Item 3
PRESENTATION
AMENDED

# Resource Adequacy Capacity Agreement with High Desert Power Project, LLC

SVCE Executive Committee
April 26, 2024

SILICON VALLEY CLEAN ENERGY

# Request of Executive Committee

Staff recommends that the Silicon Valley Clean Energy Authority (SVCE) Executive Committee recommend the SVCE Board of Directors authorize the Chief Executive Officer (CEO) to execute a Long Form Resource Adequacy Agreement with High Desert Power Project, LLC ("MRP RA Agreement")

- 6-Year term RA Agreement with expected delivery from January 1, 2027 through December 31, 2032; and
- 50 megawatts (MW) of baseload System and Flexible Resource Adequacy (RA) capacity from natural gas.

**The 6-year MRP RA Agreement exceeds the CEO's authority under the Board-approved Energy Risk Management Policy which currently authorizes transactions for RA up to five years in term.**

# Background

**California has established a Resource Adequacy (RA) framework to ensure each load serving entity has sufficient Capacity to meet grid Reliability needs**

- California must ensure there is sufficient Capacity to meet Monthly Peak **Demand**
- RA rules are set to change starting in 2025 when Slice of Day (SOD) is adopted moving away from a Peak only monthly accounting
- SOD requires LSEs meet RA requirements on a 12x24 basis
  - 12 months per year
  - 24 hours per month
  - Requirements based on “worst-day” each month

# Resource Adequacy Only Capacity Contracts

**Buyer has the rights to Capacity under a contract that ensures a resource generates when needed**

- No Energy associated RA Capacity
- These contracts serve to meet RA Program requirements
- RA-Only Capacity contracts primarily from natural gas resources
- Board has delegated authority to CEO to transact these types of contracts with less than 5 year terms

SILICON VALLEY CLEAN ENERGY

# SVCE Solicitation in March 2024

SVCE regularly solicits for resource adequacy, specifically baseload RA

Baseload RA contributes to RA need in every hour of the day

Natural gas, nuclear, geothermal and biomass are baseload

- SVCE solicited for baseload RA for any years between 2027 through 2031
- 3 offers received
- MRP's High Desert Project (natural gas) offer was the most competitively priced

# High Desert Power Project

**High Desert Power Project**

- San Bernardino County
- 830 MW resource
- 50 MW of Flexible and System RA
- High Desert Power Project, LLC is a subsidiary of Middle River Power (also owner of Hanford resource)

- Delivery Term: January 1, 2027 through December 31, 2032 (6 years)
- SVCE will only procure the RA capacity attributes
- No energy and emissions attributed to SVCE

# Summary

SVCE seeking EC recommend that the BOD authorize CEO to execute this transaction

Planned for May 2024 BOD Consent Calendar

- Resource Adequacy Program is set to change with Slice of Day Framework
- Natural Gas resources provide baseload RA in all hours of the day
- High Desert contract will make decent progress in ongoing procurement
- SVCE ladders in procurement of RA to help balance price fluctuations
- Contract aligns with SVCE's Strategic Plan

# Questions?

# High Desert Aligns with SVCE's Strategic Plan

Execution of the MRP RA Agreement supports the reliability- and compliance-focused goals of the Board adopted Strategic Plan including:

- Goal 7 – Acquire clean and reliable electricity in a cost-effective, equitable and sustainable manner
  - Measure 1 – Meet SVCE-Board directed 100% clean goals and Integrated Resource Plan directives; RPS mandates; RA obligations; and procurement mandates
- Goal 8 – Manage and optimize power supply resources to meet affordability, GHG reduction and reliability objectives
  - Measure 1 – Manage power supply portfolio and energy risk, and optimize market participation

Item 4
PRESENTATION
AMENDED

# Hanford Hybrid Plant Emissions Mitigation Guidelines Proposal

April 26, 2024
Executive Committee Meeting

SILICON VALLEY CLEAN ENERGY

# Objective – Seeking Input

**Purpose:** discuss Staff's proposal for the Hanford Hybrid Plant Emissions Mitigation Guidelines for Exec Comm to provide input.

