# Clean Pathways Discussion

SVCE Board of Directors
October 8, 2025

SILICON VALLEY CLEAN ENERGY

# What we will discuss today

1. Clean Power Procurement
2. Challenges Facing SVCE
3. Future Reporting

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# Section I: Clean Power Procurement

# Recap

# Nov 13, 2024 BOD Meeting

# Item 4: Adopt SVCE's Long-term Clean Targets

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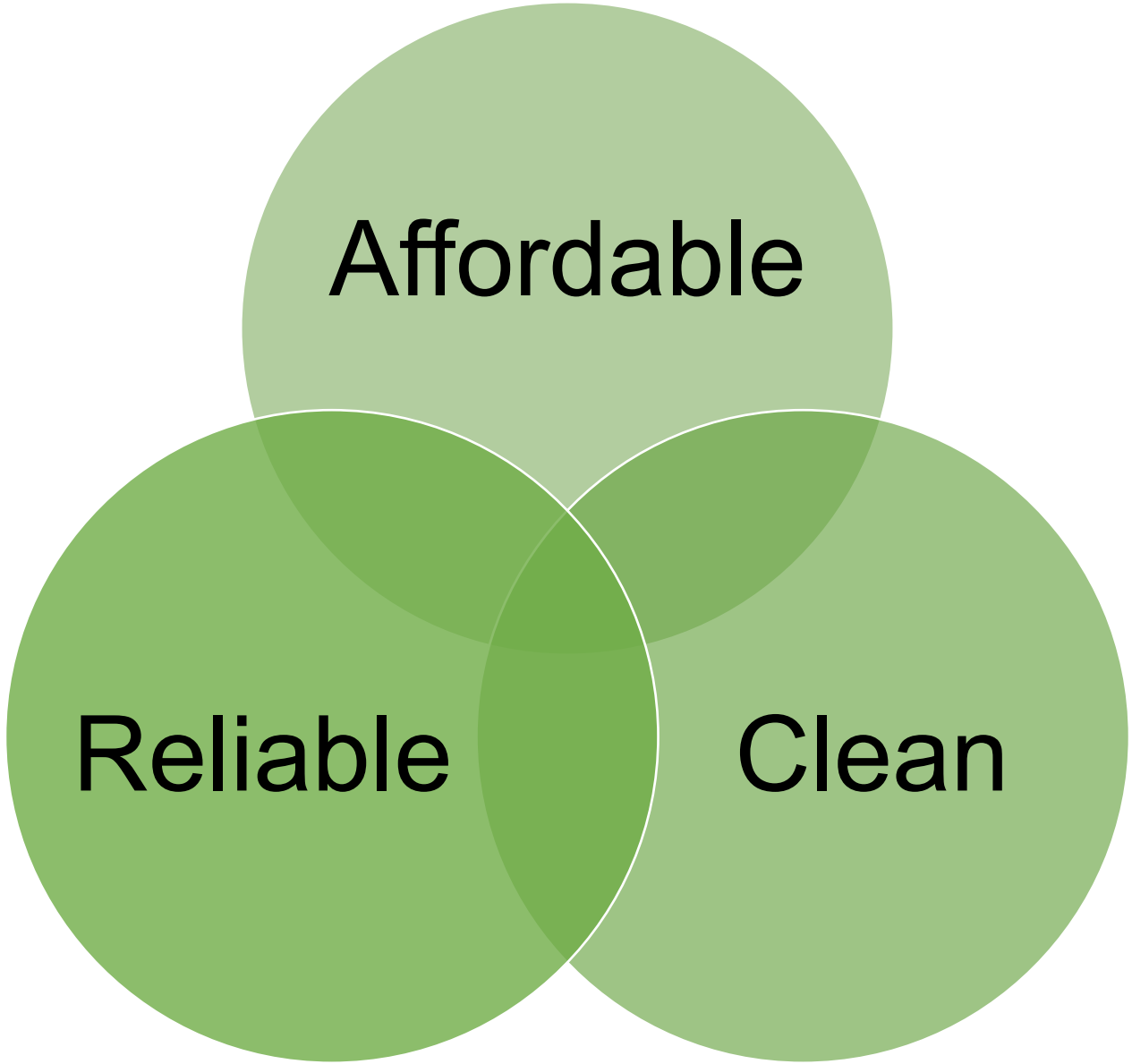
The SVCE Board adopted Renewable Portfolio Standard (RPS) and overall carbon-free position as follows:

1. **Maintain 100% clean annually through 2030 with at least 65% RPS**
2. **75% RPS target for retail sales/ 100% clean target for 2030 to 2034**
3. **100% RPS for retail sales and 100% clean target for 2035 to 2045**
4. Allow a 10% margin of error in the event targets cannot be met. If expected margin of error exceeds 10% staff will return to the Board for additional guidance.
5. Define clean energy resources to include RPS-eligible resources and carbon-free large hydroelectricity and nuclear energy.
6. Include line losses as applicable

# SVCE's Mission Statement

**Reduce dependence on fossil fuels by providing carbon free, affordable and reliable electricity and innovative programs for the SVCE community**

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# California's Clean Energy Goals

***SVCE's procurement targets are primarily driven by regulatory requirements and Board goals***

| | |
|---|---|
| SB100 | • 60% Renewable Energy by 2030<br>• 100% Carbon Free by 2045<br>• Interim targets of X% by 2035 and X% by 2040 |
| SB350 | • 65% of Renewable Energy must be from Long-Term Contracts (10+ years) |
| MTR | • Mid-Term Reliability Procurement Order<br>• Established by the CPUC to focus on securing sufficient online resources to meet expected demand in the coming few years |
| SVCE BOD | • 100% Clean – annually, with line losses<br>• 75% Renewable by 2030<br>• 100% Renewable by 2035 (adopted late 2024) |

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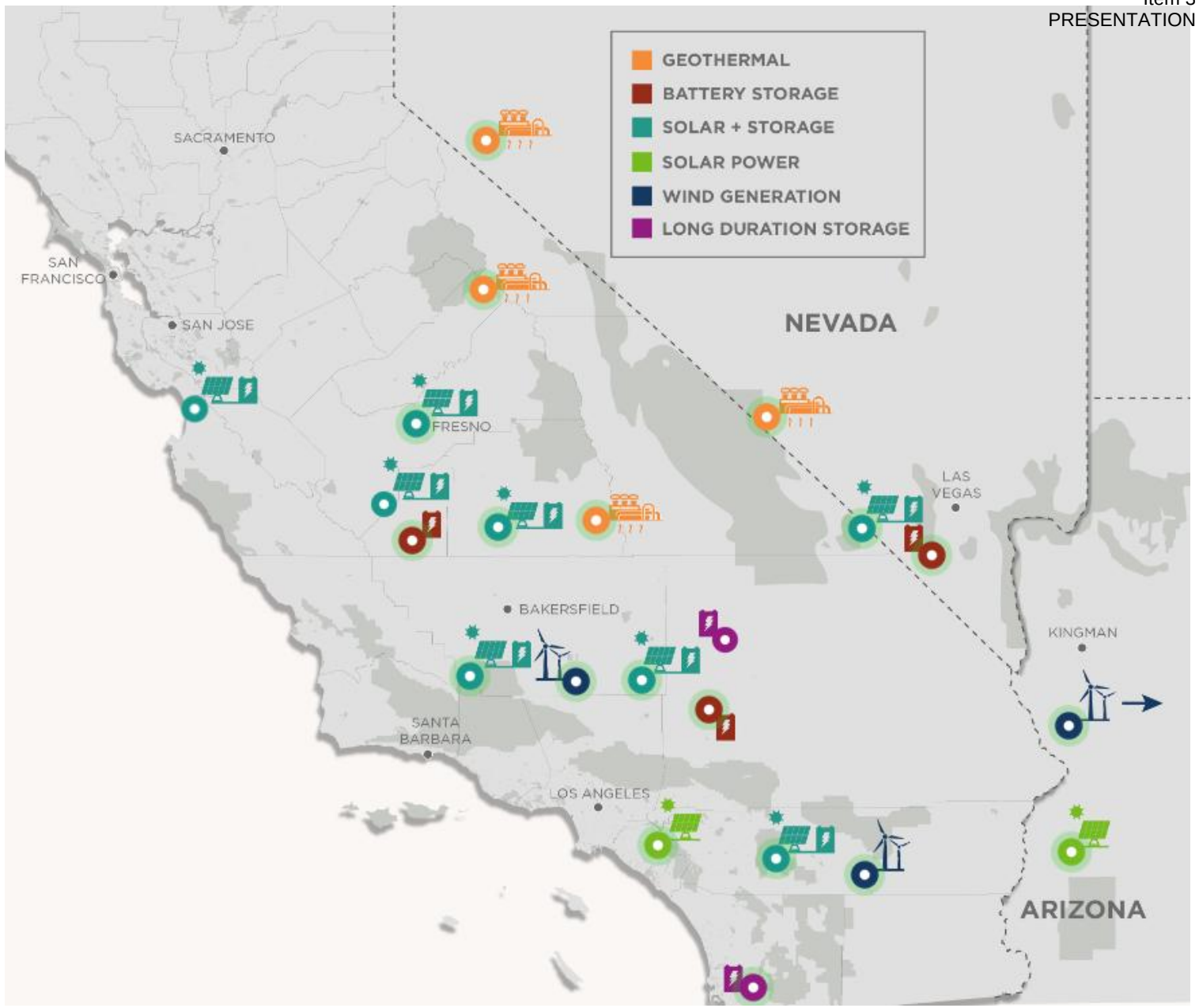
# Long Term Power Purchase Agreements

