ water districts, the Regional Climate Protection Authority, the Office of Emergency Management, two air quality management districts, refuse agencies, and a number of land use agencies to coordinate local policy that support similar climate goals of the RPS. In short, SCPA is in a good position to ensure compliance and report on progress as an authority for establishing, monitoring, and implementing regional renewable energy and climate policy.

SCPA’s Board of Directors approved a Final Local Resource Plan (“LRP”) on May 6, 2021, that sets the plan for developing additional renewable resources in SCPA’s territory to serve its growing load share of 100% local, 24/7 renewable EverGreen customers. The LRP has led to the development of the 4 MW Redemeyer solar facility co-located with 4 MW of 4-hour battery storage expected to be commissioned at the end of this year.

SCPA is also leading a cross-jurisdictional initiative to reinvigorate local geothermal power development. The Geothermal Opportunity Zone (“GeoZone”) created a formal partnership between SCPA and Sonoma and Mendocino Counties to explore opportunities for private geothermal companies to deploy new technologies and development strategies to grow local generation capacity by 600 MW. SCPA will use its commitment as an offtaker and community liaison to de-risk new geothermal projects.

The SCPA Board of Directors adopted Project Selection Criteria C.6 on April 3, 2025 that establishes a methodology for prioritizing new candidate contracts for SCPA’s portfolio. The new policy prioritizes local resources and projects with workforce benefits and is being applied for new prospective procurement. The SCPA Board of Directors has also established a goal of mitigating 85% of SCPA’s load emissions measured on an hourly marginal emissions basis by 2026.

#### **IV.D. Lessons Learned**

SCPA has served customers and participated in the RPS process since 2014. SCPA consistently sets RPS targets above California’s annual obligations. Table 6 shows the actual SCPA RPS percentages compared to California’s RPS annual obligations and SCPA annual targets. SCPA plans to meet or exceed its adopted targets through all compliance periods.

Table 6: RPS percentage of retail sales - targeted and actual

	2016	2017	2018	2019	2020	2021	2022	2023	2024
RPS obligation	25.0%	27.0%	29.0%	31.0%	33.0%	35.8%	38.5%	41.3%	44.0%
SCPA target	40.0%	44.0%	46.0%	48.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Actual RPS	41.8%	45.2%	49.0%	50.7%	49.6%	51.4%	52.5%	53.6%	53.8%
Excess of RPS obligation	<b>16.8%</b>	<b>18.2%</b>	<b>20.0%</b>	<b>19.8%</b>	<b>16.7%</b>	<b>15.7%</b>	<b>14.0%</b>	<b>12.3%</b>	<b>9.8%</b>
Excess of SCPA target	<b>1.8%</b>	<b>1.2%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>-0.3%</b>	<b>1.4%</b>	<b>2.5%</b>	<b>3.6%</b>	<b>3.8%</b>

Although SCPA has established a strong historical track record of RPS compliance, it recognizes that renewable resource development is inherently risky. SCPA has experienced contract failures, including one for a large wind farm, one for a local floating solar array, and one from a local solar with co-located storage project. SCPA has gained additional insight and care for mitigating permitting and political risks from these past experiences. In recent procurement, SCPA collected detailed information on project characteristics, including permitting requirements and transmission status. SCPA is finding that obtaining deliverability from the CAISO’s interconnection process is a key impediment to project success and has improved its understanding of the process and regional transmission constraints that can cause significant cost and delay. Developers are also vetted for experience and financing capability. Additionally, SCPA has participated in several recent joint solicitations with other CCAs and adopted best practices for capturing information in solicitation and structuring evaluations to reduce project risk.

## **V. Project Development Status Update**

SCPA currently has nine projects in development under executed contracts. Development status information for the nine projects is included below and in Appendix C – Project Development Status Template as of the date of the Draft 2025 RPS Procurement Plan filing (June 30, 2025). SCPA has not executed any new contracts since the Draft 2024 RPS Procurement Plan but has split what was represented as the “Ormat Portfolio” geothermal project last year into four resources: [REDACTED], and a reduced placeholder for residual capacity in the Ormat Portfolio. The Twin Pine local solar project in last year’s RPS Procurement Plan has been replaced with the Fern Creek project—which is being developed using a contract amendment after the Twin Pine project proved unviable. Biological surveys

identified an endangered plant species that was not compatible with the proposed development. This risk was described in the 2024 RPS Procurement Plan and factored into last year’s risk evaluation and MMoP. All of the project updates described below are incorporated into SCPA’s quantitative analysis described in Section VIII and detailed in Appendix B.

**Fish Lake**

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* Dyer, Nevada

*Commercial Online Date:* [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* 12.8 GWh

*Total Contract Volume:* 256.7 GWh

*Transmission Status:* [REDACTED]

[REDACTED]

[REDACTED]

*Narrative:*

Fish Lake is a new 13 MW geothermal project being developed in Northern Nevada that SCPA jointly procured with other CCAs through CC Power. SCPA’s share of Fish Lake is [REDACTED]. Fish Lake is expected to be developed using Organic Rankine Cycle technology. The project will deliver energy to CAISO through NV Energy and contracted third-party transmission to a CAISO intertie.

The developer submitted its hydrological and cultural reports to the Bureau of Land Management (“BLM”) in September 2022. The BLM is requiring the developer to develop a hydrologic model to address sensitivity to endangered species before issuing required permits. Drilling started in August 2022 and an interconnection agreement was executed in October 2022. In 2023, NV Energy notified Fish Lake that their in-service date for distribution upgrades would be delayed, pushing the project’s online date back to its original schedule of June 2024. The delay voided SCP’s long-term import reservation (New Use Import Commitment) secured in 2023, which will require it to resecure MIC in the 2026 process. Meanwhile, the hydrologic modeling to satisfy BLM concerns has taken longer than anticipated and permits are now expected in January 2026. Fish Lake currently sees a path to commissioning by April 2027.

[REDACTED]

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* [REDACTED]

*Commercial Online Date:* [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* [REDACTED]

*Total Contract Volume:* [REDACTED]

*Transmission Status:* [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*Narrative:*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. CC Power expects a project delivery notice that will formalize Dogwood’s position in the Ormat Portfolio later this year.

[REDACTED] is being developed on private land and being permitted through an Environmental Impact Report (EIR) with Imperial County. The CEQA documentation was submitted in the fourth quarter of 2023, and a final permit is expected imminently. Sufficient evaluation drilling has been completed to confirm the size of the resource. After the final permit is obtained, construction is anticipated to begin as soon as the [REDACTED] to facilitate a commercial operation date in [REDACTED]

[REDACTED]

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* [REDACTED]

*Commercial Online Date:* [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* [REDACTED]

*Total Contract Volume:* [REDACTED]

*Transmission Status:* Project has an executed interconnection agreement with [REDACTED] with an in-service date of [REDACTED]. Developer has excess transmission capacity that will be used to deliver energy to CAISO intertie at [REDACTED].

*Narrative:*

[REDACTED] geothermal project under development [REDACTED], which is expected to be part of the 125 MW Ormat Portfolio that SCPA jointly contracted with other CCAs through CC Power. SCPA's share [REDACTED] that is represented in this RPS Procurement Plan is [REDACTED]. CC Power expects a project delivery notice that will formalize [REDACTED] position in the Ormat Portfolio later this year.

[REDACTED] is being developed on federal land and being permitted through an NEPA Environmental Assessment ("EA") with the BLM. The final EA has been delayed due to a request for additional water monitoring, but is expected imminently. The developer has completed two resource evaluation wells, but needs to complete an additional injection test well later in 2025 before proceeding with development. Construction is expected to start as soon as the end of [REDACTED] to facilitate a commercial operation date in [REDACTED].

[REDACTED]

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* [REDACTED]

*Commercial Online Date:* [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* [REDACTED]

*Total Contract Volume:* [REDACTED]

*Transmission Status:* [REDACTED]. A restudy triggered by withdrawal of a higher queued project has delayed the interconnection agreement to the third quarter of [REDACTED]. A transmission service request to deliver energy to the [REDACTED] is undergoing a facility study.

*Narrative:*

[REDACTED] is a new [REDACTED] geothermal project under development in [REDACTED], which is expected to be part of the 125 MW Ormat Portfolio that SCPA jointly contracted with other CCAs through CC Power. SCPA's share of Crescent Valley that is represented in this RPS Procurement Plan is [REDACTED]. CC Power expects a project delivery notice that will formalize [REDACTED] position in the Ormat Portfolio later this year.

[REDACTED] is being developed on federal land and being permitted through a NEPA EIR process with BLM and CEQA EIS process with Imperial Valley. The NEPA EIR was submitted in 2023 and CEQA EIS was submitted this year. Two resource confirmation wells have been completed, but injection drilling is required before further progressing project development. The start of construction is anticipated to start as soon as the end of [REDACTED] to facilitate a commercial operation date of [REDACTED].

**Ormat Portfolio**

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* Varies (Nevada and California)

*Commercial Online Date:* starting [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* [REDACTED]

*Total Contract Volume:* [REDACTED]

*Transmission Status:* Status varies by project; some have executed agreements and others are in queue. A candidate CAISO resource in the portfolio may be dependent on local network upgrades. Projects outside CAISO will need import capacity.

*Narrative:*

The Ormat Portfolio project represents a placeholder for [REDACTED] of additional capacity from the 125 MW contract that SCPA jointly procured with other CCAs through CC Power that has not yet been assigned to specific projects. The developer has the flexibility to provide capacity for the contract from any resource in its development pipeline that is deliverable to CAISO and is commissioned in-time to meet MTR obligations. Eligible projects are expected to be in [REDACTED]. Of the candidate projects, many are actively navigating the interconnection queue and permitting status, and a subset have interconnection agreements and final permitting.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Redemeyer**

*Development Phase:* Construction

*Capacity Procured:* 4 MW solar + 4 MW 4-hr storage

*Length of Contract:* 20 years

*Location:* Ukiah, California

*Commercial Online Date:* December 31, 2025

*Technology Type:* Solar PV with lithium-ion storage

*Contract start and end dates:* December 31, 2025, through December 30, 2045

*Expected Annual Generation:* 10.1 GWh

*Total Contract Volume:* 201.1 GWh

*Transmission Status:* Developer submitted an interconnection application in PG&E's wholesale distribution access tariff using the Independent Study Process and received its System Impact Study (Phase 1) in October 2022. The developer executed an interconnection agreement with PG&E in February 2023.

*Narrative:*

The Redemeyer project was procured by SCPA through its Local Resource Plan solicitation. The project is a 4 MW solar facility with a 4 MW 4-hour energy storage system and located north of Ukiah. A Major Use Permit Application was submitted to Mendocino County in Summer 2023 and issued for the project in July 2024. The project is currently in the advanced stages of construction, with completion of racking and installation of solar modules, solar inverter, and combiner box. The battery energy storage system is expected to be delivered to the

site imminently and the project is on-track to meet its online date in December 2025. The main schedule risk is the schedule for PG&E upgrades, which the developer is closely tracking.

**Azalea**

*Development Phase:* Construction

*Capacity Procured:* 60 MW solar + 38 MW 4-hr storage

*Length of Contract:* 10 years

*Location:* Lost Hills, California

*Commercial Online Date:* May 15, 2025

*Technology Type:* Solar PV with lithium-ion storage

*Contract start and end dates:* September 8, 2025, through September 7, 2035

*Expected Annual Generation:* 150.9 GWh

*Total Contract Volume:* 1,498.4 GWh

*Transmission Status:* Developer has executed an interconnection agreement with CAISO and PG&E and attained full capacity deliverability status. Construction of interconnection facilities is complete.

*Narrative:*

Azalea is a 60 MW solar facility co-located with a 38 MW 4-hour battery storage system near Lost Hills. The project is in advanced stages of construction, with module installation, cold commissioning, and interconnection facilities complete. The project expects to achieve in-sync with PG&E and CAISO imminently and is on track for commissioning in September 2025. The project was delayed from the May 2025 online date in the 2024 RPS Procurement Plan due to delays from changing the source of modules to a domestic facility due to the impact of the

Department of Commerce’s investigation on modules sources from southeast Asia (where the modules were originally sourced).

**SunZia**

*Development Phase:* Construction

*Capacity Procured:* 100 MW wind

*Length of Contract:* 15 years

*Location:* Torrance, Lincoln, and San Miguel Counties, New Mexico

*Commercial Online Date:* September 30, 2026

*Technology Type:* Wind

*Contract start and end dates:* September 30, 2026, through September 29, 2041

*Expected Annual Generation:* 328.1 GWh

*Total Contract Volume:* 4,909.5 GWh

*Transmission Status:* Developer is in the final stages of construction on a 550-mile transmission line to connect the project to Pinal Central substation in Arizona where transmission rights are secured to deliver the power to CAISO at Palo Verde. SCPA will need to secure long-term import capability rights in the MIC process.

*Narrative:*

SunZia is a new 3.5 GW wind project in central New Mexico interconnecting to California by a 3 GW 550-mile high-voltage direct current (“HVDC”) transmission line to Pinal Central substation and firm transmission rights within Arizona to Palo Verde. SCP contracted for 100 MW of capacity from SunZia in November 2023. SunZia’s transmission project received final approval by the BLM in May 2023 to proceed. Both the transmission line and wind project are in advanced stages of construction. Transmission towers are completely installed, stringing

operations are well underway, and the two converter stations are over 80% complete. The first wind tower was installed and topped out in April 2025 and the project could be online as soon as May 2026, although SCPA is assuming a September 2026 date for its analysis.

### **Fern Creek**

*Development Phase:* Pre-Construction

*Capacity Procured:* 2 MW Solar

*Length of Contract:* 20 years

*Location:* Mendocino County, California

*Commercial Online Date:* May 1, 2029

*Technology Type:* Solar PV

*Contract start and end dates:* May 1, 2029 through April 30, 2049

*Expected Annual Generation:* 5.0 GWh

*Total Contract Volume:* 100.6 GWh

*Transmission Status:* Developer executed a wholesale distribution tariff interconnection agreement with PG&E in March 2025.

*Narrative:*

Fern Creek is a new 2 MW solar project along the coast in Mendocino County, California. Fern Creek is being developed for SCPA as a replacement resource to Twin Pine, which was included in the 2024 RPS Procurement Plan but cancelled due to biological resource constraints. The project is in the early stages of permitting and has held pre-application meetings with the County of Mendocino. The developer has determined that an amendment to the Local Coastal Program and rezoning will be required before permitting—which has elongated the development timeline. The developer is currently conducting field surveys to assess the site's

suitability and the presence of any sensitive species and is working towards a targeted permit date of late 2026 to support commercial operations in 2029. The developer has already executed an interconnection agreement with PG&E.

## **VI. Potential Compliance Delays**

SCPA's total RPS obligation for Compliance Period 5 (from 2025 through 2027) is expected to be 3,233 GWh. SCPA's load could increase RPS's obligation if electrification adoption accelerates (assessed in Section VII) or if SCPA proceeds with the potential expansion to Lake County in 2027. SCPA's 65% long-term obligation for Compliance Period 5 is expected to be 2,101 GWh. SCPA currently has 2,513 GWh of long-term RPS under contract from online resources over Compliance Period 5—which is a 19.6% excess without including any in-development resources. This excess is sufficient to comfortably avoid compliance delays in meeting SCPA's 65% long-term commitment. Although load growth or delays of in-development projects could cause a need for more RPS to satisfy SCPA's overall obligation in Compliance Period 5, SCPA can satisfy that need through short-term contracts. Given that the vast majority of SCPA's in-development RPS is in advance stages of construction and the lead time associated with a territory expansion, SCPA anticipates having plenty of time to identify any needed short-term contracts to satisfy RPS needs for Compliance Period 5. The potential impact of construction delays or other impacts on SCPA's in-development project portfolio are quantitatively assessed in Section VII. Given that all of SCPA's large solar projects are co-located with storage, SCPA is not concerned that increased curtailment will risk SCPA's compliance.

## **VII. Risk Assessment**

### **VII.A. Compliance Risk**

SCPA routinely reviews development and operational risks to achieving compliance

obligations. A discussion of key risks relevant to achieving RPS compliance, including the long-term procurement requirement, is included below and organized by assessed severity:

*High-Severity Compliance Risks*

[REDACTED]

- **Electrification adoption timing:** Although SCPA’s current load is steady, rapid growth is expected after transportation and building electrification efforts build momentum. Current forecasts for load growth increase dramatically through the 2030s for California and SCPA. This growth trend is barely captured in the 2035 planning horizon. If California and federal policy leads to an acceleration in electrification efforts, SCPA’s RPS obligation and long-term requirement could increase measurably leading to difficulties to building capacity at a sufficient pace. SCPA will continue to monitor electrification adoption trends and update its load forecast each year to inform its RPS procurement needs.

- **Tax credit eligibility:** A significant uncertainty impacting the viability of SCPA’s in-development portfolio is the expected eligibility of projects for tax credits. Congress is currently considering dramatic changes to the phase-out of clean energy tax credits. Depending on the scope and pace of credit phase-outs, projects in SCPA’s RPS portfolio could lose tax credit eligibility. Losing tax credit eligibility would make contracts unfinanceable and likely result in project cancellation or renegotiation. This risk is especially relevant to projects that have not yet started construction, given eligibility is often based on the start of construction (and in some proposals date of completion). SCPA is actively discussing the impact of tax credits with developers and exploring contractual options to maintain the viability of its in-development RPS fleet.

#### *Mid-Severity Compliance Risks*

- **Construction and Interconnection Delays:** SCPA has regularly observed delays in delivery of projects in development—whether due to permitting, supply chain issues, or the timing of interconnection delays. Although several projects remain on schedule compared to last year’s RPS Procurement Plan (Redemeyer, SunZia), others have experienced delays ranging from months (Azalea) to over a year (Fish Lake). Although much of SCPA’s in-development capacity is in advanced stages of construction with limited schedule risk, SCPA’s compliance position is still impacted by project delays. SCPA is mitigating this risk by requiring regular progress reports and check-in meetings from its developers and proactively procuring short-term RPS when needed to maintain compliance.
- **Load variability:** SCPA’s load is fairly stable. Although SCPA is actively exploring expansion to Lake County as soon as 2027, a final decision on the expansion is not

expected until later this year and SCPA has included its ability to meet RPS compliance as a key part of assessing the feasibility of an expansion. In early 2022, reduced commercial energy usage during COVID provided unexpected headroom in the PG&E direct access cap which led to an un-forecasted 2.5% decrease in load that is unlikely to occur again in the future. Many of SCPA’s largest customers are municipal accounts that are unlikely to shut down or leave service. SCPA’s load is sensitive to load changes of commercial customers. However, SCPA’s largest commercial customer only comprises 1.5% of SCPA’s load.

SCPA employs a load forecasting model that stochastically varies weather forecasts using historic data adjusted for climate change and deterministic projections of meter counts, distributed resource installs, and electric vehicle adoption. Whereas the impact of weather uncertainty remains constant through time, diverging low and high projections for meter count, distributed resources, and electric vehicles cause uncertainty to increase significantly over time. Table 7 shows the sensitivity of the load model to these uncertainties, and range of outcomes in the overall model, for both a year-ahead forecast and a forecast for 2032.

Table 7: Sensitivity of Load Model Forecast to Uncertainties in Year-Ahead and 2032

Uncertainty	Year-Ahead		2032	
	Lowside	Upside	Lowside	Upside
Weather	-1.4%	+1.5%	-1.0%	+1.8%
Meter Count	-1.2%	+1.3%	-6.6%	+8.2%
Distributed Resource Installation	-0.5%	+0.7%	+3.9%	-2.1%
Electric Vehicle Adoption	-0.4%	+0.5%	-2.6%	+3.0%
Overall Model	-3.7%	+3.7%	-13.4%	+14.7%

The uncertainty and compliance risk reflected in this table is distinct from the high risk of accelerated electrification timing described above, which has the potential to lead to changes in load that are not characterized in load modeling. Although the uncertainty range in 2032 implies load variability may be a high risk to RPS compliance, these results represent bookend outcomes and uncertainty will naturally reduce as time progresses and the projection period compresses. Please note that the uncertainties in Table 7 cannot be added to determine an overall uncertainty.

*Low-Severity Compliance Risks*

- **Supply chain:** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- **Financing:** SCPA has not yet encountered issues with financing renewable development. SCPA would expect the financeability of projects to improve with the investment-grade issuer credit rating it received in December 2021. However, the Federal Reserve Bank increased interest rates to address inflation. Higher borrowing costs could reduce the availability of resources and diversity of developers, while making it more difficult to secure resources to meet SCPA’s long-term procurement requirement. [REDACTED]

[REDACTED]

[REDACTED]

- **Online generation:** SCPA has a resource portfolio with diverse technologies, geography, and developers that minimizes the variability and risk of online generation. SCPA’s portfolio diversity strength is best illustrated through results from stochastic modeling that is trained on historical forecasts and weather variability. Table 8 shows the 90% confidence interval of variability from the mean in 2023 for a single intermittent resource, all intermittent resources in SCPA’s portfolio, and SCPA’s entire RPS portfolio. Although a single wind farm shows measurable variability (-9.5% to +11.8%), a portfolio of that resource with intermittent resources with different technologies and geographies provides a substantial reduction in range (-4.3% to +3.8%), and SCPA’s strong concentration of firm renewable resources like geothermal lead to a total portfolio variance of less than +/- 2%.

Table 8: Variability in Stochastic Generation Model for 2023 vs. Mean

Generation Source	5 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile
Golden Hills Wind	-9.5%	+11.8%
All SCPA Intermittent Resources	-4.3%	+3.8%
SCPA RPS Portfolio	-1.8%	+1.6%

In May 2023, SCPA experienced its first instance of physical failure of a portion of an online resource. [REDACTED]

[REDACTED]

[REDACTED]

- **Curtailement:** SCPA’s experience with curtailment is discussed further in Section IV.B.2. SCPA currently self-schedules all RPS generation and does not currently see curtailment as a significant risk to RPS compliance. Installation of battery storage adjacent to SCPA’s

existing solar facility and the inclusion of storage in future planned solar facilities should also minimize the risk of curtailment. The SunZia contract volumes reflect the expectation that generation delivered to CAISO will be curtailed when above SunZia's 2.1 GW of firm transmission capacity within Arizona.

### **VII.B Risk Modeling and Risk Factors**

SCPA has completed a risk assessment of its RPS portfolio by modeling risks described above that are high or medium in severity. Table 9 below includes details on the framework SCPA has employed to independently model each risk and the resulting impact to three key compliance considerations for SCPA: the overall net RPS position for 2027 (unrisked scenario currently has a 2.5% of sales deficiency), the overall net RPS position for 2030 (unrisked scenario currently has a 4.2% of sales deficiency), and the long-term position in 2030 (unrisked scenario has 16.8% of sales excess). Risks are evaluated relative to the Commission's compliance requirements rather than to SCPA voluntary targets. Across the five assessed risks, the overall RPS deficiency in 2027 varies from 2.5% of sales in the unrisked scenario to as much as 13.9% if all in-development projects experience a one-year delay. The overall RPS deficiency in 2030 varies from 4.2% of sales in the unrisked scenario to as much as 10.1% if all pre-construction projects are cancelled due to tax credit eligibility. SCPA's 2030 long-term position is robust across all risks—varying from 16.8% of excess in the unrisked scenario to a low of 10.9% excess in the scenario that pre-construction projects are cancelled due to tax credits.

Table 9: SCPA RPS Portfolio Risk Modeling Framework and Compliance Impact

Risk	Modeling Approach	MMoP Scenario Probability	2027 Net RPS Position (% of Sales)	2030 Net RPS Position (% of Sales)	2030 Long-term Position (% of Sales)
Electrification Adoption Timing	Assume a 3-year acceleration in the projected growth in EV adoption and building electrification impacts shown in Figure 2.	10%	Increases deficiency to 6.2%	Increases deficiency to 10.0%	Reduces excess to 11.0%
Tax Credit Eligibility	Assume any projects that have not yet started construction are terminated due to financing impacts of tax credit phase-out.	33%	Increases deficiency to 2.9%	Increases deficiency to 10.1%	Reduces excess to 10.9%
Construction and Interconnection Delays	Assume all in-development projects experience a delay of one-year	25%	Increases deficiency to 13.9%	Increases deficiency to 4.2%	Reduces excess to 16.8%
Load Variability	Increase load by a straight-line interpolation of the +3.7% year-ahead and +14.7% bookend sensitivity	0%	Increases deficiency to 5.6%	Increases deficiency to 9.9%	Reduces excess to 11.1%

The results from Table 9 provide a reliable assessment of the potential for independent risks to impact RPS compliance. However, adding these risks together results in an unrealistically pessimistic scenario, especially because several of the risks overlap. Accordingly, SCPA has taken the additional step of developing a deterministic scenario using a subset of the risks in Table 9 that have a higher probability of occurrence or are more difficult to mitigate to calibrate a MMoP.

The risks included in this scenario are assigned a probability in the “MMoP Scenario” column in Table 9 and results are discussed in Section IX. These probabilities are assigned based on SCPA’s judgement, as there is insufficient analogy data to statistically calibrate these occurrences. SCPA has adjusted several of these probabilities from last year’s RPS Procurement Plan. As an example, SCPA sees a reduced risk of electrification adoption due to affordability

and federal policy limitations but a higher risk of [REDACTED] Load variability was not included because it overlaps with electrification adoption and can be mitigated by following SCPA's process of updating load forecasts and procurement plans each year which is also why it was assigned a mid-level severity despite its potentially large compliance impact.

#### *Strategies to Address Risk*

SCPA addresses RPS generation resource risk by maintaining a diversified portfolio. SCPA maintains diversity in counterparties, resource types, project sizes, and locations of RPS facilities. SCPA addresses risk of overall RPS compliance by its MMoP detailed in Section IX. SCPA can utilize short-term contracts for additional RPS quantities, if necessary. SCPA can solicit for new long-term RPS generation resources if an existing contract is terminated. Though SCPA may utilize short-term RPS contracts, SCPA will exceed all long-term contracting requirements and will demonstrate this in the annual RPS Compliance filing due August 2025. Over-procurement beyond SCPA's targets can be mitigated either by selling excess energy to third parties or simply by retaining the RPS generation and exceeding its targets.

#### **VII.C. Lessons Learned – Risk Assessment**

SCPA established the current structure of assessing the impact of independent risks to its RPS portfolio and creating a MMoP scenario including probabilistic combinations of risks in its 2022 RPS Procurement Plan. SCPA decided to take this approach as opposed to the practice followed by many other LSEs of applying a standardized "point value" risk scoring based on technology, developer experience, site control, permitting status, and interconnection status because it allows the risk evaluation to better reflect the main risks SCPA's experienced staff can characterize in its portfolio. Since first implementing the risk assessment in 2022, SCPA has found it prudent to preserve certain risks (e.g. electrification adoption timing and load

variability) while varying others (e.g. introducing the tax credit risk this year). SCPA has also recalibrated the assessment for probability of occurrence depending on the maturity of its portfolio and broader market conditions—the reduced probability used this year for electrification acceleration being an example. SCPA uses the output of the risk assessment to inform its staff on the level of short-term RPS procurement that may be required to address compliance shortfalls.

SCPA has applied the lessons learned from assessing the risk of its RPS portfolio to its approach to contracting and portfolio management. Based on historical adverse outcomes, SCPA has applied a much more rigorous approach to assessing project risks including permitting, developer experience, and interconnection viability. SCPA has also setup rigorous progress reporting requirements for its in-development fleet, including detailed information on supply chain, permitting, interconnection upgrades, and construction status. This process gives SCPA lead time to plan and proactively react to changes in project scope and schedule.

SCPA recognizes the risk and extended timelines with procuring long-term resources, especially projects in development. As such, SCPA has sought to proactively procure sufficient long-term resources through 2035 (illustrated in Table 2). The timing between contracting and online date in SCPA’s current in-development portfolio ranges from two to as many as seven years (with an average of five). Accordingly, SCPA would likely view any long-term deficiency within five years as an immediate priority for procurement.

SCPA uses probabilistic analytical tools in managing its portfolio—for both RPS compliance and for maintaining financial stability. SCPA is currently deploying a tool with six future scenarios for California’s grid that can be used to assess candidate resources and optimize SCPA’s portfolio. In the past, SCPA has concentrated on stochastically modeling the near-term

impacts to its portfolio from gas price and weather uncertainty—but SCPA’s new tool set will allow it to better plan a portfolio that navigates macro uncertainties such as different resource mixes, load growth, and policy. SCPA expects these tools, coupled with the mitigations applied to minimize and manage project risk, will deliver a robust portfolio that meets SCPA’s compliance requirements, supports climate progress, and maximizes ratepayer value.

### **VIII. Renewable Net Short Calculations**

SCPA is including Appendix B – Renewable Net Short Template, which is a quantitative assessment to support the qualitative descriptions provided in this Draft 2025 RPS Procurement Plan. The quantitative information in Appendix B represents resources that are procured under existing contracts only. Note that the actual quantities for 2021-2024 are shown for the year in which the RPS credit was retired. The entry for the Voluntary Margin of Over-Procurement (“VMO<sub>P</sub>”) is inclusive of *both* a M<sub>MoP</sub> and V<sub>MoP</sub>, and referred in Section IX as Total Margin of Over-Procurement (“T<sub>MoP</sub>”).

### **IX. Minimum Margin of Procurement (M<sub>MoP</sub>)**

#### **IX.A M<sub>MoP</sub> Level**

In 2018, the SCPA Board of Directors committed to delivering 50% RPS by 2020, six years ahead of the compliance schedule. SCPA actually achieved this target in 2019, seven years ahead of the compliance schedule. SCPA will continue to target delivering at least 50% RPS through 2026. SCPA will then follow the trajectory of compliance requirements to 60% by 2030. Additionally, SCPA’s planned procurement incorporates the M<sub>MoP</sub> discussed in Section IX.A to mitigate the compliance risks discussed in Section VII.

SCPA's 2025 IRP portfolio will likely contain more renewables than required by California or Board of Directors-imposed requirements. This result is due to the comparative cost, reliability, and hourly carbon emissions impact in comparing different renewable and clean energy resources. Although the 2025 IRP may indicate SCPA's optimum portfolio will include higher levels of RPS, SCPA is defining its TMoP to only include the following:

1. Historical or forecasted RPS generation under contract in excess of compliance requirements;
2. Planned RPS procurement to reach SCPA's Board of Directors-imposed 50% RPS target through 2026; and
3. If needed, additional planned RPS procurement to reach the MMoP calculated in Section XI.A.1 above the RPS compliance obligation.

The above definition of TMoP avoids SCPA overcommitting to RPS generation that is not contracted or motivated by a compliance or self-imposed requirement. As SCPA contracts additional supply to satisfy its IRP, or if the SCPA Board of Directors adopts a revised RPS-specific target, TMoP will be revised in future RPS procurement plans.

