SILICON VALLEY CLEAN ENERGY

Silicon Valley Clean Energy
Executive Committee Meeting

Friday, August 28, 2026
10:00 a.m.

Sunnyvale Civic Center
Redwood Conference Room
456 W Olive Ave.
Sunnyvale, CA

Teleconference Meeting Information:
https://svcleanenergy-org.zoom.us/j/83869347616

Telephone (Audio only):
US: +1 669 219 2599
Webinar ID: 838 6934 7616

Members of the public may observe this meeting electronically by accessing the meeting via instructions above. Public Comments can be sent in advance of the meeting via email up to three hours before the meeting begins to Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org and will be distributed to the Executive Committee. The public will also have an opportunity to provide comments during the meeting. Members of the public using Zoom may comment during public comment or the applicable agenda item by using the Raise Hand feature and you will be recognized by the Chair. Those using the telephone (audio only) feature should press star 9 on your phones to initiate the "Raise Hand" function in Zoom. You will then be announced, unmuted, and your time to speak will begin.

The public may provide comments on any matter listed on the Agenda. Speakers are customarily limited to 3 minutes each, however, the Committee Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

If you are an individual with a disability and need a reasonable modification or accommodation pursuant to the Americans with Disabilities Act ("ADA") please contact Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org prior to the meeting for assistance.

AGENDA

Call to Order

Roll Call

Public Comment on Matters Not Listed on the Agenda

The public may provide comments on any matter not listed on the Agenda provided that it is within the subject matter jurisdiction of SVCE. Speakers are customarily

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Sunnyvale, CA 94086

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limited to 3 minutes each, however, the Committee Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

Consent Calendar (Action)

1) Approve Minutes of the June 26, 2026, Executive Committee Meeting

Regular Calendar

2) CEO Update (Discussion)

3) Integrated Decarbonization Roadmap: Recommendations (Action)

4) Recommend the Silicon Valley Clean Energy Board of Directors Approve Amendments to Energy Risk Management Policy (Action)

5) 2026 Silicon Valley Clean Energy Update on Demand Flexibility, Lunar, and Next Steps (Discussion)

Committee/Staff Remarks

Adjourn

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Silicon Valley Clean Energy
Executive Committee Meeting
Friday, June 26, 2026
10:00 a.m.

Silicon Valley Clean Energy Office
333 W El Camino Real, Suite 330
Sunnyvale, CA

DRAFT MEETING MINUTES

Call to Order

Chair Showalter called the meeting to order at 10:02 a.m.

Roll Call

Present:
Chair Pat Showalter, City of Mountain View
Director Sally Meadows, City of Los Altos
Director George Tyson, Town of Los Altos Hills
Director Bryan Mekechuk, City of Monte Sereno
Director Larry Klein, City of Sunnyvale

Absent:
Vice Chair Yvonne Martinez Beltran, City of Morgan Hill

Public Comment on Matters Not Listed on the Agenda

No speakers.

Consent Calendar

Chair Showalter opened Public Comment.
No speakers.
Chair Showalter closed Public Comment.

MOTION: Director Mekechuk moved and Director Klein seconded the motion to approve the Consent Calendar.

The motion carried with Vice Chair Martinez Beltran absent.

1) **Approve Minutes of the May 22, 2026, Executive Committee Meeting**

Regular Calendar

2) **CEO Update (Discussion)**

Zoe Elizabeth, Director of Decarbonization Policy and Community Strategies, addressed the following in the CEO update:

- An update on SVCE's new headquarters, noting that the first Board of Directors meeting at the new office would likely take place in October;
- Recent ribbon cutting events celebrating two projects: 1) the SunZia Wind and Transmission Project, and 2) Tumbleweed. Kris Van Vactor, Director of Power Resources, provided additional information on the projects; and
- Announcement that CEO Monica Padilla was celebrated as one of the region's women of influence by the Silicon Valley Business Journal.

Staff responded to committee member questions on meeting logistics while construction is underway at the new building, if delays are increasing the costs associated with the building, furniture coordination at the new building, and timing of contract execution for the SunZia Wind and Transmission and Tumbleweed projects.

Committee members shared their experience visiting the project sites mentioned in staff's report, and requested the information on the two projects, including photos, be shared with the Board of Directors.

Chair Showalter opened Public Comment.
No speakers.
Chair Showalter closed Public Comment.

3) Integrated Decarbonization Roadmap: Strategic Recommendation (Discussion)

Director of Decarbonization Policy and Community Strategies Elizabeth introduced the item and presented information on the development of the Integrated Decarbonization Roadmap with a request to gather input to assist in developing SVCE's 2045 vision statement and SVCE's role in achieving that vision. Information in the presentation included:

- The strategic focus of the 2018 roadmap versus the 2026 roadmap;
- A review of various value statements in the following categories:
    - Comprehensive and Inclusive
    - Safer and Healthier
    - Affordable and Accessible
    - Community-Centered
    - People-Focused
- The future of clean energy technologies;
- The transition that will happen in phased progress that can inform SVCE's priorities;
- A summary of SVCE's vision for the transition process;
- A recap of the December 2025 Board workshop; and
- Local stakeholder and staff feedback.

Staff responded to committee member questions on the use of the word "machines", clarification of SVCE's long-term goal and priorities, commercial and industrial customer versus residential customer emissions, the concept of no one left behind and challenges with financing, and the development of a story in the roadmap.

Committee members provided comments and feedback on staff's discussion prompts for developing a vision statement, clarifying SVCE's role, the balance of investment in expensive/hard to electrify, and focus of innovation.

Chair Showalter opened Public Comment.
No speakers.
Chair Showalter closed Public Comment.

Staff noted a study session on the Integrated Decarbonization Roadmap would be held at the August Board meeting.

4) 2026 SVCE and Electrification Awareness Residential Customer Survey Results (Informational)

Pamela Leonard, Deputy Director of Marketing and Communications, and Shawn Orgel-Olson, Programs Marketing Manager, presented an informational item on the annual residential customer survey results which took place February 12 – March 2, 2026. Staff noted this item would be included on the Consent Calendar for the August Board meeting.

Staff responded to questions and comments from committee members on the percentage of customers who would switch to dirtier electric generation to save $1-10 per month; the demographic of customers who would prefer to remain automatically enrolled in a cleaner, more renewable energy option, even if it costs a bit more; energy usage by Socio-Economic Vulnerability Index (SEVI) category; if responses were ever separated for customers living in mobile home parks; the likelihood of purchasing all appliances/equipment going down from prior years, possibly due to early adopters or customers who already own electric appliances; environmental impacts ranking last as a consideration for customers when making decisions about their home and the products they purchase; outreach into different communities, specifically non-English speakers; mobile home community cost structures; consideration of new technologies like solar fans as a low cost alternative for electrification in homes; inquiry of 2024 customer survey data; availability of a used EV program; distribution of induction cooktop information to City planners; more information on cost of operation for induction cooktops; and distribution of information to Civic Academies similar to those offered in Mountain View.

Chair Showalter opened Public Comment.
No speakers.
Chair Showalter closed Public Comment.

Committee/Staff Remarks
Chair Showalter commented on the Marin County Grand Jury Report and inquired about SVCE's response.

Staff provided brief comments on the Grand Jury Report and noted SVCE was in the process of performing an internal assessment on SVCE's own practices to assess if any changes need to be made.

Committee members provided brief comments on the Grand Jury Report and SVCE's internal process review.

Director Mekechuk thanked staff and CalCCA for coordinating a tour of the Diablo Canyon Power Plant.

Adjournment
Chair Showalter adjourned the meeting at 12:12 p.m.

ATTEST:

_____
Andrea Pizano, Board Secretary

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Staff Report – Item 2

Item 2:	**CEO Update**
From:	Monica Padilla, CEO
Prepared by:	Andrea Pizano, Sr. Executive Assistant and Board Clerk
Date:	8/28/2026

This item will be addressed in the form of an oral report to the Executive Committee from Monica Padilla, Chief Executive Officer.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 3

Item 3:	**Integrated Decarbonization Roadmap: Recommendations**
From:	Monica Padilla, CEO
Prepared by:	Zoe Elizabeth, Director of Decarbonization Policy and Community Strategies
Date:	8/28/2026

RECOMMENDATION

Staff requests the Silicon Valley Clean Energy (SVCE) Executive Committee recommend that the Board of Directors approve the 2027–2045 Roadmap Recommendations, which include the new goal, targets, principles, priorities, and outcomes listed in Attachment 1.

BACKGROUND

In 2018 SVCE published the "Decarbonization Strategy & Programs Roadmap" (https://svcleanenergy.org/plans-policies-reports/#flipbook-df_39881/1/) a public-facing document outlining SVCE's goals, strategic framework, decarbonization strategy, programs roadmap, and reporting and review structure. This guiding document was created with input from the Board of Directors (BOD), Member Agency Working Group (MAWG), stakeholders, and consultants, and came together in a public-facing document. Core to this document was the identification of greenhouse gas (GHG) emission reduction targets, adopted by the SVCE Board of Directors in December 2018 under Resolution 2018-20, as follows:

- 2021: 30% below 2015 emissions levels
- 2025: 40% below 2015 emissions levels
- 2030: 50% below 2015 emissions levels

These emissions targets were intended to align SVCE with a statewide pathway to carbon neutrality; however, a long-term target beyond 2030 was not adopted as part of SVCE's 2018 roadmap. At the time of the roadmap publication, the long-term statewide emissions reduction target was 80% below 1990 levels by 2050 as set forth in Executive Order S-3-05 (https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf). Since then, the statewide long-term target has been revised to carbon neutrality by 2045 as set forth by the legislative mandate established by Assembly Bill 1279 (2022) (https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279).

In addition to GHG reduction targets, the 2018 roadmap identified core program initiatives to help SVCE reach the ambitious GHG reduction targets, as well as more detailed program and operations strategies for implementation.

In August and September of 2025 staff brought an informational presentation to the Executive Committee and Board of Directors, respectively, describing the need to revisit the original document and outlining the goals of the Integrated Decarbonization Roadmap effort, including the following three key deliverables:

1. **Updated roadmap document**
   Sets new decarbonization targets, strategic guidelines around key focus areas, and program milestones to evaluate progress toward our goals over time.
2. **Program evaluation framework**
   Establishes a customized set of metrics to guide investment and track performance of programs toward our goals. This framework will also provide opportunity to prepare for potential future reporting requirements passed down through state legislation.
3. **Reporting guidelines**
   An established cadence and protocol for evaluating and reporting program performance.

Staff returned to the Executive Committee in June of 2026 for further discussion of high-level priorities and tradeoffs. This discussion was informed by stakeholder meetings conducted by SVCE staff throughout the previous year, including:

December 2025: SVCE Board of Directors workshop discussing high-levels values and trade-offs
February 2026: MAWG and Community Leaders workshop on strategic priorities
March 2026: SVCE staff workshop on strategic priorities
April 2026: SVCE Board of Directors presentation on decarbonization pathways and electrification targets
May 2026: Stakeholder expert interviews on strategic priorities and the role of CCAs

Staff analysis and feedback from these stakeholder discussions provided the foundation for developing the decarbonization goal, targets, principles, priorities, and outcomes presented as part of the draft final Integrated Decarbonization Roadmap.

ANALYSIS & DISCUSSION

Definition of Key Terms

The following terminology is used in the Integrated Decarbonization Roadmap:

Goal: a long-term, measurable, overarching decarbonization objective
Targets: the number of passenger vehicles and building appliances that must be electrified to meet SVCE's long-term decarbonization goal
Principles: core values that guide SVCE's decarbonization priorities and inform decision making and resource allocation
Priorities: key recommendations that bridge SVCE's long-term goal with targets and outcomes over the next six years
Outcomes: the results from SVCE investments, such as reduced costs to electrify, that will accelerate market deployment by solving challenges critical to reaching targets

Overview

To meet California's target of statewide carbon neutrality by 2045, all fossil-gas consuming appliances and passenger vehicles will need to be converted to zero-emission technology. Across SVCE's Member Agencies this equates to slightly over one million residential building appliances and passenger vehicles, as illustrated in Figure 1 below, plus tens of thousands of non-residential building appliances and vehicles.

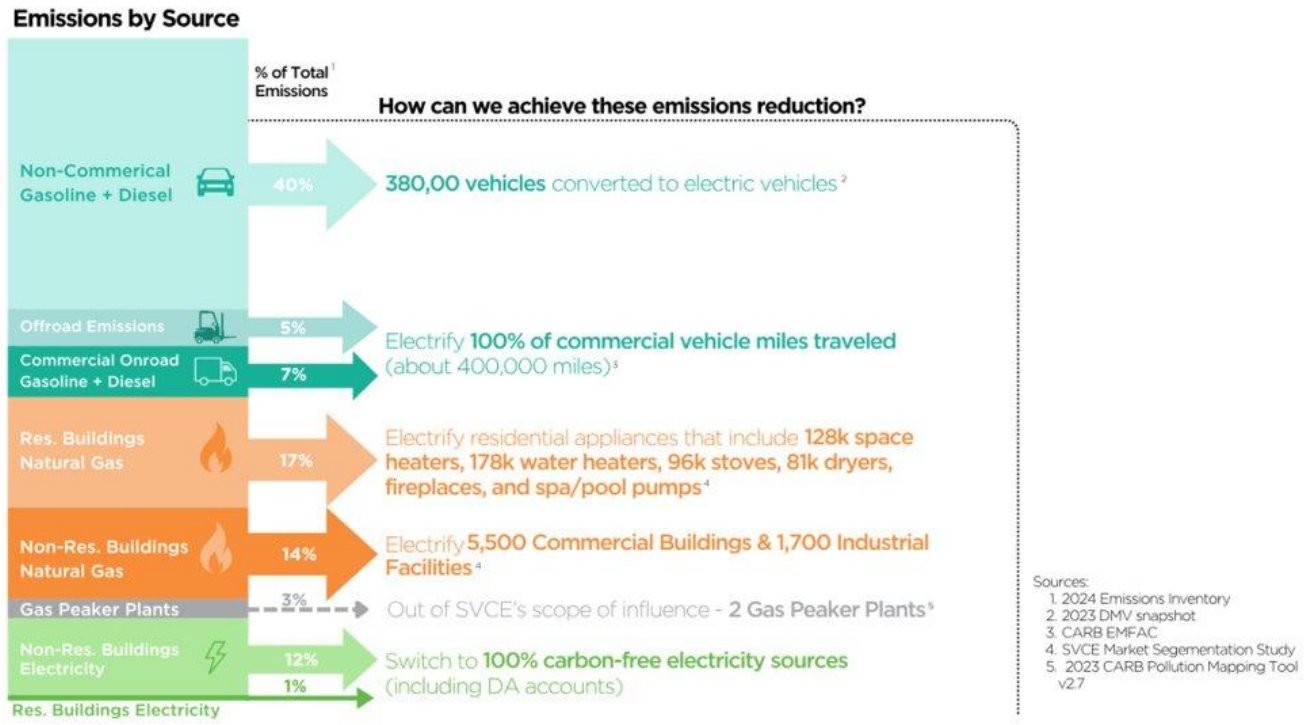

Figure 1. 2024 SVCE service area emissions by source. (Sources: SVCE 2024 Greenhouse Gas Inventory; SVCE's Vehicles dashboard; and SVCE 2022 Market Segmentation Study.)

Based on 2024 data, residential building emissions account for 17% of total emissions and non-residential building emissions account for 14% of emissions. While the sectors' emissions contribution is only 3% different, SVCE's direct influence and level of control over those emissions is decidedly unequal. Current SVCE programs influence over 90% of residential building emissions by end-use compared to less than 60% of non-residential building emissions. The reduced influence on non-residential buildings is largely due to lack of electrification solutions readily available in the food service and industrial sectors at present. For this reason, and because interest in non-residential electrification is lagging behind residential, SVCE recommends continuing a greater focus on residential electrification over the next six years, while providing some support for non-residential electrification with the intention to increase support when the market is more mature. Overall building sector emissions by end-use are reflected in Figure 2 below.

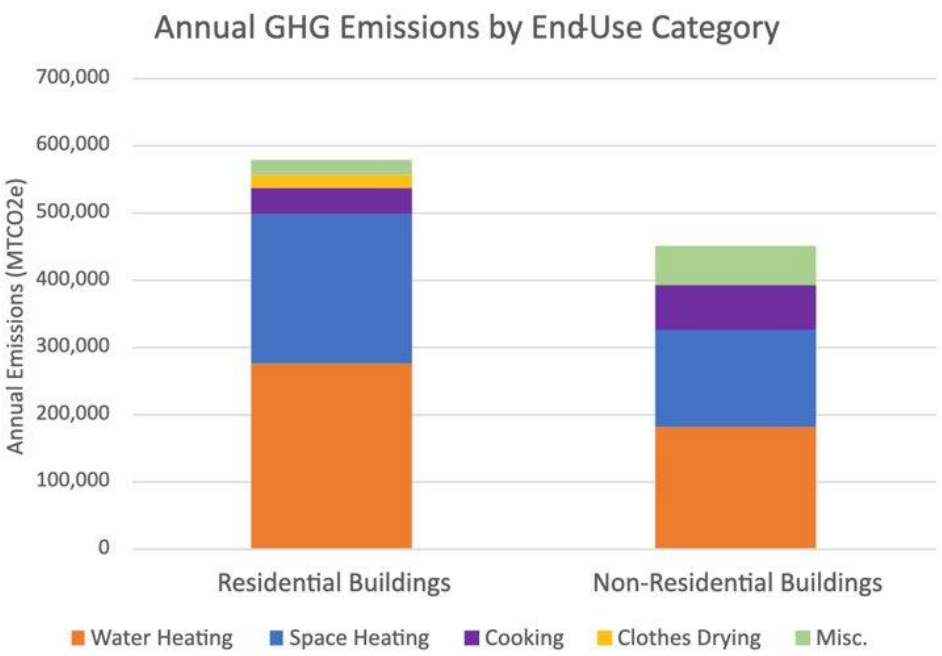

Figure 2. Estimated 2024 SVCE residential and non-residential building emissions by end-use category. (Sources: SVCE 2024 Greenhouse Gas Inventory; CEC Commercial Building End-use Survey; and SVCE 2022 Market Segmentation Study.)