- In April of 2023, the Board adopted Resolution No. 2023-06 approving a 12-year power purchase agreement with Middle River Power for energy and reliability products from its Hanford Hybrid Natural Gas Power Plant and Battery Energy Storage System
- The resolution requires staff to develop a policy and/or guidelines to set aside funds to be used for programs and/or projects to help mitigate emissions associated with energy produced by the Hanford Hybrid Plant
- SVCE is proactive about ensuring its portfolio management activities leave a net positive impact on communities

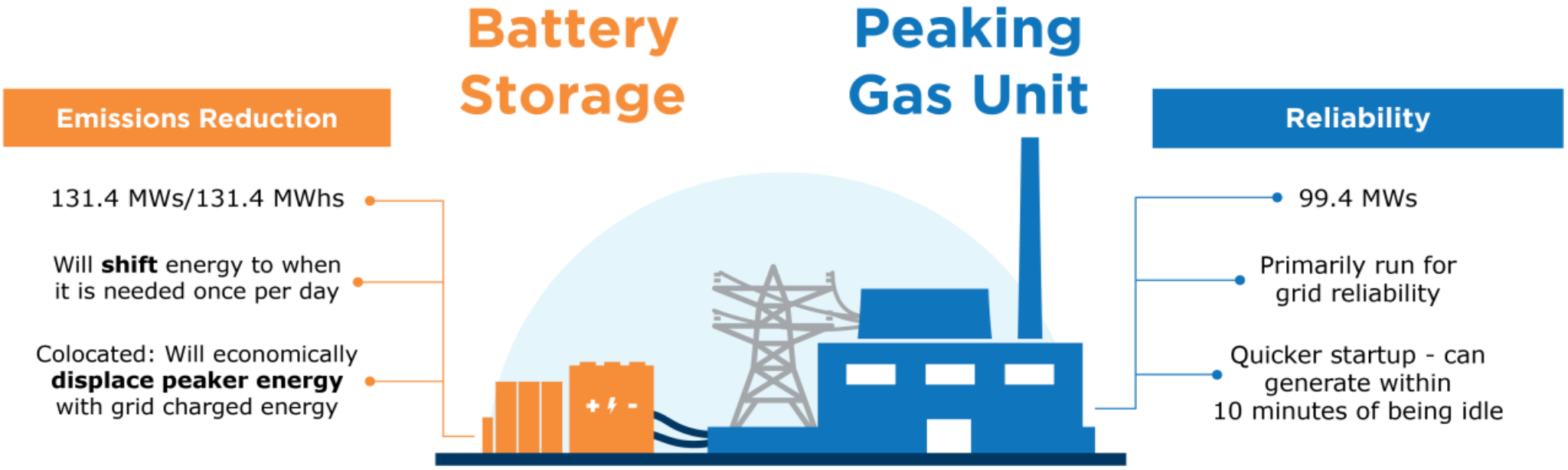
# More on the Hanford Hybrid Plant's Location


- Hanford is located Kings County, which is in the San Joaquin Valley
- The population in 2021 was 58,470
- Hanford's median household income for a family of 4 is $43,200
- Hanford has been designated a disadvantaged community as defined by the 2022 version of CalEPA's CalEnviroScreen 4.0

Source for population and income data: U.S. Census Bureau and the City of Hanford's website: https://www.ci.hanford.ca.us/.