IV.C.1 discusses the potential RPS development beyond the representation in the TMoP in SCPA's IRP. Section IX.A.2 provides a breakdown of the TMoP between MMoP and VMoP.

#### **IX.A.1. MMoP Methodology and Inputs**

SCPA has Total RPS Eligible Procurement (*i.e.*, procurement under contract) in excess of the Gross RPS Procurement Quantity Requirement through 2029 as shown in Appendix B.

Additionally, SCPA expects to satisfy its long-term procurement obligation through 2034, as demonstrated in Table 2.

SCPA routinely tracks the variability in forecasted versus actual load and generation, and can utilize short-term contracts for additional RPS quantities, if necessary. Though SCPA may utilize some short-term RPS contracts, SCPA will exceed all long-term contracting requirements which will be reported in SCPA’s annual RPS Compliance Report filing.

To develop a discrete MMoP, SCPA used the deterministic scenario discussed in Section VII and captured in the “MMoP Scenario Probability” column in Table 9. This scenario is represented quantitatively as Appendix E. In the quantitative analysis, load is increased for a 10% chance of a 3-year electrification acceleration. This risk has been reduced from last year’s due to SCPA’s on-the-ground observations of EV adoption and home electrification. RPS from facilities that are pre-construction are reduced to reflect a 33% chance that they do not proceed due to tax credit eligibility. [REDACTED]

Finally, the MMoP scenario include a 10% probability that all in-development projects are delayed. The decrease in the net RPS position relative to the compliance is used to calculate a MMoP. Table 10 shows the results of this analysis, along with a conversion of the MMoP into the percentage of retail sales forecasted in Appendix B.

Table 10: SCPA MMoP Calculation

Measure	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MMoP Scenario Compliance Net RPS Position (MWh)	-65,944	-1,475	-206,191	-116,655	-205,989	-283,481	-322,733	-375,381	-437,191	-534,460	-636,398
Appendix B Compliance Net RPS Position (MWh)	-52,920	62,656	-130,174	-41,545	-104,036	-190,306	-228,689	-278,847	-340,734	-437,199	-540,610

MMoP (MWh)	13,024	64,131	76,017	75,110	101,953	93,175	94,044	96,534	96,456	97,260	95,787
MMoP (% of Sales)	0.6%	2.9%	3.4%	3.4%	4.5%	4.0%	3.9%	3.9%	3.8%	3.7%	3.5%

The resulting MMoP from the deterministic scenario aligns with SCPA’s view of overall market conditions. RPS scheduled to come online before 2029 is from projects with greater maturity, and less risk of failure due to tax credit eligibility or [REDACTED]. Long-term, there is a residual risk with delivering new RPS contracts that requires around 4% of over-procurement.

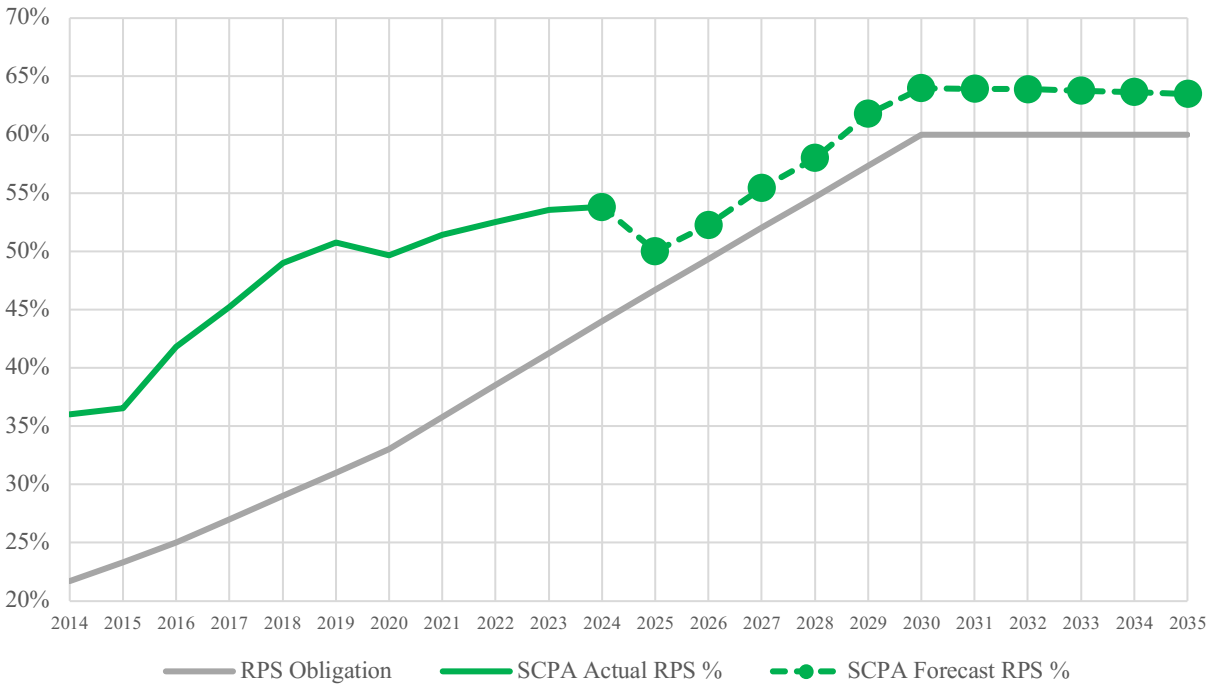
The results from Table 10 are used to allocate the TMoP into MMoP and VMoP. As discussed in Section IX.A, SCPA’s TMoP is comprised of three components: excess contracted RPS, RPS for internal benchmarks, and, if needed, additional RPS to cover MMoP requirements. Table 11 shows the allocation between MMoP and VMoP, where excess is first used to satisfy MMoP, and remaining excess is represented as VMoP.

Table 11: SCPA Margin of Over-Procurement Allocation

Measure	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
TMoP (MWh)	71,851	64,131	76,017	75,110	101,953	93,175	94,044	96,534	96,456	97,260	95,787
MMoP (MWh)	13,024	64,131	76,017	75,110	101,953	93,175	94,044	96,534	96,456	97,260	95,787
VMoP (MWh)	58,827	0	0	0	0	0	0	0	0	0	0
VMoP (% of Sales)	2.7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

SCPA has consistently exceeded California RPS minimum target since it began serving customers in 2014. The historical RPS performance from 2014 to date and the future planned RPS performance incorporating the TMoP are compared to California’s RPS requirements from 2014 through 2035 as shown in Figure 4 below.

Figure 4: SCPA RPS % Compared to Obligation



**IX.A.2 MMoP Scenarios**

SCPA utilizes the TMoP to calculate its renewable net short (Annual Net RPS Position after Bank Optimization) as shown in Appendix B. A risk assessment of SCPA’s renewable net short position is provided in Section VII. The RPS reported in the Quantitative Response in Appendix B are not adjusted for risk. Rather, SCPA takes the approach of mitigating risk through the use of MMoP.

The deterministic scenario described in section IX.A.1 to calibrate MMoP is included as a separate quantitative assessment as Appendix E. As discussed in section IX.A, the retail sales in this assessment are increased to reflect a 10% chance of a 3-year acceleration in electrification. [REDACTED]

[REDACTED], a 33% chance that pre-construction projects do not proceed due to tax credit eligibility, and a 10% probability that all development projects are delayed for a period of one year. The forecast failure rates in Appendix E represents the ratio of

the resulting RPS volumes to the un-risked volumes represented in Appendix B. The same TMoP as Appendix B is entered as VMoP, to illustrate the impact of over-procurement on mitigating compliance risk in this scenario. The results indicate that Compliance Period 5 (2025-2027) is slightly below its obligation (48.4% position vs. 49.4% obligation). Compliance Period 6 (2028-2030) is also projected to be out of compliance in the MMoP scenario (52.5% position vs. 57.4% obligation). The MMoP scenario is well above its long-term requirement in this period, so SCPA can mitigate this compliance risk with short-term procurement. Given the near-term scarcity of RPS and elevated market prices, SCPA will wait until closer to the compliance period before determining if additional procurement is necessary.

## **X. Bid Solicitation Protocol**

### **X.A. Bid Selection Protocols**

Consistent with Pub. Util. Code § 399.13(a)(6)(C), SCPA conducts, responds to solicitations, and utilizes bilateral contracting for procuring energy resources that includes specific needs for eligible renewable energy resources, generating capacity, locational preferences, generation profile, and required online dates to assist in determining what resources fit best within a portfolio. Since CCA program Governing Boards are comprised of local elected officials, these solicitation and procurement decisions are overseen by elected representatives of the ratepayers. These solicitation and procurement decisions must comply with California's RPS requirements as well as locally established policies.

SCPA has not issued any new formal RPS-related solicitations since its 2024 RPS Procurement Plan but rather relied on bilateral negotiations or brokers for filling its RPS needs. Therefore, there are no solicitation materials provided with this filing. SCPA participated in responding to one RPS solicitation since last year's RPS Procurement Plan: PG&E's 2025 Spring Bundled RPS Energy Sale. SCPA submitted a bid on May 21, 2025 but was notified

that the bid was not selected the week thereafter.

The requirement of Pub. Util. Code § 399.13(a)(8) to give preference to renewable projects located in certain communities is only expressly applicable to “electrical corporations” and is not mandatory for CCAs.<sup>3</sup> However, SCPA fully recognizes the need to help mitigate the impacts of air pollution in regions of California where communities have been disproportionately impacted by the existing generating fleet. This need has motivated two initiatives in particular: SCPA’s GeoZone project discussed in Section IV.B to develop local renewable resources that replace the capabilities of natural gas and SCPA’s GridSavvy demand response program. SCPA’s GridSavvy program dispatches EV chargers, smart thermostats, and behavioral demand response to alleviate critical grid conditions currently served by less efficient and more heavily polluting peaker plants. SCPA has also incorporated benefits to underserved communities as a criteria for prioritization in its recently adopted Project Selection Criteria C.6.

SCPA’s bilateral negotiations and decision on whether to proceed with contracting a candidate resource are aligned with this RPS Procurement Plan. SCPA actively monitors its compliance position and portfolio risks and seeks to proactively contract resources to meet its obligations. The criteria used to select the technology and other characteristics of candidate resources is described in detail in Section IV.

SCPA performs joint procurement through its participation in CC Power. Although CC Power recently released a solicitation for strategic partnerships to develop geothermal resources, it has not issued any RPS-specific solicitations since the 2024 RPS Procurement

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<sup>3</sup> Cal. Pub. Util. Code § 399.13(a)(8)(1) (“In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.”).

Plan.

### **X.C. Solicitation Protocols for Renewable Sales**

SCPA does not have immediate plans to issue a solicitation for sales of renewable energy products.

### **X.C. LCBF Criteria**

The Least-Cost Best Fit (“LCBF”) methodologies approved by the Commission pursuant to D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 are expressly only directly applicable to investor-owned utilities and the Commission does not have jurisdiction over the solicitation protocols of CCAs. However, SCPA places a high degree of importance on resource costs because SCPA is a customer-owned public agency governed by locally elected officials and does not have guaranteed cost recovery. Additionally, consistent with Pub. Util. Code § 399.13(a)(9),<sup>4</sup> SCPA also considers best-fit attributes that support a balanced mix of resources to help support reliability of the electrical grid.

SCPA’s current practice evaluates candidate resources using the Ascend PowerSimm platform described in Section IV.C, which is used to assess the net value of a contract considering the impacts of tenor, locational margin price, forward energy prices, economic curtailment, capacity contribution (including declining net qualifying capacity where necessary), and the value of environmental attributes (RPS or carbon-free). The ratio of net project value to cost is used to compare potential contracts and procuring energy and attributes separately through the market or short-term contracts.

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<sup>4</sup> Cal. Pub. Util. Code § 399.13(a)(9) (“In soliciting and procuring eligible renewable energy resources, each retail seller shall consider the best-fit attributes of resource types that ensure a balanced resource mix to maintain the reliability of the electrical grid.”).

The types and relative contribution of technologies SCPA considers procuring are driven by its IRP, which evaluates the right resource mix to cost-effectively maximize the carbon reduction and reliability contribution of SCPA's portfolio. The IRP also validates the reliability of SCPA's portfolio by comparing its reliance on short-term resource adequacy (assumed to be from gas units) relative to its peak share of statewide retained gas capacity. Despite its ambitious climate targets in the 2022 IRP, SCPA consistently uses less than its peak share of capacity thanks to its concentration of geothermal, wind, and storage capacity. SCPA also sees its leadership in the GeoZone as an opportunity to support the development of resources that benefit system reliability.

Assessing project feasibility is another important component of SCPA's contract evaluation process. In comparing candidate projects, SCPA reviews the status of project interconnection, developer experience, permitting risks, and completes a counterparty risk assessment.

SCPA's Board of Directors adopted Project Selection Criteria C.6 in April 2025 that will guide SCPA's prioritization of resources moving forward. The policy prioritizes SCPA's need to meet compliance requirements and deliver affordable, clean, and reliable service to its customers. Projects are then prioritized for their workforce benefits, location (favoring more local projects), environmental impacts, and benefits to underserved communities.

## **XI. Safety Considerations**

SCPA holds safety as a top priority. Since SCPA does not own, operate, or control generation facilities, SCPA's procurement of renewable resources does not present any direct safety risks. SCPA seeks to contract with experienced developers with rigorous safety protocols to protect its workforce.

SCPA contracts for its PPAs in a manner that all end-of-life disposal obligations are the responsibility of its counterparties. Therefore, SCPA does not make specific plans for deconstruction or environmental remediation, which are generally criteria that lead agencies establish for developers at the time of CEQA determination and criteria that are established by California and local authorities to obtain necessary permits. SCPA requires developers to adhere to all environmental requirements of their permits to construct and operate facilities under PPAs with SCPA.

SCPA considers numerous risks when determining generating resources to procure. In addition to the ordinary energy market risks such as transmission congestion, curtailment, and matching SCPA's hourly load profile, SCPA also considers risks relating to geographic overconcentration to help mitigate threats related to earthquakes, storms, and wildfires. SCPA is forecasting an increase in storm and wildfire intensity as a result of the climate crisis. Unfortunately, flood risk has become more difficult to evaluate with the climate crisis since FEMA flood risk maps are no longer tracking to historic data and are no longer a reasonable predictor of flood risk. Avoiding sites in floodplains and low-lying coastal areas is relatively straightforward, but evaluating risk of flood damage from unusually heavy rain events is much more challenging. As a result, SCPA has placed the burden of ensuring sufficient generation output onto its suppliers and organized its portfolio to be geographically and technologically diverse.

## **XII. Consideration of Price Adjustment Mechanisms**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**XIII. Cost Quantification**

SCPA has provided the Cost Quantification Table as Appendix D. Pursuant to the direction in the ACR, SCPA has completed those cells in the Cost Quantification Table that correspond to Table 3, Rows 1-5 in the ACR.

**XIV. Impact of Transmission and Interconnection Delays**

SB 1174 (stats. 2022, ch. 229) requires electrical corporations that own transmission lines to report to the Commission on the development of transmission and interconnection facilities necessary to provide transmission deliverability for renewable energy and/or energy storage facilities that have executed interconnection agreements. SCPA is not subject to the requirements of SB 1174 and does not own any transmission lines. Accordingly, SCPA has not included a Transmission/Interconnection Delay Data Report as an attachment to this RPS Procurement Plan.

Dated: June 30, 2025

Respectfully submitted,

A handwritten signature in blue ink that reads "Neal M. Reardon". The signature is written in a cursive style with a large initial 'N'.

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Neal Reardon  
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APPENDIX A

REDLINED VERSION  
OF DRAFT 2025 RPS  
PLAN

PUBLIC

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

Order Instituting Rulemaking to Continue )  
Implementation and Administration, and Consider )  
Further Development, of California Renewables ) Rulemaking 24-01-017  
Portfolio Standard Program. )  
\_\_\_\_\_ )

**DRAFT ~~2024~~2025 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN  
OF  
SONOMA CLEAN POWER  
PUBLIC VERSION**

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Dated: ~~July 22, 2024~~June 30, 2025

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

Order Instituting Rulemaking to Continue	)	Rulemaking 24-01-017
Implementation and Administration, and Consider	)	
Further Development, of California Renewables	)	
Portfolio Standard Program.	)	
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**DRAFT ~~2024~~2025 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN  
OF  
SONOMA CLEAN POWER  
  
PUBLIC VERSION**

In accordance with the California Public Utilities Commission’s (“Commission”) ~~May~~  
~~April~~ 17, ~~2024~~2025, *Assigned Commissioner and Assigned Administrative Law Judge’s Ruling  
Identifying Issues and Schedule of Review for ~~2024~~2025 Renewables Portfolio Standard  
Procurement Plans (“ACR”) and the June 18, 2024 Email Ruling Granting Request from Pacific  
Gas and Electric Company, Southern California Edison Company, and San Diego Gas &  
Electric to Extend 2024 RPS Plan Procedural Deadlines (“RPS Extension Ruling”)* Sonoma  
Clean Power Authority (“SCPA”) hereby submits this Draft ~~2024~~2025 Renewables Portfolio  
Standard Procurement Plan (“Draft RPS Procurement Plan”). As directed by the ACR, this Draft  
RPS Procurement Plan includes responses for the issues expressed in ACR sections 6.1-6.15  
responsive to ACR Paragraph 4 and page 5 of the RPS Extension Ruling ordering Community  
Choice Aggregators (“CCAs”) to file Draft RPS Procurement Plans.

SCPA notes that certain issues and requests in the ~~May 17~~April 17, 2025~~4~~ ACR sections  
apply to the other retail sellers (electrical corporations and electric service providers), and do not  
extend to Community Choice Aggregators (“CCAs”). SCPA is nevertheless voluntarily  
responding to these ACR sections in the interest of transparency and in order to collaborate with

the Commission. However, the submission of this ~~Final~~ Draft RPS Procurement Plan pursuant to the ACR, should not be construed as a waiver of the right to assert that components of the 2015 Senate Bill (“SB”) 350 or Commission decisions and rulings on RPS Procurement Plan submittals do not extend to CCAs. SCPA reserves the right to challenge any such assertion of jurisdiction over these matters.

### I. Summary of Major Changes to RPS Plan

This Section describes the most significant changes between SCPA’s Draft ~~2023-2024~~ 2024-2025 RPS Procurement Plan and its Final ~~2023-2024~~ 2024-2025 RPS Procurement Plan. Importantly, SCPA’s Draft 2024 RPS Procurement Plan was accepted as its Final 2024 RPS Procurement Plan as well. A redline of this Draft ~~2023-2024~~ 2024-2025 RPS Plan against SCPA’s Final ~~2023-2024~~ 2024-2025 RPS Plan is included as Appendix A. The table below provides a list of key differences between the Draft ~~2023-2024~~ 2024-2025 and Final ~~2023-2024~~ 2024-2025 RPS Procurement Plans:

Plan Reference	Plan Section	Summary/Justification of Change
Draft <del>2023-2024</del> <u>2024-2025</u> RPS Procurement Plan Section II	Executive Summary	Updated to reflect significant procurement completed in the past year
Draft <del>2023-2024</del> <u>2024-2025</u> RPS Procurement Plan Section IV. <del>B.1</del>	<del>Long term Procurement</del> <u>Assessment of RPS Portfolio Supplies and Demand</u>	<del>Updated to reflect success of mitigating long-term procurement through contracts with new development and existing resources.</del> <u>Updated to align better with revised structure and prompts in ACR. Revised calculations and IRP alignment based on updates to SCPA’s supply portfolio.</u>
Draft <del>2023-2024</del> <u>2024-2025</u> RPS Procurement Plan Section V	Project Development Status Update	<del>Removed Proxima project, which is now online, and added SunZia contract. Provided updates on timing and status of other contracts still in development.</del> <u>Disaggregated Ormat Portfolio contract, replaced Twin Pine with Fern Creek, provided updates to other in-development RPS contracts.</u>

<p>Draft <a href="#">2024-2025</a> RPS Procurement Plan Section VII</p>	<p>Risk Assessment</p>	<p><del>Replaced geothermal exploration and transmission deliverability risk with geothermal remarketing and transmission upgrade delay risks. Updated characterization of permitting risk and added new inexperienced developer risk. Updated evaluation of compliance risks in Table 5.</del> <u>Added tax credit eligibility and replaced permitting risk with construction and interconnection delay risk. Updated assessed impact of independent risks in Table 9.</u></p>
<p>Draft <a href="#">2024-2025</a> RPS Procurement Plan Section IX</p>	<p>MMoP <del>Methodology and Inputs &amp; MMoP Scenarios</del></p>	<p>Adjusted deterministic risk scenario composition and factors to better align with latest portfolio. Updated resulting MMoP.</p>
<p>Draft <a href="#">2024-2025</a> RPS Procurement Plan Section X</p>	<p><del>Conformance with IRP Proceeding</del> <u>Bid Solicitation Protocol</u></p>	<p><del>Updated reconciliation with 2022 IRP to include procurement activities completed over the past year.</del> <u>Added detail on SCPA's new board-adopted project selection criteria policy.</u></p>

## II. Executive Summary Key Issues

~~The past year has expanded~~ SCPA has continued to expand its long-term RPS position, with significant progress made over the last year. Construction is well underway for the two largest RPS projects in SCPA's development portfolio: the 60 megawatt ("MW") Azalea solar and storage project in Kern County is expected to be online September 2025 and the 3,500 MW SunZia wind project in New Mexico is expected to be online in September 2026 (SCPA's contract is for 100 MW of SunZia output). Construction has also started on SCPA's 4 MW local Redemeyer solar and storage project in Mendocino County, with an expected online date at the end of 2025. ~~completed on SCPA's 70 megawatt ("MW") Proxima solar and storage project in May 2024. In November 2023, SCPA contracted for 100 MW of the 3.5 GW SunZia wind project in New Mexico expected to reach COD in 2026.~~ Meanwhile, SCPA signed a 10-year contract for offtake of an existing 2.6 MW RPS-eligible hydropower facility ~~starting in 2027 to extend its offtake of existing geothermal power from the Geysers and a 10-year contract for offtake of an existing 14.5 MW RPS-eligible hydropower facility~~ that began delivery in ~~August 2023~~ February 2025. Development work continues to progress on ~~solar and storage projects in Mendocino County and Kern County, with updated timelines described in this Draft 2024 RPS Procurement Plan~~ Progress is also being made on maturing SCPA's two ~~geothermal~~ contracts for new geothermal resources—both of which have updated scopes and timelines in this Draft 2025 RPS Plan. ~~that were introduced in the 2022 RPS Procurement Plan.~~ With SCPA's diverse and expanded portfolio of RPS resources, it is well-positioned to maintain its long-term and overall RPS compliance targets.

SCPA is ~~not planning any territory expansion at this time~~ in the early stages of exploring expansion into Lake County. An expansion to Lake County is dependent on the approval of

Lake County jurisdictions and the SCPA Board of Directors. This expansion is not included in its 2025 RPS Procurement Plan given the tentative state. However, SCPA has included its ability to continue meeting RPS compliance requirements as a key criterion in assessing the feasibility of proceeding with expansion.

SCPA's load continues to exhibit minimal growth, as load growth from electrification has been offset by ~~Departure of customers to direct access in 2021 and 2022 and robust~~ growth in behind-the-meter solar and energy efficiency ~~caused a decrease in load~~ over the last few years. However, SCPA expects this trend to ~~reverse~~ change starting in 2028 as electrification of the transportation and building sectors continues to grow and outpace behind-the-meter solar and energy efficiency.

SCPA's Draft 2024-2025 RPS Procurement Plan includes a robust discussion of risks to its portfolio, including ~~transmission deliverability~~ tax credit eligibility, uncertainty on the timing of electrification adoption, ~~permitting~~ construction and permitting delays, and [REDACTED]. [REDACTED]. SCPA expects it will need to plan for a ~~3-4~~ 2.9% to 4.5% margin of retail sales of additional procurement to manage these risks.

SCPA's Draft 2024-2025 Procurement Plan is well aligned with its ~~2022~~ Integrated Resources Planning ("IRP") ~~filings~~. This includes the types and timing of contracted resources, as well as ~~new~~ hourly emissions targets adopted by SCPA's Board of Directors. The Draft 2024-2025 Procurement Plan focuses on only contracted resources to avoid overstating SCPA's compliance position.

### **III. Compliance with Recent Legislation and Impact of Regulatory Changes**

This Final RPS Procurement Plan addresses the requirements of all relevant legislation and the Commission's regulatory framework. This Section describes the relevant statutory and

regulatory requirements and demonstrates that this Draft RPS Procurement Plan meets or exceeds all requirements.

[SB 350 enacted in 2015](#)

~~Governor Brown signed SB 350 on October 7, 2015. SB 350~~ set a new RPS procurement target of 50% by December 31, 2030. Following enactment, the Commission implemented SB 350 by establishing ~~On December 20, 2016, the Commission issued Decision (“D.”) 16-12-040, which partially implemented the increased targets of SB 350 by establishing new~~ compliance periods ~~and with~~ procurement quantity requirements. ~~On July 5, 2017, the Commission issued D.17-06-026, which implemented some of the key remaining elements of SB 350, including adopting new~~ adopting minimum procurement requirements for long-term contracts and owned resources, ~~as well as revising the excess procurement rules~~ and rules for banking, waivers, and the penalty scheme. SB 100 enacted in 2015

~~On September 10, 2018, Governor Brown signed SB 100, which became effective on January 1, 2019. SB 100~~ increased the RPS procurement requirements to 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 and codified a 65% minimum for long-term contracts. ~~On June 6, 2018, the Commission issued D.18-05-026, which implemented changes made by SB 350 to the RPS waiver process and reaffirmed the existing RPS penalty scheme. In July of 2018, the Commission issued Rulemaking (“R.”) 18-07-003 to continue the implementation of the RPS. On May 22, 2019, the Commission issued a Proposed Decision that would continue to use a straight line method to calculate compliance period procurement quantity requirements. In May of 2023, the Commission issued R.24-01-017, further continuing RPS implementation.~~

SCPA’s Renewable Net Short Calculation Table, described in Section VIII below and

attached as Appendix B, incorporates current RPS procurement targets established by the Commission’s implementation of SB 350 and SB 100~~as described in Section VIII below and attached as Appendix B~~. SCPA’s current and planned ~~procurement,~~procurement is sufficient to exceed these targets, as reflected in SCPA’s Renewable Net Short Calculation Table~~and described in Sections IV and V~~. SCPA’s RPS procurement targets also include a minimum margin of over-procurement (“MMoP”) based on SCPA’s risk assessment~~, and is further described in Sections VII and IX~~. SCPA is also positioned to exceed the SB 350 long-term ~~procurement~~ requirement, as described in Sections IV and VII.

SB 255~~, signed by Governor Newsom on October 2, enacted in~~ 2019~~, amended Pub. Util. Code § 366.2 and § 8283 to~~ requires each CCA with gross annual revenues exceeding \$15,000,000SCPA to annually submit a report to the Commission regarding ~~the CCA’s~~ procurement from women, minority, disabled veteran, persons with disabilities, and LGBT business enterprises in all categories. SB 255 also requires ~~CCAs to~~SCPA to include a methodology for ensuring procurement from local, small, and diverse business enterprises. SCPA has met all of its reporting obligations to fulfill SB 255 requirements.

#### **IV. Assessment of RPS Portfolio Supplies and Demand**

##### **IV.A. Portfolio Supply and Demand**

###### *(i) Assessment of Portfolio Supply and Demand through 2035*

SCPA expects to exceed the Commission’s RPS compliance obligations. As demonstrated in Table 1, ~~The exact portfolio characteristics SCPA selects may vary depending on legislative and policy changes, technological improvements, preferences of the community, or other developments. To manage this future uncertainty, SCPA routinely examines and estimates supply and customer demand, including demand trends, as they relate to population of customers~~

~~served, climate, energy efficiency, distributed generation, electrification of vehicles and buildings, and emerging industries. SCPA structures its procurement efforts to match supply profiles with customer demand profiles. SCPA’s examination of customer demand and other market developments will help reduce costs and assist in meeting planned procurement for the period in this Draft RPS Procurement Plan.~~ SCPA currently has enough RPS under contract to satisfy its 2025, 2026, and 2028 obligations and has a 2.5% of its load as an open position for 2027. SCPA anticipates filling its 2027 open position using short-term bilateral contracts with suppliers or other load-serving entities. Even under constrained market conditions, SCPA has had success in securing short-term contracts far above the expected near-term open position.

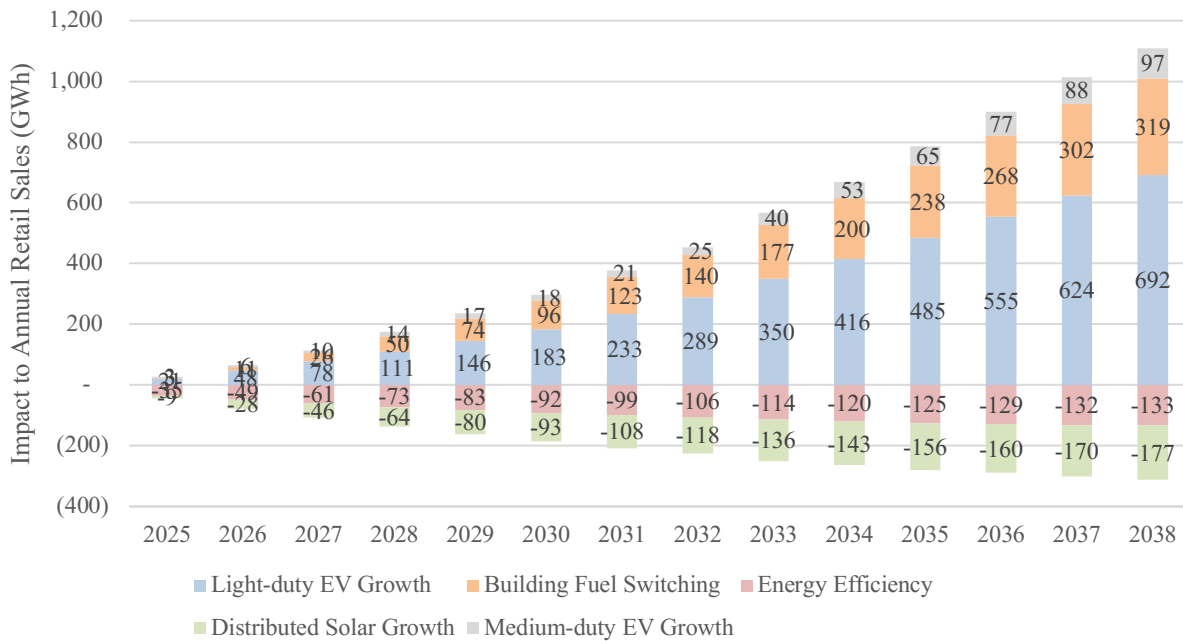
Table 1: SCPA’s RPS Open Position

<u>Compliance Measure (% of Retail Sales)</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>
<u>RPS Obligation (% of Sales)</u>	46.7%	49.3%	52.0%	54.7%	57.3%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
<u>RPS Under Contract (% of Sales)</u>	47.5%	55.1%	49.5%	56.2%	57.2%	55.8%	54.4%	52.6%	50.4%	47.1%	43.8%
<u>RPS Open Position (% of Sales)</u>	None	None	2.5%	None	0.1%	4.2%	5.6%	7.4%	9.6%	12.9%	16.2%

SCPA’s demand for RPS is driven by both increasing compliance requirements and anticipated load growth from electrification. Figure 1 illustrates the load modifiers SCPA has incorporated in its load forecast, including electrification and the effects of energy efficiency and growth in distributed solar. SCPA derives its expectations for energy efficiency and distributed solar from scaling forecasts from the 2024 Integrated Energy Policy Report (“IEPR”) using its load share of PG&E. SCPA’s forecast for the effects of transportation electrification are described in greater detail in Section IV.B.1 below. SCPA’s forecast for the effect of building electrification is based on applying an adoption rate of electrification technologies detailed in the California Air Resource Board’s (“CARB”) Final 2022 Scoping Plan to territory-specific residential natural gas usage. Absent the load modifiers in Figure 1, SCPA’s load is fairly static

given minimal population growth and expectations for new industry. The net effect is that SCPA’s load remains relatively constant until electrification outpaces solar and energy efficiency beyond 2028.