Another significant factor staff evaluated as part of updating decarbonization priorities is technology readiness and adoption levels. Electrification equipment and appliances are experiencing varying rates of market adoption, with differences across sectors even between the same technology. For example, while commercial rooftop HVAC has become firmly established over the previous decades and has reached near-cost parity with packaged gas rooftop HVAC, electric solutions for commercial cooking are still nascent and face significant cost and perception barriers before it can become more established in the market. Evaluation of technology adoption levels is presented in Figure 3, below.

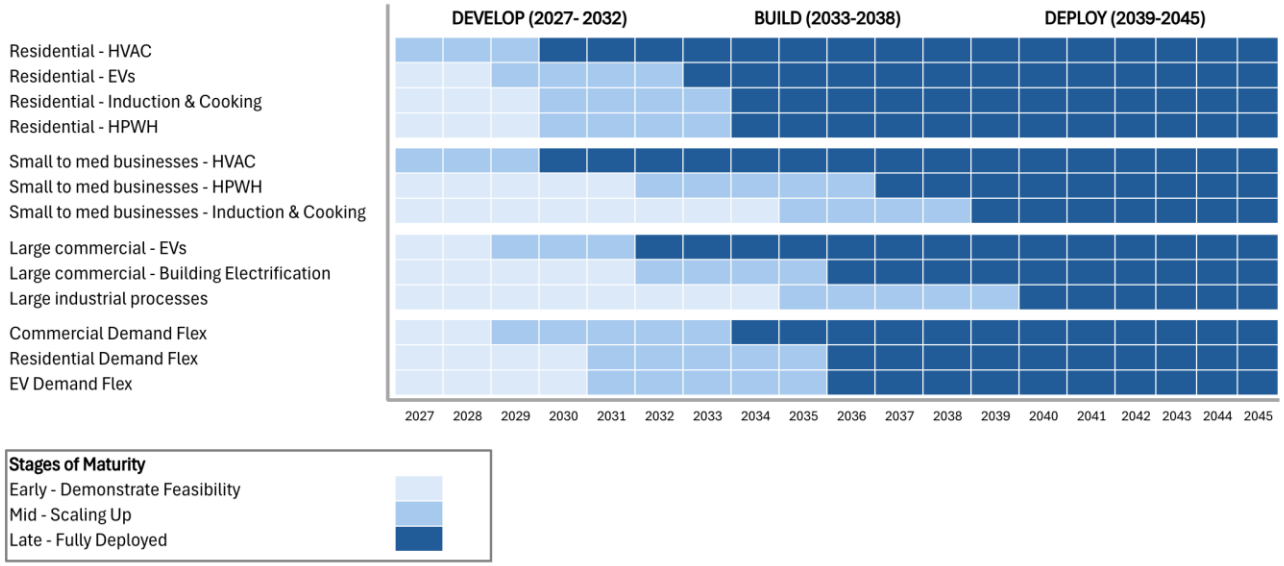

Figure 3. Staff evaluation of technology adoption levels across residential, small-to-medium business, large commercial, and industrial sectors.

Due to the variations in technology adoption levels, staff is recommending a phased approach on the pathway to 2045 consisting of the following four phases and their defining characteristics:

1. **Prove (2020–2026):** test new technologies; launch early programs; support new construction reach code adoption; and incentivize early market growth through rebates.
2. **Develop (2027–2032):** prioritize deploying building appliances and electric vehicles where most feasible to increase demand and lead to overall reduced costs; focus on electric readiness to reduce future retrofit costs; and continued experimentation and policy efforts to reduce barriers to electrification.
3. **Build (2033–2038):** a period of more rapid technological innovation; expand electrification reach beyond early adopters; SVCE programs shift to more targeted and direct investments; and wider market adoption of non-residential electrification.
4. **Deploy (2039–2045):** managed gas transition planning for system-wide decommissioning; build out of EV charging infrastructure to replace current gas station network; and a focus on the hardest-to-electrify sectors including restaurants and industrial process heating.

The rate of emissions reductions will most likely not be linear but instead consist of intermittent plateaus and potentially even short periods of emissions increases. SVCE's current GHG emissions reduction goals established in the 2018 Decarbonization Roadmap were based on a linear emissions reduction between 2025 and 2030 and extending beyond towards 2045, as illustrated in Figure 4 below.

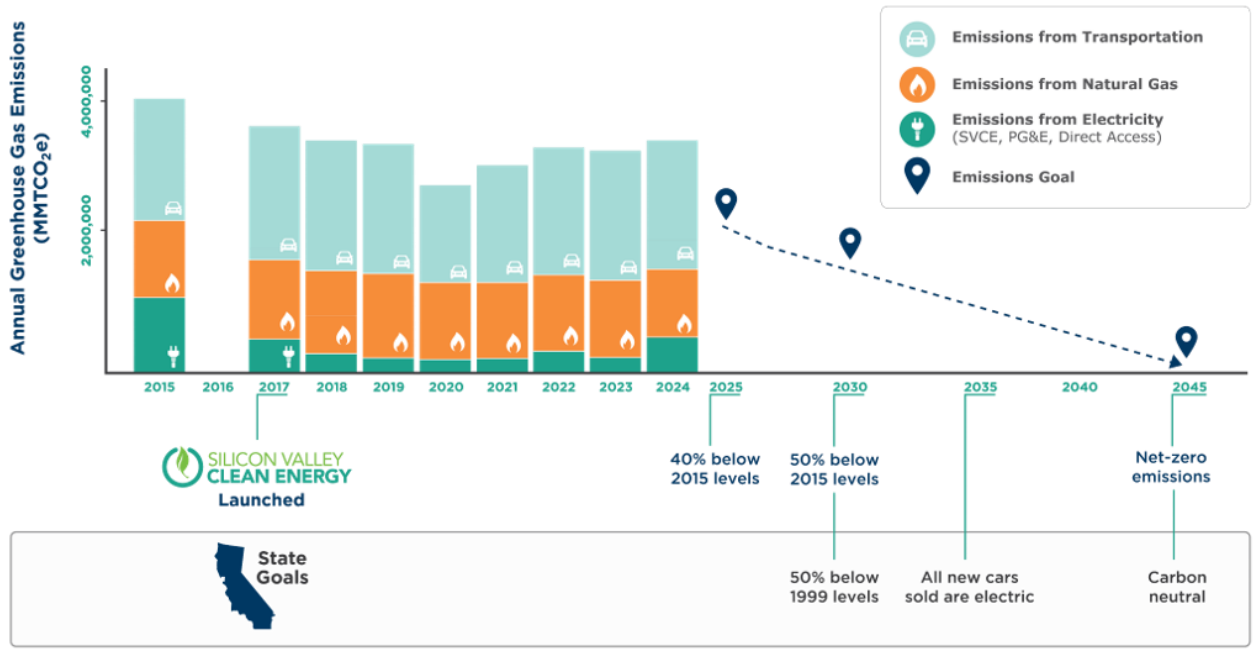

Figure 4. SVCE 2024 GHG Inventory showing emissions levels by sector from establishment in 2017 through 2024, including 2015 levels as a benchmark. Targets for 2025 and 2030 were established as part of the 2018 Decarbonization Roadmap and assumed a linear emissions decrease on the way to long-term statewide decarbonization.

While reducing GHG emissions is at the core of SVCE's founding purpose, tying SVCE's goals to emissions levels, and tracking progress towards these goals, has proven to be challenging and somewhat ineffective. In reality, emissions levels across all SVCE Member Agencies are largely out of SVCE's control and include components clearly outside of SVCE's scope of influence, such as emissions from air travel, off-road vehicles, gas peaker plants, and agriculture. Because of this lack of direct control staff is recommending shifting existing targets from emission levels to number of building appliances and vehicles electrified, as these are quantifiable metrics that can be directly influenced through SVCE programs and policies and tracked over time to monitor progress.

Proposed Goal and Targets

Since the 2018 Decarbonization Roadmap did not establish a goal beyond 2030, staff is proposing adoption of a long-term goal to officially align with current statewide goals and which includes targets and outcomes that are measurable beyond simply performing an emission inventory.

The proposed 2027–2045 SVCE Decarbonization Goal is as follows:

"Drive the SVCE region to fully electrify every building and vehicle by 2045 and power it with clean energy."

Additionally, staff is recommending the current GHG reduction targets be shifted from emissions reduction percentages to number of building appliances and passenger vehicles electrified. To align with the electrification phases previously described, the targets would be set for six-year periods occurring on 2032 and 2038, with a goal of 100% electrification of all devices by 2045. This approach would be new for SVCE and would require resources to be directed towards further study and evaluation of installed appliance levels in order to refine targets. Proposed targets were established based on preliminary study of technology adoption levels, in-depth discussion of SVCE's role and influence through a series of stakeholder workshops, as well as detailed electrification scenario modeling to better understand potential rates of electrification throughout SVCE Member Agencies between 2027 and 2045. These initial proposed electrification targets are shown in Table 1 below, but would be subject to change upon further review and study.

	2025 Baseline - Electrified Equipment	2032 Target	2038 Target	2045 Target (100% Electrified)
Light-Duty Vehicles	75,000	**132,000**	**200,000**	**451,500**
Residential HVAC	29,000	**75,000**	**130,000**	**271,000**
Residential Cooking	9,700	**40,000**	**110,000**	**281,500**
Residential Water Heaters	4,000	**35,000**	**85,000**	**252,000**
Commercial HVAC	3,800	**5,500**	**8,500**	**10,500**
Commercial Water Heaters	100	**600**	**2,200**	**6,500**

Table 1. Proposed targets to be adopted as part of the Integrated Decarbonization Roadmap in lieu of the previously adopted interim GHG reduction target for 2030.

Decarbonization Principles, Priorities, and Outcomes

To reach these targets in the broader pursuit of SVCE's 2027–2045 SVCE Decarbonization Goal, staff proposes the following decarbonization principles to articulate board direction, guide future decision making, and inform program-level staff recommendations:

1. Build a long-term clean portfolio by pragmatically balancing risks and costs and selectively investing in innovative solutions.
2. Support and partner with member agencies to catalyze emissions reductions and scale decarbonization at a lower cost.
3. Focus on the most cost-effective and market-ready solutions to increase demand, drive down costs, and lead to widespread adoption.
4. Scale impact through knowledge sharing from the lessons learned from programs, research, and pilots.
5. Reach all customers through SVCE programs, since all rely on fossil fuels and are part of successful decarbonization.

To operationalize the Decarbonization Principles over the next six-year period (2027–2032), staff identified

four "top priorities" for 2027–2032. Table 2 describes each priority, the biggest challenge to progress in each area, and strategic recommendations to move SVCE towards success.

Decarbonization Priorities	Challenge Statement	Recommendations (2027–2032)
Integrate local resources and demand flexibility into portfolio planning	Rising load, tightening regulations, and market uncertainty are straining the path to clean portfolio targets. In addition to prudent portfolio management, new solutions—including supply closer to demand and the potential to leverage demand as a supply-side resource—could play a small, but important role, in long term success.	1. Build a process to identify local energy projects that incorporate stakeholder input. 2. Quantify the real value of demand flex across multiple value streams—energy, resource adequacy, hourly GHG, and customer benefits—and build SVCE specific goals. 3. Scale demand flexibility where it is proven and cost effective; while sharing clear learnings to inform policy and market design.
Push down building electrification costs, especially heat pumps	High upfront costs are the fundamental barrier to adoption. Reduced federal rebates and policy changes magnify this issue, while the forthcoming air district appliance regulations create both additional opportunities and challenges.	1. Take a multi-pronged approach that includes contractor engagement, permit reform, and targeted rebates to increase demand and drive down cost. 2. Support customers, contractors, and Member Agencies to adapt to the Bay Area Air District zero-NOx appliance standards. 3. Prepare to phase out HVAC incentives as market reaches maturity.
Increase access to affordable, reliable EV charging solutions	The rollback of federal investment and commitments of auto manufacturers will likely slow EV adoption and makes the future of EV charging unclear. SVCE needs to continue to support adoption while avoiding high-risk investments.	1. Focus on stable, reliable, long-term charging solutions. 2. Advocate policy changes that make charging more affordable for multifamily residents. 3. Monitor market changes and adapt programmatic support as needed.
Scale impact through knowledge sharing	SVCE's Board has shown leadership and commitment to building a bold clean energy future. SVCE must leverage lessons learned to transform its commitment to trying new approaches into an invaluable resource that can guide the clean energy transition.	1. Publish 2–3 key learnings for decarbonization each year. 2. Operationalize annual decarbonization reporting metrics. 3. Incorporate findings from data and analysis to continuously improve programs and refine planning approaches.

Table 2. A summary of four decarbonization priorities towards SVCE's 2027–2045 Decarbonization Goal, the main challenge each priority area faces, and strategic recommendations to prioritize between 2027–2032.

To measure success across the four priorities staff developed five desired outcomes. If adopted, staff would report progress toward the outcomes annually.

1. Identify at least three priority locations for sensible local generation development and implement feasible projects.
2. Quantify at least two cost effective pathways for incorporating demand flex into long-term portfolio.
3. Heat pump HVAC will outsell AC with gas furnaces with no incentives and HPWH retrofits will cost 20% less than today.
4. There will be twice the number of EV charging stations available to multifamily residents.
5. Publish 10 decarbonization learnings and share them with stakeholders on a statewide level.

Planned Timing and Approach
At this time, staff is seeking Executive Committee direction on:

- Proposed 2027–2045 SVCE Decarbonization Goal
- Recommendation to shift from GHG reduction targets to the proposed appliance and vehicle targets
- Five Principles
- Four Priorities
- Five Outcomes

Staff will incorporate feedback from the Executive Committee into the final draft Integrated Decarbonization Roadmap presented to the Board of Directors in October 2026 for adoption. Public release will be in December.

STRATEGIC PLAN
This effort is directly supported by SVCE Strategic Plan Goal 3 – **"**Create a long-term decarbonization plan that integrates supply and demand changes, opportunities, and challenges." Additionally, this effort is supported by Goal 8 – "Long-term target for 100% clean energy annually by building a balanced portfolio with consideration for both affordability and reliability while exploring long-term pathways to clean power supply."

ALTERNATIVE
The Executive Committee could recommend to the Board that SVCE maintains the original emissions reduction targets adopted as part of the 2018 Decarbonization Roadmap and not adopt the long-term 2045 target, electrification goals, principles, and decarbonization priorities proposed by staff. Alternatively, the Executive Committee could recommend the Board adopts a portion of the recommendations from Attachment 1 or recommend adopting them all in addition to maintaining the emission reduction targets previously established.

FISCAL IMPACT
Adoption of the Integrated Decarbonization Roadmap will not impact the current fiscal year operating budget. The projected annual program spend will vary annually. Based on current projections, program spend for the first three years of the Roadmap (2027-2029) is $23M per year, decreasing to approximately $11M per year over the 5-year period of 2030-2034 and approximately $6M per year from 2035 through 2045. Staff will include in future operating fiscal year operating budgets, for the Board's consideration, the necessary funding needs as programs and initiatives are identified. The funds are expected to come from the existing General Programs Fund.

ATTACHMENT
1. Summary of Proposed Recommendations for Adoption

Attachment 1 – SUMMARY OF PROPOSED RECOMMENDATIONS FOR ADOPTION

2027-2045 SVCE Decarbonization Goal:
"Drive the SVCE region to fully electrify every building and vehicle by 2045 and power it with clean energy."

Targets:
(Note: the proposed targets below subject to change upon further review and study if approved by the Board)

	2025 Baseline - Electrified Equipment	2032 Target	2038 Target	2045 Target (100% Electrified)
Light-Duty Vehicles	75,000	**132,000**	**200,000**	**451,500**
Residential HVAC	29,000	**75,000**	**130,000**	**271,000**
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Decarbonization Principles (2027–2032)

1. Build a long-term clean portfolio by pragmatically balancing risks and costs and selectively investing in innovative solutions.
2. Support and partner with member agencies to catalyze emissions reductions and scale decarbonization at a lower cost.
3. Focus on the most cost-effective and market-ready solutions to increase demand, drive down costs, and lead to widespread adoption.
4. Scale impact through knowledge sharing from the lessons learned from programs, research, and pilots.
5. Reach all customers through SVCE programs, since all rely on fossil fuels and are part of successful decarbonization.