- $3.8B+ in commitments
- 24 PPAs signed
  - 21 new build projects
- 970 MW of Renewable Power
- 1,640 MWh of Battery Storage
- 10 Projects now delivering to SVCE:
  - COSO geothermal - January 2022
  - Slate Solar + Storage – January 2022
  - Casa Diablo geothermal – July 2022
  - Mountain View wind – July 2022
  - Rabbitbrush Solar + Storage – October 2022
  - Terra-Gen Wind – January 2023
  - Yellow Pine Solar + Storage – July 2023
  - Victory Pass Solar + Storage – March 2024
  - Baldy Mesa Storage (RA-only) – June 2024
  - Hanford BESS – August 2025

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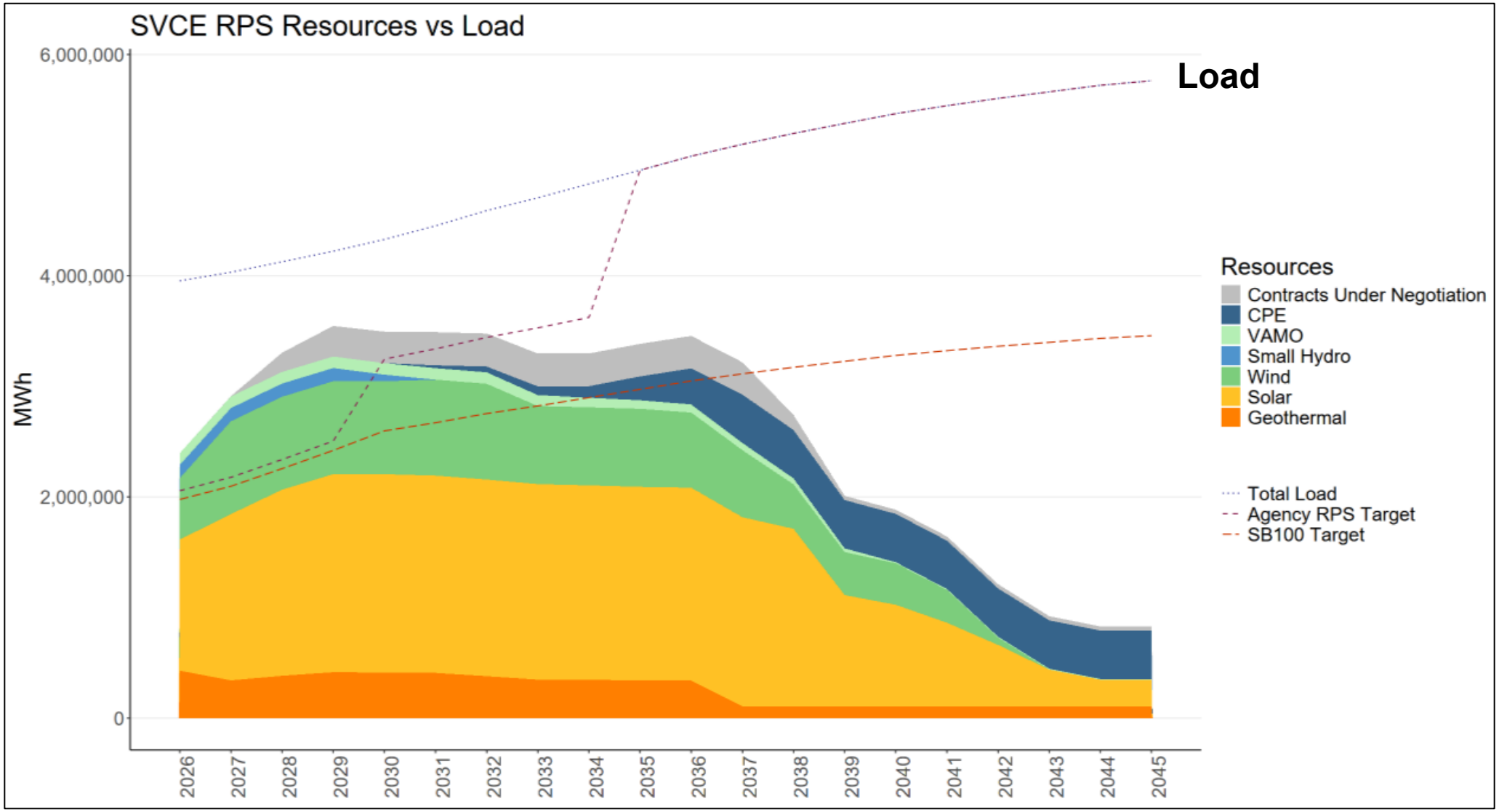
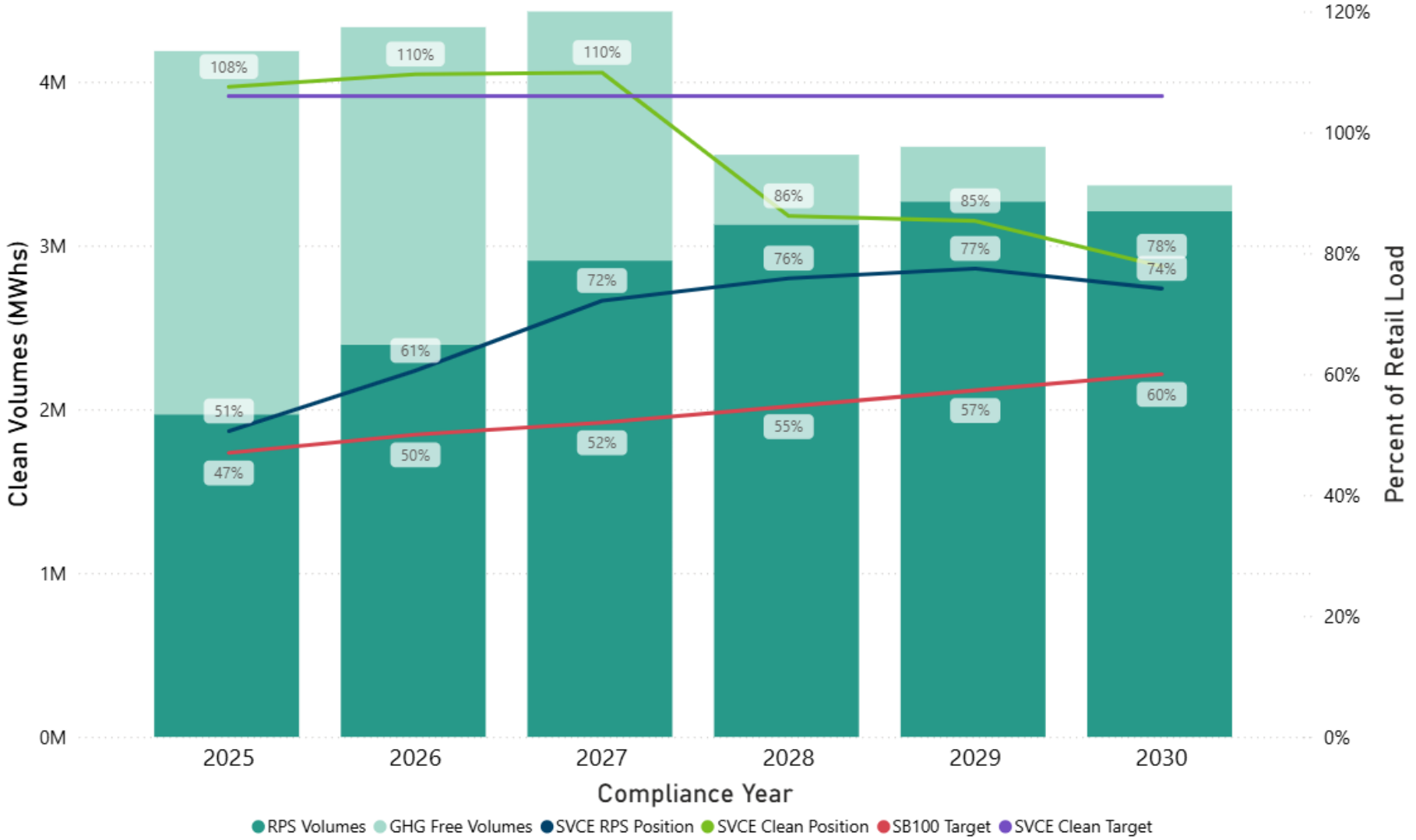
# SVCE has made excellent progress thus far in meeting renewable goals: 75% in 2030 & 100% in 2035