Figure 1. Load Modifiers in SCPA’s Draft 2025 RPS Procurement Plan Load Forecast



Starting in 2029, SCPA’s open position for RPS grows from 0.1% of sales to 16.2% of sales in 2035. Although Section IV.A.1 details how SCPA’s long-term RPS position is sufficient to meet the 65% requirement without additional long-term procurement, SCPA anticipates satisfying a portion of the long-term open position through long-term power purchase agreements with new or existing resources.

*(ii) Assessment of Need for RPS Resources with Specific Deliverability Characteristics*

SCPA’s need for specific deliverability characteristics is identified in developing its IRP and reviewing both near-term and long-term compliance requirements. The change in the Resource Adequacy (“RA”) program to Slice-of-Day (“SOD”) has increased the need for both

baseload and winter resources in SCPA's portfolio, such as geothermal and wind. SCPA has excess battery storage capacity in all months, and procuring RPS generation in non-summer months enables SCPA to increase utilization of its battery storage in satisfying RA requirements and reduce its dependency on RA from natural gas resources. Geothermal and wind resources also address SCPA's monthly open position and provide a more effective hedge against load costs.

SCPA is only considering new solar development that is either small-scale and local or paired with battery energy storage. Without battery energy storage, the market risk of exposure to curtailment and negative prices is too high. SCPA includes economic curtailment rights in its RPS contracts.

In evaluating new potential projects, SCPA has increased its focus on understanding grid constraints. SCPA has hired a full-time employee with expertise in transmission operations and planning and reviews constraints and transmission upgrades that impact candidate resources.

*(iii) Experience Managing Exposure to Negative Market Prices*

SCPA's experience in managing exposure to negative market prices is discussed in detail in Section IV.B.2.

*(iv) Renewable Net Short Quantitative Analysis Support of Supply and Demand*

The Renewable Net Short Calculation Table described in Section VIII and included as Appendix B is consistent with the description of supply and demand in this section. Appendix B provides the Renewable Net Short calculation for the un-risked RPS currently under contract by SCPA. The retail sales used in the quantitative assessment includes the effect of load growth described above. The annual net RPS position shown in the quantitative template matches the results shown in Table 1—with values exceeding the compliance requirement through 2028

except for the year 2027, which will require additional short-term procurement. The quantitative template incorporates the additional effects of SCPA’s voluntary 50% RPS target and a calibrated MMoP described in Section IX. The result of these additional requirements in the quantitative analysis leads to a negative net RPS position in all future years except for 2026. The resulting net position is sufficiently small through 2030 for SCPA to address through short-term contracting.

*(v) Effect of RPS Procurement, Allocation, or Sales*

SCPA includes only contracted resources in the 2025 RPS Procurement Plan to avoid overstating its compliance position. SCPA does not sell RPS unless it is confident that its compliance position is satisfied with a high degree of uncertainty. SCPA does not currently receive any allocations of RPS resources. Although SCPA anticipates receiving RPS allocations from resources procured from the Department of Water Resources (“DWR”) as the Central Procurement Entity, SCPA will not incorporate any allocations until DWR is under contract.

**IV.A.1. Long-term Procurement**

SCPA’s existing portfolio has historically aligned with the 65% requirement and the ramp from 25% to 65% has not introduced significant risk of noncompliance. After completing significant contracting activities described in last year’s 2024 RPS Procurement Plan, including long-term contracts extending offtake from the Geysers, offtake from an existing small hydropower facility, and new power purchase agreements with out-of-state wind, SCPA’s currently contracted procurement achieves the 65% long-term RPS requirement through 2035, as demonstrated in Table 2 below.

**Table 2: SCPA’s Long-term RPS Compliance**

<b><u>Compliance Measure (% of Retail Sales)</u></b>	<b><u>2025</u></b>	<b><u>2026</u></b>	<b><u>2027</u></b>	<b><u>2028</u></b>	<b><u>2029</u></b>	<b><u>2030</u></b>	<b><u>2031</u></b>	<b><u>2032</u></b>	<b><u>2033</u></b>	<b><u>2034</u></b>	<b><u>2035</u></b>
<b><u>RPS Obligation (% of Sales)</u></b>	<b><u>46.7%</u></b>	<b><u>49.3%</u></b>	<b><u>52.0%</u></b>	<b><u>54.7%</u></b>	<b><u>57.3%</u></b>	<b><u>60.0%</u></b>	<b><u>60.0%</u></b>	<b><u>60.0%</u></b>	<b><u>60.0%</u></b>	<b><u>60.0%</u></b>	<b><u>60.0%</u></b>

<u>RPS Obligation Long-term (x 65%)</u>	<u>30.3%</u>	<u>32.1%</u>	<u>33.8%</u>	<u>35.5%</u>	<u>37.3%</u>	<u>39.0%</u>	<u>39.0%</u>	<u>39.0%</u>	<u>39.0%</u>	<u>39.0%</u>	<u>39.0%</u>
<u>Contracted Long-term RPS (% of Sales)</u>	<u>45.7%</u>	<u>55.1%</u>	<u>49.5%</u>	<u>56.2%</u>	<u>57.2%</u>	<u>55.8%</u>	<u>54.4%</u>	<u>52.6%</u>	<u>50.4%</u>	<u>47.1%</u>	<u>43.8%</u>
<u>RPS Obligation Long-term GWh</u>	<u>655</u>	<u>701</u>	<u>746</u>	<u>797</u>	<u>851</u>	<u>911</u>	<u>933</u>	<u>961</u>	<u>995</u>	<u>1,031</u>	<u>1,070</u>
<u>Contracted Long-term RPS GWh</u>											
<u>Deficiency</u>	<u>No Deficiency</u>										

SCPA’s long-term portfolio currently includes 961 GWh of online long-term RPS from online solar, wind, small hydropower, and geothermal facilities, representing 44.6% of its load in 2025, or 95.5% of its overall 2025 RPS obligation. SCPA’s long-term RPS position will decrease slightly in 2027 as the existing Geysers contract rolls-off but then grow before the next year with the commissioning of SunZia. The in-development contracts support SCPA’s long-term position are described in detail in Section V and include SunZia, paired solar and storage, and new geothermal resources. Due to successful completion of risk mitigation measures described in past RPS Procurement Plan filings, SCPA has greatly reduced its compliance risk for satisfying its long-term obligation.

#### **IV.B. Portfolio Diversity and Reliability**

##### *(i) Description of How Portfolio Diversity is Considered.*

SCPA seeks to procure resources that align with its requirements to serve load—which requires a diverse set of resources that provide energy and capacity throughout the year. A key function of SCPA’s RPS portfolio is to provide a hedge against load costs. Given SCPA’s monthly energy requirements peak in winter, SCPA has sought to build an RPS portfolio that includes non-solar resources such as wind, geothermal, and small hydropower. The new SOD RA framework further strengthens the value of non-solar resources that can be used in tandem with SCPA’s large battery storage fleet to satisfy RA obligations.

SCPA prefers resources that are in Northern California, which are a more direct hedge

against its cost to serve load. SCPA also adopted Project Selection Criteria C.6 in April 2025<sup>1</sup>, which prioritized procurement of local resources. However, interconnection constraints and the scarcity of new local wind and geothermal resources have also led to SCPA procuring more distant resources—including out-of-state wind and geothermal. Although these resources have reduced hedging benefits, they do diversify SCPA’s RPS portfolio by reducing exposure to localized risk such as curtailment, transmission outages, and weather.

SCPA’s RPS portfolio is principally comprised of long-term power purchase agreements, which include energy market revenues, resource adequacy, and RPS attributes. SCPA has signed 10, 15, and 20-year agreements depending on the resource and counterparty and diversified contract end dates to avoid over-concentrating replacement procurement in a single year.

The technology and capacity requirements for SCPA’s RPS portfolio are defined in its IRP modeling. SCPA’s IRP optimization identifies the optimal set of resources needed to meet its compliance requirements, energy needs, and voluntary environmental targets. SCPA’s procurement team uses the outputs of IRP modeling to prioritize their engagement with counterparties and focus on specific technologies and contracting dates. Ultimately, SCPA decides to move forward with contracting a candidate RPS resource after evaluating its compatibility with the IRP portfolio and cost-effectiveness based on pricing and forecasted market revenues. Resources needed to meet procurement mandates do not always create accretive value for SCPA’s ratepayers, but SCPA still seeks to contract the best value resource.

*(ii) Description of How Planned RPS Portfolio Diversity will Contribute to System Reliability.*

The capacity contribution of RPS resources in supporting system reliability is a key

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<sup>1</sup> See Policy C.6 in Sonoma Clean Power Authority’s Board Policies available at <https://sonomacleanpower.org/uploads/documents/00-SCPA-BOD-Policies-Effective-2025.04.24.pdf>

consideration in the composition of SCPA’s portfolio. As such, SCPA has prioritized procurement of resources like geothermal, which have a high capacity value throughout the year. SCPA has also focused on procuring resources with full capacity deliverability status (“FCDS”) and sought maximum import capability (“MIC”) for its resources outside CAISO to ensure they provide not only clean energy, but clean capacity for the California grid. To maximize its contribution to system reliability, SCPA also procures energy storage to pair with its large RPS solar resources, including contracting for a 75 MW battery that was co-located with a pre-existing solar contract in SCPA’s portfolio. Installing battery allows solar output to be shaped to meet peak system reliability needs. In evaluating future portfolio decisions, SCPA uses the CPUC’s technology-specific Effective Load Carrying Capability (“ELCC”) values to validate its future portfolio is aligned with long-term system needs through 2035.

The implementation of SOD in the RA program has driven SCPA to build a portfolio that increasingly aligns with SCPA’s monthly load curve and duration. Building a fleet of RPS resources that better aligns with SCPA’s load across all 24 hours of a peak day each month reduces the requirement to procure firm natural gas capacity—which has both affordability and climate benefits. SCPA’s peak summer load curve is growing less and less dependent on the system to serve given the increased size of SCPA’s battery and solar portfolio. SCPA currently has 1,003 MWh of battery storage under contract, which is sufficient to shift 17% of SCPA’s average daily load. SCPA’s peak winter load curve is more of a challenge—because there is often not enough solar to charge battery storage for meeting load across all hours of the day.

[REDACTED]

SCPA seeks to minimize negative system impacts and maximize use of existing RPS-

eligible generation in two primary ways: by procuring local resources when possible and investing in battery storage. SCPA's current fleet of RPS resources includes a large offtake from the Geysers resource, small solar, and small solar paired with storage all within SCPA's territory. SCPA is also leading an initiative called the Geothermal Opportunity Zone ("GeoZone") to partner with the geothermal industry in building 600 MW of new local geothermal capacity. By prioritizing local capacity that is closer to its load, SCPA is reducing the impact of its portfolio on transmission. This reduced impact improves local resiliency when public safety shut offs are required due to weather events and reduces curtailment due to congestion in other areas of the state overly saturated with renewable generation. By investing in battery storage alongside RPS resources, SCPA is contributing resources that provide ancillary services and reduce curtailment of existing RPS resources. SCPA's focus on geothermal resources also contributes inertia to the grid that can be important in maintaining reliability.

*(iii) Description of How Portfolio Diversity will Maximize Ratepayer Value While Minimizing Costs and Risks.*

As discussed above, SCPA relies on IRP modeling that identifies the cost-optimal set of resources to meet SCPA's compliance requirements and voluntary environmental targets. By selecting resources that provide not only RPS, but also high capacity value and energy market revenues, SCPA seeks to maximize ratepayer value. SCPA sees advantages to a diverse portfolio that better aligns with its needs to serve load and reduces the need to buy energy and natural gas capacity separately. In addition to building a technologically diverse portfolio, SCPA also contracts with a diverse set of counterparties to reduce risk to its ratepayers. Counterparties and candidate projects are also heavily vetted for project development expertise, permitting risk, supply chain dependencies, and interconnection viability to minimize project development risk.

*(iv) Description of How Energy Storage and Emerging Technologies are*

*Addressed in Reliability and Diversity Planning.*

As previously discussed, SCPA has a large portfolio of energy storage resources under contract. These energy storage resources are all lithium-ion. SCPA has actively explored other storage technologies, including thermal long-duration energy storage and pumped hydropower, but has not yet identified an economic energy storage project to contract beyond lithium-ion. SCPA expects the economics of other energy storage technologies to improve as regulatory processes increase the relative value of long-duration energy storage.

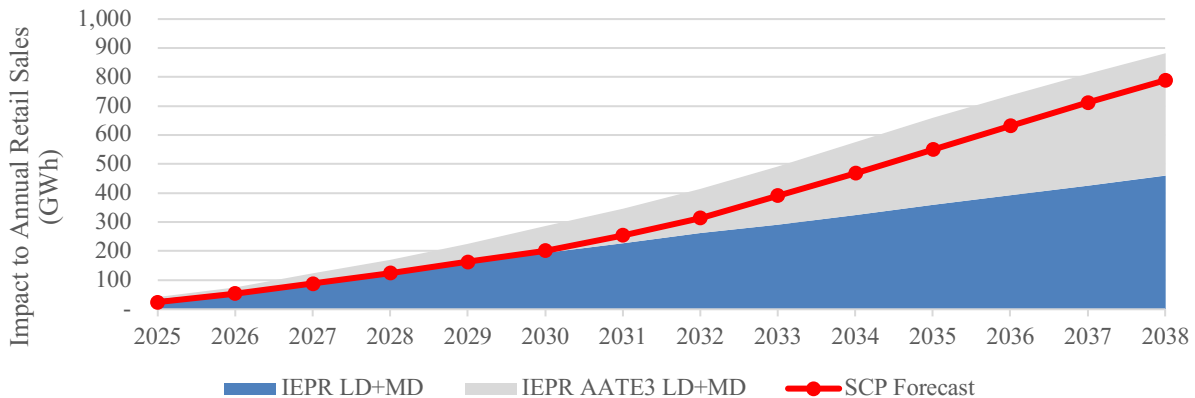
SCPA has invested heavily in advancing next-generation geothermal power. Through its GeoZone initiative, SCPA has signed cooperation agreements with industry to advance development of Enhanced Geothermal Systems (“EGS”) and Advanced Closed Loop (“ACL”) geothermal technologies in Sonoma and Mendocino counties. These cooperation agreements provide early commercial certainty to industry partners and support with community engagement and legislative and regulatory advocacy. Although these projects are not yet sufficiently mature to contract and include in SCPA’s RPS Procurement Plan, they are expected to play a large role in SCPA’s future portfolio.

#### **IV.B.1. Forecasting for Increased Transportation Electrification**

SCPA’s forecast for load impacts from increased transportation electrification is built internally based on local characteristics that are calibrated to match trends forecasted in CARB’s Final 2022 Scoping Plan. Specifically, SCPA characterizes the existing fleet of light-duty and medium-duty vehicles in its territory using 2024 data on registrations from the Department of Motor Vehicles (“DMV”) and applies an annual growth rate that varies each year depending on the adoption curve represented statewide in the CARB Final 2022 Scoping Plan. SCPA then uses locally-specific vehicle miles traveled (“VMT”) data from CARB’s 2025 EMFAC database

and an estimate of electric vehicle efficiency for light and medium duty to arrive at a locally-calibrated forecast for load impacts from increased transportation electrification. SCPA’s resulting forecast compares reasonably well with its load share of the PG&E territory estimate for light and medium duty vehicles in the Integrated Energy Policy Report (“IEPR”) Planning Scenario. Figure 2 below shows that SCPA’s forecast, which is included in the total load in this RPS Procurement Plan, lies between the base IEPR forecast and the Additional Achievable Transportation Electrification (“AATE”) scenario.

Figure 2: Light-duty (“LD”) and Medium-duty (“MD”) Electric Vehicle Modifier Forecast – SCPA vs. 2024 IEPR Planning Scenario and AATE Scenario



**IV.B.2. Curtailment Frequency, Cost, and Curtailment**

*(i) Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours*

At a system level, CAISO continues to see increased renewable curtailment as the capacity of solar generation grows. In 2024, CAISO’s solar and wind curtailment was up 29% from its level in 2023<sup>2</sup>. Both growth in battery storage and CAISO’s increased integration with neighboring balancing authorities provide significant relief, but the scale and cost of curtailment is an important consideration in building and managing a portfolio of RPS resources.

<sup>2</sup> <https://www.utilitydive.com/news/solar-wind-curtailments-increasing-california-caiso/749420/>

Curtailment is especially concentrated in the spring, when high solar output coincides with low load throughout the day.

SCPA sees local conditions as increasingly driving the frequency and magnitude of curtailment and negative pricing. Whereas SCPA's resources in the Central Valley see significant levels of curtailment, local pricing nodes in SCPA's territory are positive. Although the CAISO observes conditions with system-level curtailment, local transmission constraints can be the cause for a large share of curtailment and negative pricing. SCPA has invested in more sophisticated tools for characterizing local pricing conditions, including the impact of future approved transmission upgrades, to aid in selecting resources with lower curtailment risk.

*(ii) Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years*

SCPA currently schedules its RPS resources into the CAISO market and is partially exposed to negative pricing at each resource's pricing node. Negative pricing occurs in the Day Ahead market ("DA"), Fifteen Minute Market ("FMM"), and Real Time ("RT") market typically as a result of local or systemwide negative congestion. Although SCPA can be exposed to negative pricing from imbalance between markets, the principal risk is in the market a resource is scheduled.

The average number of net negative pricing hours experienced per resource by all SCPA resources with market revenues from January 2019 through June 18, 2025 are shown in Table 3, broken down by the market schedule. The number of hours shown in Table 3 are the average across SCPA's solar, wind, and small hydro resources scheduled in the market. After a decrease in 2021 after the installation of battery storage adjacent SCPA's Mustang solar facility, SCPA is seeing a steady increase in negative pricing hours in the day-ahead and fifteen-minute market.

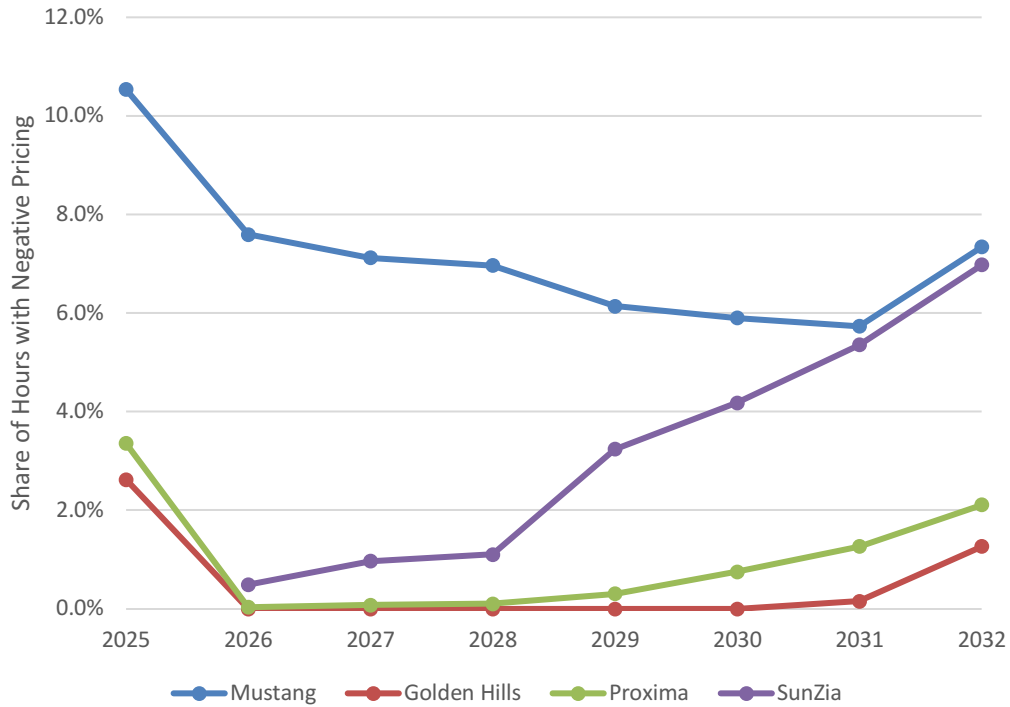
Table 3: Average Number of Negative Pricing Hours for SCPA Resources with Market Revenue

<u>Market Schedule</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>1/1/2025-6/18/2025</u>
DA	171	287	104	319	598	1,001	617
FMM	186	163	131	131	197	272	270

Negative prices and associated costs occurred mainly between March and May, during the Pacific Northwest freshet, when higher than normal water levels impact hydroelectric supply and consequently power prices across the Western Electricity Coordinating Council.

SCPA forecasts hourly pricing for each of its RPS resources using Ascend’s PowerSimm platform, which incorporates historical trends and a forecast of local transmission build-out and congestion. Figure 3 shows the latest forecast for negative pricing for four of SCPA’s key RPS resources through 2032. This forecast shows fairly steady levels of curtailment in SCPA’s Northern California resources, but growing curtailment for its SunZia resource. SCPA expects this trend to continue until transmission upgrades are approved to alleviate south to north congestion on Path 15, likely through the ten-year period evaluated in this RPS Procurement Plan. Importantly, this forecast is one deterministic realization and large uncertainties such as the impact of the Extended Day-ahead Market, reinstatement of production tax credits, and increased deployment of battery storage systems are difficult to characterize. Nonetheless, SCPA does not foresee negative pricing to be a major risk to its portfolio.

Figure 3: Forecast of Negative Pricing for SCPA RPS Resources



*(iii) Experience, to Date, With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers in California*

SCPA takes action to limit the impacts of curtailment on its ratepayers. SCPA pursues and implements contract terms that recognize and limit the potential financial impacts of negative pricing and give SCPA greater flexibility to direct economic curtailment. SCPA also evaluates new procurement opportunities by evaluating the proposed project location and nearby historical negative pricing and congestion. SCPA has contracted and is actively exploring battery storage systems at existing resources as well as new hybrid projects and has a particular focus on modeling the locational value of storage resources.

*(iv) Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices*

While not a result of CAISO incidences of overgeneration as defined by CAISO, SCPA incurred costs of approximately \$1,537,592 over a total of 78,664 MWh at negative pricing hours for all its RPS resources scheduled in the CAISO market in 2024. This represents a

negligible amount of total energy costs for SCPA ratepayers over the same time period, even when considered specifically for intermittent resources. Negative pricing occurred for resources scheduled in the DA market and FMM as shown in Table 4.

Table 4: Costs from Negative Pricing in 2024

<u>Market Schedule</u>	<u>Volume Weighted Average Price (VWAP) during negative pricing hours only (\$/MWh)</u>	<u>Volume during negative pricing hours only (MWh)</u>
<u>DA</u>	<u>-19.86</u>	<u>73,613</u>
<u>FMM</u>	<u>-14.93</u>	<u>5,052</u>

*(v) Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices*

While curtailment is a viable renewable integration strategy that is generally more cost-effective than other options, there are potential negative consequences from excessive curtailment. Curtailment of solar and wind represents a lost opportunity to renewable electricity, and excessive curtailment could impact the ability of California to meet its environmental and energy policy goals. Additionally, these over-supply situations expose ratepayers to increased costs – LSEs must either economically curtail the generating resource by often paying for the electricity that was not generated, or generate power and be exposed to negative prices. Because these conditions are largely driven by California policy, it is appropriate to consider macro-level mitigation measures through CAISO initiatives, Commission rulemakings, and possibly even legislation.

There are a number of measures and policies that have already been implemented or are currently being pursued that will have significant impacts on how substantial curtailment will be in the future. These include the expansion of the EIM, improvements to the CAISO market design and structure, enhanced forecasting capabilities, improved time-of-use rates, improved EV charging functionalities, and smart deployment of DERs. Recently, SCPA has experimented

with promoted workplace EV charging. SCPA has learned this may have significant potential to address curtailment while simultaneously providing access to EVs for renters and drivers who have only street parking options. The Commission’s IRP proceeding will be an appropriate forum to measure the impact of these policies and the effect that they will have on future curtailment. These new measures will need to be modeled and incorporated into forecasts of future curtailment.

*(vi). Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices*

SCPA includes contract terms in its PPAs that allow rights to dispatch the resource, where applicable, which could lead to an economic curtailment of the resource in the event of significant negative pricing. However, SCPA is still obligated to pay for deemed energy. In addition, SCPA includes contract language that requires the seller to use “commercially reasonable efforts to minimize the extent, amount and duration of any curtailments.” Finally, SCPA includes language in each of its PPAs for resources paired with storage that allows charging the storage resource from the grid.

**IV.A.1C. Portfolio Optimization**

SCPA’s resource portfolio includes baseload renewable power (geothermal), intermittent resources with complementary profiles (solar, ~~and~~ wind, and small hydro), and battery storage. SCPA examines the need to procure resources to meet its goals (which meet or exceed both state and local compliance obligations) and when significant change in load is expected to occur (e.g., phasing in new territories).

Starting in 2021, SCPA contracted with Ascend Analytics to provide advanced portfolio optimization capabilities. Using Ascend’s PowerSimm platform, SCPA is building a portfolio that is co-optimized for reliability, environmental performance, and cost, while meeting

compliance obligations. The underlying stochastic engine, storage dispatch logic, and locational price modeling provide the foundation for robust decisions to minimize cost and risk for SCPA customers.

Reducing greenhouse gas (“GHG”) emissions is one of SCPA’s cornerstone objectives. ~~In its 2022 IRP,~~ SCPA has established an hourly emissions target that reflects the relative contribution of different resource types to mitigating grid emissions. By 2026, SCPA is contracting a supply portfolio that aims to provide ~~100~~85% of the hourly marginal emissions mitigation as incurred by its load. Meanwhile, SCPA is increasingly focused on planning a portfolio that can maintain affordability and reliability as electrification of the transportation and building sectors ramp-up.

Although SCPA has invested considerable effort in the capability to optimize its portfolio for cost and carbon mitigation, procurement activity ~~is being~~is increasingly driven ~~also heavily~~ influenced by the Commission’s reliability requirements and market constraints. One example is the Mid-term Reliability (“MTR”) requirement established in D.21-06-035 and expanded in D.23-02-040 which requires SCPA to procure 186 megawatts (“MW”) of incremental capacity.

SCPA primarily relies on bilateral agreements through its extensive network with project developers to contract resources and did not issue any solicitations for RPS resources in the past year. In evaluating candidate resources, SCPA focuses on not just low pricing, but also developer experience, interconnection risk, and permitting timelines. SCPA also contracts resources through California Community Power (“CC Power”), a joint powers authority comprised of nine CCAs that coordinates joint procurement of large or strategic resources for its members.

~~SCPA staff balance SCPA Board of Directors’ desire for pro-active procurement~~

according to SCPA’s long-term plans with maintaining flexibility to incorporate procurement mandates. Resources that satisfy MTR zero-emitting capacity requirement and the firm non-fossil baseload resource impact SCPA’s RPS position. SCPA has already commissioned a 20-MW MTR-eligible addition to an already contracted new solar project paired with storage for zero-emitting MTR capacity that contributes 53 gigawatt hours (“GWh”) of annual RPS generation. SCPA has also executed two geothermal contracts for MTR that add 133 GWh of annual RPS by 2029, an additional MTR-eligible zero-emitting 60-MW solar project paired with storage that will add 182 GWh of RPS starting Spring 2025. In total, MTR procurement could be associated with 373 GWh of newly developed RPS by 2029, or 16% of SCPA’s load.

**IV.C.1. Conformance with the IRP Proceeding**

SCPA is including resources in the Draft 2025 RPS Procurement Plan that are currently contracted. SCPA’s 2025 IRP portfolio will contain additional RPS that are not yet ~~contracted~~, but contracted and thus not included in the Draft 2025 RPS Procurement Plan to avoid over-representing SCPA’s procurement commitment. Table 5 below describes how SCPA’s Draft 2025 RPS Procurement Plan conforms with the determinations made in the IRP Proceedings. Because the 2025 IRP portfolio is currently under development and final guidance has not yet been given to LSEs, many of the responses in Table 5 are prospective.