Decarbonization Priorities (2027–2032)

1. Integrate local resources and demand flexibility into portfolio planning
2. Push down building electrification costs, especially heat pumps
3. Increase access to affordable, reliable EV charging solutions
4. Scale impact through knowledge sharing

Outcomes (2027-2032)

1. Identify at least three priority locations for sensible local generation development and implement feasible projects.
2. Quantify at least two cost effective pathways for incorporating demand flex into long-term portfolio.
3. Heat pump HVAC will outsell AC with gas furnaces with no incentives and HPWH retrofits will cost 20% less than today.
4. There will be twice the number of EV charging stations available to multifamily residents.
5. Publish 10 decarbonization learnings and share them with stakeholders on a statewide level.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 4

Item 4:	**Recommend the Silicon Valley Clean Energy Board Approve Amendments to the Energy Risk Management Policy**
From:	Monica Padilla, CEO
Prepared by:	Amrit Singh, CFO Scott Wrigglesworth, Director of Risk Management and Analytics
Date:	8/28/2026

RECOMMENDATION

Staff request that the Executive Committee (Committee) recommend that the Silicon Valley Clean Energy (SVCE) Board of Directors (Board) approve proposed amendments to the Board-adopted Energy Risk Management Policy (ERMP).

COMMITTEE REVIEW

At the August 19, 2026 Finance and Administration Committee, staff presented two items related to SVCE's ERMP and risk management program. The first item was an informational review of internal controls, oversight and reporting. The second item was the proposed modifications to the ERMP as proposed in this staff report. The Finance and Administration Committee voted unanimously to recommend to the Board to approve the proposed changes and further suggested that the informational presentation presented by staff on ERMP oversight and controls be provided to the Board. The presentation is provided as an attachment for the Committee's benefit as well.

BACKGROUND

Periodically, staff recommend revising the Energy Risk Management Policy (ERMP) to address changes in energy market dynamics, desired operational changes to improve the organizational risk management, and to clarify roles and responsibilities, including adequate segregation of duties. The Board last reviewed and approved changes to the ERMP on March 12, 2025 date (https://www.svcleanenergy.org/wp-content/uploads/SVCE_Energy_Risk_Management_Policy_March_2025.pdf).

ANALYSIS & DISCUSSION

Revisions to the ERMP are necessary to ensure it remains aligned with SVCE's procurement obligations, market conditions, and prior policy direction. The current review identifies two substantive revisions and a set of non-substantive clarifications. The first substantive revision warrants the Committee's attention because they affect a clarification through a distinction between a motive (non/speculation) and a tool (financial derivatives). The second substantive revision clarifies the application of the ERMP hedge tolerance bands and how far the power supply portfolio may deviate from a balanced position. The non-substantive revisions improve clarity and internal consistency without altering the policy's intent.

The first substantive revision addresses the treatment of derivatives in Section 6.3. The existing language implies that financial derivative products are inherently speculative. This inference is imprecise: a derivative is a tool, and whether its use is speculative or non-speculative depends on the purpose for which it is held, not on the instrument itself. The revision removes that inference, affirms and clarifies the distinction between speculative and non-speculative activity, and retains the existing prohibition on derivatives without change.

Agenda Item: 4 **Agenda Date: 8/28/2026**

The benefit is a sounder, clearer policy that recognizes SVCE's compliance obligations alongside the ongoing work of balancing supply and demand.

The second substantive revision raises the maximum Net Open Position tolerance band to 110% across all years in Section 6.4, while leaving the minimum levels unchanged. The prior policy update introduced the Power Charge Indifference Adjustment (PCIA) as a financial hedge but did not fully contemplate the implications for out-year positions relative to the existing thresholds. Because SVCE must comply with long-term Renewable Portfolio Standard (RPS) contracts, and because the PCIA functions as a financial hedge against the physical portfolio, the existing upper bound could place the portfolio out of tolerance for reasons that reflect compliance obligations rather than imprudent risk-taking. Raising the upper band, together with an exception for compliance obligations, makes the tolerance thresholds consistent with the addition of the PCIA hedge and with SVCE's long-term contractual commitments.

The remaining revisions are non-substantive and are intended to improve clarity and align the policy with practice and with proper terminology. In summary, these revisions: add "solicitations" to the scope of the document to affirm that proper solicitation processes are referenced in policy; add load-risk language acknowledging that forecasts may be affected by the arrival or departure of large customer loads independent of weather; tighten the product table by removing redundant references without adding or removing any products; add a definition of Congestion Revenue Rights (CRRs) and clarify, in the table and its footnotes, that CRR Allocations are provided to SVCE at no cost based on the load it serves while delegated authority and limits apply to CRR Auction transactions; clarify that delegated authority is intended to apply per transaction rather than cumulatively, a term that had been a source of confusion among staff; and revise the conflict-of-interest language to reference an employee's "financial interest" rather than "direct holdings," aligning the policy with proper legal terminology while recognizing that employees or their family members may hold interests within larger personal portfolios that do not constitute a conflict. Detail on each non-substantive revision is provided in the Appendix.

Taken together, the revisions preserve the intent and rigor of the ERMP while improving its precision, aligning it with SVCE's compliance obligations, and reducing avenues for misinterpretation by staff.

STRATEGIC PLAN

Prudently managing SVCE's financial position is supported by Strategic Plan Goal 6 – **"**Maintain healthy financial position; avoid failures in the management of market risk, credit risk, liquidity risk, operational risks, and enterprise risks."

ALTERNATIVE

Staff are open to feedback and suggestions from the Executive Committee.

FISCAL IMPACT

There is no fiscal impact.

ATTACHMENTS

1. Energy Risk Management Policy (redline)
2. Energy Risk Management Policy (clean)
3. Risk Controls and Oversight Presentation

Energy Risk Management Policy

Adopted: ~~March 12, 2025~~ TBD

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1 General Provisions

1.1 Background and Purpose of Policy

Silicon Valley Clean Energy's (SVCE) mission is to reduce dependence on fossil fuels by providing carbon free, affordable, and reliable electricity and innovative programs for the SVCE community.

This Energy Risk Management Policy (Policy) has been developed to help ensure that SVCE achieves its mission and adheres to policies established by the SVCE Board of Directors (Board), power supply and related contract commitments, good utility practice, and all applicable laws and regulations. SVCE is not engaged in the power supply business for profit and is, therefore, precluded by this Policy from engaging in many of the risk-taking activities typical to an organization orientated solely toward profit maximization.

This Policy defines SVCE's general energy risk management framework and provides management with the authority to establish processes for monitoring, measuring, reporting, and controlling market and credit risks to which SVCE is exposed in its normal course of business.

1.2 Scope of Business and Related Market Risks

SVCE provides energy to retail customers in its service territory that entails business activities such as; solicitations and bilateral purchases and sales of electricity under short-, medium- and long-term contracts; scheduling of load and generation of electricity into California Independent Systems Operator (CAISO) markets; retail marketing of electricity to consumers within its service territory; compliance with voluntary objectives and regulatory requirements as it relates to carbon free and renewable portfolio standard (RPS) compliant energy; participation in CAISO Congestion Revenue Rights ("CRRs") market; managing the balance of load and generation over short, medium and long term horizons; and compliancewith California Public Utilities Commission (CPUC) Resource Adequacy (RA) requirements.

Examples of energy market risks include, but are not limited to, the following:

- Mark-to-Market Risk
- Market Price Risk
- Net Revenue Risk
- Counterparty Credit and Performance Risk
- Load and Generation Volumetric Risk
- Operational Risk
- Liquidity Risk
- Regulatory/Legislative Risk

This Policy focuses on the following:

- Risk Management Goals and Principles
- Definitions of Risks
- Internal Control Principles
- Risk Management Business Practices
- Authorized Transaction and Trading Limitations
- Risk Management Governance

This Policy does not address the following types of general business risk, which are treated separately in other official policies, ordinances, and regulations of SVCE: fire, accident and casualty; health, safety, and workers' compensation; cybersecurity, general liability; and other such typically insurable perils. The term "risk management," as used herein, is therefore understood to refer solely to energy market risks as herein defined, and not those other categories of risk.

1.3 Policy Administration

This Energy Risk Management Policy (Policy) is adopted by the SVCE Board of Directors and will be reviewed and updated as needed at least every two calendar years by SVCE's Board. The CEO is responsible for implementation of the Policy. The CEO is also responsible to develop Energy Risk Management Guidelines (Guidelines), which is required for staff to follow to implement the Policy.

1.4 Policy Distribution

This Policy shall be distributed to all SVCE employees and third-party contractors who are engaged in the planning, procurement, sale and scheduling of electricity on SVCE's behalf and/or in other SVCE departments providing oversight and support for these activities.

1.5 Acknowledgement of ERM

All SVCE staff participating in any activity or transaction within the scope of the ERM shall sign, upon joining or upon any material revision of the ERM policy and standard, that such SVCE representative has:

Read the ERM;

Understands the terms and agreements of said ERM;

Will comply with said ERM;

SVCE employees who are within the scope of the ERM understand that any violation of said ERM may subject the employee to discipline up to and including termination of employment.

2 Risk Management Goals

Although SVCE does not engage in risk-taking activities typical in a for-profit organization, certain risks are incidental to the normal power supply operations and hedging activities. SVCE's policy is to manage risk inherent with serving load, including the risks associated with normal cost-hedging activities, those associated with participation in wholesale markets in general and the CAISO in particular.

The goals of energy risk management shall be to:

1. assist in achieving the business objectives in the Strategic Plan, Integrated Resource Plan (IRP) and Cash Reserve Policy including retail rate stability and competitiveness and the accumulation of financial reserves;
2. avoid losses and excessive costs which would materially impact the financial condition of SVCE;
3. establish the parameters for energy procurement and sales activity to obtain the best possible price while ensuring compliance with Board-approved policies;
4. identify specific cost, regulatory and legislative risks that could adversely affect SVCE's ability to achieve its business objectives, and to the extent possible, quantify and measure performance against those risks;

5. assist in assuring that market activities and transactions are undertaken in compliance with established procurement authorities, applicable laws, regulations and orders;
6. encourage the development and maintenance of an agency culture at SVCE in which the proper balance is struck between control and facilitation and in which professionalism, discipline, technical skills, and analytical rigor come together to achieve SVCE objectives; and
7. manage business risks to acceptable levels consistent with retail rate-setting, resource procurement and cash reserve management.

SVCE manages its energy resources and transactions to provide its customers with low-cost renewable, carbon free and other energy while at the same time minimizing risks. The risk management principles that SVCE will use include:

1. Undue exposure to CAISO or bilateral energy market volatility for the purpose of potentially achieving lower costs but at the risk that costs may, in fact, be much higher, will not be accepted.
2. Procurement and hedging strategy will be determined by analytical methods supplemented by experienced judgement. SVCE will use that experienced judgement and its analytical tools to assess system cost drivers such as weather, short term energy prices, load variation and operational constraints to manage timing and quantity of purchases and sales of energy and related services, consistent with the limits identified in this Policy.
3. When actions are taken that are consistent with ERM Policy and supporting Standards and for the combined goal of low costs and optimized risk, those actions are considered to be consistent with the objectives of ERM Policy and supporting Standards.
4. SVCE will not engage in transactions, without proper authorization, whose purpose is not tied to managing compliance, clean directives, costs and risks or are outside of the limits identified in this Policy.

3 Definition of Market Risks

The term "market risks," as used here, refers specifically to those categories of risk which relate to SVCE's participation in wholesale and retail markets as a Load Serving Entity (LSE) and its interests in long-term contracts. Market risks include market price risk, counterparty credit and performance risk, load and generation volumetric risk, operational risk, liquidity risk, and regulatory and legislative risk. These categories are defined and explained as follows.

3.1 Mark-to-Market Risk

Mark-to-Market risk is the risk that wholesale trading positions, long-term supply contracts and generation resources may move "out of the money," that is, become less valuable in comparison with similar positions, contracts, or resources obtainable at present prices. These same positions can also be "in the money" if they become more valuable in comparison to similar positions, contracts, or resources obtainable at present market prices. This valuation methodology is commonly referred to as "Mark-to-Market." If SVCE is "out of the money" on a substantial portion of its contracts, it may have to charge higher retail rates. This may erode SVCE's competitive position and market share if other market participants (e.g., Direct Access providers or PG&E) are able to procure power at a lower cost and offer lower retail electricity rates.

3.2 Market Price Risk

Market Price risk is the risk that market prices change, resulting in changes to energy procurement cost. For example, the cost for the unhedged portion of a supply portfolio (net open position) will increase when market prices increase. Conversely, if resources are in excess to needs and market prices fall, the revenue expected from the sale of the surplus resources will decrease. In addition, uncertain market price relationships (locational risk) affect SVCE's procurement costs.

A subcomponent of market price risk is market liquidity. Illiquid markets make it more difficult to buy or sell a commodity and can result in higher premiums on purchases or deeper discounts on sales.

Another dimension of market price risk is congestion risk. This is also known as basis risk which is the risk associated with differences in locational prices. Congestion risks arise from the difference between the prices SVCE pays the CAISO to schedule its load and the prices SVCE receives from the CAISO for energy delivered by SVCE's suppliers.

3.3 Net Revenue Risk

Net Revenues are the total of all revenues received (from retail sales to customers and from the sale of any energy products), including any calculated financial impacts from the Power Charge Indifference Adjustment (PCIA) and any retail rate(s) indexed to any other rate(s) and/or component(s) such as PG&E rate(s), less the total costs (including the costs of long-term contracts, forward transactions, and spot market purchases plus all other operating costs). Net Revenue Risk is the risk that any of those factors—revenues or costs—changes (e.g. changes in market prices or retail sales volumes,or failures of counterparties). Net Revenue is the "bottom line" for SVCE as it determines the financial viability of the authority.

One of the main components of net revenue risk is on the retail revenue side, which is at risk when customers opt out from service by SVCE and return to PG&E, or if customers choose to find another supplier through direct access opportunities that may arise. In addition, when the PCIA and any other rate(s) or index(es) to which the retail rates are indexed are changed, it directly affects SVCE's financials, as it may lead SVCE to compensate by changing its retail rates.

3.4 Counterparty Credit and Performance Risk

Performance and credit risk refers to the inability or unwillingness of a counterparty to perform according to its contractual obligations or to extend credit. Failure to perform may arise if an energy supplier fails to deliver energy as agreed. There are four general performance and credit risk scenarios:

1. counterparties and wholesale suppliers may fail to deliver energy or environmental attributes, requiring SVCE to purchase replacement products elsewhere, possibly at a higher cost;
2. counterparties may fail to take delivery of energy or environmental attributes sold to them, necessitating a quick resale of the product elsewhere, possibly at a lower price;
3. counterparties may fail to pay for energy or environmental attributes delivered; and
4. counterparties and suppliers may refuse to extend credit to SVCE, possibly resulting in higher collateral posting costs impacting SVCE's cash and bank lines of credit.

An important subcategory of credit risk is concentration risk. When a portfolio of positions and resources is concentrated in one or a very few counterparties, sources, or locations, it becomes more likely that major losses will be sustained in the event of non-performance by a counterparty or supplier or as a result of price fluctuations at one location.

3.5 Load and Generation Volumetric Risk

Energy deliveries must be planned for based upon forecasted load adjusted for distribution line losses. SVCE forecasts load over the long and short term and enters into long- and short-term fixed-price energy contracts to hedge its load.

Load forecasting risks arises from inaccurate load forecasts and can result in the over or under procurement of energy and/or revenues that deviate from approved budgets. Energy delivery risk occurs if a generator fails to deliver expected or forecast energy. Variations in wind speed and cloud cover can also impact the amount of electricity generated by solar and wind resources, and occasional oversupply of power on the grid can lead to curtailment of energy deliveries or reduce revenue as a result of low or negative prices at energy delivery points. Weather is an important variable that can result in higher or lower electricity usage due to heating and cooling needs.

In the CAISO markets this situation can result in both oversupply and undersupply of electricity relative to SVCE's load and the over or under scheduling of generation or load into the day ahead market relative to actual energy consumed or delivered in the real time market. Load and generation volumetric risk may result in unanticipated open positions and imbalance energy costs. Imbalance energy costs result from differences in the price or volume of generation or load scheduled into the day ahead market when compared to the price or volume of generation or load occurring in the real time market during that time period.

3.6 Operational Risk

Operational risk consists of the potential for failure to act effectively to plan, execute, andcontrol business activities. Operational risk includes the potential for:

1. organizational structure that is ineffective in addressing risk (i.e., the lack of sufficient authority to make and execute decisions, inadequate supervision, ineffective internal checks and balances, incomplete, inaccurate, and untimelyforecasts or reporting, failure to separate incompatible functions, etc.);
2. absence, shortage or loss of key personnel or lack of cross-functional training;
3. lack or failure of facilities, equipment, systems, and tools such as computers,software, communications links, and data services;
4. exposure to litigation or sanctions resulting from violating laws and regulations, not meeting contractual obligations, failure to address legal issues and/or receive competent legal advice, not drafting and analyzing contracts effectively, etc.; and
5. errors or omissions in the conduct of business, including failure to execute transactions, violation of policies, standards and procedures, etc.