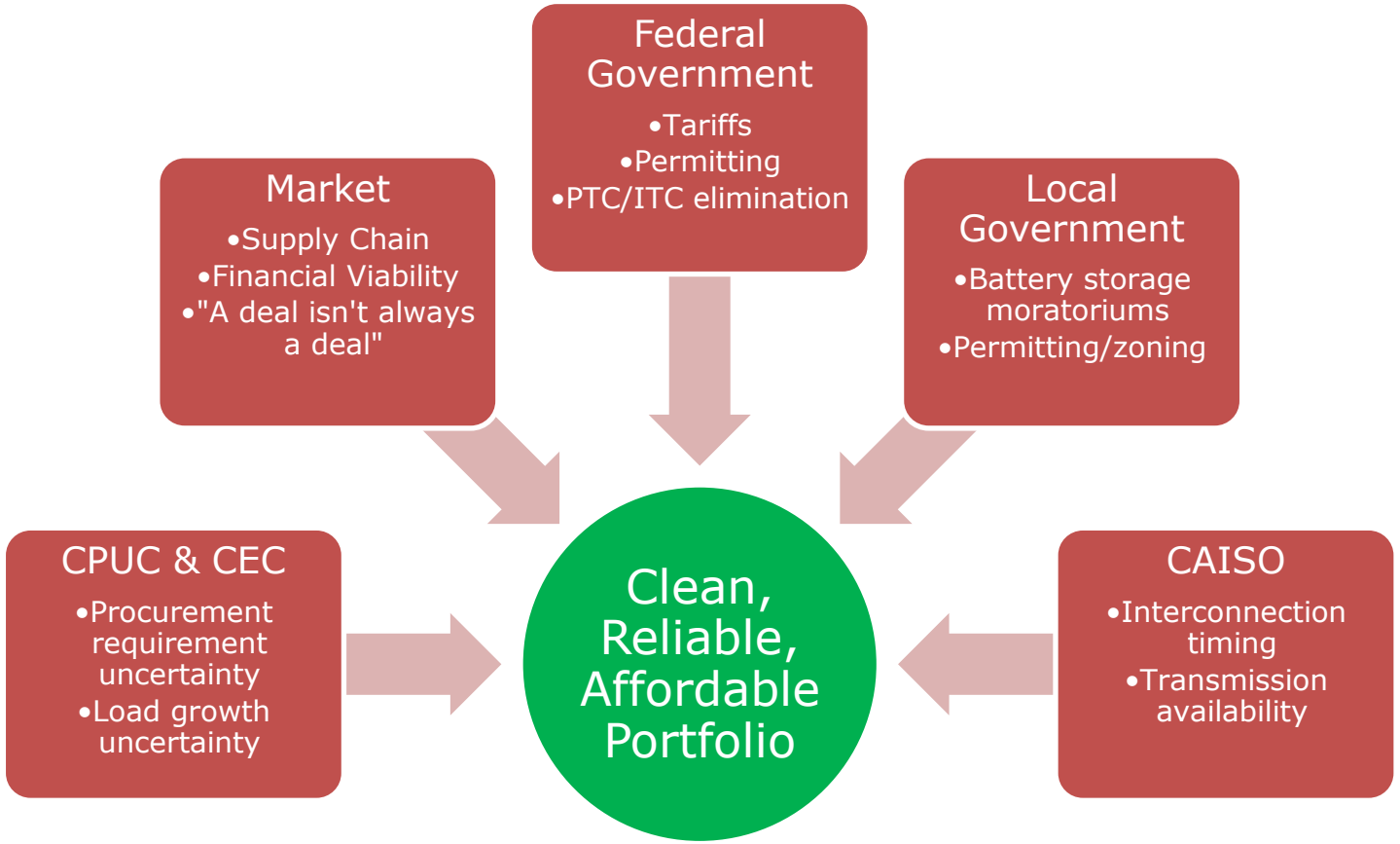

**Carbon-free and short-term RPS resources will help meet 100% clean targets**

# SVCE is on track to meet SB100 and agency goals for clean and RPS in the near term



# Section II: Challenges Facing SVCE

# Headwinds come from many fronts

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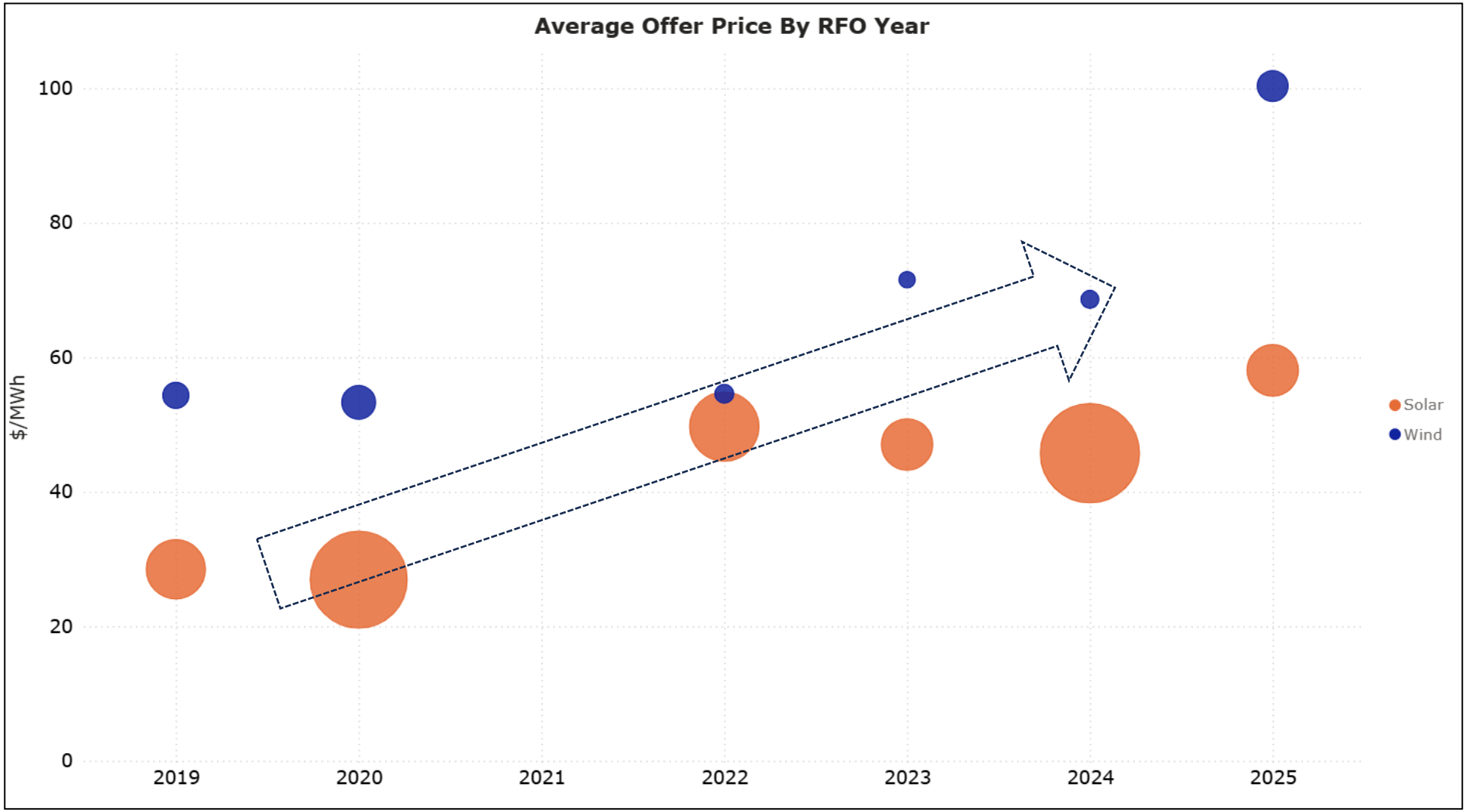