Table 5: Conformity with the IRP

<u>IRP Section Subsection</u>	<u>RPS Alignment in IRPs</u>	
<u>III. Study Results</u> <u>A. Conforming and Alternative</u>	<u>1. Existing RPS resources that the retail seller owns or contracts.</u> <u>2. Existing RPS</u>	<u>1. Existing RPS resources that the retail seller owns or contracts.</u> <u>SCPA’s 2025<sup>2</sup> IRP <del>preferred</del> portfolio and this 2025<sup>4</sup> RPS Procurement Plan will share the</u>

<p><u>Portfolios</u></p>	<p><i>resources that the retail seller plans to contract with in the future.</i></p> <p><i>3. New RPS resources that the retail seller plans to invest in.</i></p> <p><i>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035.</i></p>	<p>following existing RPS resources under contract:</p> <ul style="list-style-type: none"> <li>- <del>50 MW</del> Geysers geothermal (50 MW through 2026, 9 MW in 2027, 20 MW through 2037<del>expiring in 2026</del>)</li> <li>- 40 MW Mustang Solar</li> <li>- 30 MW Mustang Solar 3</li> <li>- 46 MW Golden Hills North Wind</li> <li>- 6 MW local solar feed-in-tariff projects</li> <li>- <del>150 GWh of existing biomass in 2023 and 2024</del> 70 MW Proxima solar project (paired with storage)</li> <li>- 14.5 MW Forks of Butte small RPS-eligible hydropower</li> <li>- 2.6 MW Montgomery Creek small RPS-eligible hydropower</li> </ul> <p><i>2. Existing RPS resources that the retail seller plans to contract with in the future</i></p> <p>The 2025<del>3</del> Final RPS Procurement Plan does not explicitly contain any resources that are not already under contract to avoid overstating SCPA's RPS position. However, SCPA continues to plan on contracting with existing RPS resources to satisfy its <del>FMoP</del> compliance needs and necessary margin of over-procurement.</p> <p>The 2025<del>2</del> IRP will contain at least one <del>contains two planned contracts for RPS from existing resources: a placeholder for short-term RPS contracts through 2029 (volume varies by year) and a 10-year 40 MW extension of SCPA's contract from existing geothermal resources that expires in 2026. In this 2024 RPS Procurement Plan, SCPA represents a contract signed for 9 MW of Geysers output in 2027, ramping up to 20 MW from 2028 through 2036 in alignment with the extension represented in the IRP. The 2024 RPS Procurement Plan also includes a 10-year contract starting in August 2023 for offtake from a 14.5 MW RPS-eligible hydropower facility and short-term RPS contracts from existing resources that align with</del></p>
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	<p><u><del>the IRP placeholders.</del></u></p> <p><u>3. New RPS resources that the retail seller plans to invest in</u></p> <p><u>The 2022<del>25</del> IRP and this Draft 2024<del>5</del> RPS Procurement Plan will share the following new RPS resources under contract:</u></p> <ul style="list-style-type: none"> <li><u>- <del>760</del> 760 MW <del>Proxima</del> Azalea solar project (paired with storage) – now online</u></li> <li><u>- 4 MW Redemeyer solar project (paired with storage)</u></li> <li><u>- <del>15.5</del> 15.5 MW of geothermal from Nevada and California (from two separate contracts)</u></li> <li><u>- 100 MW of <del>out-of-state wind (the IRP designated capacity from Idaho; the RPS Procurement Plan includes a 100 MW contract from New Mexico)</del> out-of-state wind from New Mexico</u></li> <li><u>- 2 MW Fern Creek solar project</u></li> </ul> <p><u><del>The 2022 IRP contained the 11.6 MW Tubbs Island project that is not included in this Draft 2024 RPS Procurement Plan because the contract was terminated after the 2022 IRP filing. This Draft 2024 RPS Procurement Plan includes the following specific new RPS resources that more than backfill Tubbs Island and were not included in the 2022 IRP and because they have been contracted following the IRP filing:</del></u></p> <ul style="list-style-type: none"> <li><u><del>4 MW Redemeyer solar project (paired with storage)</del></u></li> <li><u><del>5 MW Twin Pine Circle solar project</del></u></li> <li><u><del>60 MW Azalea solar project (paired with storage)</del></u></li> </ul> <p><u>The 2025<del>2</del> IRP will also contain<del>ed</del> non-specific plans for new resources <del>starting in 2027</del> including additional solar and storage, geothermal, and in-state wind to meet SCPA’s long-term portfolio requirements—including alignment with its emissions and reliability contributions for IRP. These resources are not</u></p>
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		<p><u>included in the Draft 2025<del>4</del> RPS Procurement Plan because they are not under contract and SCPA wants to avoid overstating its RPS compliance position.</u></p> <p><u>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035 and the supplemental procurement ordered in D. 23-02-040.</u></p> <p><u>The 2024<del>5</del> RPS Procurement Plan includes <del>15.5</del> 15.5 MW of new geothermal resources from Nevada and California, the Proxima project (<del>20 MW is eligible for MTR</del>), and the Azalea solar project that are expected to be used to satisfy MTR obligations and contribute to SCPA’s RPS portfolio. <del>All of these resources except Azalea were included in SCPA’s 2022 IRP.</del></u></p> <p><u>Beyond the RPS contracts listed above, SCPA has executed contracts with battery storage resources <del>that completely</del> and is currently in early stages of procuring additional new geothermal capacity to fulfill its Mid-Term and supplemental procurement obligations.</u></p>
<p><b><u>IV. Action Plan</u></b> <b><u>A. Proposed Activities</u></b></p>	<p><u>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</u></p> <p><u>2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.</u></p>	<p><u>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</u></p> <p><u>The development of new RPS resources in the Draft 2024<del>5</del> RPS Procurement <del>Plan is very consistent with the</del> will be consistent with the Action Plan in the 2022<del>5</del> IRP. The 2022<del>5</del> IRP Action Plan and this Draft 2024<del>5</del> RPS Procurement Plan will include two geothermal contracts SCPA has executed for its share of 1 GW of new firm zero-emitting generation, and solar and storage resources executed to fulfill SCPA’s share of the 2.5 GW of zero-emission generation paired with storage. <del>In the 2022 IRP Action Plan, SCPA envisioned expanding the Tubbs Island project to complete fulfillment of this category, but following its termination, SCPA replaced Tubbs Island and a planned expansion with the much larger Azalea solar with paired storage project to completely fulfill its obligation.</del></u></p>

Although not mandated, the 20225 IRP Action Plan describes will include additional RPS procurement of new out-of-state wind, an extension of SCPA's contract from existing geothermal wind, geothermal, and new in-state wind, new paired solar and storage, and new geothermal to achieve internal and CPUC targets for emissions and reliability. The 100 MW of out of state wind and extension of offtake from existing geothermal are included in the Draft 2024 RPS Procurement Plan now that they are under contract. The other resources identified in the IRP Action Plan are not included in this Draft 2024 RPS Procurement plan because they are not yet contracted and SCPA does not wish to overstate its RPS compliance position.

2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.

Many of the same risks described in Section VII for SCPA's development resources will create barriers for new RPS resources. SCPA is hopeful that issues such as supply chain constraints and transmission backlogs abate as the global market stabilizes and the MTR procurement order is satisfied. However, additional procurement orders the effects of the Reliable and Clean Power Procurement Program ("RCPPP") and the expected growth in load alongside rising compliance requirements will likely sustain a high level of demand for new RPS resources that will complicate procurement. Securing FCDS and MIC allocation is a concern for SCPA given the number of projects vying for the same designation.

SCPA is not forecasting specific resource types in its Draft 20245 RPS Procurement Plan beyond projects currently under contract. Details on the size and type of SCPA's preferred resources to satisfy RPS obligations and IRP emissions targets are will be described in the 20225 IRP filing.

		<p><u>In its past IRP analysis, SCPA identified baseload renewables, out-of-state resources, and solar paired with storage as likely preferred resources. SCPA is gaining direct experience with these resource types through projects in development with risks thoroughly described in Section VII.</u></p>
<p><b><u>IV. Action Plan</u></b>  <b><u>B. Procurement</u></b>  <b><u>Activities</u></b></p>	<p><i><u>1. The type of solicitation</u></i>  <i><u>2. The timeline for each solicitation.</u></i>  <i><u>3. Desired online dates.</u></i>  <i><u>4. Other relevant procurement planning information, such as solicitation goals and objectives.</u></i></p>	<p><u>The <del>2022 IRP Action Plan</del> 2022 IRP Action Plan included specific <del>forecasted the following near-term</del> RPS procurement activities for SCPA to build its preferred portfolio (<del>status provided for each</del>):including contracting for out-of-state wind, local renewable projects, extending offtake at the Geysers, in-state solar paired with storage, in-state wind, and strategic local geothermal development. SCPA’s current portfolio reflects the success of many of these actions. The 2025 IRP Action Plan will identify incremental procurement requirements to meet the needs of its preferred portfolio and will likely include the need to solicit more geothermal, wind, and solar paired with storage. SCPA expects any newly contracted resources to likely come online in the early 2030s.</u></p> <ul style="list-style-type: none"> <li><del>— Finish negotiating up to 100 MW of out-of-state wind in 2023 for an online date of 2026 (completed in November 2023)</del></li> <li><del>— Finish negotiating local resource contracts for solar and storage for an online date of 2025 (completed with Twin Pine Circle and Redemeyer contracts)</del></li> <li><del>— Start soliciting an offer for a 10-year extension SCPA’s existing geothermal contract by 2024 for an online date of 2027 (completed in October 2023)</del></li> <li><del>— Start soliciting an offer for 40 MW of new paired solar + storage by 2024 for an online date of 2027 (completed early with execution of Azalea contract)</del></li> <li><del>— Start soliciting an offer for up to 150 MW</del></li> </ul>

		<p><del>of in-state wind by 2025 for an online date of 2028-2030</del> [REDACTED]</p> <p><del>— Collaborate with GeoZone partners to enable 70 MW of dispatchable geothermal with online dates of 2030-2033 (cooperation agreements signed in 2022; working on required exploration, permitting, and interconnection)</del></p> <p><del>Several of the negotiations described</del> Negotiations for procurement aligned with the 2022 IRP Action Plan <del>above</del> originated from responses from <del>one of</del> SCPA's solicitations for local resources or MTR-eligible capacity over the past few years, but SCPA is increasingly relying on its network of developer contacts to identify opportunities without the administrative burden of an open solicitation. Due to the scarcity of <u>interconnection capacity and permitting risks</u>, SCPA has also shifted its procurement focus to concentrate on project maturity and developer experience <del>alongside price</del>, which is better managed through bi-lateral networking with trusted developers rather than an open solicitation.</p> <p>SCPA will manage any remaining short position relative to compliance obligations and its TmoP target through short-term RPS contracts. SCPA has a strong track record of delivering RPS volumes through short-term contracts to meet internal RPS compliance targets.</p>
<p><b><u>IV. Action Plan</u></b> <b><u>C. Potential Barriers</u></b></p>	<p><i><u>1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in both retail sellers' Preferred Portfolios.</u></i></p> <p><i><u>2. Key risks associated with the potential retirement of existing</u></i></p>	<p>The key barriers for resources under contract and in development are described in detail in Section VII. These resources are a good sample of the types of resources SCPA <del>included in its 2022</del> will include in its 2025 IRP preferred portfolios. Issues such as importing ex-CAISO generation, uncertainty on tax credits, permitting complexity, securing solar and battery modules, and geothermal exploration risk are shared between SCPA's current development queue and candidate IRP resources.</p>

	<p><u>RPS resources on which the retail seller intends to rely in the future.</u></p>	<p><u>SCPA’s 2022 RPS Procurement Plan discussed potential challenges with the risk of existing geothermal retirements due to high operating costs and their ineligibility for the procurement mandate. However, this risk has reduced considerably in the past two three years as the market value of existing geothermal has increased as LSEs prepare for hourly carbon accounting and slice-of-day resource adequacy. SCPA does not currently see any discrete risks with the retirement of existing RPS resources. Outside existing geothermal most of SCPA’s planned RPS is procured from newer facilities.</u></p>
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**IV.CB.2. Responsiveness to Local and Regional Policies**

*(i) Responsiveness to Policies of SCPA Governing Board*

SCPA is a local governmental agency. SCPA is subject to the control and additional compliance mandates of its Board of Directors and is directly accountable to the community that it serves. SCPA strongly supports and is committed to meeting California’s ~~GHG-emissions~~ reduction and renewable procurement goals. SCPA actively supported the passage of SB 100 and has fully incorporated the procurement requirements of California’s RPS program into its overall procurement strategy. Furthermore, SCPA’s planned procurement exceedededs California’s GHG emissions goal by 82% in its 2022 IRP filing and SCPA expected to identify a portfolio for its 2025 IRP that also exceeds state goals. ~~SCPA plans to attain a 0.035 million metric tons (“MMT”) emissions target rather than meet California’s 0.203 MMT equivalent for the 25 MMT benchmark.~~ SCPA does not purchase Portfolio Content Category (“PCC”) 3 products to meet compliance requirements or Board of Directors-adopted targets.

*(ii) Responsiveness to Regional Policies*

SCPA’s Board of Directors sets most of the local policies relating to RPS targets and

~~greenhouse gas emissions~~ [GHG emissions](#) from SCPA customer electricity use in Sonoma and Mendocino Counties. SCPA's Board of Directors consists of elected officials from each of the cities and counties served. SCPA's Board of Directors coordinates its policies with all other local governments accordingly, including coordination on issues relating to long-term planning targets, local project development, zoning for renewable energy, streamlined permitting for electric vehicle charging stations, and dozens of similar related topics. In addition to the cities and counties of Sonoma and Mendocino Counties, SCPA works closely with its members' water districts, the Regional Climate Protection Authority, the Office of Emergency Management, two air quality management districts, refuse agencies, and a number of land use agencies to coordinate local policy that support similar climate goals of the RPS. In short, SCPA is in a good position to ensure compliance and report on progress as an authority for establishing, monitoring, and implementing regional renewable energy and climate policy.

SCPA's Board of Directors approved a Final Local Resource Plan ("LRP") on May 6, 2021, that sets the plan for developing additional renewable resources in SCPA's territory to serve its growing load share of 100% local, 24/7 renewable EverGreen customers. [The LRP has led to the development of the 4 MW Redemeyer solar facility co-located with 4 MW of 4-hour battery storage expected to be commissioned at the end of this year.](#) ~~On June 1, 2021, SCPA released a Local Resource Solicitation to develop new local resources to achieve this plan. The Local Resource Solicitation resulted in multiple local projects being short-listed for negotiating long-term Power Purchase Agreements ("PPAs"). SCPA executed an agreement in March 2023 for two projects resulting from this solicitation: the 5 MW Twin Pine Circle solar facility in Laytonville and the 4 MW Redemeyer solar facility co-located with 4 MW of 4-hour battery storage near Ukiah.~~

SCPA is also leading a cross-jurisdictional initiative to reinvigorate local geothermal power development. The Geothermal Opportunity Zone (“GeoZone”) created a formal partnership between SCPA and Sonoma and Mendocino Counties to explore opportunities for private geothermal companies to deploy new technologies and development strategies to grow local generation capacity by 600 MW. SCPA will use its commitment as an offtaker and community liaison to de-risk new geothermal projects.

[The SCPA Board of Directors adopted Project Selection Criteria C.6 on April 3, 2025 that establishes a methodology for prioritizing new candidate contracts for SCPA’s portfolio. The new policy prioritizes local resources and projects with workforce benefits and is being applied for new prospective procurement. The SCPA Board of Directors has also established a goal of mitigating 85% of SCPA’s load emissions measured on an hourly marginal emissions basis by 2026.](#) ~~In 2022, SCPA solicited proposals from industry and selected three partners: Chevron New Energies, Cyrq Energy, and Eavor Inc. Site acquisition for GeoZone development has already started and the first exploration permits are expected to be started later this year.~~

**IV.B.1. Long-term Procurement**

~~SCPA’s existing portfolio has historically aligned with the 65% requirement and the ramp from 25% to 65% has not introduced significant risk of noncompliance. After completing significant contracting activities in the past year, including long-term contracts extending offtake from the Geysers, offtake from an existing small hydropower facility, and new power purchase agreements with out-of-state wind, SCPA’s currently contracted procurement achieves the 65% long-term RPS requirement through 2034, as demonstrated in Table 1 below.~~

~~Table 1: Long-term RPS Compliance (% of SCPA Retail Sales)~~

<del>Compliance Measure (% of Retail Sales)</del>	<del>2024</del>	<del>2025</del>	<del>2026</del>	<del>2027</del>	<del>2028</del>	<del>2029</del>	<del>2030</del>	<del>2031</del>	<del>2032</del>	<del>2033</del>	<del>2034</del>
<del>RPS Obligation</del>	<del>44.0%</del>	<del>46.7%</del>	<del>49.3%</del>	<del>52.0%</del>	<del>54.7%</del>	<del>57.3%</del>	<del>60.0%</del>	<del>60.0%</del>	<del>60.0%</del>	<del>60.0%</del>	<del>60.0%</del>

RPS Obligation Long-term (x 65%)	28.6%	30.3%	32.1%	33.8%	35.5%	37.3%	39.0%	39.0%	39.0%	39.0%	39.0%
Contracted Long-term RPS	43.0%	49.7%	60.1%	54.9%	60.5%	60.4%	59.2%	57.5%	56.1%	54.5%	51.7%
Long-term Deficiency	No Deficiencies										

~~SCPA’s long-term portfolio currently includes 939 GWh of online long-term RPS from online solar, wind, small hydropower, and geothermal facilities, representing 43.0% of its load in 2024, or 97.7% of its 2024 RPS obligation. SCPA’s long-term RPS position will decrease slightly as the size of the existing Geysers contract reduces in 2027 and beyond, but due to successful completion of risk mitigation measures described in the 2023 RPS Procurement Plan, SCPA has greatly reduced its compliance risk for satisfying its long-term obligation.~~

**~~IV.C. Portfolio Diversity and Reliability~~**

~~SCPA considers the deliverability characteristics of its resources, such as the resource’s dispatchability and available capacity, and reviews the respective risks associated with short and long-term purchases as part of its forecasting and procurement processes. These efforts will lead to a more diverse resource mix, address grid integration issues, closely match SCPA’s hourly electrical supply to its customers’ demand and provide additional value to the local community. A quantitative description of this forecast is attached to the Draft 2024 RPS Procurement Plan in Appendix B.~~

~~Contracting with solar-only resources is proving unattractive due to the mismatch with real-time load, the trajectory of hourly energy market prices, and reliability counting methodology. Accordingly, all but one of the solar resources SCPA is currently negotiating or planning to add to its portfolio are co-located with storage. SCPA also contracted for the capacity resource of a 75 MW x 4-hour battery co-located with its existing Mustang solar facility. SCPA expects these resources to significantly reduce curtailment, decrease transmission impacts, and provide cost-~~

~~effective capacity to serve peak load conditions in summer evenings. SCPA is also pursuing several standalone storage opportunities with similar benefits, including two standalone long-duration storage contracts with other CCAs. In total, SCPA already retains 1,072 MWh of full-toll battery storage under contract, which is enough capacity to shift 18% of SCPA's average daily load.~~

~~SCPA recognizes the importance of baseload renewables in providing reliability and high-value, intra-seasonal energy. Geothermal energy currently serves 20% of SCPA's load. SCPA expects the need for baseload renewables to increase as California retires nuclear and natural gas facilities and relies increasingly on intermittent renewables and storage resources. SCPA's territory is host to a world-class geothermal resource at The Geysers. Although new capacity has not been added to The Geysers since 1989, innovations in the geothermal industry that reduce the environmental impacts—critically, including water usage—provide an opportunity to reinvigorate local geothermal development that is compatible with community values.~~

~~The GeoZone is a key initiative in which SCPA is proactively alleviating barriers to development by engaging its community and partnering with geothermal development companies. These efforts are discussed in Section IV.B. Although the transmission approval timeline for large-scale geothermal projects is long, SCPA hopes the GeoZone will contribute meaningful capacity growth by the end of the current RPS planning horizon through 2034. SCPA recognizes the need for long-term planning and development of resources and is making the commitment now for the future of baseload renewables within our service territory.~~

~~To optimize cost, value, and risk, SCPA continuously examines and estimates supply and customer demand. This analysis includes demand trends as they relate to the number of customers served, climate, energy efficiency, distributed generation, and electrification of~~

vehicles and buildings. SCPA structures its procurement efforts to balance customer demand with resource commitments. SCPA also considers the deliverability characteristics of its resources, and reviews the respective risks associated with short and long term purchases as part of its forecasting and procurement processes. SCPA diversifies its resource mix to address grid integration issues such as reliability, and closely matches hourly electrical supply to customer demand to reduce ratepayer risk.

SCPA's portfolio consists of baseload geothermal renewable power and complementary, intermittent solar and wind resources combined with battery storage. SCPA regularly examines the need to procure resources to meet its own goals, compliance obligations, and changes to expected loads (e.g., when customers upgrade from SCPA's default product, CleanStart, to its 100% renewable, local, and 24/7 product, EverGreen).

SCPA uses a load forecast for the quantitative assessment for this Draft 2024 RPS Procurement Plan that explicitly models anticipated incremental load from transportation and building electrification. SCPA also incorporates the expected impact of energy efficiency measures and growth in distributed solar load forecast used in the quantitative assessment for SCPA's Draft 2024 RPS Procurement Plan.

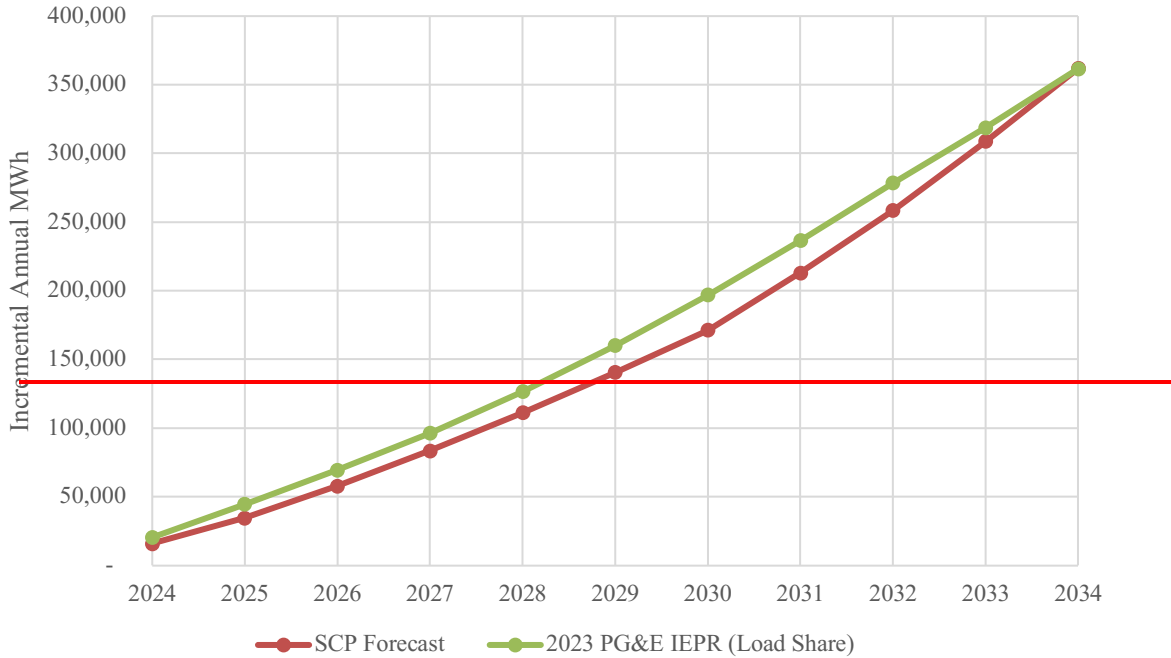
SCPA's load forecast aligns with its expectations for electrification in transportation and building electrification, and with the California Air Resources Board's ("CARB") Final 2022 Scoping Plan.<sup>3</sup> SCPA calibrated the penetration of light-duty electric vehicles and residential fuel switching forecasted in the Final 2022 Scoping Plan to specific data on the vehicle fleet and natural gas usage data in SCPA's territory. A comparison of SCPA's forecast for the impact of light-duty transportation electrification to its PG&E load share of the 2023 California Energy

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<sup>3</sup> SCPA uses data from the "AB32 GHG Inventory Sectors Modeling Data Spreadsheet" released alongside the Final Scoping Plan, available at <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-PATHWAYS-data-E3.xlsx>

Commission's ("CEC") Integrated Energy Policy Report ("IEPR") Planning Scenario is included in Figure 1.<sup>4</sup>

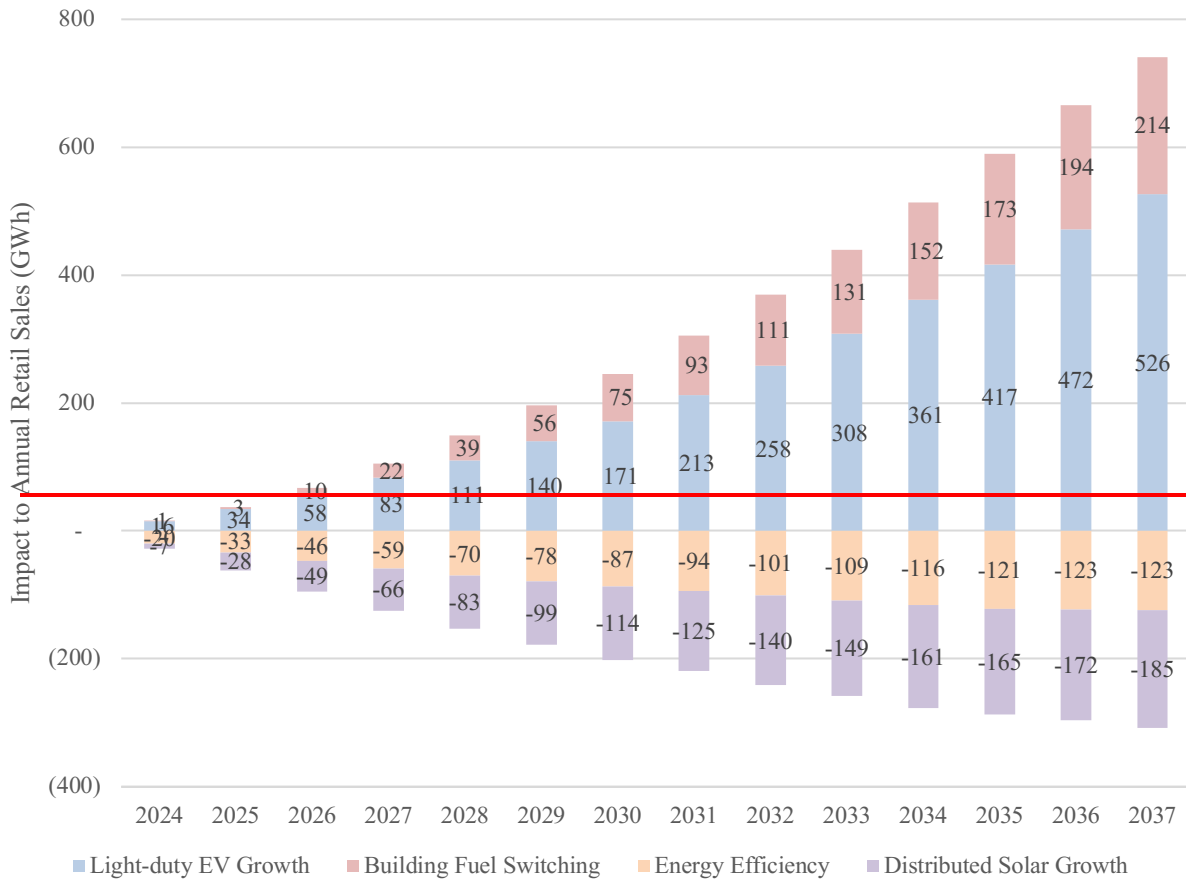
Figure 1: Light-duty Electric Vehicle Load Modifier Forecast—SCPA vs. 2023 IEPR



SCPA derived expectations for energy efficiency and growth of distributed solar from scaling forecasts in the 2023 Integrated Energy Policy Report ("IEPR") proceeding by its load share of PG&E. As shown in Figure 2, the increase in load from electrification can be roughly balanced with energy efficiency and distributed resources in the near term. However, increases from electrification begin to significantly outpace energy reductions starting in 2030 and beyond, and attention on ensuring that new loads are matched on an hourly basis with new supply remains a top priority.

Figure 2: Load Modifiers in SCPA's Draft 2024 RPS Procurement Plan Load Forecast

<sup>4</sup> "CED 2023 Hourly Forecast—PGE—Planning Scenario" from <https://www.energy.ca.gov/data-reports/california-energy-planning-library/forecasts-and-system-planning/demand-side-1>



#### IV.D. Lessons Learned

SCPA has served customers and participated in the RPS process since 2014. SCPA consistently sets RPS targets above California’s annual obligations. Table 2-6 shows the actual SCPA RPS percentages compared to California’s RPS annual obligations and SCPA annual targets. SCPA plans to meet or exceed its adopted targets through all compliance periods.

Table ~~62~~: RPS percentage of retail sales - targeted and actual

	2016	2017	2018	2019	2020	2021	2022	2023	<a href="#">2024</a>
RPS obligation	25.0%	27.0%	29.0%	31.0%	33.0%	35.8%	38.5%	41.3%	<a href="#">44.0%</a>
SCPA target	40.0%	44.0%	46.0%	48.0%	50.0%	50.0%	50.0%	50.0%	<a href="#">50.0%</a>
Actual RPS	41.8%	45.2%	49.0%	50.7%	49.6%	51.4%	52.5%	53.6%	<a href="#">53.8%</a>
Excess of RPS obligation	<b>16.8%</b>	<b>18.2%</b>	<b>20.0%</b>	<b>19.8%</b>	<b>16.7%</b>	<b>15.7%</b>	<b>14.0%</b>	<b>12.3%</b>	<a href="#">9.8%</a>
Excess of SCPA target	<b>1.8%</b>	<b>1.2%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>-0.3%</b>	<b>1.4%</b>	<b>2.5%</b>	<b>3.6%</b>	<a href="#">3.8%</a>

Although SCPA has established a strong historical track record of RPS compliance, it recognizes that renewable resource development is inherently risky. SCPA has experienced contract failures, including one for a large wind farm, one for a local floating solar array, and one from a local solar with co-located storage project. SCPA has gained additional insight and care for mitigating permitting and political risks from these past experiences. In recent ~~solicitations~~[procurement](#), SCPA collected detailed information on project characteristics, including permitting requirements and transmission status. SCPA is finding that obtaining deliverability from the CAISO’s interconnection process is a key impediment to project success and has improved its understanding of the process and regional transmission constraints that can cause significant cost and delay. Developers are also vetted for experience and financing capability. Additionally, SCPA has participated in several recent joint solicitations with other CCAs and adopted best practices for capturing information in solicitation and structuring evaluations to reduce project risk.

## V. Project Development Status Update

~~SCPA’s current and planned procurement is sufficient to meet both the applicable RPS procurement requirements as well as support California’s GHG reduction targets. Further, SCPA’s current and planned procurement supports system reliability by considering both portfolio diversity and alignment with SCPA customers’ hourly load curve.~~

SCPA currently has ~~six~~ nine projects in development under executed contracts. ~~The Proxima contract included in the Final 2023 RPS Procurement Plan was commissioned in May 2024.~~ Development status information for the ~~six~~ nine projects is included below and in Appendix C – Project Development Status Template as of the date of the Draft ~~2024~~ 2025 RPS Procurement Plan filing (~~July 22~~ June 30, 202~~5~~ 4). SCPA has not executed any new contracts since the Draft 2024 RPS Procurement Plan but has split what was represented as the “Ormat Portfolio” geothermal project last year into four resources: [REDACTED], [REDACTED], and a reduced placeholder for residual capacity in the Ormat Portfolio. The Twin Pine local solar project in last year’s RPS Procurement Plan has been replaced with the Fern Creek project—which is being developed using a contract amendment after the Twin Pine project proved unviable. Biological surveys identified an endangered plant species that was not compatible with the proposed development. This risk was described in the 2024 RPS Procurement Plan and factored into last year’s risk evaluation and MMoP. All of the project updates described below are incorporated into SCPA’s quantitative analysis described in Section VIII and detailed in Appendix B.