3.7 Liquidity Risk

Liquidity Risk is the risk that SVCE will be unable to meet its financial obligations. This can be caused by unexpected financial events and/or inaccurate pro forma calculations, rate analysis, and debt analysis. Some unexpected financial events impacting liquidity could include:

1. breach of SVCE credit covenants or thresholds; SVCE has credit covenants included

in its banking and several short-term energy contracts. Breach of credit covenants or thresholds could result in the withdrawal of SVCE's line of credit or trigger the requirement to post collateral;

2. calls for collateral from the CAISO or SVCE's counterparties based on terms of transacting agreements; and
3. from time-to-time SVCE may be the subject of legal or other claims arising from the normal course of business. Payment of a claim by SVCE could reduce SVCE's liquidity if the cause of loss is not covered by SVCE's insurance policies.

3.8 Regulatory/Legislative Risk

Regulatory risk encompasses market structure and operational risks associated with shifting state and federal regulatory policies, rules, and regulations that could negatively impact SVCE. Some examples are the potential increase of exit fees for customers served by Community Choice Aggregators such as SVCE that would result in higher electricity rates for SVCE's customers, and the risk that the customers would select another supplier through an expanded Direct Access program.

Legislative risk is associated with actions by federal and state legislative bodies, such as any adverse changes or requirements that may infringe on SVCE's autonomy, increase its costs, impact its customer base, or otherwise negatively impact SVCE's ability to fulfill its mission.

4 Internal Control Principles

Internal controls shall be based on proven principles that meet or exceed the requirements of financial institutions and credit rating agencies and good utility practices. The required controls shall include all customary and usual business practices designed to prevent errors and improprieties, ensure accurate and timely reporting of results of operations and information pertinent to management, and facilitate attainment of business objectives. These controls are currently and shall remain fully integrated into all activities of the business and shall be consistent with stated objectives.

4.1 Segregation of duties

One of the main aspects of internal controls is the segregation of duties to ensure that the staff person who executes a transaction is not the same person who evaluates or settles the transaction. Appropriate segregation of duties is to be established and maintained throughout the system of controls over financial risks. Senior management must be diligent in ensuring that appropriate segregation of duties is adhered to within the context of organizational changes, while considering staffing limitations, SVCE's business model as a cost hedger, and the overall level of transactions with counterparties. Segregation of duties and functions between front, middle, and back-office activities is generally as follows:

- The Front Office is directly involved in resource planning, product procurement and sales transactions, and implementation of strategies within authorized limits.
- The Middle Office's functions are related to risk management and counterparty credit. The primary responsibility is to ensure that all products utilized and transaction activities are undertaken in compliance with current policy.
- The Back Office is comprised of functions responsible for verification and validation of accounting, processing, reconciling, and settling of all transactions.

Controls over inputs and systems operations are of particular importance in ensuring the integrity of data used in risk control and management. In all cases, there will be an appropriate segregation of duties or oversight to reduce the risk of error and/or fraud.

To the maximum extent practicable given SVCE's business model and level of staffing, Front-Office activities will be functionally independent from Middle and Back Office activities. As a result, the Front Office will generally neither perform nor supervise Middle-Office Risk Management activities, or Back Office financial accounting or settlements. The Director of Power Resources is responsible for ensuring the Front Office's ability to perform tasks in compliance with this Policy. This arrangement will provide independent and regular management oversight for both risk-taking and risk-control activities. It will also allow for a clear separation of duties between the Front-Office transacting and Middle Office risk-controlfunctions.

To the maximum extent practicable given SVCE's business model and level of staffing, Middle Office activities will be functionally independent from all Front Office and Back Office activities. The Middle Office will have primary responsibility for risk management oversight and policy and standards development and compliance. If there are not adequate resources necessary to fully support a Middle Office, this function may be combined with another function or be supported by qualified third-party advisors, provided that appropriate segregation of dutiesor sufficient internal controls are always maintained.

To the maximum extent practicable given SVCE's business model and level of staffing, Back Office settlement activities will be functionally independent from all Front Office and Middle Office activities. The Back Office will have primary responsibility for all transaction confirmation, accounting, and reconciliation processes. If organizational capability and expertise do not fully exist within a Back Office, this function may be combined with another function, or be supported by qualified third-party advisors, provided that appropriate segregation of duties or sufficient internal controls are maintained at all times. This determination may be made by the CEO and/or CFO.

4.2 Additional Internal Controls

Besides segregation of duties, additional required operational control principles include the following, which the CEO shall implement by incorporating them into the ERM Standards:

1. Delegation of authority that is commensurate with responsibility and capability, and relevant training to ensure adequate knowledge to operate in and comply with rules associated with the markets in which they transact (e.g., CAISO). Contract origination, commercial approval, confirmation, legal review, invoice validation, and transaction auditing shall be performed by separate staff or contractor for any single transaction. No single staff member shall perform all these functions on any transaction.
2. Defining authorized products and transactions (see Section 6.3).
3. Defining procurement authority for any transactions for which procurement authority has not already been explicitly granted as set forth in SVCE's Purchasing Policy and any Board Resolution delegating energy procurement authority (e.g. Resolution 2016-15 which delegates authority to the CEO to execute confirmation agreements with energy service providers with whom SVCE has executed Master Agreements).
4. Defining proper trade capture process for executing power supply contracts.
5. Complete and precise capture of transaction and other data, with standardization of electronic and hard copy documentation.
6. Meaningful summarization and accurate reporting of transactions and other activity at regular intervals.
7. Consultation with legal counsel on all legal issues related to this Policy.
8. Timely and accurate risk and performance measurement at regular intervals.
9. Regular compliance review to ensure that this Policy and the Guidelines are adhered to, with specific guidelines for resolving instances of noncompliance.

10. Active participation by senior management in risk management processes.

5 Risk Management Business Practices

5.1 Risk Measurement Metrics and Reporting

A vital element of this Policy is the regular identification, measurement, and communication of risk. To effectively communicate risk, all risk management activities must be monitored on a frequent basis using risk measurement methodologies that quantify the risks associated with SVCE's procurement-related business activities and performance relative to goals. SVCE measures and updates its risks using a variety of tools that model programmatic financial projections, market exposure and risk metrics, as well as through short term budget updates.

SVCE seeks to minimize financial exposure to higher-volatility spot market wholesale electricity using rolling hedges and net open position percentage bands. Financial exposure creates budget uncertainty. To mitigate the financial exposure to short-time horizon price volatility, SVCE continually reduces its financial exposure by reducing the quantity of energy in either open long or short positions. The metrics used for monitoring the portfolio are maintained in the ERM Standards.

Consistent with the above, the Middle Office will develop reports and provide feedback to an internal Risk Oversight Committee. Risk measurement methodologies shall be re-evaluated on a periodic basis to ensure SVCE adjusts its methods to reflect the evolving competitive landscape.

In addition to ensuring the portfolio is within the approved hedge bands, portfolio management decisions are supported by risk metrics from simulations of future market conditions, loads, and other material risk drivers for the portfolio.

Stress tests will are used to understand the potential variability in SVCE's projected procurement costs, and resulting retail rate impacts and competitive positioning, associated with adverse scenarios of material risk drivers. The stress test analysis will complement other probabilistic metrics used to manage portfolio risks and its results will be distributed on at least an annual basis to the ROC.

5.2 Mark-to-Market Risk

SVCE manages its mark-to-market risk by comparing the current value of any wholesale trading positions and long-term supply contracts to the cost of the contracts. This is important if there are trading restrictions for entering into new transactions with certain counterparties based on the terms of the agreements and to counterparty credit limits. Being aware of the Mark-to-Market of the portfolio is important as it provides an indication of the competitiveness of the portfolio.

5.3 Market Price Risk

SVCE manages market price risk by determining its Load and Resource Balance which defines forecasted load, energy under contract and SVCE's open positions in various energy product types including renewable energy, carbon free energy, system power, and SVCE's procurement targets.

SVCE minimizes financial exposure to higher-volatility spot market wholesale electricity prices by

hedging its NOP according to the NOP tolerance bands in Section 6.4.

In general, SVCE will seek to ladder its long-term purchases of renewable energy to diversify exposure to market conditions and reduce the risk of concentrating purchases in any one year.

For products generally purchased through short- and medium-term contracts, SVCE follows a similar strategy of diversifying contracting over the delivery horizon.

As predominantly a net buyer, SVCE manages its market liquidity risk through purchasing at different intervals and maintaining a diverse set of counterparties to transact with.

Congestion risk is managed through the contracting process with a preference for day ahead scheduling and energy delivery at the NP 15 trading hub and through resource assessment and selection. Once energy is procured SVCE manages congestion risks through the prudent management of Congestion Revenue Rights (CRRs). CRRs are financial instruments used to hedge against transmission congestion costs encountered in the CAISO day-ahead market. SVCE uses a third-party scheduling coordinator to manage its CRR portfolio. SVCE uses CRRs to reduce its exposure to congestion and other CAISO charges and will not use CRRs for speculative purposes.

5.4 Net Revenue Risk

SVCE manages net revenue risk by managing each of its contributing factors as described in other sections in this Policy—market price risk, load and generation volumetric risk, counterparty performance, etc. In addition, SVCE strives to provide competitively priced products that are valued by its customers to minimize opt-out rates. Net revenue is monitored closely so that trend changes can be identified as early as possible and corrective action can be taken as appropriate.

5.5 Counterparty Credit and Performance Risk

SVCE evaluates and monitors the financial strength of service and energy providers. Generally, SVCE manages its exposure to energy suppliers through a preference for counterparties with Investment Grade Credit ratings as determined by Moody's and/or Standardand Poor's and through the use of security requirements in the form of cash and letters of credit. SVCE measures its mark-to-market counterparty credit exposure consistent with industry best practices with methodology documented in ERM Standards. Additionally, ~~The~~ the ERM Standards cover guidelines to assess and monitor counterparty creditworthiness, counterparty credit exposures, counterparty limits and manage counterparty and collateral call risk.

5.6 Load and Generation Volumetric Risk

SVCE manages energy delivery risks by ensuring that contracts include appropriate contractual penalties for non-delivery, acquiring energy from a geographically and technologically diverse portfolio of generating assets with a range of generation profiles.

SVCE manages load forecasting and related weather risks by contracting with qualified data management and scheduling coordinators who together provide the systems and data necessary to forecast and schedule load using good utility practice. SVCE's load scheduling strategy, as executed by its scheduling coordinator, ensures that price risk in the day ahead and real time CAISO markets is managed effectively and is consistent with good utility practice.

SVCE has contracted for long-term electricity resources including large hydroelectricity, renewable energy and storage to meet its RPS and clean goals. For many of these contracts, SVCE has scheduling coordination responsibilities and intends to work with Central Coast Community Energy (CCCE) to manage these resources.

SVCE's generation scheduling strategy, as executed by its scheduling coordinator and in coordination with CCCE when necessary, ensures that the resources are scheduled to produce needed PCC1 renewable energy certificates; manage curtailment risk; meet the regulatory requirements for Resource Adequacy; and optimize energy value either in the day-ahead or real time market. To effectively manage these resources, SVCE will delegate limited authority to its scheduling coordinator within the guidelines of the board-approved operating agreement. The CEO will approve an operating plan for management of each of its Power Purchase Agreements.

For load volumetric risk, beyond weather risk, there remains a discrete binary event driven risk. This risk relates to large customers loads joining SVCE through default enrollment, contractual choice, or large customer loads departing from SVCE (to move back to PG&E, to a direct access provider, bypassing SVCE through solar and/or microgrid, or shutting down operations). These could be a sizeable and potentially create an unexpected step change in the SVCE load forecast. SVCE cannot always quantify these changes as a risk metric, but may integrate economic attrition in existing risk metrics. Further SVCE routinely performs stress testing to understand the impact of unexpected load migration to or from SVCE. Overall, SVCE manages this risk, as best as possible, with monitoring and close collaboration between procurement, customer, member agencies' planning staff, finance, regulatory and risk management teams.

5.7 Operational Risk

Operational risks are managed through:

- Adherence to this Policy, Standards and oversight of procurement activity;
- Conformity to Employee Handbook;
- Staff resources, expertise and/or training reinforcing a culture of compliance;
- Ongoing and timely internal and external audits; and
- Cross-training amongst staff
- Authorized traders and others involved in any phase of transacting are prohibited to own stock in a current or potential counterparty to avoid a conflict of interest

5.8 Liquidity Risk

SVCE manages liquidity risk through adherence to its loan and power purchase agreement credit covenants, limiting commitments to provide security consistent with the Guidelines, ensuring it has adequate loan facilities, prudent cash and investment management, and adherence to its Cash Reserve Policy. SVCE monitors its liquidity (defined as unrestricted cash, investments and unused bank lines of credit) no less than weekly. SVCE utilizes scenario and sensitivity analyses while preparing budget, rate, and pro forma analyses in order to identify potential financial outcomes and ensure sufficient liquidity under adverse conditions.

5.9 Regulatory/Legislative Risk

SVCE manages its regulatory and legislative risk through active participation in working groups and advocacy coalitions such as the California Community Choice Association. SVCE

regularly participates in regulatory rulemaking proceedings and legislative affairs to protect SVCE's interests.

5.10 Reporting

Reporting of critical information to relevant parties is a key component of energy risk management. Periodic reports will be provided to the ROC that shall provide sufficient details on SVCE's transactions, NOP, market exposure, credit exposure, counterparty credit ratings, transaction compliance, and other relevant data. The frequency and content of the reports for each oversight body shall be prescribed in the Energy Risk Management Standards.

Compliance exceptions are actions which violate the limits, and/or the procedures developed and approved in consultation with the ROC. For example, the risks associated with the portfolio or a specific transaction within the portfolio may fall outside of any established risk limit at a given point intime.

In the event a compliance exception occurs, the CEO will notify the ROC within 24 hours via email after it is identified and ensure that the Front Office prepares a report (Exception Report) for the ROC at its next meeting. The Report shall identify the issue or violation, and discuss the alternative remedial actions, document the action takenin response, and describe the steps that will be taken to prevent a reoccurrence of the event.

6 Authorized Transaction and Trading Limitations

6.1 Trader Authorization Process

SVCE shall maintain steps for Trader Authorization in the ERM Standards. Standards will ensure that authorized traders have the required background, experience, training and integrity to transact on behalf of SVCE.

6.2 Approved Markets

Approved markets in which SVCE authorized traders can participate are as follows:

- California Independent System Operator (CAISO);
- Bilateral energy, attributes and capacity market;
- Western Electricity Coordinating Council (WECC); and
- California Air Resources Board (CARB) emissions/carbon auctions

6.3 Approved Transactions

All Approved Transactions will be initiated through solicitation, bilateral negotiation, auction, or allocation process as further detailed in the ERM Standard. Authorized transactions which SVCE authorized traders can utilize must be consistent withthis Policy. Transactions must be directly related to the procurement and/or administrationof products~~:~~ to meet load obligations and compliance for ~~for~~ power supply, hedging and operation of the Authority. Such products include but are not limited to:

- Electric energy
- Resource adequacy products
- Reliability products

- RPS and carbon free attributes
- Ancillary services
- Basis transactions and products including congestion revenue rights (CRRs)
- Tolling agreements, & natural gas tolling agreements specifically approved by the board,
- Natural gas hedges needed to manage risks associated with Board-approved natural gas tolling agreements. This includes use of both physical and financially settled natural gas hedges and bilateral purchases of energy products.

- ~~electric energy,~~
- ~~Resource adequacy products,~~
- ~~Storage capacity,~~
- ~~Transmission products,~~
- ~~ancillary services,~~
- ~~congestion revenue rights (CRRs),~~
- ~~renewable energy,~~
- ~~Carbon-free energy and/or attributes~~
- ~~renewable energy certificates (RECs),~~
- ~~basis transactions,~~
- ~~greenhouse gas emissions allowances,~~
- ~~tolling agreements, & natural gas tolling agreements specifically approved by the board,~~
- ~~natural gas hedges needed to manage risks associated with Board-approved natural gas tolling agreements. This includes use of both physical and financially settled natural gas hedges and bilateral purchases of energy products.~~

Prohibited transactions are those transactions that are not related to serving retail electric load and/or reducing financial exposure. Speculative buying and selling of energy products is prohibited~~, including the use of financial derivatives such as but not limited to futures, swaps, options, and swaptions~~. Speculation is defined as buying energy more than forecasted load plus reasonable planning reserves or selling energy or environmental attributes that are not yet owned by SVCE. In no event shall speculative transactions be permitted. Procurement to meet compliance obligations set by a regulatory authority is not considered speculative, even if it may exceed forecasted load needs.

The use of financial derivatives, including but not limited to futures, swaps, options, and swaptions is prohibited. Transactions that are technically financial but settle with physical obligation into CAISO are permitted (e.g., ISTs and CRRs).

6.4 Tolerance Bands

Hedging its load obligation is a key function for SVCE. The primary responsibility of the Front Office is to manage the energy portfolio by purchasing energy to hedge the cost of SVCE's load obligation and managing SVCE's portfolio of power resources to optimize value and load obligations. Table 1.