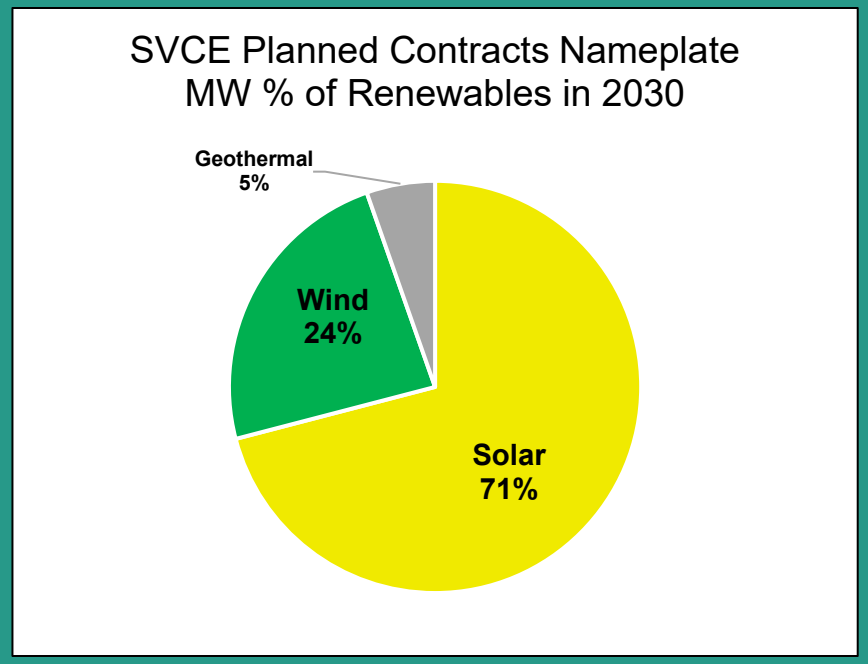
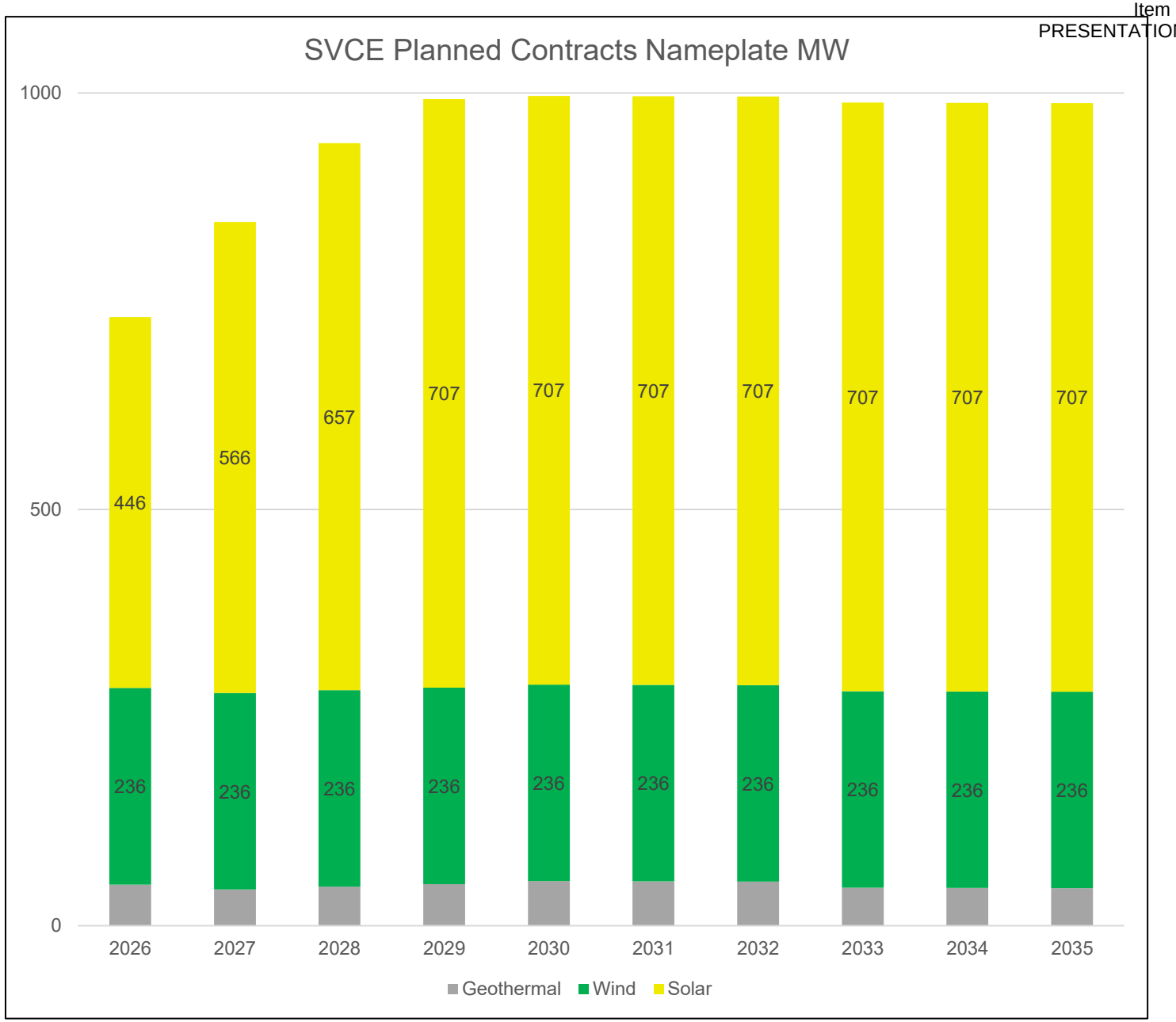
# SVCE has seen increasing project costs across solicitations



# SVCE's portfolio is heavily dominated by solar

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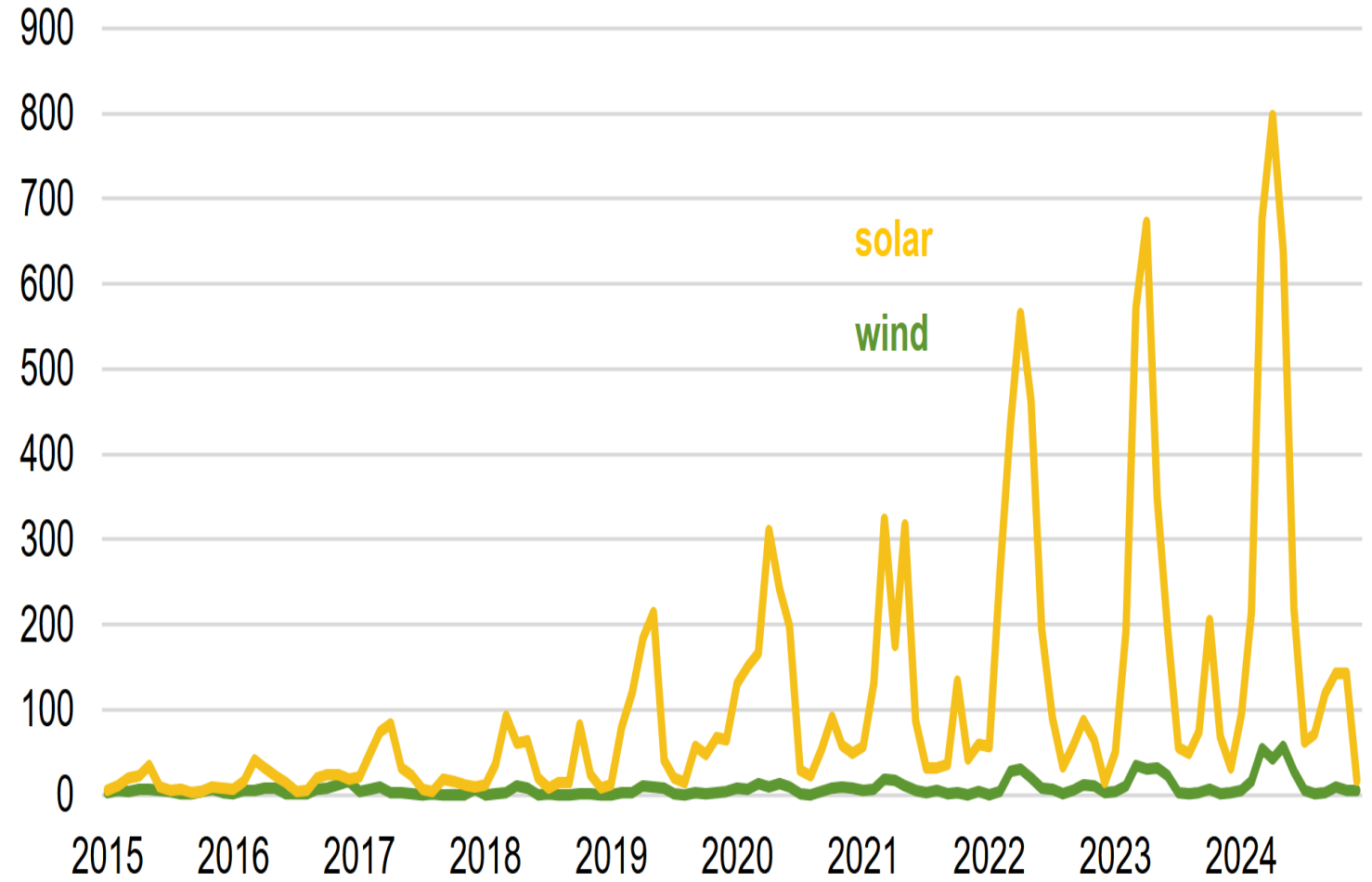
# Curtailments of solar has risen dramatically in recent years