**Fish Lake**

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* Dyer, Nevada

*Commercial Online Date:* [REDACTED]

*Technology Type:* Geothermal

Contract start and end dates: [REDACTED]

[REDACTED]

Expected Annual Generation: ~~12.8~~[12.8](#) GWh

Total Contract Volume: ~~256.7~~[256.7](#) GWh

Transmission Status: [REDACTED]

[REDACTED]

[REDACTED]

~~The interconnection agreement with NV Energy was executed on October 20, 2022, and transmission service agreements are in place to deliver energy to CAISO. NV Energy revised the original in-service date of the interconnection agreement, and now anticipates completing network upgrades in November 2025. SCPA will have to secure long-term import capacity in the 2025 Maximum Import Capability (“MIC”) process.~~

*Narrative:*

Fish Lake is a new 13 MW geothermal project being developed in Northern Nevada that SCPA jointly procured with other CCAs through ~~California Community Power~~[CC Power](#).

SCPA’s share of Fish Lake is [REDACTED] Fish Lake is expected to be developed using Organic Rankine Cycle technology. The project will deliver energy to CAISO through NV Energy and contracted third-party transmission to ~~Mona~~[CAISO intertie](#).

The developer submitted its hydrological and cultural reports to the Bureau of Land Management (“BLM”) in September 2022. The BLM is requiring the developer to develop a hydrologic model to address sensitivity to endangered species before issuing required permits. Drilling started in August 2022 and an interconnection agreement was executed in October 2022. In 2023, NV Energy notified Fish Lake that their in-service date for distribution upgrades would

be delayed ~~until November 2025~~, pushing the project's online date back to its original schedule of June 2024. The delay voided SCP's long-term import reservation (New Use Import Commitment) secured in 2023, which will require it to resecure MIC in the 202~~6~~<sup>5</sup> process. Meanwhile, the hydrologic modeling to satisfy BLM concerns has taken longer than anticipated and permits are now expected in ~~Spring 2025~~ January 2026. Fish Lake currently sees a path to commissioning ~~between December 2025 and March 2026~~ by April 2027.

[REDACTED]

Development Phase: Pre-Construction

Capacity Procured: [REDACTED] geothermal

Length of Contract: [REDACTED]

Location: [REDACTED]

Commercial Online Date: [REDACTED]

Technology Type: Geothermal

Contract start and end dates: [REDACTED]

Expected Annual Generation: [REDACTED]

Total Contract Volume: [REDACTED]

Transmission Status: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Narrative:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] CC Power expects a project delivery notice that will formalize Dogwood's position in the Ormat Portfolio later this year.

[REDACTED] is being developed on private land and being permitted through an Environmental Impact Report (EIR) with Imperial County. The CEQA documentation was submitted in the fourth quarter of 2023, and a final permit is expected imminently. Sufficient evaluation drilling has been completed to confirm the size of the resource. After the final permit is obtained, construction is anticipated to begin as soon as the [REDACTED] to facilitate a commercial operation date in [REDACTED].

[REDACTED]

Development Phase: Pre-Construction

Capacity Procured: [REDACTED] geothermal

Length of Contract: [REDACTED]

Location: [REDACTED]

Commercial Online Date: [REDACTED]

Technology Type: Geothermal

Contract start and end dates: [REDACTED]

Expected Annual Generation: [REDACTED]

Total Contract Volume: [REDACTED]

Transmission Status: Project has an executed interconnection agreement with [REDACTED] with an in-service date of [REDACTED]. Developer has excess transmission capacity that will be used to deliver energy to CAISO intertie at [REDACTED].

Narrative:

[REDACTED] geothermal project under development [REDACTED]  
[REDACTED] which is expected to be part of the 125 MW Ormat Portfolio that SCPA jointly  
contracted with other CCAs through CC Power. SCPA's share [REDACTED] that is  
represented in this RPS Procurement Plan is [REDACTED]. CC Power expects a project delivery  
notice that will formalize [REDACTED] position in the Ormat Portfolio later this year.

[REDACTED] is being developed on federal land and being permitted through an  
NEPA Environmental Assessment ("EA") with the BLM. The final EA has been delayed due to  
a request for additional water monitoring, but is expected imminently. The developer has  
completed two resource evaluation wells, but needs to complete an additional injection test well  
later in 2025 before proceeding with development. Construction is expected to start as soon as  
the end of [REDACTED] to facilitate a commercial operation date in [REDACTED].

[REDACTED]  
Development Phase: Pre-Construction

Capacity Procured: [REDACTED] geothermal

Length of Contract: [REDACTED]

Location: [REDACTED]

Commercial Online Date: [REDACTED]

Technology Type: Geothermal

Contract start and end dates: [REDACTED]

Expected Annual Generation: [REDACTED]

Total Contract Volume: [REDACTED]

Transmission Status: [REDACTED]. A restudy triggered  
by withdrawal of a higher queued project has delayed the interconnection agreement to the third

quarter of [REDACTED]. A transmission service request to deliver energy to the [REDACTED] is undergoing a facility study.

Narrative:

[REDACTED] is a new [REDACTED] geothermal project under development in [REDACTED], which is expected to be part of the 125 MW Ormat Portfolio that SCPA jointly contracted with other CCAs through CC Power. SCPA's share of Crescent Valley that is represented in this RPS Procurement Plan is [REDACTED]. CC Power expects a project delivery notice that will formalize [REDACTED] position in the Ormat Portfolio later this year.

[REDACTED] is being developed on federal land and being permitted through a NEPA EIR process with BLM and CEQA EIS process with Imperial Valley. The NEPA EIR was submitted in 2023 and CEQA EIS was submitted this year. Two resource confirmation wells have been completed, but injection drilling is required before further progressing project development. The start of construction is anticipated to start as soon as the end of [REDACTED] to facilitate a commercial operation date of [REDACTED].

**Ormat Portfolio**

*Development Phase:* Pre-Construction

*Capacity Procured:* [REDACTED] geothermal

*Length of Contract:* [REDACTED]

*Location:* Varies (Nevada and California)

*Commercial Online Date:* starting [REDACTED]

*Technology Type:* Geothermal

*Contract start and end dates:* [REDACTED]

*Expected Annual Generation:* [REDACTED]

*Total Contract Volume:* [REDACTED]

*Transmission Status:* Status varies by project; some have executed agreements and others are in queue. A candidate CAISO resource in the portfolio may be dependent on local network upgrades. Projects outside CAISO will need import capacity.

*Narrative:*

The Ormat Portfolio project represents a placeholder for [REDACTED] of additional capacity from the 125 MW contract that SCPA jointly procured with other CCAs through CC Power that has not yet been assigned to specific projects. The developer has the flexibility to provide capacity for the contract from any resource in its development pipeline that is deliverable to CAISO and is commissioned in-time to meet MTR obligations. Eligible projects are expected to be in [REDACTED]. Of the candidate projects, many are actively navigating the interconnection queue and permitting status, and a subset have interconnection agreements and final permitting.

~~The Ormat Portfolio is a 125 MW contract for new geothermal projects in Nevada and California that SCPA jointly procured with other CCAs through California Community Power. The agreement is structured as a portfolio with flexibility in the location and attributes of specific projects to accommodate the uncertainty and risk in geothermal project development. SCPA's share of the portfolio is 14 MW. Potential projects in the portfolio could be commissioned as soon as February 2026 and may be located in Northern Nevada, California's Imperial Valley, or Sonoma County. The developer is progressing geologic exploration, transmission, and permitting activities for all projects—with some more mature than others. SCPA will need to secure import capability from CAISO for any projects in Nevada or the Imperial Valley.~~



~~Transmission Status: Developer submitted an interconnection application in PG&E's wholesale distribution access tariff ("WDAT") using the Independent Study Process and received its System Impact Study (Phase 1) in September 2022 for a solar system paired with storage, but the developer asked PG&E to restudy the project as solar only. The developer executed an interconnection agreement for the solar only configuration with PG&E on February 28, 2023.~~

~~Narrative:~~

~~The Twin Pine Circle project was procured by SCPA through its Local Resource Plan solicitation. The project is 4.99 MW solar facility and will be located near Laytonville. The project was originally proposed as a solar + storage, but SCPA ultimately negotiated a contract for solar only after completing an economic evaluation. The developer has executed an interconnection agreement with PG&E and has secured site control. While completing biological surveys in 2023, the endangered plant species meadowfoam was discovered on the project site. The developer is currently evaluating options to redesign the layout of the site.~~

**Redemeyer**

*Development Phase:* ~~Pre~~-Construction

*Capacity Procured:* 4 MW solar + 4 MW 4-hr storage

*Length of Contract:* 20 years

*Location:* Ukiah, California

*Commercial Online Date:* December 31, 2025

*Technology Type:* Solar PV with lithium-ion storage

*Contract start and end dates:* December 31, 2025, through December 30, 2045

*Expected Annual Generation:* 10.15 GWh

*Total Contract Volume:* ~~199.5~~201.1 GWh

*Transmission Status:* Developer submitted an interconnection application in PG&E's ~~WDAT~~ wholesale distribution access tariff using the Independent Study Process and received its System Impact Study (Phase 1) in October 2022. The developer executed an interconnection agreement with PG&E in February 2023.

*Narrative:*

The Redemeyer project was procured by SCPA through its Local Resource Plan solicitation. The project is a 4 MW solar facility with a 4 MW 4-hour energy storage system and located north of Ukiah. ~~The developer has secured site control. Although the developer will be seeking full deliverability for the project through CAISO, the contract is written to allow the project to proceed as energy only.~~ A Major Use Permit Application was submitted to Mendocino County in Summer 2023 and ~~is expected to be issued in Summer 2024. The developer is currently awaiting guidance on the timing for biological surveys which could lead to a 6-month project delay.~~ issued for the project in July 2024. The project is currently in the advanced stages of construction, with completion of racking and installation of solar modules, solar inverter, and combiner box. The battery energy storage system is expected to be delivered to the site imminently and the project is on-track to meet its online date in December 2025. The main schedule risk is the schedule for PG&E upgrades, which the developer is closely tracking.

**Azalea**

*Development Phase:* Construction

*Capacity Procured:* 60 MW solar + 38 MW 4-hr storage

*Length of Contract:* 10 years

*Location:* Lost Hills, California

*Commercial Online Date:* May 15, 2025

*Technology Type:* Solar PV with lithium-ion storage

*Contract start and end dates:* ~~September 8~~~~May 15~~, 2025, through ~~May 14~~~~September 7~~, 2035

*Expected Annual Generation:* ~~182.7~~150.9 GWh

*Total Contract Volume:* 1,~~783.5~~498.4 GWh

*Transmission Status:* Developer has executed an interconnection agreement with CAISO and PG&E and attained full capacity deliverability status. ~~Construction is underway for interconnection at PG&E's Arco substation.~~Construction of interconnection facilities is complete.

*Narrative:*

Azalea is a 60 MW solar facility co-located with a 38 MW 4-hour battery storage system near Lost Hills. The project ~~has completed site control, environmental and cultural surveys, and solicited bids for construction and equipment contracts. The project has also circulated its Draft Environmental Impact Report and received its non-appealable Conditional Use Permit from Kern County. The project received its Incidental Take Permit ("ITP") from California Department of Fish and Wildlife in May 2024 and expects a federal ITP in Summer 2024. In late 2023, the developer completed procurement of long-lead time items and executed EPC agreement.~~ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] is in advanced stages of construction, with module installation, cold commissioning, and interconnection facilities complete. The project expects to achieve in-sync with PG&E and CAISO imminently and is on track for commissioning in September 2025. The

[project was delayed from the May 2025 online date in the 2024 RPS Procurement Plan due to delays from changing the source of modules to a domestic facility due to the impact of the Department of Commerce’s investigation on modules sources from southeast Asia \(where the modules were originally sourced\).](#)

## **SunZia**

*Development Phase:* Construction

*Capacity Procured:* 100 MW wind

*Length of Contract:* 15 years

*Location:* Torrance, Lincoln, and San Miguel Counties, New Mexico

*Commercial Online Date:* September 30, 2026

*Technology Type:* Wind

*Contract start and end dates:* September 30, 2026, through September 29, 2041

*Expected Annual Generation:* ~~315.7~~[328.1](#) GWh

*Total Contract Volume:* ~~4,909.5~~[735.1](#) GWh

*Transmission Status:* Developer [is in the final stages of](#)~~has started~~ construction on a 550-mile transmission line to connect the project to Pinal Central substation in Arizona where transmission rights are secured to deliver the power to CAISO at Palo Verde. SCPA will need to secure long-term import capability rights in the ~~2026~~-MIC process.

### *Narrative:*

SunZia is a new 3.5 GW wind project in central New Mexico interconnecting to California by a 3 GW 550-mile high-voltage direct current (“HVDC”) transmission line to Pinal Central substation and firm transmission rights within Arizona to Palo Verde. SCP contracted for

100 MW of capacity from SunZia in November 2023. SunZia's transmission project received final approval by the BLM in May 2023 to proceed. ~~Construction is well underway for both the transmission facilities and the wind project, including access roads and foundations. SunZia closed financing on the project in December 2023 and executed major construction and equipment contracts in 2023.~~ Both the transmission line and wind project are in advanced stages of construction. Transmission towers are completely installed, stringing operations are well underway, and the two converter stations are over 80% complete. The first wind tower was installed and topped out in April 2025 and the project could be online as soon as May 2026, although SCPA is assuming a September 2026 date for its analysis.

### **Fern Creek**

Development Phase: Pre-Construction

Capacity Procured: 2 MW Solar

Length of Contract: 20 years

Location: Mendocino County, California

Commercial Online Date: May 1, 2029

Technology Type: Solar PV

Contract start and end dates: May 1, 2029 through April 30, 2049

Expected Annual Generation: 5.0 GWh

Total Contract Volume: 100.6 GWh

Transmission Status: Developer executed a wholesale distribution tariff interconnection agreement with PG&E in March 2025.

Narrative:

Fern Creek is a new 2 MW solar project along the coast in Mendocino County, California. Fern Creek is being developed for SCPA as a replacement resource to Twin Pine, which was included in the 2024 RPS Procurement Plan but cancelled due to biological resource constraints. The project is in the early stages of permitting and has held pre-application meetings with the County of Mendocino. The developer has determined that an amendment to the Local Coastal Program and rezoning will be required before permitting—which has elongated the development timeline. The developer is currently conducting field surveys to assess the site’s suitability and the presence of any sensitive species and is working towards a targeted permit date of late 2026 to support commercial operations in 2029. The developer has already executed an interconnection agreement with PG&E.

#### **VI. Potential Compliance Delays**

SCPA’s total RPS obligation for Compliance Period 5 (from 2025 through 2027) is expected to be 3,233 GWh. SCPA’s load could increase RPS’s obligation if electrification adoption accelerates (assessed in Section VII) or if SCPA proceeds with the potential expansion to Lake County in 2027.- SCPA’s 65% long-term obligation for Compliance Period 5 is expected to be 2,101 GWh. SCPA currently has 2,513 GWh of long-term RPS under contract from online resources over Compliance Period 5—which is a 19.6% excess without including any in-development resources. This excess is sufficient to comfortably avoid compliance delays in meeting SCPA’s 65% long-term commitment. Although load growth or delays of in-development projects could cause a need for more RPS to satisfy SCPA’s overall obligation in Compliance Period 5, SCPA can satisfy that need through short-term contracts. Given that the vast majority of SCPA’s in-development RPS is in advance stages of construction and the lead time associated with a territory expansion, SCPA anticipates having plenty of time to identify

any needed short-term contracts to satisfy RPS needs for Compliance Period 5. The potential impact of construction delays or other impacts on SCPA's in-development project portfolio are quantitatively assessed in Section VII. Given that all of SCPA's large solar projects are co-located with storage, SCPA is not concerned that increased curtailment will risk SCPA's compliance.

~~does not anticipate any potential delays in the current compliance period. Although a delay or cancellation of the development resources described in Section V could impede SCPA from reaching its internal goals, these projects are not necessary to achieve the weighted RPS objective for Compliance Period 4.~~

~~As SCPA's margin of voluntary over procurement decreases going into the next compliance period, SCPA does expect to be exposed to compliance risks. These risks are discussed in more detail in Section VII and quantified where appropriate in Section VIII.~~

## **VII. Risk Assessment**

### **VII.A. Compliance Risk**

SCPA routinely reviews development and operational risks to achieving compliance obligations. A discussion of key risks relevant to achieving RPS compliance, including the long-term procurement requirement, is included below and organized by assessed severity:

#### *High-Severity Compliance Risks*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- **Electrification adoption timing:** Although SCPA’s current load is steady, rapid growth is expected after transportation and building electrification efforts build momentum. Current forecasts for load growth increase dramatically through the 2030s for California and SCPA. This growth trend is barely captured in the [2034-2035](#) planning horizon. If California and federal policy leads to an acceleration in electrification efforts, SCPA’s RPS obligation and long-term requirement could increase measurably leading to difficulties to building capacity at a sufficient pace. SCPA will continue to monitor electrification adoption trends and update its load forecast each year to inform its RPS procurement needs.
- ~~**Transmission upgrade delays**~~ **[Tax credit eligibility](#)**: ~~SCPA’s current portfolio either has executed interconnection agreements with deliverability or SCPA has accepted the potential of energy-only offtake. However, transmission upgrade delays are becoming prevalent and could impact the timing of many projects. A delay in network upgrades was a major driver in the nearly two-year delay in Fish Lake project. Securing Maximum~~

~~Import Capability rights for resources outside CAISO adds an additional uncertainty to securing the capacity benefits of new resources. SCPA has proactively requested CAISO study MIC expansion at import points that can accommodate Ormat's portfolio and has demonstrated experience in securing long-term new use import commitments.~~ A significant uncertainty impacting the viability of SCPA's in-development portfolio is the expected eligibility of projects for tax credits. Congress is currently considering dramatic changes to the phase-out of clean energy tax credits. Depending on the scope and pace of credit phase-outs, projects in SCPA's RPS portfolio could lose tax credit eligibility. Losing tax credit eligibility would make contracts unfinanceable and likely result in project cancellation or renegotiation. This risk is especially relevant to projects that have not yet started construction, given eligibility is often based on the start of construction (and in some proposals date of completion). SCPA is actively discussing the impact of tax credits with developers and exploring contractual options to maintain the viability of its in-development RPS fleet.

#### *Mid-Severity Compliance Risks*

- ~~Permitting~~ **Construction and Interconnection Delays:** ~~The local Twin Pine Circle and Redemeyer projects, as well as Nevada geothermal projects have significant permitting hurdles to overcome prior to construction, including requirements to satisfy the California Environmental Quality Act and National Environmental Policy Act. The Ormat geothermal contract is structured as a portfolio of potential projects that allows the developer to substitute facilities if permitting constraints are encountered. The SunZia project has secured permits from the Bureau of Land Management for the project site and transmission project after significant stakeholder engagement and responsiveness by the~~

~~developer. Although there are still some permits outstanding, they are smaller in scope and the developer has already proceeded with construction of the project.~~ SCPA has regularly observed delays in delivery of projects in development—whether due to permitting, supply chain issues, or the timing of interconnection delays. Although several projects remain on schedule compared to last year’s RPS Procurement Plan (Redemeyer, SunZia), others have experienced delays ranging from months (Azalea) to over a year (Fish Lake). Although much of SCPA’s in-development capacity is in advanced stages of construction with limited schedule risk, SCPA’s compliance position is still impacted by project delays. SCPA is mitigating this risk by requiring regular progress reports and check-in meetings from its developers and proactively procuring short-term RPS when needed to maintain compliance.

- **Load variability:** SCPA’s load is fairly stable. ~~No territory expansion is planned at this time, and population and economic growth within the territory is fairly nominal.~~ Although SCPA is actively exploring expansion to Lake County as soon as 2027, a final decision on the expansion is not expected until later this year and SCPA has included its ability to meet RPS compliance as a key part of assessing the feasibility of an expansion. In early 2022, reduced commercial energy usage during COVID provided unexpected headroom in the PG&E direct access cap which led to an un-forecasted 2.5% decrease in load that is unlikely to occur again in the future. Many of SCPA’s largest customers are municipal accounts that are unlikely to shut down or leave service. SCPA’s load is sensitive to load changes of commercial customers. However, SCPA’s largest commercial customer only comprises 1.5% of SCPA’s load.

SCPA employs a load forecasting model that stochastically varies weather

forecasts using historic data adjusted for climate change and deterministic projections of meter counts, distributed resource installs, and electric vehicle adoption. Whereas the impact of weather uncertainty remains constant through time, diverging low and high projections for meter count, distributed resources, and electric vehicles cause uncertainty to increase significantly over time. Table 3-7 shows the sensitivity of the load model to these uncertainties, and range of outcomes in the overall model, for both a year-ahead forecast and a forecast for 2031-2032.

Table 7-3: Sensitivity of Load Model Forecast to Uncertainties in Year-Ahead and 2032+

Uncertainty	Year-Ahead		2032+	
	Lowside	Upside	Lowside	Upside
Weather	-1.4%	+1.5%	-1.0%	+1.8%
Meter Count	-1.2%	+1.3%	-6.6%	+8.2%
Distributed Resource Installation	-0.5%	+0.7%	+3.9%	-2.1%
Electric Vehicle Adoption	-0.4%	+0.5%	-2.6%	+3.0%
Overall Model	-3.7%	+3.7%	-13.4%	+14.7%

The uncertainty and compliance risk reflected in this table is distinct from the high risk of accelerated electrification timing described above, which has the potential to lead to changes in load that are not characterized in load modeling. Although the uncertainty range in 2031-2032 implies load variability may be a high risk to RPS compliance, these results represent bookend outcomes and uncertainty will naturally reduce as time progresses and the projection period compresses. Please note that the uncertainties in Table 7-3 cannot be added to determine an overall uncertainty.

- ~~• **Inexperienced developer:** The experience of project developers is an important criterion when SCPA selects candidate projects for negotiation and developer inexperience has not generally been an issue for SCPA’s large RPS projects.~~

[REDACTED]

[REDACTED] -SCPA is hopeful that the groundwork the current developer completed on permitting, interconnection, and procurement sets the new developer up for success, but does see a risk that the inexperience of the new developer may lead to project failure or change the financial incentives that could lead to contract termination.

*Low-Severity Compliance Risks*

- **Supply chain:** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- **Financing:** SCPA has not yet encountered issues with financing renewable development. SCPA would expect the financeability of projects to improve with the investment-grade issuer credit rating it received in December 2021. However, the Federal Reserve Bank increased interest rates to address inflation. Higher borrowing costs could reduce the availability of resources and diversity of developers, while making it more difficult to secure resources to meet SCPA’s long-term procurement requirement. [REDACTED]

[REDACTED]

- Online generation:** SCPA has a resource portfolio with diverse technologies, geography, and developers that minimizes the variability and risk of online generation. SCPA’s portfolio diversity strength is best illustrated through results from stochastic modeling that is trained on historical forecasts and weather variability. Table 84 shows the 90% confidence interval of variability from the mean in 2023 for a single intermittent resource, all intermittent resources in SCPA’s portfolio, and SCPA’s entire RPS portfolio. Although a single wind farm shows measurable variability (-9.5% to +11.8%), a portfolio of that resource with intermittent resources with different technologies and geographies provides a substantial reduction in range (-4.3% to +3.8%), and SCPA’s strong concentration of firm renewable resources like geothermal lead to a total portfolio variance of less than +/- 2%.

Table 84: Variability in Stochastic Generation Model for 2023 vs. Mean

Generation Source	5 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile
Golden Hills Wind	-9.5%	+11.8%
All SCPA Intermittent Resources	-4.3%	+3.8%
SCPA RPS Portfolio	-1.8%	+1.6%

In May 2023, SCPA experienced its first instance of physical failure of a portion of an online resource. [REDACTED]

~~SCPA is removing the risk it included in the Draft 2023 RPS Procurement Plan that the facility would experience permanent degradation.~~

- Curtailment:** SCPA’s experience with curtailment is discussed further in Section

~~IV.B.2XIII~~. SCPA currently self-schedules all RPS generation and does not currently see curtailment as a significant risk to RPS compliance. Installation of battery storage adjacent to SCPA’s existing solar facility and the inclusion of storage in future planned solar facilities should also minimize the risk of curtailment. The SunZia contract volumes reflect the expectation that generation delivered to CAISO will be curtailed when above SunZia’s 2.1 GW of firm transmission capacity within Arizona.

### **VII.B Risk Modeling and Risk Factors**

SCPA has completed a risk assessment of its RPS portfolio by modeling risks described above that are high or medium in severity. Table ~~95~~ below includes details on the framework SCPA has employed to independently model each risk and the resulting impact to three key compliance considerations for SCPA: the overall net RPS position for 202~~75~~ (unrisked scenario currently has ~~3.0% of sales excess~~ a 2.5% of sales deficiency), the overall net RPS position for ~~2027-2030~~ (unrisked scenario currently has ~~2.9% of sales excess~~ a 4.2% of sales deficiency), and the long-term position in ~~2027-2030~~ (unrisked scenario has ~~21.1~~16.8% of sales excess). Risks are evaluated relative to the Commission’s compliance requirements rather than to SCPA voluntary targets. Across the five assessed risks, the overall RPS deficiency in 2027 varies from 2.5% of sales in the unrisked scenario to as much as 13.9% if all in-development projects experience a one-year delay. The overall RPS deficiency in 2030 varies from 4.2% of sales in the unrisked scenario to as much as 10.1% if all pre-construction projects are cancelled due to tax credit eligibility. SCPA’s 2030 long-term position is robust across all risks—varying from 16.8% of excess in the unrisked scenario to a low of 10.9% excess in the scenario that pre-construction projects are cancelled due to tax credits.

Table ~~95~~: SCPA RPS Portfolio Risk Modeling Framework and Compliance Impact

Risk	Modeling Approach	MMoP Scenario Probability	2027 Net RPS Position (% of Sales)	2027-2030 Net RPS Position (% of Sales)	2030-27 Long-term Position (% of Sales)
Electrification Adoption Timing	Assume a 3-year acceleration in the projected growth in EV adoption and building electrification impacts shown in Figure 2.	<del>15%</del> 10%	<del>Reduces excess to 0.6%</del> <del>Increases deficiency to 6.2%</del>	<del>Creates deficiency of 0.4%</del> <del>Increases deficiency to 10.0%</del>	<del>Reduces excess to 17.8%</del> <del>11.0%</del>
<del>Transmission Upgrade Delays Tax Credit Eligibility</del>	<del>Assume projects with significant interconnection facilities (SunZia, Fish Lake, Ormat) experience a two-year delay. Assume any projects that have not yet started construction are terminated due to financing impacts of tax credit phase-out.</del>	<del>33%</del>	<del>No Impact</del> <del>Increases deficiency to 2.9%</del>	<del>Creates deficiency of 15.6%</del> <del>Increases deficiency to 10.1%</del>	<del>Reduces excess to 10.9%</del> <del>2.6%</del>
<del>Construction and Interconnection Delays Permitting</del>	<del>Assume Fish Lake and local Twin Pine and Redemeyer projects cannot be built. Assume all in-development projects experience a delay of one-year</del>	<del>50%</del> 25%	<del>No Impact</del> <del>Increases deficiency to 13.9%</del>	<del>Reduces excess to 1.3%</del> <del>Increases deficiency to 4.2%</del>	<del>Reduces excess to 19.5%</del> <del>16.8%</del>
Load Variability	Increase load by a straight-line interpolation of the +3.7% year-ahead and +14.7% bookend sensitivity	0%	<del>Reduces excess to 0.5%</del> <del>Increases deficiency to 5.6%</del>	<del>Creates deficiency of 1.3%</del> <del>Increases deficiency to 9.9%</del>	<del>Reduces excess to 16.9%</del> <del>Reduces excess to 11.1%</del>
<del>Inexperienced Developer Execution Risk</del>		<del>20%</del>	<del>Creates deficiency of 2.4%</del>		

The results from Table 95 provide a reliable assessment of the potential for independent risks to impact RPS compliance. However, adding these risks together results in an unrealistically pessimistic scenario, especially because several of the risks overlap. Accordingly, SCPA has taken the additional step of developing a deterministic scenario using a subset of the risks in Table 95 that have a higher probability of occurrence or are more difficult to mitigate to

calibrate a ~~Minimum Margin of Over-Procurement (“MMoP”)~~. MMoP.

The risks included in this scenario are assigned a probability in the “MMoP Scenario” column in Table 95 and results are discussed in Section IX.A. These probabilities are assigned based on SCPA’s judgement, as there is insufficient analogy data to statistically calibrate these occurrences. SCPA has adjusted several of these probabilities from last year’s RPS Procurement Plan. As an example, SCPA sees a reduced risk of electrification adoption due to affordability and federal policy limitations but a higher risk of [REDACTED]. Load variability was not included because it overlaps with electrification adoption and can be mitigated by following SCPA’s process of updating load forecasts and procurement plans each year which is also why it was assigned a mid-level severity despite its potentially large compliance impact.

#### *Strategies to Address Risk*

SCPA addresses RPS generation resource risk by maintaining a diversified portfolio. SCPA maintains diversity in counterparties, resource types, project sizes, and locations of RPS facilities. SCPA addresses risk of overall RPS compliance by its MMoP detailed in Section IX. SCPA can utilize short-term contracts for additional RPS quantities, if necessary. SCPA can solicit for new long-term RPS generation resources if an existing contract is terminated. Though SCPA may utilize short-term RPS contracts, SCPA will exceed all long-term contracting requirements and will demonstrate this in the annual RPS Compliance filing due August ~~2024~~2025. Over-procurement beyond SCPA’s targets can be mitigated either by selling excess energy to third parties or simply by retaining the RPS generation and exceeding its targets.

#### **~~VII.C System Reliability~~**

~~SCPA’s current and planned procurement is sufficient to meet the applicable RPS procurement requirements, California’s GHG reduction targets, and support system reliability by~~

~~considering both portfolio diversification and alignment with SCPA customers' hourly load curve. Specifically, the projects that are currently under development fit within and support SCPA's plans for meeting these goals.~~

~~The capacity value of resources is a key consideration in selecting resources to fulfill SCPA's long-term RPS obligations. As previously stated, SCPA currently plans to prioritize contracting with solar that is co-located with storage with Full Capacity Deliverability Status ("FCDS") capability. SCPA is also strategically focused on growing baseload renewables that will provide high capacity value to the grid through the new geothermal contracts reflected in this filing and SCPA's investment in the GeoZone initiative to grow local geothermal power. Meanwhile, SCPA's procurement of local resources to satisfy Board of Directors requirements in its LRP, including the 4 MW Redemeyer solar facility with co-located storage and 4.99 MW Twin Pine Circle solar facility, are expected to reduce the constraints on high-voltage transmission lines in SCPA's region that reach capacity during large-scale PSPS events.~~

#### **VII.DC. Lessons Learned – Risk Assessment**

~~In 2021, SCPA's Board of Directors adopted a detailed Energy Risk Management Policy which is actively monitored by SCPA's Risk Oversight Committee ("ROC"). The Energy Risk Management Policy exists to limit SCPA's exposure to unnecessary risks and provide clear guidance for SCPA's procurement-related decisions. The ROC serves in an oversight and advisory role which governs and ensures adherence to SCPA's Energy Risk Management Policy and advises SCPA's CEO on prudent risk management.~~

~~The ROC evaluates energy market transactions for consistency with SCPA's procurement strategy, its RPS, IRP, GHG, Resource Adequacy ("RA"), energy storage targets, and established risk tolerances. The ROC also validates that risk management controls and practices~~

appropriately monitor SCPA's risk exposure. The ROC reviews risk management reports provided by SCPA's Middle Office. These reports contain quantitative metrics by which the ROC can assess SCPA's performance.