Energy Hedging

SVCE will maintain Net Open Position (NOP) portfolio hedge levels, ***inclusive*** of a percentage related to the PCIA and any retail rate(s) indexed to any other rate(s)

and/or component(s) such as PG&E rate(s), within the tolerances ~~-~~outlined in Table 1 below. :

Table 1 Calendar Year Energy NOP Tolerance Bands

Period*	Minimum Tolerance	Maximum Tolerance
Current Balance of Year	80%	110%
Year 2	70%	~~90~~110%
Year 3	55%	~~80~~110%
Year 4	50%	~~80~~110%
Year 5	50%	~~80~~110%

*For example, if the current year calendar year is 2023, then Year 2 is 2024.

In the event, the Maximum Tolerance level is exceeded because of a physical position needed to meet compliance obligations for RPS and/or carbon-free energy, SVCE will not automatically unwind a position to be within the limits. Instead, SVCE will report the exception to the ROC and will only sell on a forward basis if there is no need to hold the position for compliance purposes and the underlying resource volume is considered firm or certain.

Resource Adequacy

SVCE must comply with the regulatory requirements for procurement of capacity products for Resource Adequacy (RA) needs. SVCE endeavors to purchase RA products over time to meet its obligation and to diversify itspurchases between suppliers and market conditions.

Renewable Portfolio Standard and Carbon-free

With respect to purchases to meet the Renewable Portfolio Standard (RPS), SVCE is guided by its Strategic Plan, which states that purchases shall meet legislative and regulatory requirements, Board directives and shall be staggered to accommodate regulatory uncertainty, changes in load and supply price risks and that the RPS portfolio should be diversified with respect to technologies.

Congestion Revenue Rights

CRRs are a tool used to manage a portion of Market Risk known as basis risk, which is the difference in wholesale energy price between where SVCE has a generation resource versus the price paid to meet load in the CAISO market. As a load serving entity, SVCE is awarded a certain quantity of CRRs which it may use to mitigate some of the risk. SVCE may also participate in the CAISO's CRR Auction in order to acquire additional CRRs. While CRRs are intended to hedge risk, they can create an obligation or cost to SVCE. CRRs, whether from auction or allocation, are administered by CAISO, and CAISO is the sole SVCE counterparty for the CRRs. Guidelines related to the overall CRR strategy including amount, location and bidding, are included in the ERM Standard.

6.5 Authorized Trading Limits

6.5.1 Transacting Authority Retained by the Board

The Board retains the authority to approve:

- All transactions with terms of over 12 months unless it has explicitly delegated authority to the CEO;

- All transactions with terms of over 5 years; and
- Master Agreements under which the CEO is delegated authority to transact

6.5.2 Authority Delegated to the CEO by the Board

Under the Board-approved Purchasing Policy, the CEO is delegated the authority to approve and execute contracts for ~~E~~energy ~~P~~procurement for terms of less than or equal to 12 months, to meet SVCE's expected energy, capacity, and hedging needs, which the CEO shall timely report to the Board. In addition, under Resolution 2019-03, the Board delegates to the CEO the authority to enter into Confirmations for terms not greater than 60 months and limited to authorized transactions consistent with forecasted load and withinthe Energy Hedge Tolerance Bands (as defined in the ERM Standards).

Table 2 below lists the authorized trading limits to transact on behalf of SVCE for all non-resource adequacy related products. If the CEO delegates some of their authority, they must document any such delegations in the Energy Risk Management Standards. Table 3 below lists the authorized annual trading limits for broker fees per broker.

Table 2: Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limits	Who
Energy, Capacity, and CAISO Ancillary Services	Day Ahead and Real Time	N/A	As needed to meet SVCE's expected load obligations with the CAISO	Any counterparty	CEO
Gas	Daily	N/A	As needed to meet SVCE's obligations for gas tolls*	Through the counterparty associated with the toll	CEO
Energy(Power) Gas, Capacity, CRRs through CAISO Auction**,and Environmental Products	Up to 12 Months	18 months	As needed to meet SVCE's expected load^/gas toll*needs (per Purchasing Policy)	Any counterparty	CEO
	Up to 60 months	72 months	As needed to meet SVCE's expected load/gas toll*needs	Board-approved Master Agreements	CEO
	Over 60 months	As approved by Board	As approved bythe Board	As approved by the Board	Board

^~~m~~May include physical IST transactions or financial derivatives.
*~~n~~Natural gas hedges needed to manage risks associated with board approved natural gas tolling agreements.

**CRRs through CAISO allocation may exceed 72 months, and extend up to 108 months (9 years), if part of the standard claim an LSE possesses on allocated CRRs.

Table 3: Authority Delegated to the CEO by the Board for Brokered Transactions

Transaction Type	Fiscal Year Limit
Brokered Transactions Fees	$500K of broker fee expense per broker

6.5.3 Resource Adequacy Authority Delegated to the CEO by the Board

The CEO has the authority to meet resource adequacy requirements based on CPUC and CAISO guidelines. Failure to meet California's RA compliance obligations may subject SVCE to hefty penalties.

To adequately and effectively meet RA requirements, the CEO needs a broad authority to transact for terms of up to five years and with a broad set of suppliers, including counterparties not under a Master Agreement. Table 4 lists the CEO's authority for RA transactions, which may be delegated provided proper documentation is established by the CEO.

Table4: Resource Adequacy Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limit	Who
Resource Adequacy	Up to 60 months	72 months	As required to comply	Any counterparty	CEO

6.5.4 Limits of Authority Delegated to Authorized Personnel by the CEO

Although the CEO may delegate some of her/his authority to Authorized Personnel, the Boardlimits the authority she/he can delegate as shown in Table 5 below:

Table 5: Per Transaction Limits of Authority Delegated to Authorized Personnel by the CEO

Product	Term Limit	Notional Value Limit*
Energy, Capacity, and CAISO Ancillary Services	Day Ahead and Real Time	As needed to meet SVCE's obligations with the CAISO
Energy**	Balance of the month	$5 Million
	Prompt month	$7.5 Million
	Up to 12 months	$25 Million
	Prompt month	As needed to meet SVCE's obligations

Resource Adequacy Products, CRRs through Auction	Balance of compliance year	As needed to meet SVCE's obligations
	Up to 12 months	$15 Million
Environmental Products (Carbon Free and Renewable Energy Resources)	Up to 12 months	$15 Million

*Notional value limits are inclusive of broker fees ~~and represent cumulative notional value limits irrespective of the time of transaction.~~
** Energy Notional Value Limits are ~~cumulative~~exclusive of one another for any one transaction, such that the $25MM up to twelve months is in addition to the balance of month and prompt month values (and not inclusive of them). They are not cumulative across transactions as this table is for per transaction limits.

6.6 Conflict of Interest

All SVCE employees who are involved in any aspect of transacting for energy or energy-related resources are prohibited from investing or having a financial interest in any company with whom they transact on behalf of SVCE ~~transacts~~,including ~~those with whom it has executed~~ enabling agreements. Prior to preparing a solicitation, engaging in evaluation of, negotiation with, transacting with, or oversight of a transaction or potential transaction with any company, all involved employees must ensure that they do not have a financial interest in ~~are divested in direct holdings with~~ that company. The ban on investment and requirement to divest is regardless of whether the investment would require disclosure on the employee's FPPC Form 700.

SVCE employees will sign notice acknowledging policy regarding conflict of interest and report any existing or potential conflicts of interest (see Appendix A).

7 Risk Management Policy Governance

7.1 SVCE Board of Directors

The SVCE Board is responsible for adopting this Policy and reviewing it as needed every two calendar years. The Board also approves SVCE's annual budget, contracting authorities and delegates responsibilities for the management of SVCE's operations to its CEO.

7.2 Risk Oversight Committee

SVCE's CEO formed the Risk Oversight Committee (ROC) and is responsible to inform the ROC about any risk management issues and to provide assurance that this Policy is implemented. The CEO will provide the ROC information and analysis that illustrate that all transactions are consistent with the risk tolerances and that risk management controls and practices are sufficient to monitor and manage risks that SVCE is exposed to.

The ROC will meet at least once per calendar quarter, or as otherwise called to order by the CEO.

At the CEO's direction, the ROC may engage in the following activities. The ROC will from time to time review the Energy Risk Management Standards defining indetail the internal controls, strategies and processes for managing market risks incurred through or attendant upon wholesale trading, retail marketing, long-term contracting, CRR trading and load and generation scheduling. The ROC will receive and review information and reports regarding risk management, wholesale trading transactions, and the administration of supply

contracts. The ROC will also review counterparty credit lines and cash reserves to ensure proper levels are maintained for credit, operations and liquidity. Inaddition, the ROC shall review any instances of non-compliance with any provisions of the Policy or Standards.

8 Appendix A: Acknowledgement of ERM Policy, Declaration of Conflict of Interest and Trader Integrity Attestation

To:_____

Acknowledgement of ERM Policy & Standards

I acknowledge that I've read, understand, and will comply with SVCE's Energy Risk Management Policy & Standards.

Declaration of Conflict of Interest

I understand that I am obligated to give notice in writing to Silicon Valley Clean Energy of any interest or relationship that I may have in any counterparty that seeks to do business with Silicon Valley Clean Energy, and to identify any real or potential conflict of interest such counterparty has or may have with regard to any existing or potential contract or transaction with Silicon Valley Clean Energy, within 48-hours of becoming aware of the conflict of interest.

I would like to declare the following existing/potential conflict of interest situation arising from the discharge of my duties concerning Silicon Valley Clean Energy activities covered by the scope of the ERM:

a) Persons/companies with whom/which I have official dealings and/or private interests:

b) Brief description of my duties which involved the persons/companies mentioned in item a) above.

Trader Integrity Attestation – Please complete this section if you trade on behalf of SVCE

Yes No : Are you currently under investigation for market manipulation?

Yes No : Were you previously investigated for market manipulation ?

Position and Name: _____

Signature: _____

Date: _____

9 Appendix B: Glossary

- EEI – Edison Electric Institute (industry standardize contracting for enabling agreements)
- PPA – Purchased Power Agreement (structured contract for asset offtake)
- WSPP – Western Systems Power Pool (standardized master agreement)
- CAISO – California Independent System Operator
- Exchange – a futures trading platform
- IST – Inter-Scheduling Coordinator Trade (a financial forward trade scheduled into CAISO with physical load and assets, obtaining the benefits of physical settlement and offsetting collateral obligations for a CAISO participant that may otherwise be longer or shorter without the IST)
- RA – Resource Adequacy
    - Generic – a type of RA that is basic system or local RA throughout the day
    - Flex – a type of RA that is from asset with the ability to ramp quickly to meet rapid fluctuations in load (e.g. the 'evening ramp' of the 'duck curve')
    - IAR – Import Allocation Rights, needed to count out-of-state import as RA
    - MTR – Mid-Term Reliability – obligations to procure to help meet California's RA shortfalls over the next 3-5 years
- RPS – Renewable Portfolio Standard (state mandated renewable procurement percentage)
- PCC1 – Portfolio Content Category 1 (the highest level of RPS compliance product)
- CF – Carbon Free
- GHG Free – Green House Gas Free
- CRR – Congestion Revenue Right (a CAISO product for hedging congestion risk)
- NG – Natural Gas
- OTC – Over the Counter (broker or bilateral transactions not performed on an exchange)
- ICE – Intercontinental Exchange (the leading power market exchange)
- Fixed – a forward contract with a fixed price set now, for a future delivery
- Index – a forward contract with a price indexed to prices in the future
- Physical Swap (Exchange of Quantity) – a transaction that exchanges quantities from different periods of time, scheduled into CAISO (not financial swaps/derivatives)
- Physical Swap (Fixed Price) – equivalent to Fixed price contract, alternate terminology, scheduled into CAISO (not financial swaps/derivatives)
- Futures – a forward contract executed on and exchange
- Allocation – for CRRs, namely ones allocated by the CAISO
- Auction – for CRRs, CAISO run auctions to procure CRRs not allocated

Energy Risk Management Policy

Adopted: TBD

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1 General Provisions

1.1 Background and Purpose of Policy

Silicon Valley Clean Energy's (SVCE) mission is to reduce dependence on fossil fuels by providing carbon free, affordable, and reliable electricity and innovative programs for the SVCE community.

This Energy Risk Management Policy (Policy) has been developed to help ensure that SVCE achieves its mission and adheres to policies established by the SVCE Board of Directors (Board), power supply and related contract commitments, good utility practice, and all applicable laws and regulations. SVCE is not engaged in the power supply business for profit and is, therefore, precluded by this Policy from engaging in many of the risk-taking activities typical to an organization orientated solely toward profit maximization.

This Policy defines SVCE's general energy risk management framework and provides management with the authority to establish processes for monitoring, measuring, reporting, and controlling market and credit risks to which SVCE is exposed in its normal course of business.

1.2 Scope of Business and Related Market Risks

SVCE provides energy to retail customers in its service territory that entails business activities such as; solicitations and bilateral purchases and sales of electricity under short-, medium- and long-term contracts; scheduling of load and generation of electricity into California Independent Systems Operator (CAISO) markets; retail marketing of electricity to consumers within its service territory; compliance with voluntary objectives and regulatory requirements as it relates to carbon free and renewable portfolio standard (RPS) compliant energy; participation in CAISO Congestion Revenue Rights ("CRRs") market; managing the balance of load and generation over short, medium and long term horizons; and compliancewith California Public Utilities Commission (CPUC) Resource Adequacy (RA) requirements.

Examples of energy market risks include, but are not limited to, the following:

- Mark-to-Market Risk
- Market Price Risk
- Net Revenue Risk
- Counterparty Credit and Performance Risk
- Load and Generation Volumetric Risk
- Operational Risk
- Liquidity Risk
- Regulatory/Legislative Risk

This Policy focuses on the following:

- Risk Management Goals and Principles
- Definitions of Risks
- Internal Control Principles
- Risk Management Business Practices
- Authorized Transaction and Trading Limitations
- Risk Management Governance

This Policy does not address the following types of general business risk, which are treated separately in other official policies, ordinances, and regulations of SVCE: fire, accident and casualty; health, safety, and workers' compensation; cybersecurity, general liability; and other such typically insurable perils. The term "risk management," as used herein, is therefore understood to refer solely to energy market risks as herein defined, and not thoseother categories of risk.

1.3 Policy Administration

This Energy Risk Management Policy (Policy) is adopted by the SVCE Board of Directors and will be reviewed and updated as needed at least every two calendar years by SVCE's Board. The CEO is responsible for implementation of the Policy. The CEO is also responsible to develop Energy Risk Management Guidelines (Guidelines), which is required for staff to follow to implement the Policy.

1.4 Policy Distribution

This Policy shall be distributed to all SVCE employees and third-party contractors who are engaged in the planning, procurement, sale and scheduling of electricity on SVCE's behalf and/or in other SVCE departments providing oversight and support for these activities.

1.5 Acknowledgement of ERM

All SVCE staff participating in any activity or transaction within the scope of the ERM shall sign, upon joining or upon any material revision of the ERM policy and standard, that such SVCE representative has:

Read the ERM;

Understands the terms and agreements of said ERM;

Will comply with said ERM;

SVCE employees who are within the scope of the ERM understand that any violation of said ERM may subject the employee to discipline up to and including termination of employment.

2 Risk Management Goals

Although SVCE does not engage in risk-taking activities typical in a for-profit organization, certain risks are incidental to the normal power supply operations and hedging activities. SVCE's policy is to manage risk inherent with serving load, including the risks associated with normal cost-hedging activities, those associated with participation in wholesale markets in general and the CAISO in particular.

The goals of energy risk management shall be to:

1. assist in achieving the business objectives in the Strategic Plan, Integrated Resource Plan (IRP) and Cash Reserve Policy including retail rate stability and competitiveness and the accumulation of financial reserves;
2. avoid losses and excessive costs which would materially impact the financial condition of SVCE;
3. establish the parameters for energy procurement and sales activity to obtain the best possible price while ensuring compliance with Board-approved policies;
4. identify specific cost, regulatory and legislative risks that could adversely affect SVCE's ability to achieve its business objectives, and to the extent possible, quantify and measure performance against those risks;

5. assist in assuring that market activities and transactions are undertaken in compliance with established procurement authorities, applicable laws, regulations and orders;
6. encourage the development and maintenance of an agency culture at SVCE in which the proper balance is struck between control and facilitation and in which professionalism, discipline, technical skills, and analytical rigor come together to achieve SVCE objectives; and
7. manage business risks to acceptable levels consistent with retail rate-setting, resource procurement and cash reserve management.

SVCE manages its energy resources and transactions to provide its customers with low-cost renewable, carbon free and other energy while at the same time minimizing risks. The risk management principles that SVCE will use include:

1. Undue exposure to CAISO or bilateral energy market volatility for the purpose of potentially achieving lower costs but at the risk that costs may, in fact, be much higher, will not be accepted.
2. Procurement and hedging strategy will be determined by analytical methods supplemented by experienced judgement. SVCE will use that experienced judgement and its analytical tools to assess system cost drivers such as weather, short term energy prices, load variation and operational constraints to manage timing and quantity of purchases and sales of energy and related services, consistent with the limits identified in this Policy.
3. When actions are taken that are consistent with ERM Policy and supporting Standards and for the combined goal of low costs and optimized risk, those actions are considered to be consistent with the objectives of ERM Policy and supporting Standards.
4. SVCE will not engage in transactions, without proper authorization, whose purpose is not tied to managing compliance, clean directives, costs and risks or are outside of the limits identified in this Policy.