**Monthly solar and wind curtailments, California Indepenent System Operator (January 2015–December 2024)**

thousand megawatthours




Source



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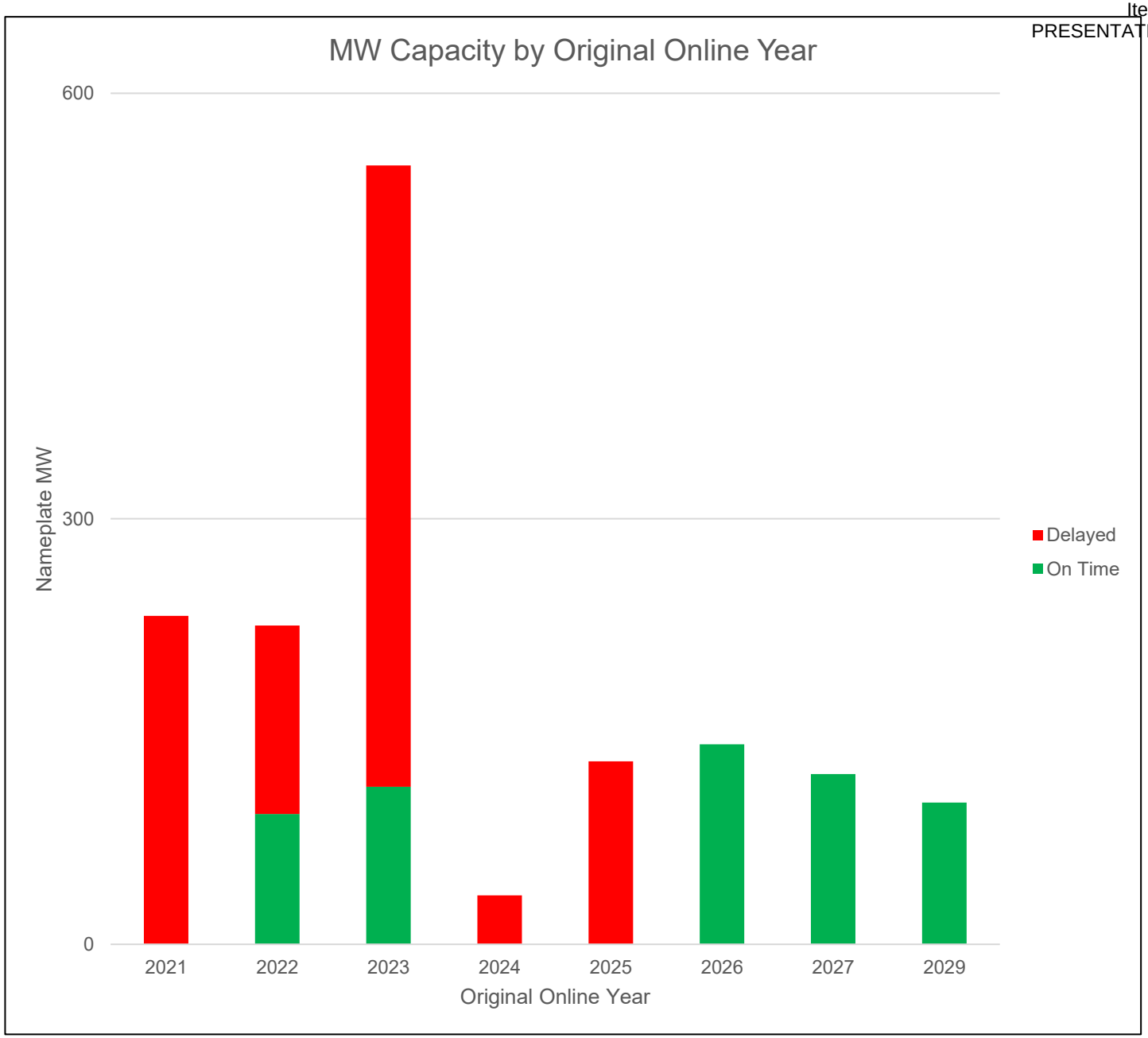
# SVCE has faced significant pressures bringing projects online on time

- Pandemic
- Supply Chain
- Tariffs
- Tax Incentives
- Interest Rates

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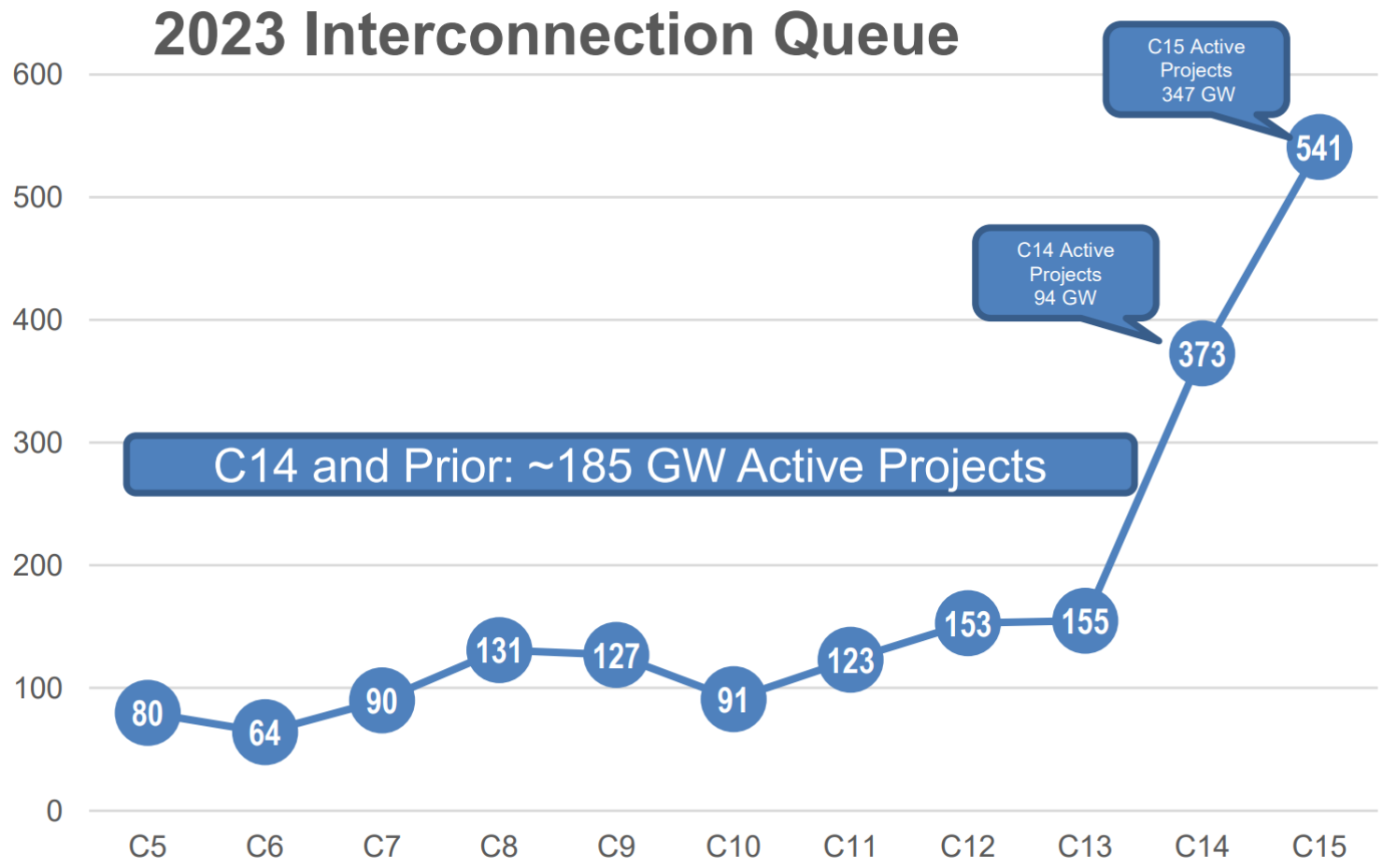
# The CAISO Interconnection queue is "the line" resources get in to connect to the grid

- CAISO studies new requests in clusters to determine necessary transmission upgrades to support additional capacity
- Cluster 14 and 15 significant jump in requests highlighting need for queue reform to avoid development delays

