

Residential Building Electrification Programs Summary

Whole-Home Incentives

- Self-serve
- Layering
- Customer finds contractor

Concierge Service (Hotline)

- Answer questions, provide guidance
- Electrification roadmaps
- Support finding contractors

Water Heater Loaner

- For emergency replacements (burnout)
- Temporary gas water heater until heat pump can be installed

Multifamily Direct Install

- No-cost upgrades
- Includes
 baseboard
 electric
 heating
 replacement
- SVCEmanaged

Planning

Tariffed On-Bill Financing

- Proposed pilot to CPUC
- Co-pay for some
- Single family and small multifamily
- Renters and owners
- SVCE-managed

Planning, will return to BOD

Active

Summer 2023

Development

Fall 2023

Early 2024

\$2.6M

~\$1.15M

\$11.5M

 * 3M (+ * 3M from state)

~450 households

Hard to estimate

~1,500 households ~500 households



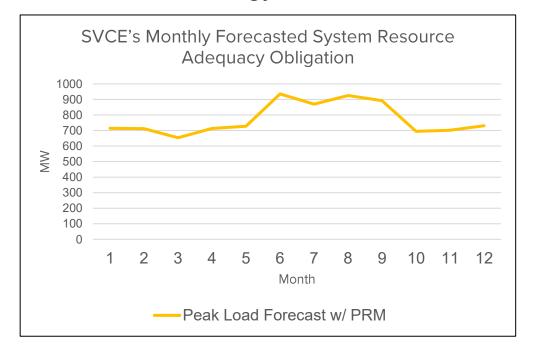


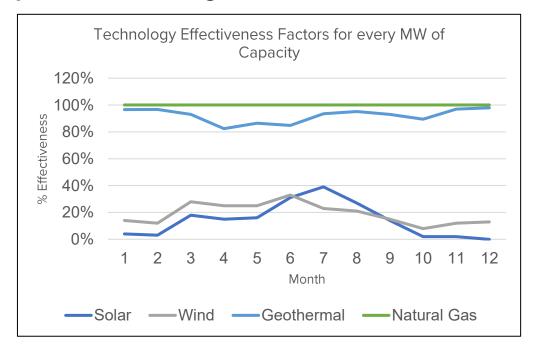
Resource Adequacy (RA) Overview

California must ensure there is sufficient Capacity to meet Demand under strained conditions

California Public Utilities Commission (CPUC) oversees RA Program

- Determine Load Serving Entities (LSEs) obligation --→ Peak Monthly Demand with a buffer or Planning Reserve Margin (PRM) of 16%
- 2. Determine technology effectiveness at delivering to peak load during stressed conditions





2023 RA Compliance Overview

SVCE must demonstrate compliance to the CPUC

- Year-Ahead Compliance Filings ("YARA")
 - 90% coverage for May-October
 - Filed end of October the year prior
 - For CY 2023 submitted 12/31/22 (extended)
- SVCE is deficient in the 2023 YARA filing

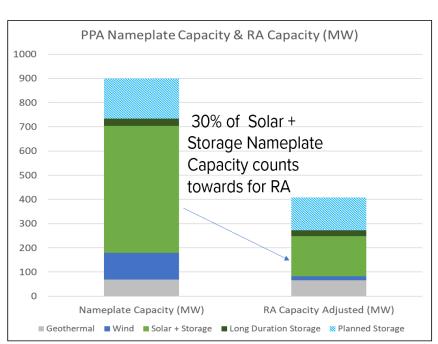
- Month-Ahead Compliance Filings ("MARA")
 - 100% monthly coverage
 - Due 45 days before start of compliance month
- Ability to cure YARA deficiencies, but still subject to penalties
- SVCE expects to be deficient in some summer months in MARA