3 Definition of Market Risks

The term "market risks," as used here, refers specifically to those categories of risk which relate to SVCE's participation in wholesale and retail markets as a Load Serving Entity (LSE) and its interests in long-term contracts. Market risks include market price risk, counterparty credit and performance risk, load and generation volumetric risk, operational risk, liquidity risk, and regulatory and legislative risk. These categories are defined and explained as follows.

3.1 Mark-to-Market Risk

Mark-to-Market risk is the risk that wholesale trading positions, long-term supply contracts and generation resources may move "out of the money," that is, become less valuable in comparison with similar positions, contracts, or resources obtainable at present prices. These same positions can also be "in the money" if they become more valuable in comparison to similar positions, contracts, or resources obtainable at present market prices. This valuation methodology is commonly referred to as "Mark-to-Market." If SVCE is "out of the money" on a substantial portion of its contracts, it may have to charge higher retail rates. This may erode SVCE's competitive position and market share if other market participants (e.g., Direct Access providers or PG&E) are able to procure power at a lower cost and offer lower retail electricity rates.

3.2 Market Price Risk

Market Price risk is the risk that market prices change, resulting in changes to energy procurement cost. For example, the cost for the unhedged portion of a supply portfolio (net open position) will increase when market prices increase. Conversely, if resources are in excess to needs and market prices fall, the revenue expected from the sale of the surplus resources will decrease. In addition, uncertain market price relationships (locational risk) affect SVCE's procurement costs.

A subcomponent of market price risk is market liquidity. Illiquid markets make it more difficult to buy or sell a commodity and can result in higher premiums on purchases or deeper discounts on sales.

Another dimension of market price risk is congestion risk. This is also known as basis risk, which is the risk associated with locational difference in prices. Congestion risks arise from the difference between the prices SVCE pays the CAISO to schedule its load and the prices SVCE receives from the CAISO for energy delivered by SVCE's suppliers.

3.3 Net Revenue Risk

Net Revenues are the total of all revenues received (from retail sales to customers and from the sale of any energy products), including any calculated financial impacts from the Power Charge Indifference Adjustment (PCIA) and any retail rate(s) indexed to any other rate(s) and/or component(s) such as PG&E rate(s), less the total costs (including the costs of long-term contracts, forward transactions, and spot market purchases plus all other operating costs). Net Revenue Risk is the risk that any of those factors—revenues or costs—changes (e.g. changes in market prices or retail sales volumes,or failures of counterparties). Net Revenue is the "bottom line" for SVCE as it determines the financial viability of the authority.

One of the main components of net revenue risk is on the retail revenue side, which is at risk when customers opt out from service by SVCE and return to PG&E, or if customers choose to find another supplier through direct access opportunities that may arise. In addition, when the PCIA and any other rate(s) or index(es) to which the retail rates are indexed are changed, it directly affects SVCE's financials, as it may lead SVCE to compensate by changing its retail rates.

3.4 Counterparty Credit and Performance Risk

Performance and credit risk refers to the inability or unwillingness of a counterparty to perform according to its contractual obligations or to extend credit. Failure to perform may arise if an energy supplier fails to deliver energy as agreed. There are four general performance and credit risk scenarios:

1. counterparties and wholesale suppliers may fail to deliver energy or environmental attributes, requiring SVCE to purchase replacement products elsewhere, possibly at a higher cost;
2. counterparties may fail to take delivery of energy or environmental attributes sold to them, necessitating a quick resale of the product elsewhere, possibly at a lower price;
3. counterparties may fail to pay for energy or environmental attributes delivered; and
4. counterparties and suppliers may refuse to extend credit to SVCE, possibly resulting in higher collateral posting costs impacting SVCE's cash and bank lines of credit.

An important subcategory of credit risk is concentration risk. When a portfolio of positions and resources is concentrated in one or a very few counterparties, sources, or locations, it becomes more likely that major losses will be sustained in the event of non-performance by a counterparty or supplier or as a result of price fluctuations at one location.

3.5 Load and Generation Volumetric Risk

Energy deliveries must be planned for based upon forecasted load adjusted for distribution line losses. SVCE forecasts load over the long and short term and enters into long- and short-term fixed-price energy contracts to hedge its load.

Load forecasting risks arises from inaccurate load forecasts and can result in the over or under procurement of energy and/or revenues that deviate from approved budgets. Energy delivery risk occurs if a generator fails to deliver expected or forecast energy. Variations in wind speed and cloud cover can also impact the amount of electricity generated by solar and wind resources, and occasional oversupply of power on the grid can lead to curtailment of energy deliveries or reduce revenue as a result of low or negative prices at energy delivery points. Weather is an important variable that can result in higher or lower electricity usage due to heating and cooling needs.

In the CAISO markets this situation can result in both oversupply and undersupply of electricity relative to SVCE's load and the over or under scheduling of generation or load into the day ahead market relative to actual energy consumed or delivered in the real time market. Load and generation volumetric risk may result in unanticipated open positions and imbalance energy costs. Imbalance energy costs result from differences in the price or volume of generation or load scheduled into the day ahead market when compared to the price or volume of generation or load occurring in the real time market during that time period.

3.6 Operational Risk

Operational risk consists of the potential for failure to act effectively to plan, execute, andcontrol business activities. Operational risk includes the potential for:

1. organizational structure that is ineffective in addressing risk (i.e., the lack of sufficient authority to make and execute decisions, inadequate supervision, ineffective internal checks and balances, incomplete, inaccurate, and untimelyforecasts or reporting, failure to separate incompatible functions, etc.);
2. absence, shortage or loss of key personnel or lack of cross-functional training;
3. lack or failure of facilities, equipment, systems, and tools such as computers,software, communications links, and data services;
4. exposure to litigation or sanctions resulting from violating laws and regulations, not meeting contractual obligations, failure to address legal issues and/or receive competent legal advice, not drafting and analyzing contracts effectively, etc.; and
5. errors or omissions in the conduct of business, including failure to execute transactions, violation of policies, standards and procedures, etc.

3.7 Liquidity Risk

Liquidity Risk is the risk that SVCE will be unable to meet its financial obligations. This can be caused by unexpected financial events and/or inaccurate pro forma calculations, rate analysis, and debt analysis. Some unexpected financial events impacting liquidity could include:

1. breach of SVCE credit covenants or thresholds; SVCE has credit covenants included in its banking and several short-term energy contracts. Breach of credit covenants or thresholds could result in the withdrawal of SVCE's line of credit or trigger the requirement to post collateral;
2. calls for collateral from the CAISO or SVCE's counterparties based on terms of transacting agreements; and
3. from time-to-time SVCE may be the subject of legal or other claims arising from the normal course of business. Payment of a claim by SVCE could reduce SVCE's liquidity if the cause of loss is not covered by SVCE's insurance policies.

3.8 Regulatory/Legislative Risk

Regulatory risk encompasses market structure and operational risks associated with shifting state and federal regulatory policies, rules, and regulations that could negatively impact SVCE. Some examples are the potential increase of exit fees for customers served by Community Choice Aggregators such as SVCE that would result in higher electricity rates for SVCE's customers, and the risk that the customers would select another supplier through an expanded Direct Access program.

Legislative risk is associated with actions by federal and state legislative bodies, such as any adverse changes or requirements that may infringe on SVCE's autonomy, increase its costs, impact its customer base, or otherwise negatively impact SVCE's ability to fulfill its mission.

4 Internal Control Principles

Internal controls shall be based on proven principles that meet or exceed the requirements of financial institutions and credit rating agencies and good utility practices. The required controls shall include all customary and usual business practices designed to prevent errors and improprieties, ensure accurate and timely reporting of results of operations and information pertinent to management, and facilitate attainment of business objectives. These controls are currently and shall remain fully integrated into all activities of the business and shall be consistent with stated objectives.

4.1 Segregation of duties

One of the main aspects of internal controls is the segregation of duties to ensure that the staff person who executes a transaction is not the same person who evaluates or settles the transaction. Appropriate segregation of duties is to be established and maintained throughout the system of controls over financial risks. Senior management must be diligent in ensuring that appropriate segregation of duties is adhered to within the context of organizational changes, while considering staffing limitations, SVCE's business model as a cost hedger, and the overall level of transactions with counterparties. Segregation of duties and functions between front, middle, and back-office activities is generally as follows:

- The Front Office is directly involved in resource planning, product procurement and sales transactions, and implementation of strategies within authorized limits.
- The Middle Office's functions are related to risk management and counterparty credit. The primary responsibility is to ensure that all products utilized and transaction activities are undertaken in compliance with current policy.
- The Back Office is comprised of functions responsible for verification and validation of accounting, processing, reconciling, and settling of all transactions.

Controls over inputs and systems operations are of particular importance in ensuring the integrity of data used in risk control and management. In all cases, there will be an appropriate segregation of duties or oversight to reduce the risk of error and/or fraud.

To the maximum extent practicable given SVCE's business model and level of staffing, Front-Office activities will be functionally independent from Middle and Back Office activities. As a result, the Front Office will generally neither perform nor supervise Middle-Office Risk Management activities, or Back Office financial accounting or settlements. The Director of Power Resources is responsible for ensuring the Front Office's ability to perform tasks in compliance with this Policy. This arrangement will provide independent and regular management oversight for both risk-taking and risk-control activities. It will also allow for a clear separation of duties between the Front-Office transacting and Middle Office risk-controlfunctions.

To the maximum extent practicable given SVCE's business model and level of staffing, Middle Office activities will be functionally independent from all Front Office and Back Office activities. The Middle Office will have primary responsibility for risk management oversight and policy and standards development and compliance. If there are not adequate resources necessary to fully support a Middle Office, this function may be combined with another function or be supported by qualified third-party advisors, provided that appropriate segregation of dutiesor sufficient internal controls are always maintained.

To the maximum extent practicable given SVCE's business model and level of staffing, Back Office settlement activities will be functionally independent from all Front Office and Middle Office activities. The Back Office will have primary responsibility for all transaction confirmation, accounting, and reconciliation processes. If organizational capability and expertise do not fully exist within a Back Office, this function may be combined with another function, or be supported by qualified third-party advisors, provided that appropriate segregation of duties or sufficient internal controls are maintained at all times. This determination may be made by the CEO and/or CFO.

4.2 Additional Internal Controls

Besides segregation of duties, additional required operational control principles include the following, which the CEO shall implement by incorporating them into the ERM Standards:

1. Delegation of authority that is commensurate with responsibility and capability, and relevant training to ensure adequate knowledge to operate in and comply with rules associated with the markets in which they transact (e.g., CAISO). Contract origination, commercial approval, confirmation, legal review, invoice validation, and transaction auditing shall be performed by separate staff or contractor for any single transaction. No single staff member shall perform all these functions on any transaction.
2. Defining authorized products and transactions (see Section 6.3).
3. Defining procurement authority for any transactions for which procurement authority has not already been explicitly granted as set forth in SVCE's Purchasing Policy and any Board Resolution delegating energy procurement authority (e.g. Resolution 2016-15 which delegates authority to the CEO to execute confirmation agreements with energy service providers with whom SVCE has executed Master Agreements).
4. Defining proper trade capture process for executing power supply contracts.
5. Complete and precise capture of transaction and other data, with standardization of electronic and hard copy documentation.
6. Meaningful summarization and accurate reporting of transactions and other activity at regular intervals.

7. Consultation with legal counsel on all legal issues related to this Policy.
8. Timely and accurate risk and performance measurement at regular intervals.
9. Regular compliance review to ensure that this Policy and the Guidelines are adhered to, with specific guidelines for resolving instances of noncompliance.
10. Active participation by senior management in risk management processes.

5 Risk Management Business Practices

5.1 Risk Measurement Metrics and Reporting

A vital element of this Policy is the regular identification, measurement, and communication of risk. To effectively communicate risk, all risk management activities must be monitored on a frequent basis using risk measurement methodologies that quantify the risks associated with SVCE's procurement-related business activities and performance relative to goals. SVCE measures and updates its risks using a variety of tools that model programmatic financial projections, market exposure and risk metrics, as well as through short term budget updates.

SVCE seeks to minimize financial exposure to higher-volatility spot market wholesale electricity using rolling hedges and net open position percentage bands. Financial exposure creates budget uncertainty. To mitigate the financial exposure to short-time horizon price volatility, SVCE continually reduces its financial exposure by reducing the quantity of energy in either open long or short positions. The metrics used for monitoring the portfolio are maintained in the ERM Standards.

Consistent with the above, the Middle Office will develop reports and provide feedback to an internal Risk Oversight Committee. Risk measurement methodologies shall be re-evaluated on a periodic basis to ensure SVCE adjusts its methods to reflect the evolving competitive landscape.

In addition to ensuring the portfolio is within the approved hedge bands, portfolio management decisions are supported by risk metrics from simulations of future market conditions, loads, and other material risk drivers for the portfolio.

Stress tests will are used to understand the potential variability in SVCE's projected procurement costs, and resulting retail rate impacts and competitive positioning, associated with adverse scenarios of material risk drivers. The stress test analysis will complement other probabilistic metrics used to manage portfolio risks and its results will be distributed on at least an annual basis to the ROC.

5.2 Mark-to-Market Risk

SVCE manages its mark-to-market risk by comparing the current value of any wholesale trading positions and long-term supply contracts to the cost of the contracts. This is important if there are trading restrictions for entering into new transactions with certain counterparties based on the terms of the agreements and to counterparty credit limits. Being aware of the Mark-to-Market of the portfolio is important as it provides an indication of the competitiveness of the portfolio.

5.3 Market Price Risk

SVCE manages market price risk by determining its Load and Resource Balance which

defines forecasted load, energy under contract and SVCE's open positions in various energy product types including renewable energy, carbon free energy, system power, and SVCE's procurement targets.

SVCE minimizes financial exposure to higher-volatility spot market wholesale electricity prices by hedging its NOP according to the NOP tolerance bands in Section 6.4.

In general, SVCE will seek to ladder its long-term purchases of renewable energy to diversify exposure to market conditions and reduce the risk of concentrating purchases in any one year.

For products generally purchased through short- and medium-term contracts, SVCE follows a similar strategy of diversifying contracting over the delivery horizon.

As predominantly a net buyer, SVCE manages its market liquidity risk through purchasing at different intervals and maintaining a diverse set of counterparties to transact with.

Congestion risk is managed through the contracting process with a preference for day ahead scheduling and energy delivery at the NP 15 trading hub and through resource assessment and selection. Once energy is procured SVCE manages congestion risks through the prudent management of Congestion Revenue Rights (CRRs). CRRs are financial instruments used to hedge against transmission congestion costs encountered in the CAISO day-ahead market. SVCE uses a third-party scheduling coordinator to manage its CRR portfolio. SVCE uses CRRs to reduce its exposure to congestion and other CAISO charges and will not use CRRs for speculative purposes.

5.4 Net Revenue Risk

SVCE manages net revenue risk by managing each of its contributing factors as described in other sections in this Policy—market price risk, load and generation volumetric risk, counterparty performance, etc. In addition, SVCE strives to provide competitively priced products that are valued by its customers to minimize opt-out rates. Net revenue is monitored closely so that trend changes can be identified as early as possible and corrective action can be taken as appropriate.

5.5 Counterparty Credit and Performance Risk

SVCE evaluates and monitors the financial strength of service and energy providers. Generally, SVCE manages its exposure to energy suppliers through a preference for counterparties with Investment Grade Credit ratings as determined by Moody's and/or Standardand Poor's and through the use of security requirements in the form of cash and letters of credit. SVCE measures its mark-to-market counterparty credit exposure consistent with industry best practices with methodology documented in ERM Standards. Additionally, the ERM Standards cover guidelines to assess and monitor counterparty creditworthiness, counterparty credit exposures, counterparty limits and manage counterparty and collateral call risk.

5.6 Load and Generation Volumetric Risk

SVCE manages energy delivery risks by ensuring that contracts include appropriate contractual penalties for non-delivery, acquiring energy from a geographically and technologically diverse portfolio of generating assets with a range of generation profiles.

SVCE manages load forecasting and related weather risks by contracting with qualified data management and scheduling coordinators who together provide the systems and data necessary to forecast and schedule load using good utility practice. SVCE's load scheduling strategy, as executed by its scheduling coordinator, ensures that price risk in the day ahead and real time CAISO markets is managed effectively and is consistent with good utility practice.

SVCE has contracted for long-term electricity resources including large hydroelectricity, renewable energy and storage to meet its RPS and clean goals. For many of these contracts,SVCE has scheduling coordination responsibilities and intends to work with Central Coast Community Energy (CCCE) to manage these resources.

SVCE's generation scheduling strategy, as executed by its scheduling coordinator and in coordination with CCCE when necessary, ensures that the resources are scheduled to produceneeded PCC1 renewable energy certificates; manage curtailment risk; meet the regulatory requirements for Resource Adequacy; and optimize energy value either in the day-ahead or real time market. To effectively manage these resources, SVCE will delegate limited authorityto its scheduling coordinator within the guidelines of the board-approved operating agreement. The CEO will approve an operating plan for management of each of its Power Purchase Agreements.