**Chart below depicts number of unique interconnection requests by cluster:**




Source

# SVCE is not immune to regulatory uncertainty

## *CPUC's Reliable and Clean Power Procurement Program (RCPPP) & Clean Energy Standard (CES)*

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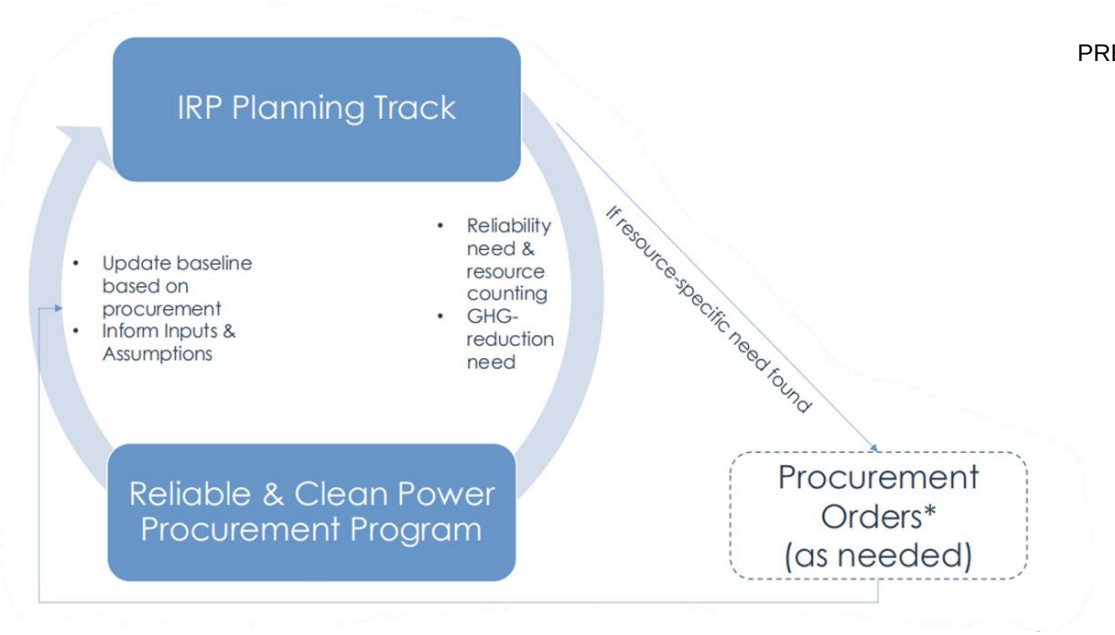
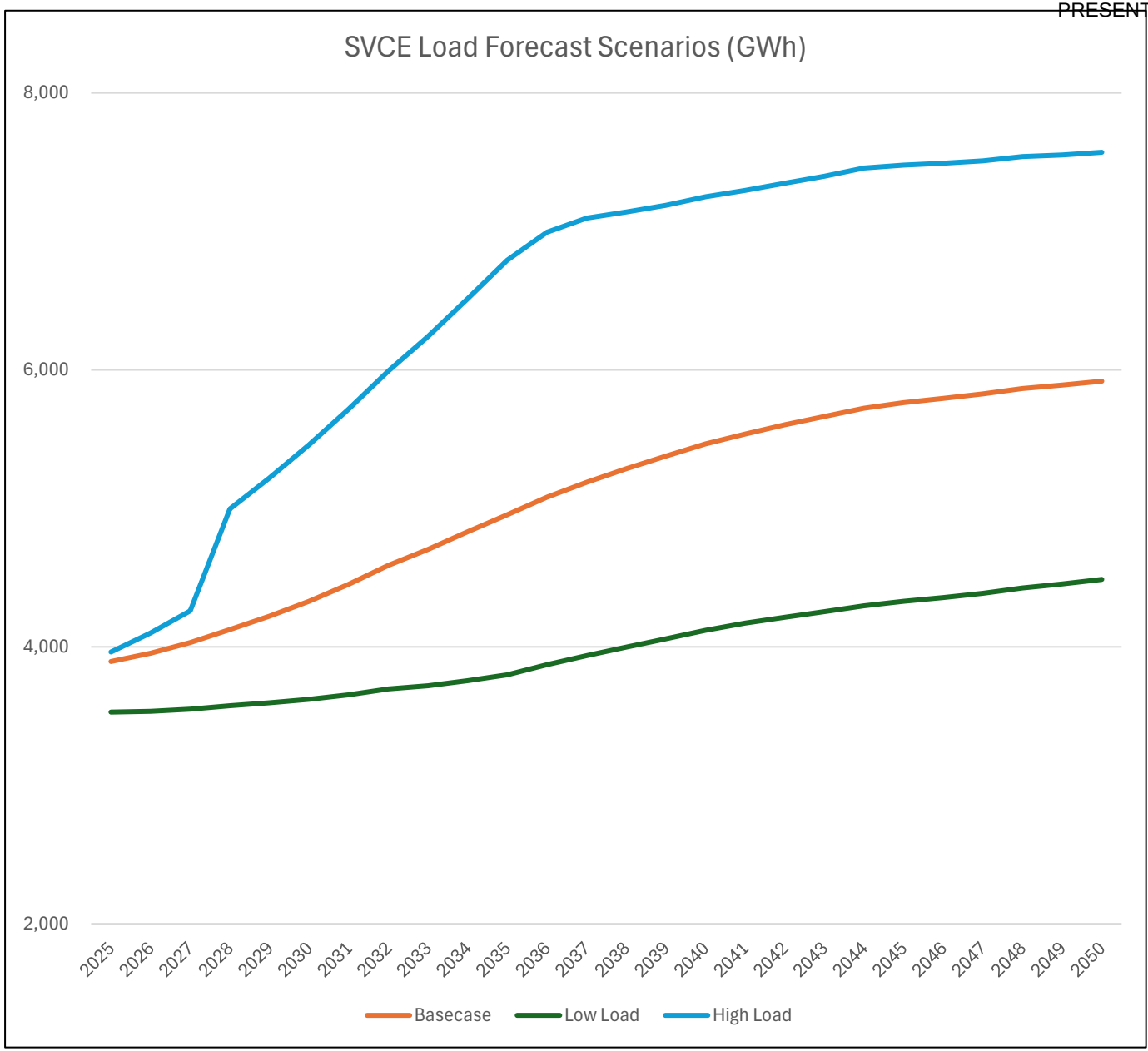



- Proposed long-term procurement framework. **Overlaps the current Integrated Resource Planning (IRP), Renewable Portfolio Standards (RPS) and Resource Adequacy (RA) Programs.**
- Successor to the current Mid-Term Reliability (MTR) procurement order
- Ongoing cycle of determining Reliability Procurement Need (RPN) and Reliability Procurement Requirement (RPR)
- Clean Energy Standard (CES) integration to ensure electric sector meets SB100 GHG reduction targets

Source

# Load growth uncertainty, driven by potential data center demand, is current industry hot topic

# IEPR forecast shows 75% increase in load between 2025 and 2040

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# Section III: Future Reporting

# Follow up from Nov 13, 2024 BOD Meeting:

# SVCE staff providing the Board an update on future reporting

1. How to incorporate and inform the Board of the expected clean position and any expected shortfall

2. Report on clean hourly progress

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# How to incorporate and inform the Board of the expected clean position and any expected shortfall

## Background

- SVCE runs stochastic analysis of the portfolio to simulate expected performance in the future
- Currently weekly but moving to daily
- SVCE will know well ahead of time if on or off track

## Proposal

- Annually Staff will provide a detailed Clean Pathways Report to the Board on progress toward 2030 and 2035 goals
- Continue to report near-term progress as part of monthly CEO Report

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# Report on clean hourly progress

## Background

- SB 1158 requires LSEs to report hourly portfolio results to regulators starting 2028

## Proposal

- As part of the Clean Pathways Report, annually Staff will provide a report to the Board showing hourly supply and demand for the prior year