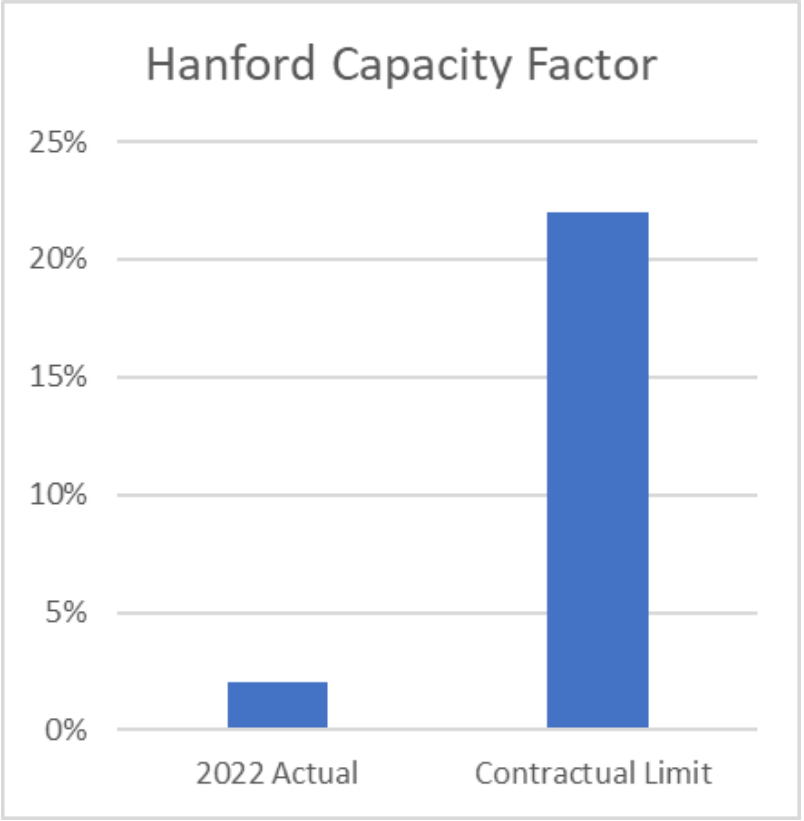
# About the Hanford Hybrid Plant

- The Hanford Hybrid Plant is a hybrid natural gas peaker power plant and battery energy storage system that SVCE contracted with for twelve years to ensure that SVCE can meet its Resource Adequacy (RA) program obligations.



# About the Hanford Hybrid Plant's Emissions

- Due to tight RA supply conditions, the Hanford plant is likely to have run through the end of the decade whether or not SVCE contracted for the unit
- The Hanford Hybrid Plant agreement is 12 years in duration, with the battery energy storage system and the natural gas peaker both starting October 1, 2024
- Projected energy dispatch expected to result in ~5,000 MT of CO2/year at start of contract period; the CPUC's electric sector GHG emissions target for 2030 is 25,000,000 MT of CO2
- SVCE's hybridization of the plant (i.e., addition of a battery energy storage system) is expected to decrease the utilization rate of the gas portion of the plant because the battery system will displace the peaker, likely resulting in yearly emissions decreasing over time



# Proposal for Hanford Hybrid Plant Emissions Mitigation Guidelines

## Objective

- Fund existing programs to help reduce emissions from greenhouse gases through electrification activities in disadvantaged or low-income communities in Kings County
- Propose a funding amount that can make a meaningful impact and is worthwhile to spend resources on

## Impacts

- Guidelines require staff evaluation of the effectiveness of the fund disbursements