- **Establishing independent departments to quantify risk:**

In 2020, SCPA created a new department solely dedicated to Planning and Analytics. This data-based team provides analysis and forecasts of every aspect of SCPA's load, resources, customer participation, GHG emissions, RPS generation output, and more. Since the department is independent of SCPA's Power Procurement department, it creates an independent assessment of SCPA's portfolio with respect to the likelihood of complying with future regulatory obligations. In 2024, SCPA hired a Senior Risk Manager to further monitor risks across the organization.

- **Relying on strong modeling tools:**

SCPA contracted with Ascend Analytics which utilizes PowerSimm, a stochastic modeling platform, to evaluate resource selection and overall portfolio scenarios under a host of risks and future scenarios. This platform is operated by SCPA's Planning and Analytics department and provides a detailed understanding of specific sensitivities to many different kinds of risk, including risks associated with deliverability—an issue of key concern with respect to summer capacity far into the future. These range from price changes at specific p-nodes, to variations in generation to modifications, to Effective Load Carrying Capability (“ELCC”) methodology and changes in demand. Specifically, the tool utilizes market intelligence to forecast hourly and sub-hourly energy prices, congestion, volatility, ancillary services, PPA prices, and provides scenarios for variables contributing to assumptions such as low/high natural gas prices, EV adoption rates, and storage adoption rates. Resource and load modeling factors

~~consider weather variability, dispatch optimization, and SCPA defined constraints such as RPS targets, GHG emissions, costs, reliability, and system power reliance. PowerSimm can provide reports on net position by year, gross margin at risk, and potential future exposure using stochastic modeling.~~

~~● **Financial Resilience When Risk Mitigation is Insufficient:**~~

~~SCPA has been preparing for another potential energy crisis since its inception. This is why SCPA maintains minimum reserves of 180 days cash reserves on hand and carries no debt. This conservative fiscal management is perhaps one of SCPA's most important risk management tools for achieving California's long-term RPS objectives because it facilitates contracting for new resources and allows SCPA to sustain its progress through adverse economic conditions.~~ SCPA established the current structure of assessing the impact of independent risks to its RPS portfolio and creating a MMoP scenario including probabilistic combinations of risks in its 2022 RPS Procurement Plan. SCPA decided to take this approach as opposed to the practice followed by many other LSEs of applying a standardized "point value" risk scoring based on technology, developer experience, site control, permitting status, and interconnection status because it allows the risk evaluation to better reflect the main risks SCPA's experienced staff can characterize in its portfolio. Since first implementing the risk assessment in 2022, SCPA has found it prudent to preserve certain risks (e.g. electrification adoption timing and load variability) while varying others (e.g. introducing the tax credit risk this year). SCPA has also recalibrated the assessment for probability of occurrence depending on the maturity of its portfolio and broader market conditions—the reduced probability used this year for electrification acceleration being an example. SCPA uses the output of the risk assessment to inform its staff on the level of short-term RPS procurement that may be required to address

compliance shortfalls.

SCPA has applied the lessons learned from assessing the risk of its RPS portfolio to its approach to contracting and portfolio management. Based on historical adverse outcomes, SCPA has applied a much more rigorous approach to assessing project risks including permitting, developer experience, and interconnection viability. SCPA has also setup rigorous progress reporting requirements for its in-development fleet, including detailed information on supply chain, permitting, interconnection upgrades, and construction status. This process gives SCPA lead time to plan and proactively react to changes in project scope and schedule.

SCPA recognizes the risk and extended timelines with procuring long-term resources, especially projects in development. As such, SCPA has sought to proactively procure sufficient long-term resources through 2035 (illustrated in Table 2). The timing between contracting and online date in SCPA’s current in-development portfolio ranges from two to as many as seven years (with an average of five). Accordingly, SCPA would likely view any long-term deficiency within five years as an immediate priority for procurement.

SCPA uses probabilistic analytical tools in managing its portfolio—for both RPS compliance and for maintaining financial stability. SCPA is currently deploying a tool with six future scenarios for California’s grid that can be used to assess candidate resources and optimize SCPA’s portfolio. In the past, SCPA has concentrated on stochastically modeling the near-term impacts to its portfolio from gas price and weather uncertainty—but SCPA’s new tool set will allow it to better plan a portfolio that navigates macro uncertainties such as different resource mixes, load growth, and policy. SCPA expects these tools, coupled with the mitigations applied to minimize and manage project risk, will deliver a robust portfolio that meets SCPA’s compliance requirements, supports climate progress, and maximizes ratepayer value.

## VIII. Renewable Net Short Calculations

SCPA is including Appendix B – Renewable Net Short Template, which is a quantitative assessment to support the qualitative descriptions provided in this Draft ~~2024-2025~~ RPS Procurement Plan. The quantitative information in Appendix B ~~represents~~ resources that are procured under existing contracts only. Note that the actual quantities for ~~2017-2023~~ are shown for the year in which the ~~REC~~ RPS credit was retired ~~for RPS~~. The entry for the Voluntary Margin of Over-Procurement (“VMoP”) is inclusive of *both* a MMoP and VMoP, and referred in Section IX as Total Margin of Over-Procurement (“TMoP”).

## IX. Minimum Margin of Procurement (MMoP)

### IX.A MMoP Level

In 2018, the SCPA Board of Directors committed to delivering 50% RPS by 2020, six years ahead of the compliance schedule. SCPA actually achieved this target in 2019, seven years ahead of the compliance schedule. SCPA will continue to target delivering at least 50% RPS through 2026. SCPA will then follow the trajectory of compliance requirements to 60% by 2030. Additionally, SCPA’s planned procurement incorporates the MMoP discussed in Section IX.A to mitigate the compliance risks discussed in Section VII.

SCPA’s ~~2022-2025~~ IRP portfolio ~~contains measurably~~ will likely contain more renewables than required by California or Board of Directors-imposed requirements; ~~reaching up to 89% of sales by 2030~~. This result is due to the comparative cost, reliability, and hourly carbon emissions impact in comparing different renewable and clean energy resources. Although the ~~2022-2025~~ IRP ~~may~~ indicates SCPA’s optimum portfolio ~~may~~ will include higher levels of RPS, SCPA is defining its TMoP to only include the following:

1. Historical or forecasted RPS generation under contract in excess of

compliance requirements;

2. Planned RPS procurement to reach SCPA's Board of Directors-imposed 50% RPS target through 2026; and
3. If needed, additional planned RPS procurement to reach the MMoP calculated in Section XI.A.1 above the RPS compliance obligation.

The above definition of TMoP avoids SCPA overcommitting to RPS generation that is not contracted or motivated by a compliance or self-imposed requirement. As SCPA contracts additional supply to satisfy its IRP, or if the SCPA Board of Directors adopts a revised RPS-specific target, TMoP will be revised in future RPS procurement plans.

~~Section XV~~[IV.C.1](#) discusses the potential RPS development beyond the representation in the TMoP in SCPA's IRP. Section IX.[A.2B](#) provides a breakdown of the TMoP between MMoP and VMoP.

#### **IX.A.1. MMoP Methodology and Inputs**

SCPA has Total RPS Eligible Procurement (*i.e.*, procurement under contract) in excess of the Gross RPS Procurement Quantity Requirement through 2029 as shown in Appendix B. Additionally, SCPA expects to satisfy its long-term procurement obligation through 2034, as demonstrated in Table [2+](#).

SCPA routinely tracks the variability in forecasted versus actual load and generation, and can utilize short-term contracts for additional RPS quantities, if necessary. Though SCPA may utilize some short-term RPS contracts, SCPA will exceed all long-term contracting requirements which will be reported in SCPA's annual RPS Compliance Report filing.

To develop a discrete MMoP, SCPA used the deterministic scenario discussed in Section VII and captured in the "MMoP Scenario Probability" column in Table [59](#). This scenario is

represented quantitatively as Appendix E. In the quantitative analysis, load is increased for a 105% chance of a 3-year electrification acceleration. This risk has been reduced from last year’s 25% due to SCPA’s on-the-ground observations of EV adoption and home electrification. RECs RPS from facilities in development are decreased that are pre-construction are reduced to reflect a 3350% chance of failure for Fish Lake, Twin Pine, and Redemeyer due to their increased permitting risk, that they do not proceed due to tax credit eligibility. [REDACTED]

[REDACTED]. Finally, the MMoP scenario include a 10% probability that all in-development projects are delayed at [REDACTED], and a 20% risk that [REDACTED] project is not completed due to its sale to an inexperienced developer. M

The decrease in the net RPS position relative to the compliance is used to calculate a MMoP. Table 106 shows the results of this analysis, along with a conversion of the MMoP into the percentage of retail sales forecasted in Appendix B.

Table 106: SCPA MMoP Calculation

Measure	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MMoP Scenario Compliance Net RPS Position (MWh)	-65,944-38,748	= 1,475,89,974	-206,191-97,729	-116,655-54,032	-205,989-131,853	-283,481-222,649	-322,733-264,560	-375,381-300,489	-437,191-342,946	-534,460-413,836	-636,398
Appendix B Compliance Net RPS Position (MWh)	-52,920-7,183	62,656+62,797	-130,174-16,534	= 41,545,38,502	-104,036-31,542	-190,306-120,490	-228,689-161,546	-278,847-196,766	-340,734-239,368	-437,199-310,745	-540,610
MMoP (MWh)	13,02431,565	64,13172,823	76,01781,195	75,11092,533	101,953100,311	93,175102,159	94,044103,014	96,534103,722	96,456103,578	97,260103,091	95,787
MMoP (% of Sales)	0.6%+1.4%	2.9%3.3%	3.4%3.7%	3.4%4.1%	4.5%4.4%	4.0%4.4%	3.9%4.4%	3.9%4.3%	3.8%4.2%	3.7%4.1%	3.5%

The resulting MMoP from the deterministic scenario aligns with SCPA’s view of overall market conditions. RPS scheduled to come online before 20296 is from projects with greater

maturity, and less risk of failure due to ~~transmission and permitting requirements~~ [tax credit eligibility or](#) [REDACTED]. Long-term, there is a residual risk with delivering new RPS contracts that requires around 4% of over-procurement.

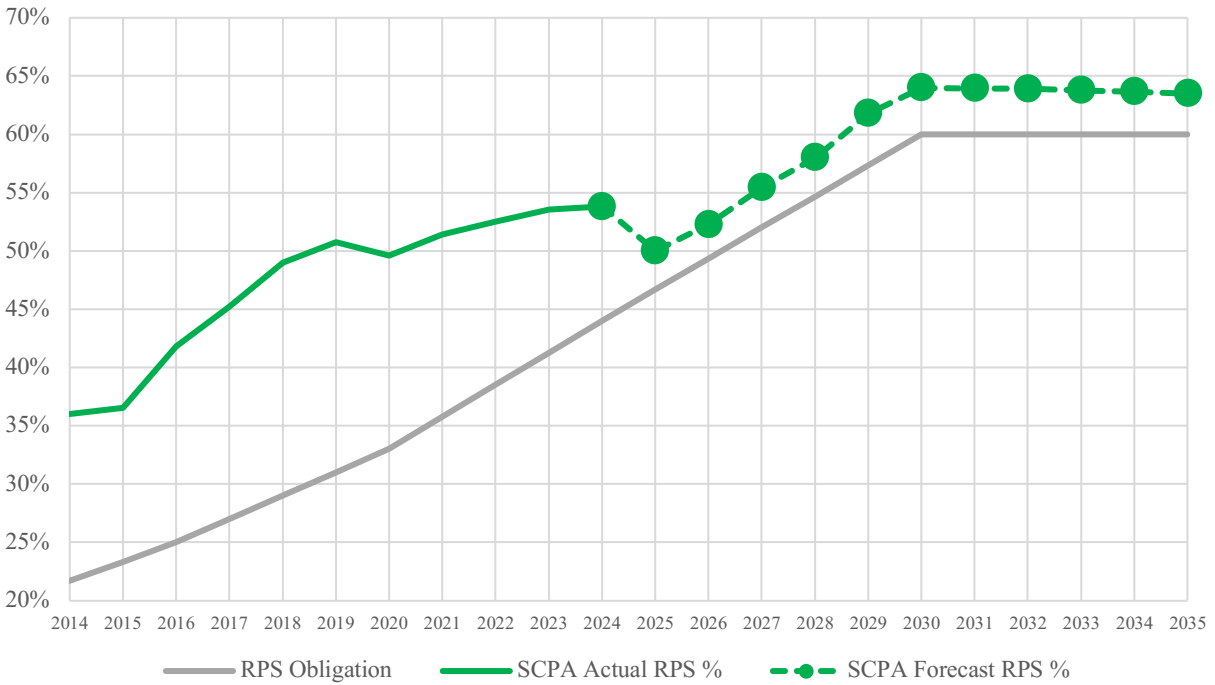
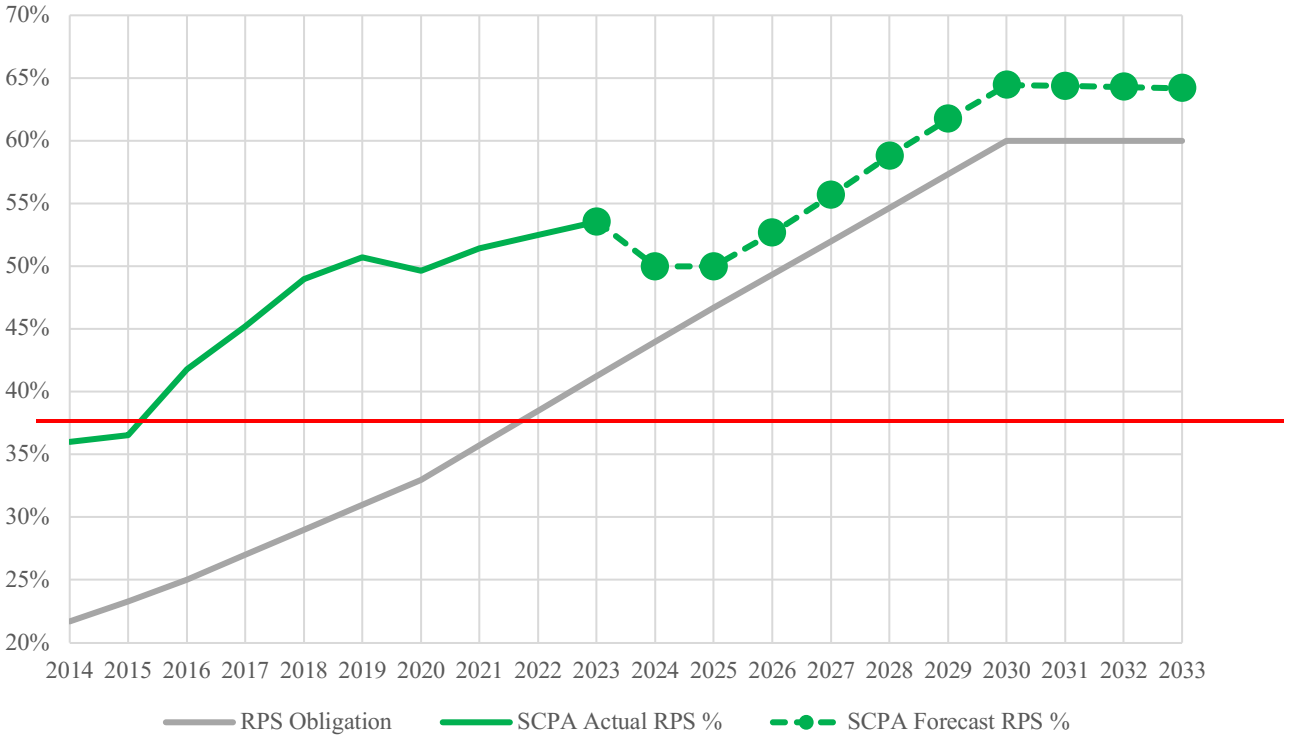
The results from Table [106](#) are used to allocate the TMoP into MMoP and VMoP. As discussed in Section IX.A, SCPA’s TMoP is comprised of three components: excess contracted RPS, RPS for internal benchmarks, and, if needed, additional RPS to cover MMoP requirements. Table [117](#) shows the allocation between MMoP and VMoP, where excess is first used to satisfy MMoP, and remaining excess is represented as VMoP.

Table [711](#): SCPA Margin of Over-Procurement Allocation

Measure	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
TMoP (MWh)	<del>71,851</del> <del>72,732</del>	<del>64,131</del> <del>72,823</del>	<del>76,017</del> <del>81,195</del>	<del>75,110</del> <del>92,533</del>	<del>101,953</del> <del>100,311</del>	<del>93,175</del> <del>102,159</del>	<del>94,044</del> <del>103,014</del>	<del>96,534</del> <del>103,722</del>	<del>96,456</del> <del>103,578</del>	<del>97,260</del> <del>103,091</del>	<del>95,787</del>
MMoP (MWh)	<del>13,024</del> <del>31,565</del>	<del>64,131</del> <del>72,823</del>	<del>76,017</del> <del>81,195</del>	<del>75,110</del> <del>92,533</del>	<del>101,953</del> <del>100,311</del>	<del>93,175</del> <del>102,159</del>	<del>94,044</del> <del>103,014</del>	<del>96,534</del> <del>103,722</del>	<del>96,456</del> <del>103,578</del>	<del>97,260</del> <del>103,091</del>	<del>95,787</del>
VMoP (MWh)	<del>41,166</del> <del>58,827</del>	0	0	0	0	0	0	0	0	0	0
VMoP (% of Sales)	<del>2.7</del> <del>1.9</del> %	0%	0%	0%	0%	0%	0%	0%	0%	0%	

SCPA has consistently exceeded California RPS minimum target since it began serving customers in 2014. The historical RPS performance from 2014 to date and the future planned RPS performance incorporating the TMoP are compared to California’s RPS requirements from 2014 through ~~2032~~ [2035](#) as shown in Figure [3-4](#) below.

Figure [34](#): SCPA RPS % Compared to Obligation



**IX.AB.2 MMoP Scenarios**

SCPA utilizes the TMoP to calculate its renewable net short (Annual Net RPS Position after Bank Optimization) as shown in Appendix B. A risk assessment of SCPA’s renewable net

short position is provided in Section VII. The ~~RECs~~ RPS reported in the Quantitative Response in Appendix B are not adjusted for risk. Rather, SCPA takes the approach of mitigating risk through the use of MMoP.

The deterministic scenario described in section IX.A.1 to calibrate MMoP is included as a separate quantitative assessment as Appendix E. As discussed in section IX.A, the retail sales in this assessment are increased to reflect a ~~15~~ 10% chance of a 3-year acceleration in electrification. [REDACTED]

[REDACTED] a 33% chance that pre-construction projects do not proceed due to tax credit eligibility, and a 10% probability that all development projects are delayed for a period of one year. ~~Additionally, the risk-adjusted RECs from facilities in development are decreased to reflect a 50% chance of failure for Fish Lake, Twin Pine, and Redemeyer due to their increased permitting risk,~~ [REDACTED] [REDACTED] and a 20% risk that [REDACTED] project is not completed due to its sale to an inexperienced developer. The forecast failure rates in Appendix E

represents the ratio of the resulting RPS volumes to the un-risked volumes represented in Appendix B. The same TMoP as Appendix B is entered as VMoP, to illustrate the impact of over-procurement on mitigating compliance risk in this scenario. The results indicate that ~~Compliance Period 4 (2021-2024) is well above its obligation (52.9% position vs. 39.8% obligation).~~ Compliance Period 5 (2025-2027) is ~~also above its~~ slightly below its obligation (~~52.148.4%~~ 52.148.4% position vs. ~~49.34%~~ 49.34% obligation). ~~Unlike the un-risked scenario shown in Appendix B,~~ Compliance Period 6 (2028-2030) is also projected to be out of compliance in the MMoP scenario (~~55.72.5%~~ 55.72.5% position vs. 57.4% obligation). The MMoP scenario is well above its long-term requirement in this period, so SCPA can mitigate this compliance risk with short-term

procurement. Given the near-term scarcity of ~~REC~~RPSs and ~~extreme~~ elevated market prices, SCPA will wait until closer to the compliance period before determining if additional procurement is necessary.

## **X. Bid Solicitation Protocol**

### ~~X.A. Solicitation Protocols for Renewables Sales~~

~~SCPA does not have immediate plans to issue a solicitation for sales of renewable energy products.~~

### **X.~~A~~B. Bid Selection Protocols**

Consistent with Pub. Util. Code § 399.13(a)(6)(C), SCPA conducts, responds to solicitations, and utilizes bilateral contracting for procuring energy resources that includes specific needs for eligible renewable energy resources, generating capacity, locational preferences, generation profile, and required online dates to assist in determining what resources fit best within a portfolio. Since CCA program Governing Boards are comprised of local elected officials, these solicitation and procurement decisions are overseen by elected representatives of the ratepayers. These solicitation and procurement decisions must comply with California's RPS requirements as well as locally established policies.

SCPA has not issued any new formal RPS-related solicitations since its ~~Final 2023~~2024 RPS Procurement ~~Plan, but~~Plan but rather relied on bilateral negotiations or brokers for filling its RPS needs. Therefore, there are no solicitation materials provided with this filing. ~~SCPA has also not participated in responding to any RPS-related solicitations since its Final 2023 RPS Procurement Plan.~~SCPA participated in responding to one RPS solicitation since last year's RPS Procurement Plan: PG&E's 2025 Spring Bundled RPS Energy Sale. SCPA submitted a bid on May 21, 2025 but was notified that the bid was not selected the week thereafter.

The requirement of Pub. Util. Code § 399.13(a)(8) to give preference to renewable projects located in certain communities is only expressly applicable to “electrical corporations” and is not mandatory for CCAs.<sup>5</sup> However, SCPA fully recognizes the need to help mitigate the impacts of air pollution in regions of California where communities have been disproportionately impacted by the existing generating fleet. This need has motivated two initiatives in particular: SCPA’s GeoZone project discussed in Section IV.B to develop local renewable resources that replace the capabilities of natural gas and SCPA’s GridSavvy demand response program. SCPA’s GridSavvy program dispatches EV chargers, smart thermostats, and behavioral demand response to alleviate critical grid conditions currently served by less efficient and more heavily polluting peaker plants. SCPA has also incorporated benefits to underserved communities as a criteria for prioritization in its recently adopted Project Selection Criteria C.6.

-SCPA’s bilateral negotiations and decision on whether to proceed with contracting a candidate resource are aligned with this RPS Procurement Plan. SCPA actively monitors its compliance position and portfolio risks and seeks to proactively contract resources to meet its obligations. The criteria used to select the technology and other characteristics of candidate resources is described in detail in Section IV.

SCPA performs joint procurement through its participation in CC Power. Although CC Power recently released a solicitation for strategic partnerships to develop geothermal resources, it has not issued any RPS-specific solicitations since the 2024 RPS Procurement Plan.

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<sup>5</sup> Cal. Pub. Util. Code § 399.13(a)(8)(1) (“In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.”).

## [X.C. Solicitation Protocols for Renewable Sales](#)

[SCPA does not have immediate plans to issue a solicitation for sales of renewable energy products.](#)

### **X.C. LCBF Criteria**

The Least-Cost Best Fit (“LCBF”) methodologies approved by the Commission pursuant to D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 are expressly only directly applicable to investor-owned utilities and the Commission does not have jurisdiction over the solicitation protocols of CCAs. However, SCPA places a high degree of importance on resource costs because SCPA is a customer-owned public agency governed by locally elected officials and does not have guaranteed cost recovery. Additionally, consistent with Pub. Util. Code § 399.13(a)(9),<sup>6</sup> SCPA also considers best-fit attributes that support a balanced mix of resources to help support reliability of the electrical grid.

SCPA’s current practice evaluates candidate resources using the Ascend PowerSimm platform described in Section IV.~~A.1C~~, which is used to assess the net value of a contract considering the impacts of tenor, locational margin price, (~~“LMP”~~), forward energy prices, economic curtailment, capacity contribution (including declining net qualifying capacity where necessary), and the value of environmental attributes (~~RECs~~~~RPS~~ or carbon-free). The ratio of net project value to cost is used to compare potential contracts and procuring energy and attributes separately through the market or short-term contracts.

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<sup>6</sup> Cal. Pub. Util. Code § 399.13(a)(9) (“In soliciting and procuring eligible renewable energy resources, each retail seller shall consider the best-fit attributes of resource types that ensure a balanced resource mix to maintain the reliability of the electrical grid.”).

The types and relative contribution of technologies SCPA considers procuring are driven by ~~the 2022~~[its](#) IRP, which evaluates the right resource mix to cost-effectively maximize the carbon reduction and reliability contribution of SCPA’s portfolio. The IRP also validates the reliability of SCPA’s portfolio by comparing its reliance on short-term resource adequacy (assumed to be from gas units) relative to its peak share of statewide retained gas capacity. Despite its ambitious climate targets in the 2022 IRP, SCPA consistently uses less than its peak share of capacity thanks to its concentration of geothermal, wind, and storage capacity. [SCPA also sees its leadership in the GeoZone as an opportunity to support the development of resources that benefit system reliability.](#)

Assessing project feasibility is another important component of SCPA’s contract evaluation ~~project~~[process](#). In comparing candidate projects, SCPA reviews the status of project interconnection, developer experience, permitting risks, and completes a counterparty risk assessment.

~~The requirement of Pub. Util. Code § 399.13(a)(8) to give preference to renewable projects located in certain communities is only expressly applicable to “electrical corporations” and is not mandatory for CCAs.<sup>7</sup> However, SCPA fully recognizes the need to help mitigate the impacts of air pollution in regions of California where communities have been disproportionately impacted by the existing generating fleet. This need has motivated two initiatives in particular: SCPA’s GeoZone project discussed in Section IV.B to develop local renewable resources that replace the capabilities of natural gas and SCPA’s GridSavvy~~

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<sup>7</sup>Cal. Pub. Util. Code § 399.13(a)(8)(1) (“In soliciting and procuring eligible renewable energy resources for California-based projects, each electrical corporation shall give preference to renewable energy projects that provide environmental and economic benefits to communities afflicted with poverty or high unemployment, or that suffer from high emission levels of toxic air contaminants, criteria air pollutants, and greenhouse gases.”).

~~demand response program. SCPA's GridSavvy program dispatches EV chargers, smart thermostats, and behavioral demand response to alleviate critical grid conditions currently served by less efficient and more heavily polluting peaker plants.~~ SCPA's Board of Directors adopted Project Selection Criteria C.6 in April 2025 that will guide SCPA's prioritization of resources moving forward. The policy prioritizes SCPA's need to meet compliance requirements and deliver affordable, clean, and reliable service to its customers. Projects are then prioritized for their workforce benefits, location (favoring more local projects), environmental impacts, and benefits to underserved communities.

## **XI. Safety Considerations**

SCPA holds safety as a top priority. Since SCPA does not own, operate, or control generation facilities, SCPA's procurement of renewable resources does not present any direct safety risks. SCPA seeks to contract with experienced developers with rigorous safety protocols to protect its workforce. ~~This Section describes how SCPA has taken actions to reduce the safety risks posed by its renewable resource portfolio and how SCPA supports California's environmental, safety, and energy policy goals.~~

### (i) Decommissioning Facilities

SCPA contracts for its PPAs in a manner that all end-of-life disposal obligations are the responsibility of its counterparties. Therefore, SCPA does not make specific plans for deconstruction or environmental remediation, which are generally criteria that lead agencies establish for developers at the time of CEQA determination and criteria that are established by California and local authorities to obtain necessary permits. SCPA requires developers to adhere to all environmental requirements of their permits to construct and operate facilities under PPAs with SCPA.

### (ii) Climate Change Adaptation

SCPA considers numerous risks when determining generating resources to procure. In addition to the ordinary energy market risks such as transmission congestion, curtailment, and matching SCPA's hourly load profile, SCPA also considers risks relating to geographic overconcentration to help mitigate threats related to earthquakes, storms, and wildfires. SCPA is forecasting an increase in storm and wildfire intensity as a result of the climate crisis. Unfortunately, flood risk has become more difficult to evaluate with the climate crisis since FEMA flood risk maps are no longer tracking to historic data and are no longer a reasonable predictor of flood risk. Avoiding sites in floodplains and low-lying coastal areas is relatively straightforward, but evaluating risk of flood damage from unusually heavy rain events is much more challenging. As a result, SCPA has placed the burden of ensuring sufficient generation output onto its suppliers and organized its portfolio to be geographically and technologically diverse.

### ~~(iii) Impacts During PSPS Events~~

~~PSPS events can have a moderate, but important, impact on SCPA's portfolio of renewable resources. The following resources can be shutoff or curtailed during local PG&E PSPS events:~~

- ~~• A portion of SCPA's 50 MW of geothermal from Geysers. Note that it is unlikely that all Geysers transmission would be shut down in a PSPS, so it is unlikely that SCPA would lose more than a fraction of its contracted supply.~~
- ~~• Any of the 6 MW of feed-in tariff solar power facilities located within SCPA's service territory.~~
- ~~• Any of the local renewable generation resources and storage constructed as part of SCPA's local resource solicitation.~~

- ~~• An unknown amount of other renewable resources located outside SCPA's territory with PSPS caused transmission Force Majeure. This is assumed to be both small and very rare and is therefore ignored for this purpose.~~

~~SCPA has analyzed each of the past PSPS events to determine the renewable energy impacts and has determined that the volume of customers shutdown by PG&E more than offsets the loss in renewable energy output of SCPA's local facilities. In 2019, SCPA's Lavio 1 MW solar feed-in tariff project experienced three separate PSPS shutdowns for a total of 8.5 days of solar production. The loss of renewable supply was far less than the loss of customer load during these events. The Geysers facility was partially shutdown due to a Force Majeure event separate from PSPS. As a result, SCPA has determined that the impact of PSPS events is unlikely to have a negative impact on SCPA's percentage of renewable energy delivered to customers.~~

## **XII. Consideration of Price Adjustment Mechanisms**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



### **~~XIII. Curtailment Frequency, Cost, and Forecasting~~**

~~This Section responds to the questions presented in Section 6.13 of the ACR<sup>8</sup> and describe SCPA's strategies and experience so far in managing SCPA's exposure to negative pricing events, overgeneration, and economic curtailment for SCPA's region and portfolio of renewable resources.~~

#### ~~(i) Factors Having the Most Impact on the Projected Increases in Incidences of Overgeneration and Negative Market Price Hours~~

~~SCPA continues to track the many changes occurring in the California energy market, including considerations related to energy curtailment with increased solar buildout, forecasts of storage value by duration and location over time, and the potential for different kinds of customer-owned resources to contribute to solutions. The following represents SCPA's understanding of this topic, which may impact future procurement processes.~~

~~Due in large part to the rapid increase in the amount of wind and solar generating facilities that have been built throughout the western United States, the CAISO balancing authority area has experienced an increasing frequency and magnitude of curtailment and negative pricing events. As of 2023, California has 19,887 MW of solar and 6,284 MW of wind capacity.<sup>9</sup>~~

~~This increased capacity results in discrete periods where the majority of load in the CAISO is served by solar and wind resources. The monthly maximum load served by renewables in the CAISO has averaged 86.1% over the past 3 years (May 2021 to April 2024), and in April~~

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<sup>8</sup>-ACR at 34.