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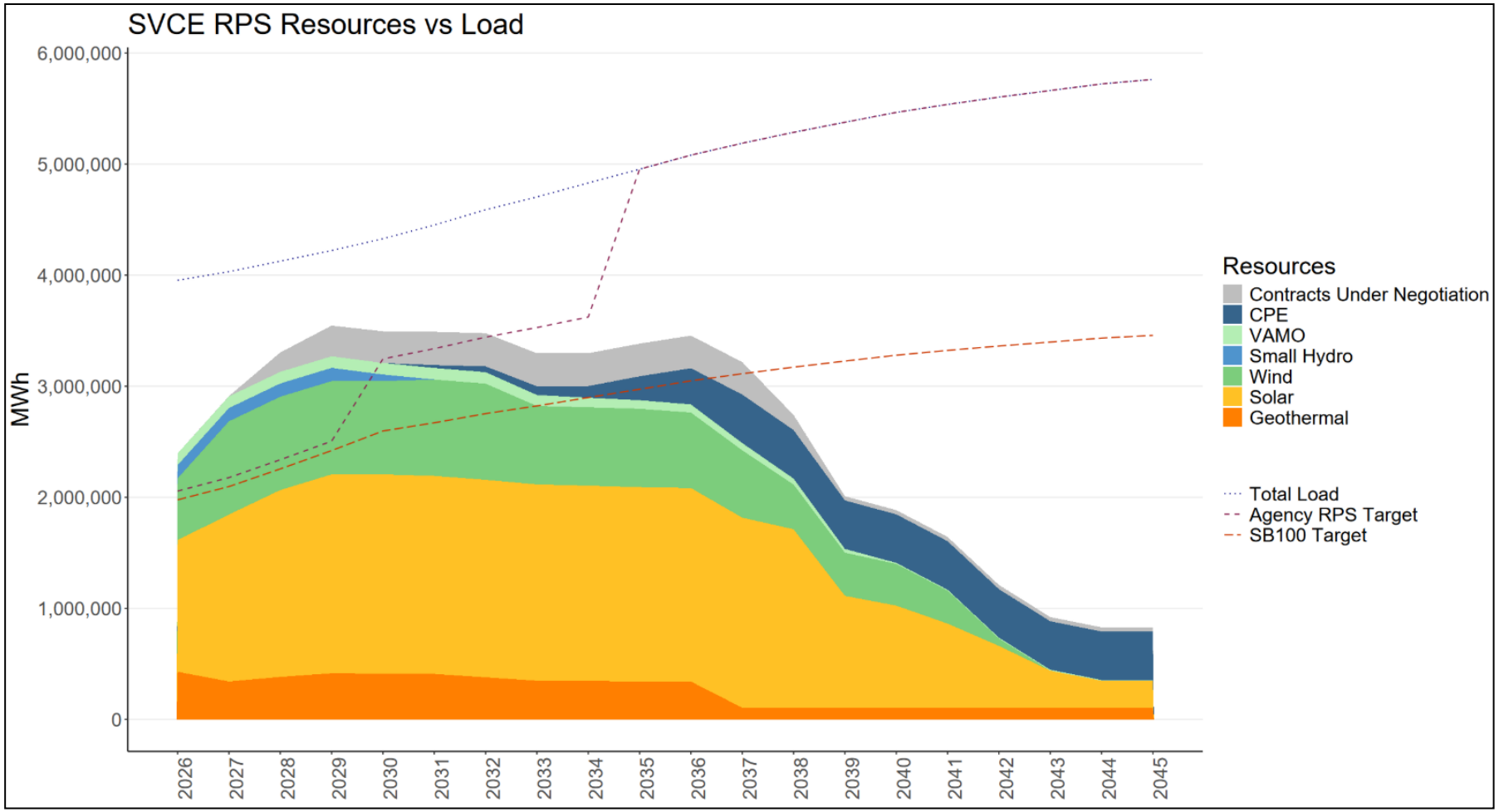
# Illustrative Example Reporting

*Progress Toward 2030 and 2035 Goals*

**SVCE will return regularly with a chart like this including modeled uncertainty**



# Illustrative Example Reporting

*Hourly Clean Progress*

## Average hourly clean supply by month

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 73% | 75% | 75% | 72% | 68% | 72% | 74% | 87% | 93% | 93% | 95% | 96% | 96% | 97% | 94% | 93% | 82% | 66% | 65% | 65% | 65% | 68% | 71% | 72% |
| 2 | 75% | 77% | 77% | 77% | 73% | 72% | 76% | 89% | 93% | 93% | 95% | 95% | 97% | 97% | 96% | 97% | 93% | 70% | 67% | 66% | 66% | 69% | 72% | 74% |
| 3 | 91% | 91% | 91% | 91% | 87% | 80% | 93% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 83% | 74% | 75% | 81% | 87% | 90% | 90% |
| 4 | 92% | 94% | 96% | 95% | 92% | 90% | 99% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 92% | 82% | 83% | 89% | 91% | 91% | 92% |
| 5 | 95% | 95% | 96% | 95% | 93% | 98% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 96% | 87% | 87% | 92% | 95% | 95% | 95% |
| 6 | 90% | 93% | 94% | 93% | 90% | 97% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 97% | 87% | 86% | 90% | 90% | 90% | 90% |
| 7 | 74% | 77% | 79% | 78% | 77% | 84% | 94% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 99% | 97% | 89% | 79% | 79% | 80% | 76% | 72% | 74% |
| 8 | 66% | 69% | 71% | 69% | 66% | 76% | 88% | 93% | 97% | 98% | 99% | 99% | 99% | 98% | 98% | 96% | 92% | 79% | 73% | 74% | 72% | 66% | 65% | 66% |
| 9 | 63% | 66% | 66% | 65% | 62% | 66% | 83% | 92% | 98% | 100% | 100% | 99% | 100% | 99% | 98% | 95% | 85% | 73% | 72% | 72% | 69% | 66% | 66% | 66% |
| 10 | 79% | 81% | 82% | 81% | 77% | 74% | 90% | 94% | 99% | 100% | 100% | 100% | 100% | 100% | 100% | 99% | 82% | 70% | 69% | 68% | 70% | 72% | 74% | 77% |
| 11 | 67% | 70% | 74% | 73% | 74% | 73% | 80% | 94% | 98% | 100% | 100% | 100% | 100% | 100% | 99% | 92% | 65% | 64% | 64% | 64% | 64% | 65% | 66% | 68% |
| 12 | 64% | 65% | 66% | 65% | 66% | 67% | 69% | 82% | 82% | 89% | 92% | 93% | 93% | 93% | 91% | 81% | 66% | 63% | 62% | 61% | 62% | 62% | 63% | 64% |

*As part of the Board-approved PPA Selection Standard, staff must also show the impact on hourly clean position when recommending approval of new PPAs. Similar reporting will also be provided along with those recommendations.*

# Recap

## Clean Power Procurement

- SVCE has made significant progress toward Board directed goals

## Challenges Facing SVCE

- Macroeconomic, regulatory and cost uncertainty has put pressure on ability to achieve mission: clean, reliable, affordable

## Future Reporting

- Annual Clean Pathways Report will detail SVCE's progress in meeting future goals and past hourly performance
- Monthly CEO Report will highlight near-term progress

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# Thank you

# State Legislative Update

Bena Chang
October 8, 2025

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# Significant package of energy/climate bills passed at end of session

- AB 825 (Petrie-Norris): Regional Energy Markets
- SB 254 (Becker): Energy Affordability Omnibus
- AB 1207 (Irwin) and SB 840 (Limon): Cap and Invest

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# AB 825 (Petrie-Norris)

## Regional Energy Markets

| What the bill does | Impact on SVCE and customers |
|---|---|
| Allows creation of a West-wide governing body to oversee two regional energy markets. | CEC study shows potential ratepayer savings of up to $1 billion annually. |

# SB 254 (Becker)

## Energy Affordability Omnibus Bill

| What the bill does | Impact on SVCE and customers |
|---|---|
| • Replenishes wildfire insurance fund<br>• Does not allow rate-basing of $6 billion in wildfire costs<br>• More oversight on wildfire mitigation spending<br>• Public transmission financing<br>• CEQA streamlining<br>• Energization timelines audits and penalties | • Upward rate pressure from $9 billion to replenish wildfire insurance fund (after 2036).<br><br>• Downward rate pressure from other elements of bill. |

# Executive Order to Implement SB 254

N-34-2 focuses on report to legislature and Governor, due April 1, 2026

State Agencies report to include:

- Alternative risk socialization structures
- Insurance changes: hardening measures, limits on public entity claims
- New wildfire mitigation technologies and solutions
- New wildfire risk reduction programs: state/local event response, home fire risk reduction standards, vegetation management, community-wide wildfire hardening,
- Special assessments for infrastructure and emergency response
- Improved land use planning

# Cap and Invest

## AB 1207 (Irwin): Reauthorizes Cap and Trade program

| What the bill does | Impact on SVCE and customers |
|---|---|
| • Renames "Cap and Trade" to "Cap and Invest."<br>• Electricity climate credits – 4 times a year<br>• Starts transition from gas to electricity climate credits. | • Provides market certainty for program<br>• Redirects climate credits to highest bill months |