For load volumetric risk, beyond weather risk, there remains a discrete binary event driven risk. This risk relates to large customers loads joining SVCE through default enrollment, contractual choice, or large customer loads departing from SVCE (to move back to PG&E, to a direct access provider, bypassing SVCE through solar and/or microgrid, or shutting down operations). These could be a sizeable and potentially create an unexpected step change in the SVCE load forecast. SVCE cannot always quantify these changes as a risk metric, but may integrate economic attrition in existing risk metrics. Further SVCE routinely performs stress testing to understand the impact of unexpected load migration to or from SVCE. Overall, SVCE manages this risk, as best as possible, with monitoring and close collaboration between procurement, customer, member agencies' planning staff, finance, regulatory and risk management teams.

5.7 Operational Risk

Operational risks are managed through:

- Adherence to this Policy, Standards and oversight of procurement activity;
- Conformity to Employee Handbook;
- Staff resources, expertise and/or training reinforcing a culture of compliance;
- Ongoing and timely internal and external audits; and
- Cross-training amongst staff
- Authorized traders and others involved in any phase of transacting are prohibited to own stock in a current or potential counterparty to avoid a conflict of interest

5.8 Liquidity Risk

SVCE manages liquidity risk through adherence to its loan and power purchase agreement credit covenants, limiting commitments to provide security consistent with the Guidelines, ensuring it has adequate loan facilities, prudent cash and investment management, and adherence to its Cash Reserve Policy. SVCE monitors its liquidity (defined as unrestricted cash, investments and unused bank lines of credit) no less than weekly. SVCE utilizes scenario and sensitivity analyses while preparing budget, rate, and pro forma analyses in order to identify potential financial outcomes and ensure sufficient liquidity under adverse conditions.

5.9 Regulatory/Legislative Risk

SVCE manages its regulatory and legislative risk through active participation in working groups and advocacy coalitions such as the California Community Choice Association. SVCE regularly participates in regulatory rulemaking proceedings and legislative affairs to protect SVCE's interests.

5.10 Reporting

Reporting of critical information to relevant parties is a key component of energy risk management. Periodic reports will be provided to the ROC that shall provide sufficient details on SVCE's transactions, NOP, market exposure, credit exposure, counterparty credit ratings, transaction compliance, and other relevant data. The frequency and content of the reports for each oversight body shall be prescribed in the Energy Risk Management Standards.

Compliance exceptions are actions which violate the limits, and/or the procedures developed and approved in consultation with the ROC. For example, the risks associated with the portfolio or a specific transaction within the portfolio may fall outside of any established risk limit at a given point intime.

In the event a compliance exception occurs, the CEO will notify the ROC within 24 hours via email after it is identified and ensure that the Front Office prepares a report (Exception Report) for the ROC at its next meeting. The Report shall identify the issue or violation, and discuss the alternative remedial actions, document the action takenin response, and describe the steps that will be taken to prevent a reoccurrence of the event.

6 Authorized Transaction and Trading Limitations

6.1 Trader Authorization Process

SVCE shall maintain steps for Trader Authorization in the ERM Standards. Standards will ensure that authorized traders have the required background, experience, training and integrity to transact on behalf of SVCE.

6.2 Approved Markets

Approved markets in which SVCE authorized traders can participate are as follows:

- California Independent System Operator (CAISO);
- Bilateral energy, attributes and capacity market;
- Western Electricity Coordinating Council (WECC); and
- California Air Resources Board (CARB) emissions/carbon auctions

6.3 Approved Transactions

All Approved Transactions will be initiated through solicitation, bilateral negotiation, auction, or allocation process as further detailed in the ERM Standard. Authorized transactions which SVCE authorized traders can utilize must be consistent withthis Policy. Transactions must be directly related to the procurement and/or administrationof products to meet load obligations and compliance for power supply, hedging and operation of the Authority. Such products include but are not limited to:

- Electric energy
- Resource adequacy products
- Reliability products
- RPS and carbon free attributes
- Ancillary services
- Basis transactions and products including congestion revenue rights (CRRs)
- Tolling agreements, & natural gas tolling agreements specifically approved by the board,
- Natural gas hedges needed to manage risks associated with Board-approved natural gas tolling agreements. This includes use of both physical and financially settled natural gas hedges and bilateral purchases of energy products.

Prohibited transactions are those transactions that are not related to serving retail electric load and/or reducing financial exposure. Speculative buying and selling of energy products is prohibited. Speculation is defined as buying energy more than forecasted load plus reasonable planning reserves or selling energy or environmental attributes that are not yet owned by SVCE. In no event shall speculative transactions be permitted. Procurement to meet compliance obligations set by a regulatory authority is not considered speculative, even if it may exceed forecasted load needs.

The use of financial derivatives including but not limited to futures, swaps, options, and swaptions is prohibited. Transactions that are technically financial but settle with physical obligation into CAISO are permitted (e.g., ISTs and CRRs).

6.4 Tolerance Bands

Hedging its load obligation is a key function for SVCE. The primary responsibility of the Front Office is to manage the energy portfolio by purchasing energy to hedge the cost of SVCE's load obligation and managing SVCE's portfolio of power resources to optimize value and load obligations. Table 1.

Energy Hedging

SVCE will maintain Net Open Position (NOP) portfolio hedge levels, ***inclusive*** of a percentage related to the PCIA and any retail rate(s) indexed to any other rate(s) and/or component(s) such as PG&E rate(s), within the tolerances outlined in Table 1 below.

Table 1 Calendar Year Energy NOP Tolerance Bands

Period*	Minimum Tolerance	Maximum Tolerance
Current Balance of Year	80%	110%
Year 2	70%	110%
Year 3	55%	110%
Year 4	50%	110%
Year 5	50%	110%

*For example, if the current year calendar year is 2023, then Year 2 is 2024.

In the event, the Maximum Tolerance level is exceeded because of a physical position needed to meet compliance obligations for clean energy, SVCE will not automatically unwind a position to be within the limits. Instead, SVCE will report the exception to the ROC and will only sell on a forward basis if there is no need to hold the position for compliance purposes and the underlying resource volume is considered firm or certain.

Resource Adequacy

SVCE must comply with the regulatory requirements for procurement of capacity products for Resource Adequacy (RA) needs. SVCE endeavors to purchase RA products over time to meet its obligation and to diversify itspurchases between suppliers and market conditions.

Renewable Portfolio Standard and Carbon-free

With respect to purchases to meet the Renewable Portfolio Standard (RPS), SVCE is guided by its Strategic Plan, which states that purchases shall meet legislative and regulatory requirements, Board directives and shall be staggered to accommodate regulatory uncertainty, changes in load and supply price risks and that the RPS portfolio should be diversified with respect to technologies.

Congestion Revenue Rights

CRRs are a tool used to manage basis risk, which is the difference in wholesale energy price between where SVCE has a generation resource versus the price paid to meet load in the CAISO market. As a load serving entity, SVCE is awarded a certain quantity of CRRs which it may use to mitigate some of the risk. SVCE may also participate in the CAISO's CRR Auction in order to acquire additional CRRs. While CRRs are intended to hedge risk, they can create an obligation or cost to SVCE. CRRs, whether from auction or allocation, are administered by CAISO, and CAISO is the sole SVCE counterparty for the CRRs. Guidelines related to the overall CRR strategy including amount, location and bidding, are included in the ERM Standard.

6.5 Authorized Trading Limits

6.5.1 Transacting Authority Retained by the Board

The Board retains the authority to approve:

- All transactions with terms of over 12 months unless it has explicitly delegated authority to the CEO;
- All transactions with terms of over 5 years; and
- Master Agreements under which the CEO is delegated authority to transact

6.5.2 Authority Delegated to the CEO by the Board

Under the Board-approved Purchasing Policy, the CEO is delegated the authority to approve and execute contracts for energy procurement for terms of less than or equal to 12 months, to meet SVCE's expected energy, capacity, and hedging needs, which the CEO shall timely report to the Board. In addition, under Resolution 2019-03, the Board delegates to the CEO the authority to enter into Confirmations for terms not greater than 60 months and limited to authorized transactions consistent with forecasted load and withinthe Energy Hedge Tolerance Bands (as defined in the ERM Standards).

Table 2 below lists the authorized trading limits to transact on behalf of SVCE for all non-resource adequacy related products. If the CEO delegates some of their authority, they must document any such delegations in the Energy Risk Management Standards. Table 3 below lists the authorized annual trading limits for broker fees per broker.

Table 2: Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limits	Who
Energy, Capacity, and CAISO Ancillary Services	Day Ahead and Real Time	N/A	As needed to meet SVCE's expected load obligations with the CAISO	Any counterparty	CEO
Gas	Daily	N/A	As needed to meet SVCE's obligations for gas tolls*	Through the counterparty associated with the toll	CEO
Energy(Power) Gas, Capacity, CRRs through CAISO Auction**,and Environmental Products	Up to 12 Months	18 months	As needed to meet SVCE's expected load^/gas toll*needs (per Purchasing Policy)	Any counterparty	CEO
	Up to 60 months	72 months	As needed to meet SVCE's expected load/gas toll*needs	Board-approved Master Agreements	CEO
	Over 60 months	As approved by Board	As approved bythe Board	As approved by the Board	Board

^May include physical IST transactions or financial derivatives.
*Natural gas hedges needed to manage risks associated with board approved natural gas tolling agreements.
**CRRs through CAISO allocation may exceed 72 months, and extend up to 108 months (9 years), if part of the standard claim an LSE possesses on allocated CRRs.

Table 3: Authority Delegated to the CEO by the Board for Brokered Transactions

Transaction Type	Fiscal Year Limit
Brokered Transactions Fees	$500K of broker fee expense per broker

6.5.3 Resource Adequacy Authority Delegated to the CEO by the Board

The CEO has the authority to meet resource adequacy requirements based on CPUC and CAISO guidelines. Failure to meet California's RA compliance obligations may subject SVCE to hefty penalties.

To adequately and effectively meet RA requirements, the CEO needs a broad authority to transact for terms of up to five years and with a broad set of suppliers, including counterparties not under a Master Agreement. Table 4 lists the CEO's authority for RA transactions, which may be delegated provided proper documentation is established by the CEO.

Table4: Resource Adequacy Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limit	Who
Resource Adequacy	Up to 60 months	72 months	As required to comply	Any counterparty	CEO

6.5.4 Limits of Authority Delegated to Authorized Personnel by the CEO

Although the CEO may delegate some of her/his authority to Authorized Personnel, the Boardlimits the authority she/he can delegate as shown in Table 5 below:

Table 5: Per Transaction Limits of Authority Delegated to Authorized Personnel by the CEO

Product	Term Limit	Notional Value Limit*
Energy, Capacity, and CAISO Ancillary Services	Day Ahead and Real Time	As needed to meet SVCE's obligations with the CAISO
Energy**	Balance of the month	$5 Million
	Prompt month	$7.5 Million
	Up to 12 months	$25 Million
Resource Adequacy Products, CRRs through Auction	Prompt month	As needed to meet SVCE's obligations
	Balance of compliance year	As needed to meet SVCE's obligations
	Up to 12 months	$15 Million
Environmental Products (Carbon Free and Renewable Energy Resources)	Up to 12 months	$15 Million

*Notional value limits are inclusive of broker fees
** Energy Notional Value Limits are exclusive of one another for any one transaction, such that the $25MM up to twelve months is in addition to the balance of month and prompt month values (and not inclusive of them). They are not cumulative across transactions as this table is for per transaction limits.

6.6 Conflict of Interest

All SVCE employees who are involved in any aspect of transacting for energy or energy-related resources are prohibited from investing or having a financial interest in any company with whom they transact on behalf of SVCE,including enabling agreements. Prior to preparing a solicitation, engaging in evaluation of, negotiation with, transacting with, or oversight of a transaction or potential transaction with any company, all involved employees must ensure that they do not have a financial interest in that company. The ban on investment and requirement to divest is regardless of whether the investment would require disclosure on the employee's FPPC Form 700.

SVCE employees will sign notice acknowledging policy regarding conflict of interest and report any existing or potential conflicts of interest (see Appendix A).

7 Risk Management Policy Governance

7.1 SVCE Board of Directors

The SVCE Board is responsible for adopting this Policy and reviewing it as needed every two calendar years. The Board also approves SVCE's annual budget, contracting authorities and delegates responsibilities for the management of SVCE's operations to its CEO.

7.2 Risk Oversight Committee

SVCE's CEO formed the Risk Oversight Committee (ROC) and is responsible to inform the ROC about any risk management issues and to provide assurance that this Policy is implemented. The CEO will provide the ROC information and analysis that illustrate that all transactions are consistent with the risk tolerances and that risk management controls and practices are sufficient to monitor and manage risks that SVCE is exposed to.

The ROC will meet at least once per calendar quarter, or as otherwise called to order by the CEO.

At the CEO's direction, the ROC may engage in the following activities. The ROC will from time to time review the Energy Risk Management Standards defining indetail the internal controls, strategies and processes for managing market risks incurred through or attendant upon wholesale trading, retail marketing, long-term contracting, CRR trading and load and generation scheduling. The ROC will receive and review information and reports regarding risk management, wholesale trading transactions, and the administration of supply contracts. The ROC will also review counterparty credit lines and cash reserves to ensure proper levels are maintained for credit, operations and liquidity. Inaddition, the ROC shall review any instances of non-compliance with any provisions of the Policy or Standards.

8 Appendix A: Acknowledgement of ERM Policy, Declaration of Conflict of Interest and Trader Integrity Attestation

To:_____

Acknowledgement of ERM Policy & Standards

I acknowledge that I've read, understand, and will comply with SVCE's Energy Risk Management Policy & Standards.

Declaration of Conflict of Interest

I understand that I am obligated to give notice in writing to Silicon Valley Clean Energy of any interest or relationship that I may have in any counterparty that seeks to do business with Silicon Valley Clean Energy, and to identify any real or potential conflict of interest such counterparty has or may have with regard to any existing or potential contract or transaction with Silicon Valley Clean Energy, within 48-hours of becoming aware of the conflict of interest.

I would like to declare the following existing/potential conflict of interest situation arising from the discharge of my duties concerning Silicon Valley Clean Energy activities covered by the scope of the ERM:

a) Persons/companies with whom/which I have official dealings and/or private interests:

b) Brief description of my duties which involved the persons/companies mentioned in item a) above.

Trader Integrity Attestation – Please complete this section if you trade on behalf of SVCE

Yes No : Are you currently under investigation for market manipulation?

Yes No : Were you previously investigated for market manipulation ?

Position and Name: _____

Signature: _____

Date: _____

9 Appendix B: Glossary

- EEI – Edison Electric Institute (industry standardize contracting for enabling agreements)
- PPA – Purchased Power Agreement (structured contract for asset offtake)
- WSPP – Western Systems Power Pool (standardized master agreement)
- CAISO – California Independent System Operator
- Exchange – a futures trading platform
- IST – Inter-Scheduling Coordinator Trade (a financial forward trade scheduled into CAISO with physical load and assets, obtaining the benefits of physical settlement and offsetting collateral obligations for a CAISO participant that may otherwise be longer or shorter without the IST)
- RA – Resource Adequacy
    - Generic – a type of RA that is basic system or local RA throughout the day
    - Flex – a type of RA that is from asset with the ability to ramp quickly to meet rapid fluctuations in load (e.g. the 'evening ramp' of the 'duck curve')
    - IAR – Import Allocation Rights, needed to count out-of-state import as RA
    - MTR – Mid-Term Reliability – obligations to procure to help meet California's RA shortfalls over the next 3-5 years
- RPS – Renewable Portfolio Standard (state mandated renewable procurement percentage)
- PCC1 – Portfolio Content Category 1 (the highest level of RPS compliance product)
- CF – Carbon Free
- GHG Free – Green House Gas Free
- CRR – Congestion Revenue Right (a CAISO product for hedging congestion risk)
- NG – Natural Gas
- OTC – Over the Counter (broker or bilateral transactions not performed on an exchange)
- ICE – Intercontinental Exchange (the leading power market exchange)
- Fixed – a forward contract with a fixed price set now, for a future delivery
- Index – a forward contract with a price indexed to prices in the future
- Physical Swap (Exchange of Quantity) – a transaction that exchanges quantities from different periods of time, scheduled into CAISO (not financial swaps/derivatives)
- Physical Swap (Fixed Price) – equivalent to Fixed price contract, alternate terminology, scheduled into CAISO (not financial swaps/derivatives)
- Futures – a forward contract executed on and exchange
- Allocation – for CRRs, namely ones allocated by the CAISO
- Auction – for CRRs, CAISO run auctions to procure CRRs not allocated

Risk Controls & Oversight

Scott Wrigglesworth
Director, Risk Management & Analytics
August 19, 2026 – Finance and Administration Committee

SILICON VALLEY CLEAN ENERGY

Purpose

Informational only

Provide a high level overview of internal controls, oversight and process related to transactions executed under authority delegated to the CEO to manage energy risk.