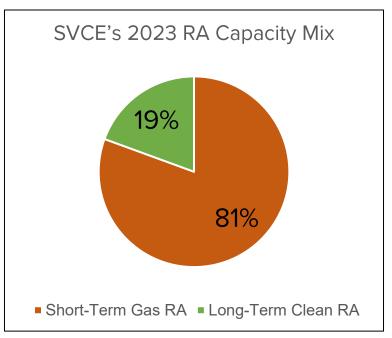
SVCE's 2023 Resource Adequacy Supply

- Laddered procurement strategy
- Power Purchase Agreements (PPAs)
- Storage
- Baseload resources
- Solicitations
- Bilateral Market
- Broker Market

CPUC determines how much each technology counts towards RA.
Solar and wind resources get a big "haircut"



SVCE must rely heavily on baseload resources, such as natural gas, to meet RA obligations



Power Purchase Agreements & Delays

- Since 2018 SVCE has executed 18 PPAs
- Several projects facing delays

- Globally, COVID, supply-chain and labor issues
- Nationally, tariff circumvention and forced labor concerns
- Locally, interconnection, permitting and transmission upgrades
- Project economics and financing

SVCE has over 450 MW of Solar and 218 MW of Storage subject to delays and/or termination in 2023

California's RA Supply

SVCE along with many other LSEs believe RA Supply in California is insufficient and do not expect the problems to improve in the immediate future.

Issues Affecting RA Construct -

- CPUC's counting rules erode value of renewable technologies
- CPUC's regulatory framework creates market uncertainty (e.g., changing the PRM, import rules)
- Timing of allocations of Central Procurement Entity (CPE) procured resources (local) have disrupted LSE procurement efforts

Issues Affecting Supply -

- Out-of-state entities and non-CAISO entities are procuring RA supply and/or not selling to California
- Investor-owned utilities (IOUs) are allowed to procure or retain resources based on Effective Summer PRM (20-22.5%)
- Department of Water Resources (DWR) is retaining capacity for the Strategic Reliability Reserve



Potential Solutions to Supply Issue

Regulators must acknowledge the severely constrained market conditions in designing policy responses

- Modify import requirements to be less onerous
- Modify CPE timeline and notification
- IOU effective PRM needs refinement to avoid effectively double penalizing CCAs
- Be more proactive on interconnection and transmission problems causing delays in bringing on new resources
- Create more transparency in the market for buyers and sellers
- Support sound efforts towards regionalization
- Develop a plan which considers fossil fuel plant retirement in the transition to a clean grid

SVCE's 2023 RA Situation

- Based on YARA filing SVCE is deficient in its compliance
- SVCE expects to be deficient in MARA filings
- SVCE is subject to YARA and MARA penalties
- SVCE is not alone in its deficiency

- Increased obligation due to changes in load
- Delays in bringing PPAs on-line
- BigBeau
- Haircut on wind, solar and storage resources
- CPE's failure to procure sufficient Local RA and timing
- Insufficient supply offered into SVCE's RFOs
- Lack of award in other RFOs

SVCE continues to try to fill its monthly RA obligations!

(C) RA Penalties

CPUC has a "no waiver for System RA" policy and imposes penalties based on YA and MA deficiencies

CPUC Penalties

Summer Deficiency Rate: \$8.88/kW-month

= \$8,880/MW-month

Winter Deficiency Rate: \$4.44/kW-month

= \$4,440/MW-month

CPUC point system

- 6 Points = 2x Deficiency Rate
- 11 Points = 3x Deficiency Rate

Points assessed based on historical number of months deficient and magnitude of deficiency

Example:

LSE has 6 points 10 MW deficient in Summer Penalty: 10 MW x

(2 x \$8880) = \$177,600

CPUC enforces this Penalty structure to motivate LSEs to comply with RA requirements LSEs are penalized for past deficiencies based on multiplier effect CPUC does not take into consideration market conditions and/or individual LSE's efforts

Procurement Efforts

- Continue to try to fill monthly deficiencies for 2023
- Issue RA RFOs for 2024 and beyond
- Continue Clean RFOs with bundled energy and capacity
- Work with developers and Governor's Go-Biz office to bring new projects on-line ASAP
- Consider natural gas peaker plant with hybridized battery energy storage system to meet longer-term RA needs