# Cap and Invest

## SB 840 (Limon): Cap and Trade program allocations

| What the bill does | Impact on SVCE and customers |
|---|---|
| **Tier 1**<br>• CalFire<br>• Sales tax exemption for manufacturing<br>• Legislative Counsel Climate Bureau<br><br>**Tier 2**<br>• $1 billion High Speed Rail<br>• $1 billion legislative discretionary fund<br><br>**Tier 3**<br>• $800M Affordable Housing Sustainable Communities<br>• $400M Transit and Intercity Rail Capital Program<br>• $250M AB 617 Air District Projects<br>• $200M Low Carbon Transit Operations<br>• $200M Dept. of Forestry and Fire Protection | • Funds programs member agencies and transportation partner agencies have used for housing and transportation projects.<br><br>• Potential future funding for SVCE priorities around electrifying transportation and housing. |

# 2025 Local Agency Action Planning

*Resources to support the transition to pollution-free buildings and transportation.*

October 2025

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# Objective

Provide the Board with a status update on agency electrification readiness planning

# Despite Legal Changes, Reach Codes Drove Electrification, while Reducing Cost

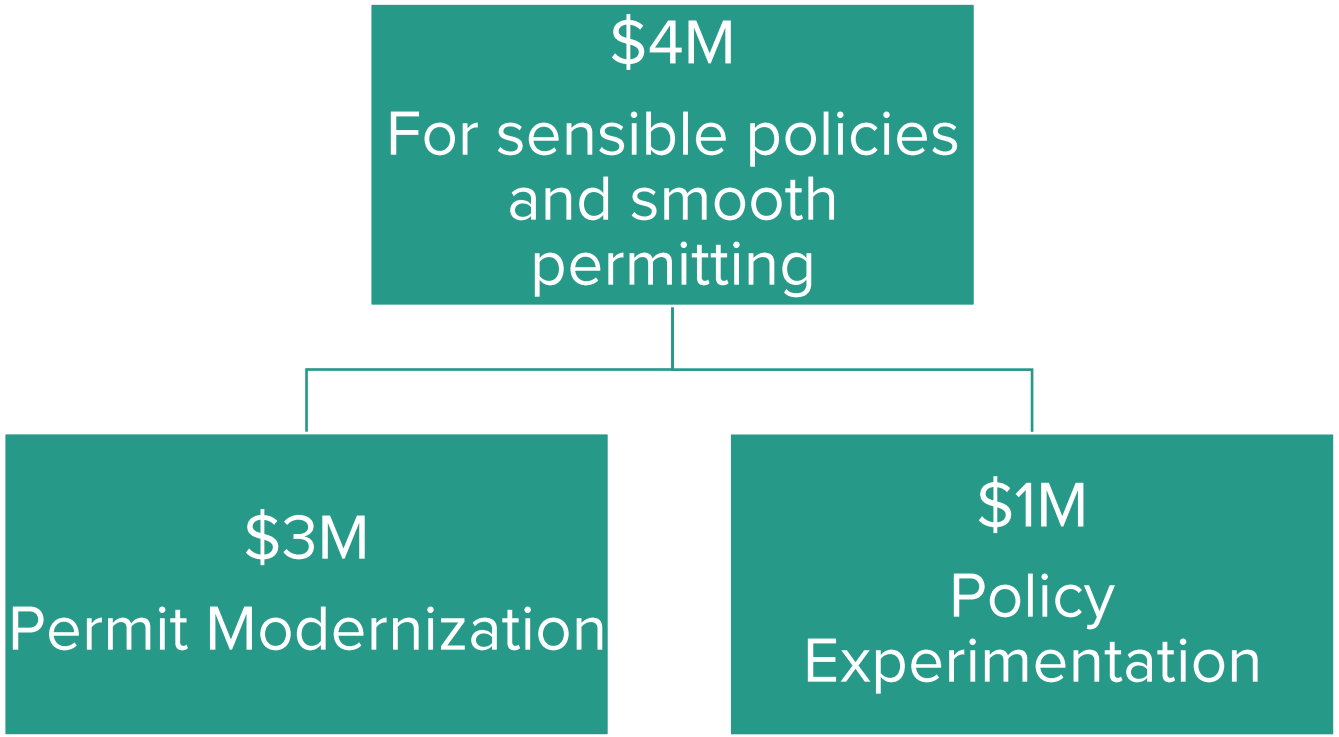
A few of the benefits in our territory 2020-2023

- >11,000 HPWHs
- ~$34M in on-bill savings
- >$71M in avoided retrofit costs
- Thousands of EV Chargers
- Thousands of induction cooktops

# SVCE and Member Agency Partnership

SVCE rebates and federal tax credits can reduce the financial cost of electrification. Local codes and permitting can increase adoption at the best time and with less friction.

SVCE is launching two complementary programs to provide our member agencies $4M in technical resources and grants to enable sensible local policies and smoother local permitting.

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# Passage of AB130 limits the ability of local jurisdictions to adopt reach codes September 2025 – December 2031.

**There are some exceptions**

- Only impacts residential - commercial reach codes remain a go
- Carve out for jurisdictions where electrification codes are linked to their general plan requirements/goals - if general plan was adopted before June 10, 2025.

# Mountain View adopted in August; Sunnyvale did preliminary adoption in August; four others working to adopt before December 1; two evaluating.

**Before Oct 1**
**Before Dec 1**
**Evaluating**
**No Go**

All agencies are also moving forward to increase training and modernize permitting.

| Jurisdiction | Two-Way AC | Flex Path Code (electrify at remodel) | Electric Readiness Code (prewire) |
|---|---|---|---|
| Campbell | TBD | Ø | TBD |
| Cupertino | Ø | Ø | Ø |
| Gilroy | Ø | Ø | Ø |
| Los Altos | October | Ø | October |
| Los Altos Hills | November | Ø | November |
| Los Gatos | October | Ø | October |
| Milpitas | Ø | Ø | Ø |
| Monte Sereno | TBD | TBD | TBD |
| Morgan Hill | Ø | Ø | Ø |
| Mountain View ✓ | September | Ø | September |
| Saratoga | November | Ø | November |
| Sunnyvale (Round 2) | October | Ø | October |
| County of Santa Clara | Ø | Ø | Ø |

# SVCE is here to support Board members and member agency staff.

1. **Staff in communication with all 13 jurisdictions**
2. **Available for Board 1:1s as needed**
3. **Troubleshoot and discuss options given new requirements**
4. **Technical resources, Special Counsel resources, communications resources**

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# 2025 is Different

**SVCE will continue to work with your staff to develop sensible actions and continue to pivot as circumstances evolve. We are working with each member jurisdiction to walk through options and create solutions given new requirements.**

# Thank you!

svcleanenergy.org

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# Appendix

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# Each agency selects from a menu of options to help their community more easily make this transition.

There are three tiers of action.

| Foundational Practices | Advancing Practices | Leading Practices |
|---|---|---|
| *Choose 3* | *Foundational + Choose 3 Advancing* | *Advancing + Choose 4 Leading* |
| Distribute info about BAAQMD, incentives, etc. with each permit | Train on avoiding unnecessary service upgrades | Allow plumbers to perform minor electrical work to streamline HPWH installations per CSLB |
| Implement Permit Concierge | Participate in meeting(s) on certified contractors network | BAAQMD ramp up (includes electrification readiness) on remodels |
| Provide staff training on building electrification technologies | Free permit pilot with outreach campaign | Require disclosures about gas appliances at time of sale |
| Enhance pre-application support materials | Insert comments in plans encouraging prewiring during other work | Implement certified contractors program |
| | | Incentive-based remodels for electrification |
| | | Adopt real-time permitting for HPWHs |
| | | Require heat pumps at time of AC install or replacement |

# SVCE is providing a comprehensive set of resources to help each agency meet its goals.

| | Resources Available | Permit Modernization | Policy Experimentation |
|---|---|---|---|
| Available to All | 1:1 consultation w/SVCE staff (Board member & agency staff) | X | X |
| | Tailored action plan for each jurisdiction | X | X |
| | Technical, legal, and staff support resources | X | X |
| Available to Leadership Cohort | Access to national-level climate change trainings | X | X |
| | Stipend for part-time, one-year fellow | X | X |
| | Expanded consultant support to implement leading-edge initiatives | X | X |

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# The Impact of Your Leadership - Assumptions

Sensible action now can make this transition easier and cheaper. For example, if every jurisdiction…

- Adopted prewiring requirements it could lead to **tens of thousands of electric-ready homes by 2030**.
- There are at least 5000 permits drawn per year in our service territory that could reasonably require pre-wiring. This could mean at least 25,000 electric-ready homes by 2030. Given the variety of ways these policies could be written, we are not stating a certain number, but rather an order of magnitude.
- Required bi-directional AC at the time of replacement, it could add **~16,000 heat pumps by 2029** and **save residents $ millions in redundant costs.**
- According to the market saturation study that SVCE conducted, there are ~100,000 ducted AC systems in our territory and they last ~20 years. Assuming an even annual turnover, that is ~5 replacements per year and ~20,000 by 2029 if policies went into effect in 2025.

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*Note: These are meant to be illustrative examples. Assumptions in the appendix*