Up Front Disclaimer

Please note:

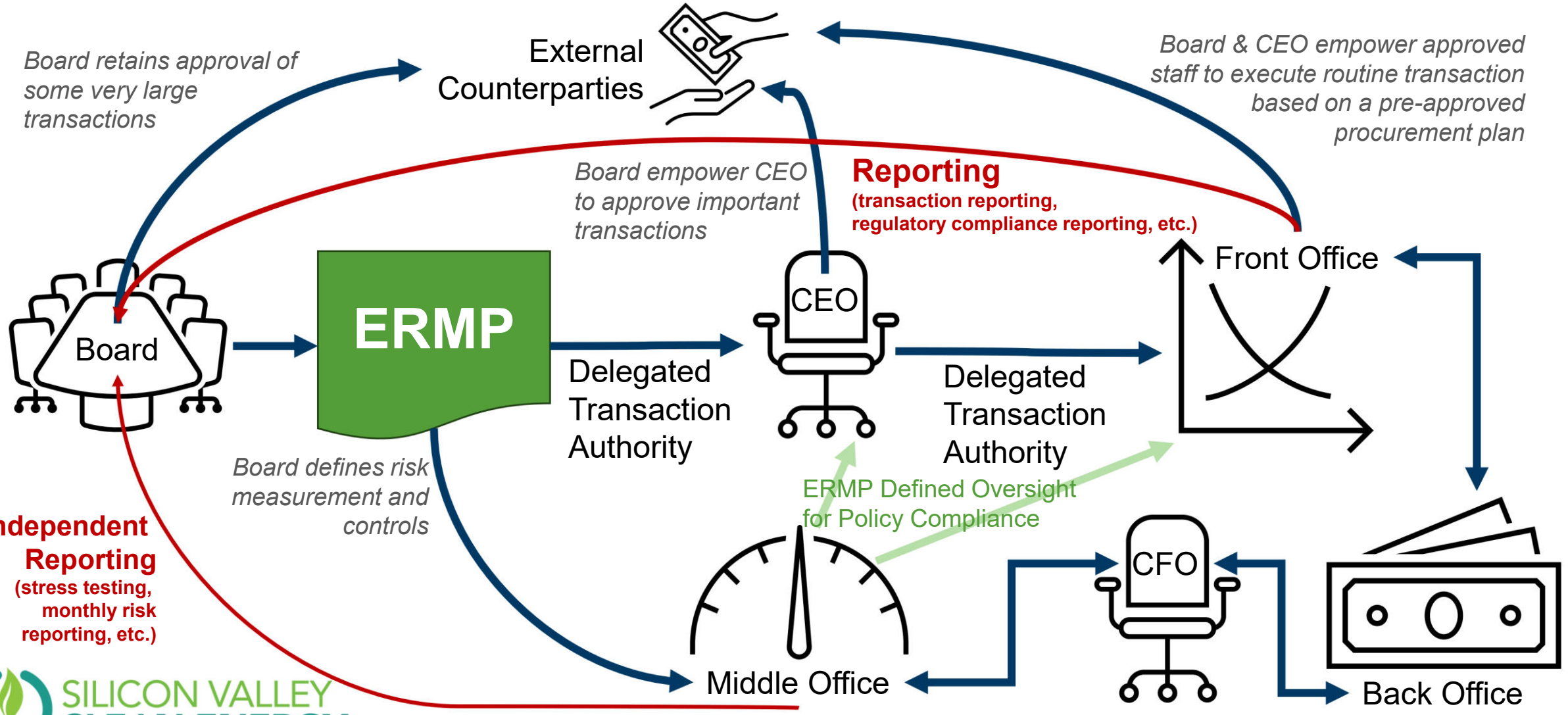
- The following reflects **current policy, standard**s, and procedures
- The following also contemplates policy and standard revisions coming to the committees for input & review and Board for approval.
- Procedures are operational – recommended by appropriate staff and approved by the Risk Manager, CFO and CEO

What is the Energy Risk Management Policy (ERMP), what does it govern, and what does the Board enable through it?

- **In short, an ERMP governs how an entity manages its risks, with what products, for how much, with whom, measured how, reported to whom.**
- The ERMP is a policy that is not only common to government entities but most participants in power markets.
- It defines how an organization identifies, measures, manages, controls and reports financial and operational risks.
- It is the Board's conveyance of the guardrails between which staff executes power procurement and compliance activities.
- It balances the need for oversight, aligning staff to the Board's risk tolerance and policies, with the need to facilitate a nimble organization empowered to act in the best interest of its stakeholders.

SILICON VALLEY CLEAN ENERGY

Practical Application of the ERMP



SILICON VALLEY CLEAN ENERGY

Note: ERMP delegation of authority only applies energy and related supply products

Delegated Authority

The ERM Policy Delegates Authority to the CEO to execute transactions to manage risk for up to five years in term.

- Transactions greater than 5 years must be approved by the Board
- Wholesale market is volatile and timing of execution is a short window
- Master Power & Purchase Sale Agreements with Counterparties Approved by the Board (establishing approved counterparties)
- Resource adequacy transactions can be with any counterparty
- Board approves the types of transactions and volume limits

Table 2: Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limits	Who
Energy, Capacity, and CAISO Ancillary Services	Day Ahead and Real Time	N/A	As needed to meet SVCE's expected load obligations with the CAISO	Any counterparty	CEO
Gas	Daily	N/A	As needed to meet SVCE's obligations for gas tolls*	Through the counterparty associated with the toll	CEO
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	Up to 60 months	72 months	As needed to meet SVCE's expected load/gas toll* needs	Board-approved Master Agreements	CEO
	Over 60 months	As approved by Board	As approved by the Board	As approved by the Board	Board

^may include physical IST transactions or financial derivatives
*natural gas hedges needed to manage risks associated with board approved natural gas tolling agreements

Table 3: Authority Delegated to the CEO by the Board for Brokered Transactions

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Table 4: Resource Adequacy Authority Delegated to the CEO by the Board

Product	Term Limit	Maturity Limit	Volume Limit	Counterparty Limit	Who
Resource Adequacy	Up to 60 months	72 months	As required to comply	Any counterparty	CEO

Front, Middle, and Back Offices

What does Front, Middle, and Back Office Mean?

Front Office – Market Facing & Transactions	Middle Office – Analytics, Risk Mgmt. & Controls	Back Office – Ops, Settlements & Validation
• Transaction Reporting • Procurement Contact • RFO Screening, Shortlisting and Selection • Customer Contact • Deal Structure • Price Negotiation/Approval • Transaction Deal Entry • Hedging Compliance, Strategy, and Execution	• Risk Reporting • Mgmt Reporting (including stakeholder reserve projections) • Independence • Deal Capture Confirmation • Risk and Gross Margin Modeling • Stress Testing • RFO Valuation and Analysis • Risk Limits and Metrics • Counterparty Credit Monitoring & Authorization • Retail Pricing Analysis • Market Curves & Fundamentals	• Compliance Reporting • Operational Performance Reporting • Portfolio Operations and Scheduling Coordinator Mgmt. • CAISO and Counterparty Settlements • Invoice Validations and Processing • Contract Management

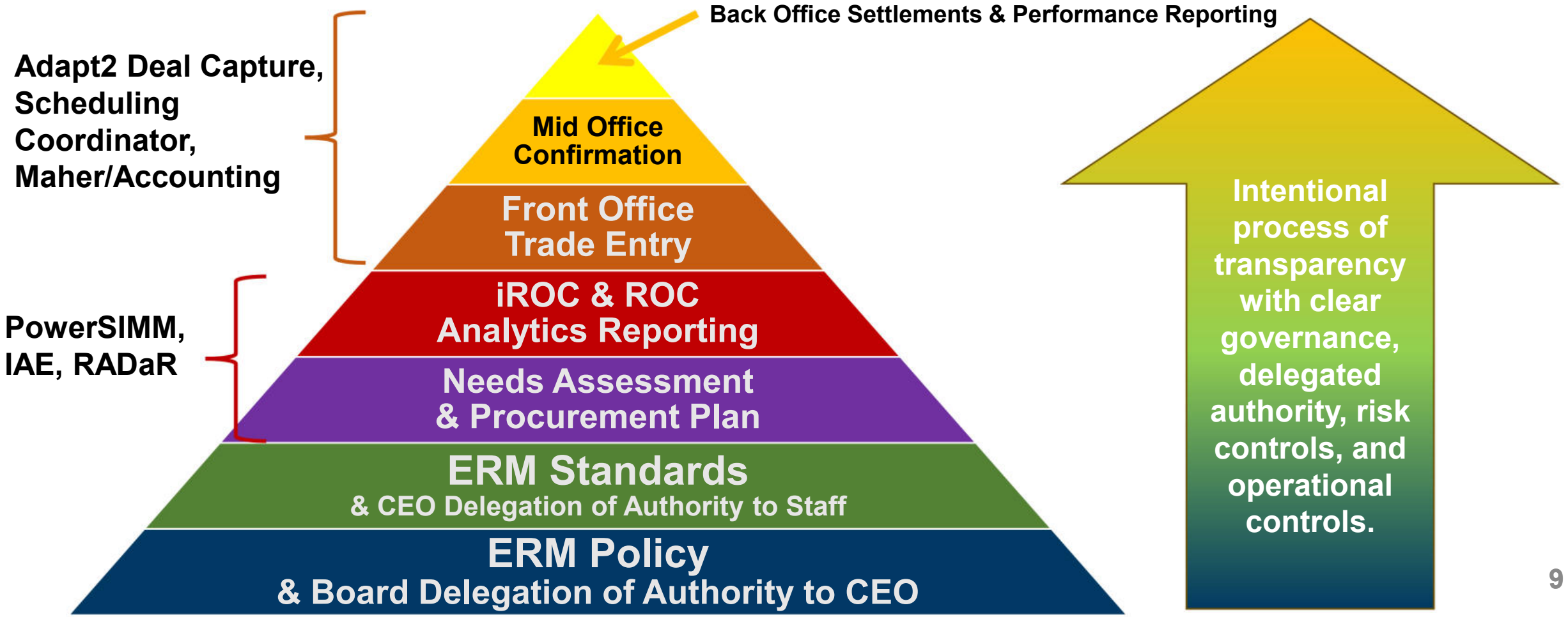
Energy Delegation of Authority

Governance and delegation of authority at SVCE involves the Board at multiple touch points in the transaction & operation process.

Multiple Meetings for Transparency and Accountability	Involved Parties							
	Board Members	CEO	General Counsel	RPPL	Customer Success	Front Office	Middle Office (and/or CFO)	Back Office
Board Meetings	✓	✓	✓	✓	✓	✓	✓	✓
Executive Committee	✓	✓	✓	✓	✓	✓	✓	✓
Finance Committee	✓	✓	✓	✓	✓	✓	✓	✓
Risk Oversight Committee	✓	✓	✓	✓	✓	✓	✓	✓
Internal Risk Oversight		✓	✓	✓	✓	✓	✓	✓
C&I Custom Product Offerings		✓		✓	✓	✓	✓	✓
Mgmt. & Ops of Portfolio (MOoP)		✓			✓	✓	✓	✓
Front Office Middle Office (FOMO)						✓	✓	✓
Front Office Commercial Meeting		✓		✓		✓	✓	✓

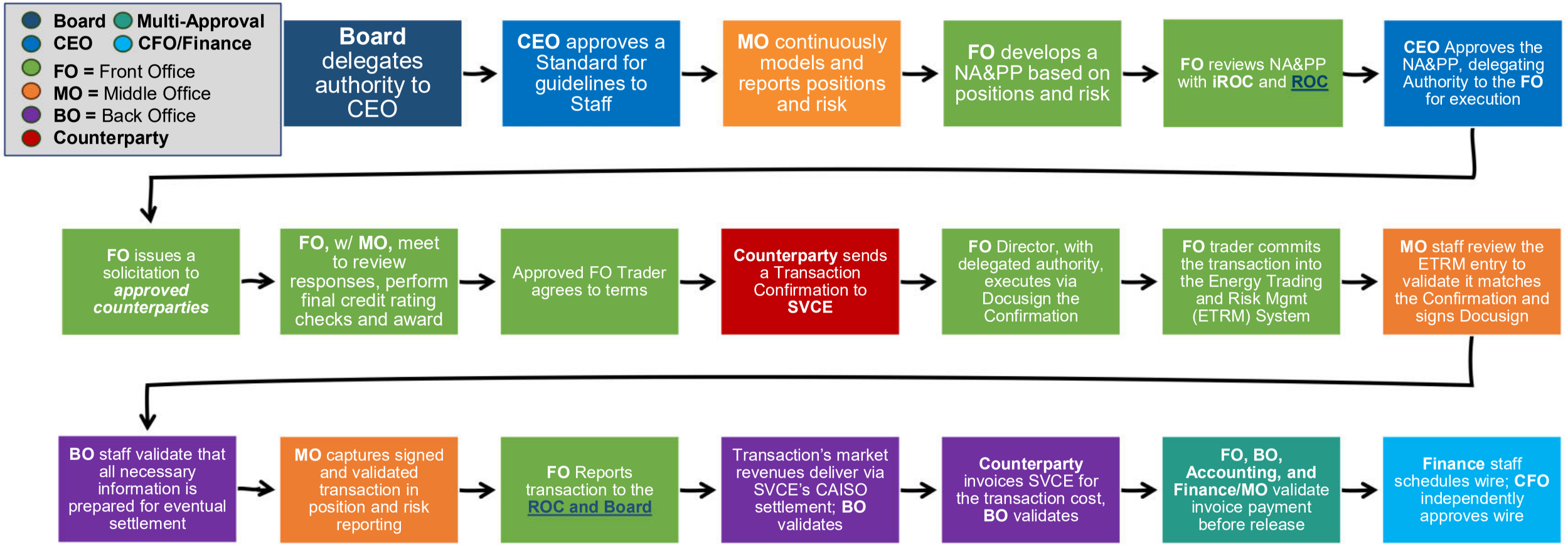
Governance, Controls, Oversight

SVCE's commercial activity is transparent, diligent, and has sound oversight.



Example of a Transaction

A transaction is as much about the preparation and post-transaction steps as it is about the execution of a trade agreeing on volume and price.



NA&PP = Needs Assessment and Procurement Plan

Note: this example is for an IST Energy Transaction, but other product types follow nearly identical steps.

Next Steps & Continuous Improvement

Risk Policy, Standards and Controls have been robust for many years.
Staff are continuously refining as well as building enhanced capabilities and reporting.

Current Initiatives Include:

- **Desktop Procedures & Business Continuity (Nik)**
  Ongoing enhancement and refinement of documentation to provide step by step execution of business as usual and business interruption continuity planning.

- **RADaR**
  iROC and ROC reporting are currently in place, although it is through some manual intervention. RADaR will create significant efficiency gains for automated reporting. It will also further enhance transparency across the organization.

- **Policy & Standards**
  Improvements and enhancements to the policy and standards will be reviewed with committees and the policy will go for Board approval in September.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 5

Item 5:	**2026 Silicon Valley Clean Energy Update on Demand Flexibility, Lunar, and Next Steps**
From:	Monica Padilla, CEO
Prepared by:	Joseph Lande, Energy Services Manager Alisha Pegan, Demand Flexibility Manager
Date:	8/28/2026

RECOMMENDATION

This item will be addressed in a presentation to the Executive Committee. The presentation will provide an update on the status of the contract with Lunar Energy, rigorous efforts aimed at quantifying the value of demand flexibility programs and recommended next steps.

BACKGROUND

On May 14, 2025, the Board of Directors authorized the CEO to negotiate and execute a five-year Main Services Agreement (MSA) with Lunar Energy for a Distributed Energy Resources Management System (DERMS) and related program operation and load modification services, in an amount not to exceed $971,238.

Following negotiations with Lunar Energy, the contract was executed in October 2025. The first scope of work to be implemented focused on program design services for a new battery storage program, including value modeling, which would be the basis for funding allocations to an eventual program. The value modeling required the creation of numerous load profiles, based on the dispatch of customer-owned batteries, and quantifying the subsequent costs and benefits to SVCE.

ANALYSIS & DISCUSSION

After assessing value through dozens of different modeled scenarios and expanding the value modeling to cover other types of equipment and program models, staff have uncovered unique findings. These findings challenge the perspective that demand flexibility provides valuable load shape improvements to the benefit of SVCE's power supply portfolio. Staff recommend pausing DERMS program development until financial feasibility is clear. Staff also recommend sharing these findings to ensure that key stakeholders are informed and that solutions are identified.

STRATEGIC PLAN

Demand flexibility strategy efforts support a number of the Goals identified in SVCE's Strategic Plan, including:

Goal 5: "Manage and optimize load and power resources to meet affordability, GHG reduction and reliability objectives."

Goal 7: "Support all SVCE communities to decarbonize through local investments that reduce barriers and demonstrate sensible, scalable, and equitable solutions."

Agenda Item: 5 **Agenda Date: 8/28/2026**

ALTERNATIVE

Staff are open to suggestions from the Executive Committee on other alternatives.

FISCAL IMPACT

No additional fiscal impact outside of approved agreement.

ATTACHMENTS

The presentation for this item is posted to the SVCE website.