Advocacy Efforts

- Regulatory change is needed at CPUC
- Legislative fixes may be the only way to solve some of the problems

- Filing comments in CPUC's RA proceeding (SVCE and CalCCA) on issues currently being considered:
 - Setting the PRM and effective PRM
 - Resource eligibility for effective PRM
 - CPE showing timelines
 - Non-compliance and ability to serve new load
 - Penalties
- Supporting CalCCA on advocacy efforts and discussions with CPUC staff
- Assessing/supporting legislation that improves the interconnection and transmission enhancement process as well as regionalization efforts
- Tracking the CA Budget Bill and educating legislators on complexity of RA market and effects of expanding penalties

Summary

- CPUC's RA framework and Integrated Resource Plan process need to work together to ensure resource sufficiency for grid reliability
- IOU bundled and unbundled customers should be treated fairly
- Increasing or augmenting penalties will not get more resources built
- Market dynamics and procurement efforts should be considered before penalizing an LSE
- Significant costs resulting from RA market dynamics along with penalties will fall on all customers' shoulders



(C) Existing SVCE EVI Programs











CALeVIP

L2 & DCFC incentives

Ecology Action

Low-powered direct install EV charging in MUDs

EVmatch

Shared public access & reservationbased charging at MUDs

FutureFit **EV** Assist

Technical Assistance for MUDs/SMB EV Charging

Charging Installation Incentives Program (CHIIP)

> L1 and L2 incentives











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Charging Installation Incentives Program (CHIIP)

L1 and L2 incentives



California EV Incentive Program



Goal: Install ~1,100 L2 and ~85 DCFC EV chargers

How

- Objectives: install DC Fast Chargers (DCFCs) and L2 chargers
- Target Audience: public agencies, property owners, EVSE providers, non-profits, schools
- Sites: public parking lots and garages, multifamily buildings, retail/commercial sites
- Timeline: 2020 ongoing

\$55.2M across Peninsula-Silicon Valley Project

SVCE territory – total \$12M:

- \$6M from CEC for DCFC
- \$6M match from SVCE for L2 chargers













Progress to Date

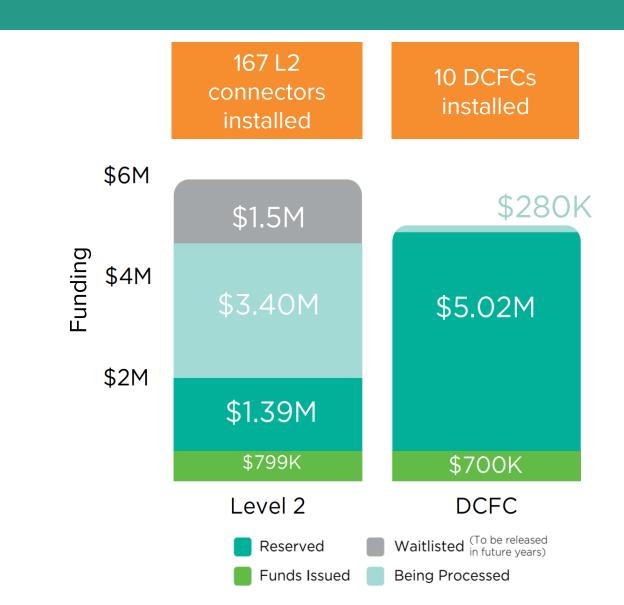
Incentives offered



\$4.5K-6K per L2 connector, up to 75% project cost



Adders for disadvantaged and low-income sites



(V) Key Design Elements

- Adder for multifamily properties
- Joint partnership across counties
- First-come, first served



Next Steps

- Continue to process applications
- DCFC funding oversubscribed, L2 still available
- Planning to open SVCE's \$6M to allow L2 or DCFC in March



Program details at:

https://svcleanenergy.org/calevip/