<sup>9</sup>-California Energy Commission, Renewable Electric Generation Capacity and Energy, June 2024, available at <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/electric-generation-capacity-and-energy>.

~~2022, May 2022, April 2023, June 2023, July 2023, and April 2024 the monthly maximum load exceeded 100.<sup>10</sup> When combined with the current need to operate natural gas peaking power plants at their minimum setting to ensure quick ramping capability, mandatory seasonal hydropower flows, and Title 24 building codes requiring solar on most new residential rooftops, oversupply in solar hours is now a more common issue, as was widely expected.~~

~~To address the resulting instances of over-supply, the amount of curtailment of solar and wind in the CAISO has significantly increased. In 2015, curtailments totaled 187 GWh. In 2023, curtailments reached 2,659 GWh. Curtailments have already reached 2,581 GWh in the first five months of 2024.<sup>11</sup>~~

~~Curtailment is typically highest during the months of March, April, and May when hydroelectric generation is historically at its highest, solar output is typically high and air conditioning loads are still low. California experienced both above average snowpack and extreme drought in the past few years, so the extreme variability in total and seasonal California hydropower output is considered a large factor in SCPA's portfolio management. With the buildout of battery storage, SCPA anticipates solar curtailments to stabilize and potentially decrease as batteries are able to charge during the hours of the day with the lowest prices, typically during curtailment hours. In general, SCPA plans for greater variability in hydropower output that will trend lower average output over time, but with occasional higher output from wetter and colder years.~~

(ii) Written Description of Quantitative Analysis of Forecast of the Number of Hours Per Year of Negative Market Pricing for the Next 10 Years

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<sup>10</sup> CAISO, Monthly Renewables Performance Report, April 2024, available at <https://www.caiso.com/Documents/MonthlyRenewablesPerformanceReport-Apr2024.html>.

<sup>11</sup> CAISO, Managing Oversupply, Wind and Solar Curtailment Totals, obtained June 16, 2024, available at <http://www.caiso.com/informed/Pages/ManagingOversupply.aspx>.

SCPA currently schedules its Variable Energy Resources (“VERs”) into the CAISO market and is partially exposed to negative pricing at each resource’s pricing node. Negative pricing occurs in the Day Ahead market (“DA”), Fifteen Minute Market (“FMM”), and Real Time (“RT”) market typically as a result of local or systemwide negative congestion. Although SCPA can be exposed to negative pricing from imbalance between markets, the principal risk is in the market a resource is scheduled.

The average number of net negative pricing hours experienced per resource by all SCPA VERs from January 2018 through June 16, 2024 are shown in Table 8, broken down by the market schedule. The number of hours shown in Table 8 are the average across all SCPA solar and wind VERs resources. After a decrease in 2021 after the installation of battery storage adjacent SCPA’s Mustang solar facility, SCPA is seeing a steady increase in negative pricing hours in the day-ahead and fifteen-minute market.

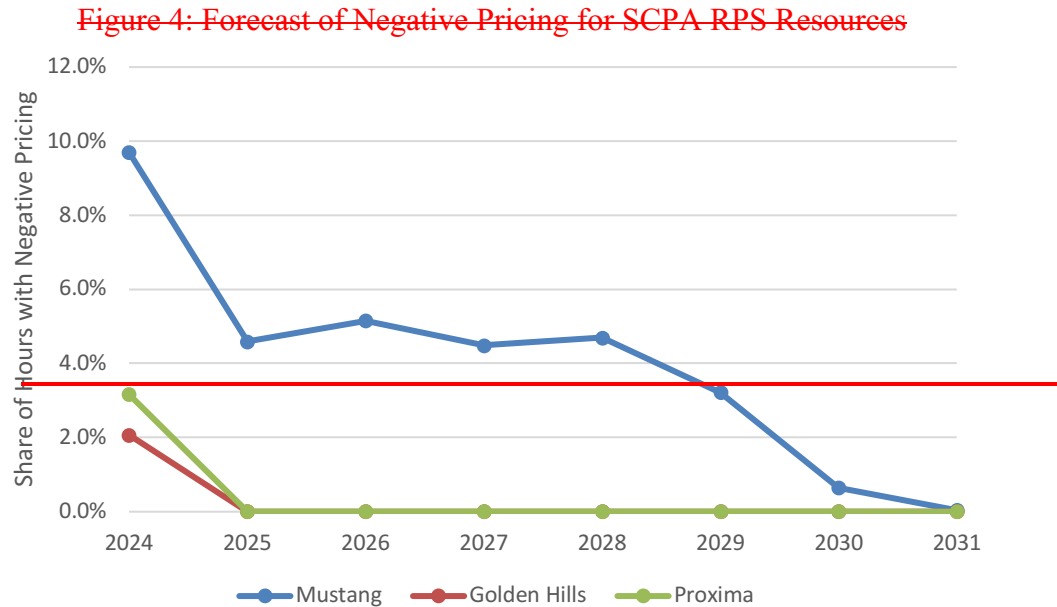
**Table 8: Average Number of Negative Pricing Hours for SCPA VERs**

<b>Market Schedule</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>1/1/2024-6/16/2024</b>
DA	102	171	287	104	319	598	882
FMM	144	186	163	131	131	197	281

Negative prices and associated costs occurred mainly between March and May, during the Pacific Northwest freshet, when higher than normal water levels impact hydroelectric supply and consequently power prices across the Western Electricity Coordinating Council.

SCPA forecasts hourly pricing for each of its RPS resources using Ascend’s PowerSimm platform, which incorporates historical trends and a forecast of local transmission build-out and congestion. Figure 4 shows the latest forecast for negative pricing for three of SCPA’s key RPS resources. SCPA expects long-term battery storage and the high demand for RPS energy to reduce curtailment for its resource fleet, which is all located in NP15 and less exposed to

oversaturation of solar resources. Importantly, this forecast is one deterministic realization and large uncertainties such as the impact of the Extended Day-ahead Market, reinstatement of production tax credits, and increased deployment of battery storage systems are difficult to characterize. Nonetheless, SCPA does not foresee negative pricing to be a major risk to its portfolio.



(iii) Experience, to Date, With Managing Exposure to Negative Market Prices and/or Lessons Learned from Other Retail Sellers in California

SCPA takes action to limit the impacts of curtailment on its ratepayers. SCPA pursues and implements contract terms that recognize and limit the potential financial impacts of negative pricing, and give SCPA greater flexibility to direct economic curtailment. SCPA also evaluates new procurement opportunities by evaluating the proposed project location and nearby historical negative pricing and congestion. SCPA has contracted and is actively exploring battery storage systems at existing resources as well as new hybrid projects and has a particular focus on modeling the locational value of storage resources.

(iv) Direct Costs Incurred, to Date, for Incidences of Overgeneration and Associated Negative Market Prices

While not a result of CAISO incidences of overgeneration as defined by CAISO, SCPA incurred costs of approximately \$263,000 over a total of 28,310 MWh at negative pricing hours for all VERs in 2023. This represents a negligible amount of total energy costs for SCPA ratepayers over the same time period, even when considered specifically for intermittent resources. Negative pricing occurred for resources scheduled in the DA market and FMM as shown in Table 9.

Table 9: Costs from Negative Pricing in 2023

Market Schedule	Volume Weighted Average Price (VWAP) during negative pricing hours only (\$/MWh)	Volume during negative pricing hours only (MWh)
DA	-9.29	25,171
FMM	-9.26	3,139

(v) Overall Strategy for Managing the Overall Cost Impact of Increasing Incidences of Overgeneration and Negative Market Prices

While curtailment is a viable renewable integration strategy that is generally more cost-effective than other options, there are potential negative consequences from excessive curtailment. Curtailment of solar and wind represents a lost opportunity to generate zero GHG emitting electricity, and excessive curtailment could impact the ability of California to meet its environmental and energy policy goals. Additionally, these over supply situations expose ratepayers to increased costs—LSEs must either economically curtail the generating resource by often paying for the electricity that was not generated, or generate power and be exposed to negative prices. Because these conditions are largely driven by California policy, it is appropriate to consider macro-level mitigation measures through CAISO initiatives, Commission rulemakings, and possibly even legislation.

There are a number of measures and policies that have already been implemented or are currently being pursued that will have significant impacts on how substantial curtailment will be in the future. These include the expansion of the EIM, improvements to the CAISO market

~~design and structure, enhanced forecasting capabilities, improved time-of-use rates, improved EV charging functionalities, and smart deployment of DERs. Recently, SCPA has experimented with promoted workplace EV charging. SCPA has learned this may have significant potential to address curtailment while simultaneously providing access to EVs for renters and drivers who have only street parking options. The Commission’s IRP proceeding will be an appropriate forum to measure the impact of these policies and the effect that they will have on future curtailment. These new measures will need to be modeled and incorporated into forecasts of future curtailment.~~

~~(vi). Contract Terms Included in RPS Contracts Intended to Reduce the Likelihood of Curtailment or Protect Against Negative Prices~~

~~SCPA includes contract terms in its PPAs that allow rights to dispatch the resource, where applicable, which could lead to an economic curtailment of the resource in the event of significant negative pricing. However, SCPA is still obligated to pay for deemed energy. In addition, SCPA includes contract language that requires the seller to use “commercially reasonable efforts to minimize the extent, amount and duration of any curtailments.” Finally, SCPA includes language in each of its PPAs for resources paired with storage that allows charging the storage resource from the grid.~~

**XIII**~~V~~. Cost Quantification

SCPA has provided the Cost Quantification Table as Appendix D. Pursuant to the direction in the ACR, SCPA has completed those cells in the Cost Quantification Table that correspond to Table ~~23~~, Rows 1-5 in the ACR.

~~**XV. Conformance with the IRP Proceeding**~~

~~SCPA is including resources in the Draft 2024 RPS Procurement Plan that are currently contracted. SCPA’s 2022 IRP portfolio contained additional RPS that is not yet contracted, but~~

are not included in the Draft 2024 RPS Procurement Plan to avoid over-representing SCPA’s procurement commitment. As required by the ACR,<sup>12</sup> Table 10, below, describes how SCPA’s Draft 2024 RPS Procurement Plan conforms with the determinations made in the IRP Proceedings (R.16-02-007 and R.20-05-003). SCPA submitted a single conforming portfolio for the 25 MMT GHG target in its 2022 IRP.

Table 10: Conformity with the IRP

<b><del>IRP Section Subsection</del></b>	<b><del>RPS Alignment in IRPs</del></b>	
<p><b><del>III. Study Results</del></b>  <b><del>A. Conforming and Alternative Portfolios</del></b></p>	<p><del>1. Existing RPS resources that the retail seller owns or contracts.</del></p> <p><del>2. Existing RPS resources that the retail seller plans to contract with in the future.</del></p> <p><del>3. New RPS resources that the retail seller plans to invest in.</del></p> <p><del>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035.</del></p>	<p><del>1. Existing RPS resources that the retail seller owns or contracts.</del></p> <p>SCPA’s 2022 IRP preferred portfolio and this 2024 RPS Procurement Plan share the following existing RPS resources under contract:</p> <ul style="list-style-type: none"> <li><del>— 50 MW Geysers geothermal (expiring in 2026)</del></li> <li><del>— 40 MW Mustang Solar</del></li> <li><del>— 30 MW Mustang Solar 3</del></li> <li><del>— 46 MW Golden Hills North Wind</del></li> <li><del>— 6 MW local solar feed-in tariff projects</del></li> <li><del>— 150 GWh of existing biomass in 2023 and 2024</del></li> </ul> <p><del>2. Existing RPS resources that the retail seller plans to contract with in the future</del></p> <p>The 2023 Final RPS Procurement Plan does not explicitly contain any resources that are not already under contract to avoid overstating SCPA’s RPS position. However, SCPA continues to plan on contracting with existing RPS resources to satisfy its TMoP.</p> <p>The 2022 IRP contains two planned contracts for RPS from existing resources: a placeholder for short-term RPS contracts through 2029</p>

<sup>12</sup> ACR at 35-38.

	<p>(volume varies by year) and a 10-year 40 MW extension of SCPA’s contract from existing geothermal resources that expires in 2026. In this 2024 RPS Procurement Plan, SCPA represents a contract signed for 9 MW of Geysers output in 2027, ramping up to 20 MW from 2028 through 2036 in alignment with the extension represented in the IRP. The 2024 RPS Procurement Plan also includes a 10-year contract starting in August 2023 for offtake from a 14.5 MW RPS-eligible hydropower facility and short-term RPS contracts from existing resources that align with the IRP placeholders.</p> <p><i>3. New RPS resources that the retail seller plans to invest in</i></p> <p>The 2022 IRP and this Draft 2024 RPS Procurement Plan share the following new RPS resources under contract:</p> <ul style="list-style-type: none"> <li>— 70 MW Proxima solar project (paired with storage) — now online</li> <li>— 15.5 MW of geothermal from Nevada and California (two separate contracts)</li> <li>— 100 MW of out-of-state wind (the IRP designated capacity from Idaho; the RPS Procurement Plan includes a 100 MW contract from New Mexico)</li> </ul> <p>The 2022 IRP contained the 11.6 MW Tubbs Island project that is not included in this Draft 2024 RPS Procurement Plan because the contract was terminated after the 2022 IRP filing. This Draft 2024 RPS Procurement Plan includes the following specific new RPS resources that more than backfill Tubbs Island and were not included in the 2022 IRP and because they have been contracted following the IRP filing:</p> <ul style="list-style-type: none"> <li>— 4 MW Redemeyer solar project (paired with storage)</li> <li>— 5 MW Twin Pine Circle solar project</li> <li>— 60 MW Azalea solar project (paired with storage)</li> </ul>
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		<p>The 2022 IRP also contained non-specific plans for new resources starting in 2027 including additional solar and storage, geothermal, and in-state wind. These resources are not included in the Draft 2024 RPS Procurement Plan because they are not under contract and SCPA wants to avoid overstating its RPS compliance position.</p> <p><i>4. New and existing resources that will be used to meet Mid-Term Reliability obligations adopted in D.21-06-035 and the supplemental procurement ordered in D.23-02-040.</i></p> <p>The 2024 RPS Procurement Plan includes 15.5 MW of new geothermal resources from Nevada and California, the Proxima project (20 MW is eligible for MTR), and the Azalea solar project that are expected to be used to satisfy MTR obligations and contribute to SCPA's RPS portfolio. All of these resources except Azalea were included in SCPA's 2022 IRP.</p> <p>Beyond the RPS contracts listed above, SCPA has executed contracts with battery storage resources that completely fulfill its Mid-Term and supplemental procurement obligations.</p>
<p><b>IV. Action Plan</b> <b>A. Proposed Activities</b></p>	<p><i>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</i></p> <p><i>2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.</i></p>	<p>1. Proposed RPS procurement activities as required by Commission decision or mandated procurement.</p> <p>The development of new RPS resources in the Draft 2024 RPS Procurement Plan is very consistent with the Action Plan in the 2022 IRP. The 2022 IRP Action Plan and this Draft 2024 RPS Procurement Plan include two geothermal contracts SCPA has executed for its share of 1 GW of new firm zero-emitting generation, and solar and storage resources executed to fulfill SCPA's share of the 2.5 GW of zero-emission generation paired with storage. In the 2022 IRP Action Plan, SCPA envisioned expanding the Tubbs Island project to complete fulfillment of this category, but following its termination, SCPA replaced Tubbs Island and a planned expansion with the much larger Azalea solar with paired storage project to completely fulfill its obligation.</p>

Although not mandated, the 2022 IRP Action Plan describes additional RPS procurement of new out-of-state wind, an extension of SCPA's contract from existing geothermal, new in-state wind, new paired solar and storage, and new geothermal to achieve internal and CPUC targets for emissions and reliability. The 100 MW of out-of-state wind and extension of offtake from existing geothermal are included in the Draft 2024 RPS Procurement Plan now that they are under contract. The other resources identified in the IRP Action Plan are not included in this Draft 2024 RPS Procurement plan because they are not yet contracted and SCPA does not wish to overstate its RPS compliance position.

2. Procurement plans, potential barriers, and resource viability for each new RPS resource identified.

Many of the same risks described in Section VII for SCPA's development resources will create barriers for new RPS resources. SCPA is hopeful that issues such as supply chain constraints and transmission backlogs abate as the global market stabilizes and the MTR procurement order is satisfied. However, additional procurement orders and the expected growth in load alongside rising compliance requirements will likely sustain a high level of demand for new RPS resources that will complicate procurement. Securing FCDS and MIC allocation is a concern for SCPA given the number of projects vying for the same designation.

SCPA is not forecasting specific resource types in its Draft 2024 RPS Procurement Plan beyond projects currently under contract. Details on the size and type of SCPA's preferred resources to satisfy RPS obligations and IRP emissions targets are described in the 2022 IRP filing.

In its IRP analysis, SCPA identified baseload renewables, out-of-state resources, and solar

		<p>paired with storage as likely preferred resources. SCPA is gaining direct experience with these resource types through projects in development with risks thoroughly described in Section VII.</p>
<p><b>IV. Action Plan</b> <b>B. Procurement Activities</b></p>	<p><i>1. The type of solicitation</i> <i>2. The timeline for each solicitation.</i> <i>3. Desired online dates.</i> <i>4. Other relevant procurement planning information, such as solicitation goals and objectives.</i></p>	<p>The 2022 IRP Action Plan forecasted the following near-term RPS procurement activities for SCPA to build its preferred portfolio (status provided for each):</p> <ul style="list-style-type: none"> <li>— Finish negotiating up to 100 MW of out-of-state wind in 2023 for an online date of 2026 (completed in November 2023)</li> <li>— Finish negotiating local resource contracts for solar and storage for an online date of 2025 (completed with Twin Pine Circle and Redemeyer contracts)</li> <li>— Start soliciting an offer for a 10-year extension SCPA’s existing geothermal contract by 2024 for an online date of 2027 (completed in October 2023)</li> <li>— Start soliciting an offer for 40 MW of new paired solar + storage by 2024 for an online date of 2027 (completed early with execution of Azalea contract)</li> <li>— Start soliciting an offer for up to 150 MW of in-state wind by 2025 for an online date of 2028-2030 [REDACTED]</li> <li>— Collaborate with GeoZone partners to enable 70 MW of dispatchable geothermal with online dates of 2030-2033 (cooperation agreements signed in 2022; working on required exploration, permitting, and interconnection)</li> </ul> <p>Several of the negotiations described above originated from responses from one of SCPA’s solicitations for local resources or MTR-eligible capacity over the past few years, but SCPA is increasingly relying on its network of developer contacts to identify opportunities</p>

		<p>without the administrative burden of an open solicitation. Due to the scarcity of interconnection capacity and permitting risks, SCPA has also shifted its procurement focus to concentrate on project maturity and developer experience alongside price, which is better managed through bi-lateral networking with trusted developers rather than an open solicitation.</p> <p>SCPA will manage any remaining short position relative to compliance obligations and its TmOP target through short-term RPS contracts. SCPA has a strong track record of delivering RPS volumes through short-term contracts to meet internal RPS compliance targets.</p>
<p><b>IV. Action Plan</b> <b>C. Potential Barriers</b></p>	<p><i>1. Key market, regulatory, financial, or other resource viability barriers or risks associated with the RPS resources coming online in both retail sellers' Preferred Portfolios.</i></p> <p><i>2. Key risks associated with the potential retirement of existing RPS resources on which the retail seller intends to rely in the future.</i></p>	<p>The key barriers for resources under contract and in development are described in detail in Section VII. These resources are a good sample of the types of resources SCPA included in its 2022 IRP preferred portfolios. Issues such as importing ex-CAISO generation, permitting complexity, securing solar and battery modules, and geothermal exploration risk are shared between SCPA's current development queue and candidate IRP resources.</p> <p>SCPA's 2022 RPS Procurement Plan discussed potential challenges with the risk of existing geothermal retirements due to high operating costs and their ineligibility for the procurement mandate. However, this risk has reduced considerably in the past two years as the market value of existing geothermal has increased as LSEs prepare for hourly carbon accounting and slice-of-day resource adequacy. SCPA does not currently see any discrete risks with the retirement of existing RPS resources. Outside existing geothermal most of SCPA's planned RPS is procured from newer facilities.</p>

**XVIV. Impact of Transmission and Interconnection Delays**

SB 1174 (stats. 2022, ch. 229) requires electrical corporations that own transmission lines to

report to the Commission on the development of transmission and interconnection facilities necessary to provide transmission deliverability for renewable energy and/or energy storage facilities that have executed interconnection agreements. SCPA is not subject to the requirements of SB 1174 and does not own any transmission lines. Accordingly, SCPA has not included a Transmission/Interconnection Delay Data Report as an attachment to this RPS Procurement Plan.

Dated: ~~July~~ June 2230, 20254

Respectfully submitted,



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APPENDIX B

RENEWABLE NET SHORT  
TEMPLATE 2025

PUBLIC

**LSE Name:** Sonoma Clean Power Authority (SCPA) Input required

**Date Filed:** 6/30/25

No input required

Variable	Calculation	Item	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2021-2024
		Forecast Year					CP 4
		<b>Annual RPS Requirement</b>					
A		Total Retail Sales (MWh)	2,271,341	2,179,224	2,120,839	2,132,809	8,704,213
B		RPS Procurement Quantity Requirement (%)	35.8%	38.5%	41.3%	44.0%	39.8%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	812,004	839,001	874,846	938,436	3,464,288
D		Voluntary Margin of Over-procurement (MWh)	355,571	305,265	260,873	209,431	1,131,139
E	C+D	Net RPS Procurement Need (MWh)	1,167,575	1,144,266	1,135,719	1,147,867	4,595,427
		<b>RPS-Eligible Procurement</b>					
Fa		Risk-Adjusted RECs from Online Generation (MWh)	1,167,575	1,144,266	1,185,719	1,187,867	4,685,427
Faa		Forecast Failure Rate for Online Generation (%)					0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)					0
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)					0.0%
Fc		Pre-Approved Generic RECs (MWh)					0
Fd		Executed REC Sales (MWh)			50,000	40,000	90,000
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	1,167,575	1,144,266	1,135,719	1,147,867	4,595,427
F0		Category 0 RECs					0
F1		Category 1 RECs	1,167,575	1,144,266	1,185,719	1,187,867	4,685,427
F2		Category 2 RECs					0
F3		Category 3 RECs					0
		<b>Gross RPS Position (Physical Net Short)</b>					
Ga	F-E	Annual Gross RPS Position (MWh)	0	0	0	0	0
Gb	F/A	Annual Gross RPS Position (%)	51.4%	52.5%	53.6%	53.8%	52.8%
		<b>Application of Bank</b>					
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR					0
Hb		RECs above the PQR added to Bank					0
Hc		Non-bankable RECs above the PQR					0
H	Ha+Hb	Gross Balance of RECs above the PQR	0	0	0	0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance					0
Ib		Planned Sales of RECs above the PQR					0
J	H-Ia-Ib	Net Balance of RECs above the PQR	0	0	0	0	0
J0		Category 0 RECs					0
J1		Category 1 RECs					0
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*					0
		<b>Expiring Contracts</b>					
K		RECs from Expiring RPS Contracts (MWh)					0
		<b>Net RPS Position (Optimized Net Short)</b>					
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)	0	0	0	0	0
Lb	(F+Ia-Ib-Ic)/A	Annual Net RPS Position after Bank Optimization (%)	51.4%	52.5%	53.6%	53.8%	52.8%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs

**LSE Name:** Sonoma Clean Power Authority (SCPA)  
**Date Filed:** 6/30/25

Hard-coded

Variable	Calculation	Item	2025 Forecast	2026 Forecast	2027 Forecast	2025-2027	2028 Forecast	2029 Forecast
Forecast Year			1	2	3	CP 5	4	5
<b>Annual RPS Requirement</b>								
A		<b>Total Retail Sales (MWh)</b>	2,157,680	2,184,970	2,207,740	6,550,390	2,241,560	2,284,820
B		RPS Procurement Quantity Requirement (%)	46.7%	49.3%	52.0%	49.4%	54.7%	57.3%
C	A*B	<b>Gross RPS Procurement Quantity Requirement (MWh)</b>	1,006,989	1,077,846	1,148,025	3,232,860	1,225,461	1,309,887
D		Voluntary Margin of Over-procurement (MWh)	71,851	64,131	76,017	211,999	75,110	101,953
E	C+D	<b>Net RPS Procurement Need (MWh)</b>	1,078,840	1,141,977	1,224,042	3,444,858	1,300,571	1,411,840
<b>RPS-Eligible Procurement</b>								
Fa		Risk-Adjusted RECs from Online Generation (MWh)					686,069	681,433
Faa		Forecast Failure Rate for Online Generation (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)					572,958	626,371
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fc		Pre-Approved Generic RECs (MWh)						
Fd		Executed REC Sales (MWh)						
F	Fa+Fb+Fc-Fd	<b>Total RPS Eligible Procurement (MWh)</b>					1,259,027	1,307,804
F0		Category 0 RECs						
F1		Category 1 RECs					1,259,027	1,307,804
F2		Category 2 RECs						
F3		Category 3 RECs						
<b>Gross RPS Position (Physical Net Short)</b>								
Ga	F-E	Annual Gross RPS Position (MWh)					-41,545	-104,036
Gb	F/A	Annual Gross RPS Position (%)					56.2%	57.2%
<b>Application of Bank</b>								
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR						
Hb		RECs above the PQR added to Bank						
Hc		Non-bankable RECs above the PQR						
H	Ha+Hb	<b>Gross Balance of RECs above the PQR</b>					0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance						
Ib		Planned Sales of RECs above the PQR						
J	H-Ia-Ib	<b>Net Balance of RECs above the PQR</b>					0	0
J0		Category 0 RECs						
J1		Category 1 RECs						
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*						
<b>Expiring Contracts</b>								
K		RECs from Expiring RPS Contracts (MWh)						
<b>Net RPS Position (Optimized Net Short)</b>								
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)					-41,545	-104,036
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)					56.2%	57.2%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Bal

<b>LSE Name:</b>	Sonoma Clean Power Authority (SCPA)
<b>Date Filed:</b>	6/30/25

Variable	Calculation	Item	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast	2033 Forecast	2031-2033
		Forecast Year	6	CP 6	7	8	9	CP 7
		<b>Annual RPS Requirement</b>						
A		Total Retail Sales (MWh)	2,336,280	6,862,660	2,391,230	2,463,180	2,551,210	7,405,620
B		RPS Procurement Quantity Requirement (%)	60.0%	57.4%	60.0%	60.0%	60.0%	60.0%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	1,401,768	3,937,116	1,434,738	1,477,908	1,530,726	4,443,372
D		Voluntary Margin of Over-procurement (MWh)	93,175	270,238	94,044	96,534	96,456	287,034
E	C+D	Net RPS Procurement Need (MWh)	1,494,943	4,207,354	1,528,782	1,574,442	1,627,182	4,730,406
		<b>RPS-Eligible Procurement</b>						
Fa		Risk-Adjusted RECs from Online Generation (MWh)	676,844	2,044,346	672,300	667,802	658,656	1,998,758
Faa		Forecast Failure Rate for Online Generation (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)	627,793	1,827,121	627,793	627,793	627,793	1,883,378
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fc		Pre-Approved Generic RECs (MWh)		0				0
Fd		Executed REC Sales (MWh)		0				0
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	1,304,637	3,871,468	1,300,093	1,295,595	1,286,448	3,882,136
F0		Category 0 RECs		0				0
F1		Category 1 RECs	1,304,637	3,871,468	1,300,093	1,295,595	1,286,448	3,882,136
F2		Category 2 RECs		0				0
F3		Category 3 RECs		0				0
		<b>Gross RPS Position (Physical Net Short)</b>						
Ga	F-E	Annual Gross RPS Position (MWh)	-190,306	-335,886	-228,689	-278,847	-340,734	-848,270
Gb	F/A	Annual Gross RPS Position (%)	55.8%	56.4%	54.4%	52.6%	50.4%	52.4%
		<b>Application of Bank</b>						
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR		0	0			0
Hb		RECs above the PQR added to Bank		0				0
Hc		Non-bankable RECs above the PQR		0				0
H	Ha+Hb	Gross Balance of RECs above the PQR	0	0	0	0	0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance		0				0
Ib		Planned Sales of RECs above the PQR		0				0
J	H-Ia-Ib	Net Balance of RECs above the PQR	0	0	0	0	0	0
J0		Category 0 RECs		0				0
J1		Category 1 RECs		0				0
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*		0				0
		<b>Expiring Contracts</b>						
K		RECs from Expiring RPS Contracts (MWh)		0				0
		<b>Net RPS Position (Optimized Net Short)</b>						
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)	-190,306	-335,886	-228,689	-278,847	-340,734	-848,270
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	55.8%	56.4%	54.4%	52.6%	50.4%	52.4%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Bal:

<b>LSE Name:</b>	Sonoma Clean Power Authority (SCPA)
<b>Date Filed:</b>	6/30/25

Variable	Calculation	Item	2034 Forecast	2035 Forecast
		Forecast Year	10	11
		<b>Annual RPS Requirement</b>		
A		Total Retail Sales (MWh)	2,644,570	2,742,520
B		RPS Procurement Quantity Requirement (%)	60.0%	60.0%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	1,586,742	1,645,512
D		Voluntary Margin of Over-procurement (MWh)	97,260	95,787
E	C+D	Net RPS Procurement Need (MWh)	1,684,002	1,741,299
		<b>RPS-Eligible Procurement</b>		
Fa		Risk-Adjusted RECs from Online Generation (MWh)	619,010	607,774
Faa		Forecast Failure Rate for Online Generation (%)	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)	627,793	592,915
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	0.0%	0.0%
Fc		Pre-Approved Generic RECs (MWh)		
Fd		Executed REC Sales (MWh)		
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	1,246,803	1,200,689
F0		Category 0 RECs		
F1		Category 1 RECs	1,246,803	1,200,689
F2		Category 2 RECs		
F3		Category 3 RECs		
		<b>Gross RPS Position (Physical Net Short)</b>		
Ga	F-E	Annual Gross RPS Position (MWh)	-437,199	-540,610
Gb	F/A	Annual Gross RPS Position (%)	47.1%	43.8%
		<b>Application of Bank</b>		
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR	0	
Hb		RECs above the PQR added to Bank		
Hc		Non-bankable RECs above the PQR		
H	Ha+Hb	Gross Balance of RECs above the PQR	0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance		
Ib		Planned Sales of RECs above the PQR		
J	H-Ia-Ib	Net Balance of RECs above the PQR	0	0
J0		Category 0 RECs		
J1		Category 1 RECs		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*		
		<b>Expiring Contracts</b>		
K		RECs from Expiring RPS Contracts (MWh)		
		<b>Net RPS Position (Optimized Net Short)</b>		
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)	-437,199	-540,610
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	47.1%	43.8%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Bal:

# APPENDIX C

## PROJECT DEVELOPMENT STATUS UPDATE TEMPLATE 2025

PUBLIC

Reporting LSE Name	RPS Contract ID	Project Name	Technology Type	Project Development Phase	City
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake	Geothermal	Pre-Construction	Dyer
Sonoma Clean Power Authority (SCPA)	SCPA30005		Geothermal	Pre-Construction	
Sonoma Clean Power Authority (SCPA)	SCPA30006		Geothermal	Pre-Construction	
Sonoma Clean Power Authority (SCPA)	SCPA30007		Geothermal	Pre-Construction	
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio	Geothermal	Pre-Construction	Various
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	Solar PV- Ground Mount	Construction	Ukiah
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	Solar PV- Ground Mount	Construction	Lost Hills
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	Wind	Construction	Corona
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	Solar PV- Ground Mount	Pre-Construction	Caspar

Reporting LSE Name	RPS Contract ID	Project Name	County	State	Zip Code	Latitude	Longitude
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake	Esmeralda	NV	89010	37.8609	-118.0341
Sonoma Clean Power Authority (SCPA)	SCPA30005						
Sonoma Clean Power Authority (SCPA)	SCPA30006						
Sonoma Clean Power Authority (SCPA)	SCPA30007						
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio	Various	Various	Various	Various	Various
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	Mendocino	CA	95482	39.1831	-123.1948
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	Kern	CA	93249	35.76	-119.89
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	Torrance San Miguel Lincoln	NM	88318	34.2632	-105.5591
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	Mendocino	CA	95420	39.3634	-123.8057

Reporting LSE Name	RPS Contract ID	Project Name	Contract Length (Years)	Contract Execution Date (mm/dd/yyyy)	Contract Start Date (mm/dd/yyyy)
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake		5/31/22	
Sonoma Clean Power Authority (SCPA)	SCPA30005			5/31/22	
Sonoma Clean Power Authority (SCPA)	SCPA30006			5/31/22	
Sonoma Clean Power Authority (SCPA)	SCPA30007			5/31/22	
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio		5/31/22	
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	20	3/23/23	12/31/25
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	10	5/16/23	9/8/25
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	15	11/2/23	9/30/26
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	20	3/23/23	5/1/29

Reporting LSE Name	RPS Contract ID	Project Name	Contract End Date (mm/dd/yyyy)	Contract Capacity	Expected Annual Generation
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake		1.52	12.83
Sonoma Clean Power Authority (SCPA)	SCPA30005				
Sonoma Clean Power Authority (SCPA)	SCPA30006				
Sonoma Clean Power Authority (SCPA)	SCPA30007				
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio			
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	12/30/45	4	10.1
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	9/7/35	60	150.9
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	9/29/41	100	328.1
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	4/30/49	2	5.0

Reporting LSE Name	RPS Contract ID	Project Name	Total Contract Volume	Commercial Operation Date (COD)
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake	256.66	
Sonoma Clean Power Authority (SCPA)	SCPA30005			
Sonoma Clean Power Authority (SCPA)	SCPA30006			
Sonoma Clean Power Authority (SCPA)	SCPA30007			
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio		
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	201.1	12/31/25
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	1498.4	9/7/25
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	4909.5	9/30/26
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	100.6	5/1/29

Reporting LSE Name	RPS Contract ID	Project Name	Transmission Status	Storage: Rated Power (MW)
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake		
Sonoma Clean Power Authority (SCPA)	SCPA30005			
Sonoma Clean Power Authority (SCPA)	SCPA30006			
Sonoma Clean Power Authority (SCPA)	SCPA30007			
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio		
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	agreement with PG&E in February 2023.	4
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	Interconnection agreement executed with PG&E and CAISO. Construction of interconnection facilities is complete.	38
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	Developer is in the final stages of building a 550-mile HVDC line to connect in Arizona to wheel to Palo Verde. SCPA will need to secure long-term MIC.	
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	Developer executed a wholesale distribution tariff interconnection agreement with PG&E in March 2025.	

Reporting LSE Name	RPS Contract ID	Project Name	Storage: Capacity (MWh)
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake	
Sonoma Clean Power Authority (SCPA)	SCPA30005		
Sonoma Clean Power Authority (SCPA)	SCPA30006		
Sonoma Clean Power Authority (SCPA)	SCPA30007		
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio	
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	16
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	152
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	

Reporting LSE Name	RPS Contract ID	Project Name	Project Notes
Sonoma Clean Power Authority (SCPA)	SCPA30003	Fish Lake	
Sonoma Clean Power Authority (SCPA)	SCPA30005		
Sonoma Clean Power Authority (SCPA)	SCPA30006		
Sonoma Clean Power Authority (SCPA)	SCPA30007		
Sonoma Clean Power Authority (SCPA)	SCPA30004	Ormat Portfolio	
Sonoma Clean Power Authority (SCPA)	SCPA50014	Redemeyer	
Sonoma Clean Power Authority (SCPA)	SCPA50015	Azalea	
Sonoma Clean Power Authority (SCPA)	SCPA70002	SunZia	
Sonoma Clean Power Authority (SCPA)	SCPA50016	Fern Creek	Contracting as an amendment to the Twin Pine project described in previous 2024 RPS Procurement Plans. Developer changed sites (and downsized) due to biological resource constraints at Twin Pine site. Amendment is not yet fully executed but imminent.

# APPENDIX D

## COST QUANTIFICATION TEMPLATE 2025

PUBLIC

Table	Row	Notes
	1	2-24 Actual costs reflect bundled costs for the renewable resources (i.e. not just renewable premium). Where SCPA has entered into an index plus renewable premium contract, SCPA has assumed the annual average LMP at NP15 for each compliance year plus the contracted renewable premium cost.
	1	18 Though SCPA entered into Various Resource Index Plus contracts for 2022-2024, once the energy and RECs are delivered to SCPA, the associated resources are known and the \$ and MWh are reported according to the resource type delivered.
	2	30-53 Projected costs reflect bundled costs for the renewable resources according to the bundled PPA prices. Index Plus contracts include the annual forward LMP cost at NP15 for the given year plus the contracted renewable premium cost. The forward price curve was obtained from ICE on June 23, 2025.
	3	24-Feb Actual procurement MWh reflect RECs retired and claimed by SCPA in each compliance year.
	3	18 Though SCPA entered into Various Resource Index Plus contracts for 2022-2024, once the energy and RECs are delivered to SCPA, the associated resources are known and the \$ and MWh are reported according to the resource type delivered.

**LSE Name:** Sonoma Clean Power Authority (SCPA)  
**Date Filed:** 6/30/25

Input Required

No Input Required

Table 1: Cost Quantification (Actual Net Costs, \$)		Actual RPS-Eligible Procurement and Generation Net Costs (\$)		
Executed RPS-Eligible Contracts by Technology Type* (Purchases and Sales)		T1_2022	T1_2023	T1_2024
1				
2	Biogas: Digester Gas			
3	Biogas: Landfill Gas			
4	Biodiesel			
5	Biomass	\$34,740,408	\$13,792,644	\$7,968,190
6	Muri Solid Waste			
7	Geothermal	\$32,550,058	\$35,612,143	\$32,329,512
8	Small Hydro (Non-UOG)	\$772,884	\$1,416,911	\$4,000,261
9	Conduit Hydro			
10	Water Supply / Conveyance			
11	Ocean Wave			
12	Ocean Thermal			
13	Tidal Current			
14	Solar PV (Non-UOG)	\$14,372,168	\$17,829,668	\$15,455,099
15	Solar Thermal			
16	Wind	\$9,679,550	\$25,332,475	\$14,746,962
17	Unbundled RECs (REC Only)			
18	Various (Index Plus REC)**			
19	Fuel Cell			
20	Linear Generator			
21	UOG: Small Hydro			
22	UOG: Solar PV			
23	UOG: Other			
24	Executed REC Sales (Revenue)		\$4,968,648	\$4,346,533
25	<b>Total RPS-Eligible Procurement and Generation Net Cost</b>	<b>\$92,115,067</b>	<b>\$89,015,094</b>	<b>\$70,153,490</b>
26	Total Retail Sales (MWh)	2,179,224	2,120,839	2,132,809
27	<b>Incremental Rate Impact</b>	<b>4.227</b>	<b>4.197</b>	<b>3.289</b>

LSE Name: Sonoma Clean Power Authority (SCPA)  
 Date Filed: 6/30/25

Input Required

No Input Required

Table 2: Cost Quantification (Forecast Costs and Revenues, \$)		Forecast RPS-Eligible Procurement Costs and Revenues (\$)										
1	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales)**	T2_2025_EBNA	T2_2026_EBNA	T2_2027_EBNA	T2_2028_EBNA	T2_2029_EBNA	T2_2030_EBNA	T2_2031_EBNA	T2_2032_EBNA	T2_2033_EBNA	T2_2034_EBNA	T2_2035_EBNA
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
5	Biomass											
6	Muni Solid Waste											
7	Geothermal											
8	Small Hydro (Non-UOG)											
9	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
12	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Thermal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	Linear Generator											
22	UOG: Small Hydro											
23	UOG: Solar PV											
24	UOG: Other											
25	Executed REC Sales (Revenue)											
26	<b>Total Executed But Not Approved RPS-Eligible Procurement and Generation Cost</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
27	<b>Total Retail Sales (MWh)</b>	<b>2,157,680</b>	<b>2,184,970</b>	<b>2,207,740</b>	<b>2,241,560</b>	<b>2,284,820</b>	<b>2,336,280</b>	<b>2,391,230</b>	<b>2,463,180</b>	<b>2,551,210</b>	<b>2,644,570</b>	<b>2,742,520</b>
28	<b>Incremental Rate Impact</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
29	<b>Executed RPS-Eligible Contracts (Purchases and Sales)****</b>	<b>T2_2025_EAA</b>	<b>T2_2026_EAA</b>	<b>T2_2027_EAA</b>	<b>T2_2028_EAA</b>	<b>T2_2029_EAA</b>	<b>T2_2030_EAA</b>	<b>T2_2031_EAA</b>	<b>T2_2032_EAA</b>	<b>T2_2033_EAA</b>	<b>T2_2034_EAA</b>	<b>T2_2035_EAA</b>
30	Biogas: Digester Gas											
31	Biogas: Landfill Gas											
32	Biodiesel											
33	Biomass											
34	Muni Solid Waste											
35	Geothermal											
36	Small Hydro (Non-UOG)											
37	Conduit Hydro											
38	Water Supply / Conveyance											
39	Ocean Wave											
40	Ocean Thermal											
41	Tidal Current											
42	Solar PV (Non-UOG)											
43	Solar Thermal											
44	Wind											
45	Unbundled RECs (REC Only)											
47	Various (Index Plus REC)***											
48	Fuel Cell											
49	Linear Generator											
50	UOG: Small Hydro											
51	UOG: Solar PV											
52	UOG: Other											
53	Executed REC Sales (Revenue)											
54	<b>Total Executed and Approved RPS-Eligible Procurement and Generation Cost</b>	<b>2,157,680</b>	<b>2,184,970</b>	<b>2,207,740</b>	<b>2,241,560</b>	<b>2,284,820</b>	<b>2,336,280</b>	<b>2,391,230</b>	<b>2,463,180</b>	<b>2,551,210</b>	<b>2,644,570</b>	<b>2,742,520</b>
55	<b>Total Retail Sales (MWh)</b>	<b>2,157,680</b>	<b>2,184,970</b>	<b>2,207,740</b>	<b>2,241,560</b>	<b>2,284,820</b>	<b>2,336,280</b>	<b>2,391,230</b>	<b>2,463,180</b>	<b>2,551,210</b>	<b>2,644,570</b>	<b>2,742,520</b>
56	<b>Incremental Rate Impact</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
57	<b>Total RPS-Eligible Procurement and Generation Cost</b>	<b>2,157,680</b>	<b>2,184,970</b>	<b>2,207,740</b>	<b>2,241,560</b>	<b>2,284,820</b>	<b>2,336,280</b>	<b>2,391,230</b>	<b>2,463,180</b>	<b>2,551,210</b>	<b>2,644,570</b>	<b>2,742,520</b>
58	<b>Total Incremental Rate Impact</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*Note: Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting section of: <https://www.cpsc.ca.gov/RPSComplianceReporting/>  
 \*\*Note: For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales.  
 \*\*\*Note: The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known  
 \*\*\*\*Note: For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.

**LSE Name:** Sonoma Clean Power Authority (SCPA)  Input Required  No Input Required  
**Date Filed:** 8/30/25

Table 3: Cost Quantification (Actual Procurement / Generation and Sales, MWh)		Actual RPS-Eligible Procurement / Generation and Sales (MWh)		
1	Technology Type* (Procurement / Generation and Sales)	T3_2022	T3_2023	T3_2024
2	Biogas: Digester Gas			
3	Biogas: Landfill Gas			
4	Biodiesel			
5	Biomass	341,676	190,551	154,233
6	Muni Solid Waste			
7	Geothermal	438,000	463,200	439,200
8	Small Hydro (Non-UOG)	7,289	15,081	65,942
9	Conduit Hydro			
10	Water Supply / Conveyance			
11	Ocean Wave			
12	Ocean Thermal			
13	Tidal Current			
14	Solar PV (Non-UOG)	200,927	212,180	300,618
15	Solar Thermal			
16	Wind	156,374	304,707	227,874
17	Unbonded RECs (REC Only)			
18	Various (Index Plus REC)**			
19	Fuel Cell			
20	Linear Generator			
21	UOG: Small Hydro			
22	UOG: Solar PV			
23	UOG: Other			
24	Executed REC Sales (MWh)		50,000	40,000
25	<b>Total RPS Eligible Procurement (MWh)</b>	<b>1,144,266</b>	<b>1,135,719</b>	<b>1,147,867</b>

LSE Name: Sonoma Clean Power Authority (SCPA) Input Required No Input Required  
 Date Filed: 8/30/25

Table 4: Cost Quantification (Forecast Procurement / Generation and Sales, MWh)		Forecast RPS-Eligible Procurement / Generation and Sales (MWh)										
1	Executed But Not Approved RPS-Eligible Contracts (Purchases and Sales) **	T4_2025_EBNA	T4_2026_EBNA	T4_2027_EBNA	T4_2028_EBNA	T4_2029_EBNA	T4_2030_EBNA	T4_2031_EBNA	T4_2032_EBNA	T4_2033_EBNA	T4_2034_EBNA	T4_2035_EBNA
2	Biogas: Digester Gas											
3	Biogas: Landfill Gas											
4	Biodiesel											
5	Biomass											
6	Muni Solid Waste											
7	Geothermal											
8	Small Hydro (Non-UOG)											
9	Conduit Hydro											
10	Water Supply / Conveyance											
11	Ocean Wave											
12	Ocean Thermal											
13	Tidal Current											
14	Solar PV (Non-UOG)											
15	Solar Thermal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (Index Plus REC)***											
20	Fuel Cell											
21	Linear Generator											
22	UOG: Small Hydro											
23	UOG: Solar PV											
24	UOG: Other											
25	Executed REC Sales (MWh)											
26	<b>Total Executed But Not Approved RPS-Eligible Procurement</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
27	<b>Executed and Approved RPS-Eligible Contracts (Purchases and Sales) ****</b>	<b>T4_2025_EAA</b>	<b>T4_2026_EAA</b>	<b>T4_2027_EAA</b>	<b>T4_2028_EAA</b>	<b>T4_2029_EAA</b>	<b>T4_2030_EAA</b>	<b>T4_2031_EAA</b>	<b>T4_2032_EAA</b>	<b>T4_2033_EAA</b>	<b>T4_2034_EAA</b>	<b>T4_2035_EAA</b>
28	Biogas: Digester Gas											
29	Biogas: Landfill Gas											
30	Biodiesel											
31	Biomass											
32	Muni Solid Waste											
33	Geothermal	436,800	436,800	89,256	259,098	308,903	308,903	308,903	308,903	308,903	308,903	308,903
34	Small Hydro (Non-UOG)	46,724	47,290	47,290	47,290	47,290	47,290	47,290	47,290	42,597	7,360	488
35	Conduit Hydro											
36	Water Supply / Conveyance											
37	Ocean Wave											
38	Ocean Thermal											
39	Tidal Current											
40	Solar PV (Non-UOG)	413,998	506,423	503,380	499,955	500,174	498,239	494,917	491,628	488,371	485,148	447,079
41	Solar Thermal											
42	Wind	145,725	228,320	453,941	452,683	451,437	450,204	448,983	447,774	446,577	445,392	444,219
43	Unbundled RECs (REC Only)											
45	Various (Index Plus REC)***											
46	Fuel Cell											
47	Linear Generator											
48	UOG: Small Hydro											
49	UOG: Solar PV											
50	UOG: Other											
51	Executed REC Sales (MWh)	17,328	14,200									
52	<b>Total Executed and Approved RPS-Eligible Procurement</b>	<b>1,025,920</b>	<b>1,204,633</b>	<b>1,093,867</b>	<b>1,259,027</b>	<b>1,307,804</b>	<b>1,304,637</b>	<b>1,300,093</b>	<b>1,295,595</b>	<b>1,286,448</b>	<b>1,246,803</b>	<b>1,200,689</b>
53	<b>Total RPS Eligible Procurement (MWh)</b>	<b>1,025,920</b>	<b>1,204,633</b>	<b>1,093,867</b>	<b>1,259,027</b>	<b>1,307,804</b>	<b>1,304,637</b>	<b>1,300,093</b>	<b>1,295,595</b>	<b>1,286,448</b>	<b>1,246,803</b>	<b>1,200,689</b>

\*Note: Technology definitions are given in the PCC Classification Handbook located in the RPS Compliance Reporting section of: <https://www.cpuc.ca.gov/RPSComplianceReporting/>  
 \*\*Note: For contracts that have been executed but still require formal approval (CPUC or other formal approval process) for purchases and sales.  
 \*\*\*Note: The "Various" technology type is to be used in the case of contracts encompassing multiple facilities where the generation type is not yet known  
 \*\*\*\*Note: For IOUs and SMJUs: Include all executed contracts that required CPUC approval. For CCAs and ESPs: Include all executed contracts that have been approved through relevant formal approval processes.

APPENDIX E

RENEWABLE NET SHORT TEMPLATE  
2025 FOR MMoP

PUBLIC

**LSE Name:** Sonoma Clean Power Authority (SCPA) Input required No input required  
**Date Filed:** 6/30/25

Variable	Calculation	Item	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2021-2024 CP 4	2025 Forecast 1	2026 Forecast 2
<b>Forecast Year</b>									
<b>Annual RPS Requirement</b>									
A		Total Retail Sales (MWh)	2,271,341	2,179,224	2,120,839	2,132,809	8,704,213	2,172,394	2,201,998
B		RPS Procurement Quantity Requirement (%)	35.8%	38.5%	41.3%	44.0%	39.8%	46.7%	49.3%
C	A/B	Gross RPS Procurement Quantity Requirement (MWh)	812,004	839,001	874,846	938,436	3,464,288	1,013,856	1,086,246
D		Voluntary Margin of Over-procurement (MWh)	355,571	305,265	260,873	209,431	1,131,139	71,851	64,131
E	C+D	Net RPS Procurement Need (MWh)	1,167,575	1,144,266	1,135,719	1,147,867	4,595,427	1,085,707	1,150,377
<b>RPS-Eligible Procurement</b>									
Fa		Risk-Adjusted RECs from Online Generation (MWh)	1,167,575	1,144,266	1,185,719	1,187,867	4,685,427		
Faa		Forecast Failure Rate for Online Generation (%)				0.0%	0.0%	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)					0		
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)				0.0%	0.0%		
Fc		Pre-Approved Generic RECs (MWh)					0	25.0%	22.5%
Fd		Executed REC Sales (MWh)			50,000	40,000	90,000		
F	Fa+Fb+Fc+Fd	Total RPS Eligible Procurement (MWh)	1,167,575	1,144,266	1,135,719	1,147,867	4,595,427		
F0		Category 0 RECs					0		
F1		Category 1 RECs	1,167,575	1,144,266	1,185,719	1,187,867	4,685,427		
F2		Category 2 RECs					0		
F3		Category 3 RECs					0		
<b>Gross RPS Position (Physical Net Short)</b>									
Ga	F-E	Annual Gross RPS Position (MWh)	0	0	0	0	0		
Gb	F/A	Annual Gross RPS Position (%)	51.4%	52.5%	53.6%	53.8%	52.8%		
<b>Application of Bank</b>									
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR					0		
Hb		RECs above the PQR added to Bank					0		
Hc		Non-bankable RECs above the PQR					0		
H	Ha+Hb	Gross Balance of RECs above the PQR	0	0	0	0	0		
Ia		Planned Application of RECs above the PQR towards RPS Compliance					0		
Ib		Planned Sales of RECs above the PQR					0		
J	H-Ia-Ib	Net Balance of RECs above the PQR	0	0	0	0	0		
J0		Category 0 RECs					0		
J1		Category 1 RECs					0		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*					0		
<b>Expiring Contracts</b>									
K		RECs from Expiring RPS Contracts (MWh)					0		
<b>Net RPS Position (Optimized Net Short)</b>									
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)	0	0	0	0	0		
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	51.4%	52.5%	53.6%	53.8%	52.8%		

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Balancing Authority (Non-CBA Utilities) to bank excess bundled PCC3 RECs

**LSE Name:** Sonoma Clean Power Authority (SCPA) Hard-coded  
**Date Filed:** 6/30/25

Variable	Calculation	Item	2027 Forecast	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2026-2030	2031 Forecast
		Forecast Year	3	CP 5	4	5	6	CP 6	7
<b>Annual RPS Requirement</b>									
A		Total Retail Sales (MWh)	2,225,958	6,600,350	2,261,799	2,306,647	2,363,386	6,931,832	2,420,378
B		RPS Procurement Quantity Requirement (%)	52.0%	49.4%	54.7%	57.3%	60.0%	57.4%	60.0%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	1,157,498	3,257,600	1,236,526	1,322,401	1,418,032	3,976,958	1,452,227
D		Voluntary Margin of Over-procurement (MWh)	76,017	211,999	75,110	101,953	93,175	270,238	94,044
E	C+D	Net RPS Procurement Need (MWh)	1,233,515	3,469,599	1,311,636	1,424,353	1,511,206	4,247,196	1,546,271
<b>RPS-Eligible Procurement</b>									
Fa		Risk-Adjusted RECs from Online Generation (MWh)			686,069	681,433	676,844	2,044,346	672,300
Faa		Forecast Failure Rate for Online Generation (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)			508,912	536,931	550,882	1,596,725	551,237
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	13.3%	20.3%	11.2%	14.3%	12.3%	12.6%	12.2%
Fc		Pre-Approved Generic RECs (MWh)						0	
Fd		Executed REC Sales (MWh)						0	
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)			1,194,981	1,218,365	1,227,726	3,641,072	1,223,538
F0		Category 0 RECs						0	
F1		Category 1 RECs			1,194,981	1,218,365	1,227,726	3,641,072	1,223,538
F2		Category 2 RECs						0	
F3		Category 3 RECs						0	
<b>Gross RPS Position (Physical Net Short)</b>									
Ga	F-E	Annual Gross RPS Position (MWh)			-116,655	-205,989	-283,481	-606,124	-322,733
Gb	F/A	Annual Gross RPS Position (%)			52.8%	52.8%	51.9%	52.5%	50.6%
<b>Application of Bank</b>									
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR					0	0	
Hb		RECs above the PQR added to Bank					0		
Hc		Non-bankable RECs above the PQR					0		
H	Ha+Hb	Gross Balance of RECs above the PQR			0	0	0	0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance					0		
Ib		Planned Sales of RECs above the PQR					0		
J	H-Ia-Ib	Net Balance of RECs above the PQR			0	0	0	0	0
J0		Category 0 RECs					0		
J1		Category 1 RECs					0		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*					0		
<b>Expiring Contracts</b>									
K		RECs from Expiring RPS Contracts (MWh)					0		
<b>Net RPS Position (Optimized Net Short)</b>									
La	Ga+Ia-Ib-Ic	Annual Net RPS Position after Bank Optimization (MWh)			-116,655	-205,989	-283,481	-606,124	-322,733
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)			52.8%	52.8%	51.9%	52.5%	50.6%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Bal:

<b>LSE Name:</b>	Sonoma Clean Power Authority (SCPA)
<b>Date Filed:</b>	6/30/25

Variable	Calculation	Item	2032 Forecast	2033 Forecast	2031-2033 CP 7	2034 Forecast	2035 Forecast
		Forecast Year	8	9	10	11	
<b>Annual RPS Requirement</b>							
A		Total Retail Sales (MWh)	2,496,477	2,584,378	7,501,233	2,679,078	2,774,573
B		RPS Procurement Quantity Requirement (%)	60.0%	60.0%	60.0%	60.0%	60.0%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	1,497,886	1,550,627	4,500,740	1,607,447	1,664,744
D		Voluntary Margin of Over-procurement (MWh)	96,534	96,456	287,034	97,260	95,787
E	C+D	Net RPS Procurement Need (MWh)	1,594,420	1,647,084	4,787,774	1,704,707	1,760,531
<b>RPS-Eligible Procurement</b>							
Fa		Risk-Adjusted RECs from Online Generation (MWh)	667,802	658,656	1,998,758	619,010	607,774
Faa		Forecast Failure Rate for Online Generation (%)	0.0%	0.0%	0.0%	0.0%	0.0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)	551,237	551,237	1,653,712	551,237	516,360
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)	12.2%	12.2%	12.2%	12.2%	12.9%
Fc		Pre-Approved Generic RECs (MWh)			0		
Fd		Executed REC Sales (MWh)			0		
F	Fa+Fb+Fc+Fd	Total RPS Eligible Procurement (MWh)	1,219,039	1,209,893	3,652,470	1,170,247	1,124,134
F0		Category 0 RECs			0		
F1		Category 1 RECs	1,219,039	1,209,893	3,652,470	1,170,247	1,124,134
F2		Category 2 RECs			0		
F3		Category 3 RECs			0		
<b>Gross RPS Position (Physical Net Short)</b>							
Ga	F-E	Annual Gross RPS Position (MWh)	-375,381	-437,191	-1,135,304	-534,460	-636,398
Gb	F/A	Annual Gross RPS Position (%)	48.8%	46.8%	48.7%	43.7%	40.5%
<b>Application of Bank</b>							
Ha	J-Hc (from previous CP)	Existing Banked RECs above the PQR			0	0	
Hb		RECs above the PQR added to Bank			0		
Hc		Non-bankable RECs above the PQR			0		
H	Ha+Hb	Gross Balance of RECs above the PQR	0	0	0	0	0
Ia		Planned Application of RECs above the PQR towards RPS Compliance			0		
Ib		Planned Sales of RECs above the PQR			0		
J	H-Ia-Ib	Net Balance of RECs above the PQR	0	0	0	0	0
J0		Category 0 RECs			0		
J1		Category 1 RECs			0		
J3		Category 3 Bundled RECs (Non-CBA Utilities Only)*			0		
<b>Expiring Contracts</b>							
K		RECs from Expiring RPS Contracts (MWh)			0		
<b>Net RPS Position (Optimized Net Short)</b>							
La	Ga+Ia-Ib-Hc	Annual Net RPS Position after Bank Optimization (MWh)	-375,381	-437,191	-1,135,304	-534,460	-636,398
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	48.8%	46.8%	48.7%	43.7%	40.5%

Note: All values are to be input in MWhs

\*D.17-11-037 provides for utilities serving load in areas outside California Independent System Operator Bal:

APPENDIX F

CHECKLIST AND OFFICER  
VERIFICATION

**2025 RPS Procurement Plan Checklist- Task Completed**

<b>Retail seller name: Sonoma Clean Power</b>	<b>YES/NO</b>	<b>NOTES</b>
I. Summary of Major Changes to RPS Plan	YES	
II. Executive Summary Key Issues	YES	
III. Compliance with Recent Legislation and Impact of Regulatory	YES	
IV. Assessment of RPS Portfolio Supplies and Demand	YES	
IV.A. Portfolio Supply and Demand	YES	
IV.A.1. Long-term Procurement	YES	
IV.B. Portfolio Diversity and Reliability	YES	
IV.B.1 Forecasting for Increased Transportation Electrification	YES	
IV.B.2 Curtailment Frequency, Cost, and Forecasting	YES	
IV.C. Portfolio Optimization	YES	
IV.C.1 Conformance with the IRP Proceeding	YES	
IV.C.2 Response to Local and Regional Policies	YES	
IV.D. Lessons Learned	YES	
V. Project Development Status Update	YES	
VI. Potential Compliance Delays	YES	
VII. Risk Assessment	YES	
VII.A Compliance Risk	YES	
VII.B Risk Modeling and Risk Factors	YES	
VII.C Lessons Learned	YES	
VIII. Renewable Net Short Calculation	YES	
IX. Minimum Margin of Procurement (MMoP)	YES	
IX.A MMoP Level	YES	
IX.A.1 MMoP Methodology and Inputs	YES	
IX.A.2 MMoP Scenarios	YES	
X. Bid Solicitation Protocol	YES	
X.A. Bid Selection Protocols	YES	
X.B. Solicitation Protocols for Renewables Sales	YES	
X.C. Least-Cost Best-Fit (LCBF) Criteria	YES	
XI. Safety Considerations	YES	
XII. Consideration of Price Adjustments Mechanisms	YES	
XIII. Cost Quantification	YES	
XIV. Impact of Transmission and Interconnection Delays	N/A	
Appendix A: Redlined Version of the Draft 2025 RPS Plan	YES	

### **Officer Verification**

I am an officer of the reporting organization herein 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 or belief, and as to those matters, I believe them to be true. The spreadsheet templates used within this filing have not been altered from the version issued or approved by Energy Division.

Executed on June 30, 2025 at Santa Rosa, California.



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