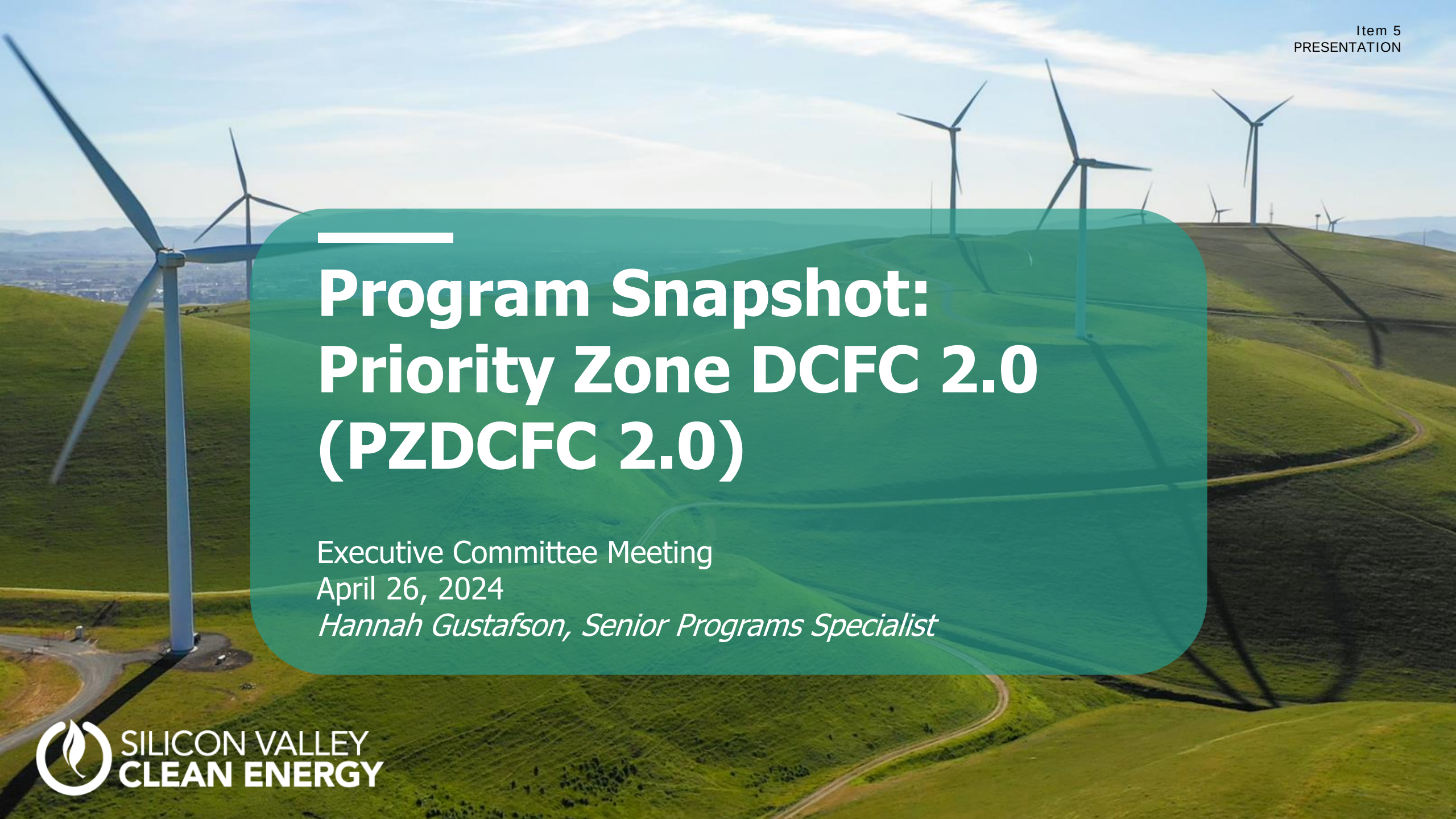
| | Key Elements of the Guidelines |
|---|---|
| 1 | Establishes the Hanford Hybrid Plant Emissions Mitigation Fund ("Hanford Fund") |
| 2 | Hanford Fund will be used to fund existing local programs to help reduce emissions from greenhouse gases through electrification activities in disadvantaged or low-income communities in Kings County |
| 3 | Recommended one-time funding allocation of $750,000 to $1.8 million– for the entire duration of the Hanford contract (12 years)<br>• This represents:<br>○ 0.6% - 1.5% of SVCE's total Programs Budget Allocation<br>○ 0.3% - 0.6% of the total not-to-exceed amount approved by the board for the Hanford Hybrid Plant Power Purchase Agreement over 12 years |
| 4 | Fund could be used to pay for activities led by organizations working in Kings County |
| 5 | SVCE staff will evaluate the effectiveness of fund disbursements |
| 6 | All funds in the Hanford Fund must be disbursed by June 1, 2036 |

# Option for Stakeholder Input

- An option or requirement could be included in the guidelines for stakeholder input
- Stakeholder engagement process would allow us to receive feedback directly from Kings County community members
  - Understand types of emission reduction programs that would be most beneficial to Kings County residents.
  - What are community priorities?
- Guidelines could require collected feedback be used to determine best course of action for utilizing Hanford Hybrid Plant Emissions Mitigation funds

# Conclusion

- The Hanford Hybrid Plant Emissions Mitigation Guidelines will enable staff to meet the Board's directive to develop a policy and/or guidelines to set aside funds to be used for programs and/or projects to help mitigate emissions associated with energy produced by the Hanford Hybrid Plant.
- After the Executive Committee provides feedback on the proposed guidelines, staff will return with a modified proposal for guidelines.

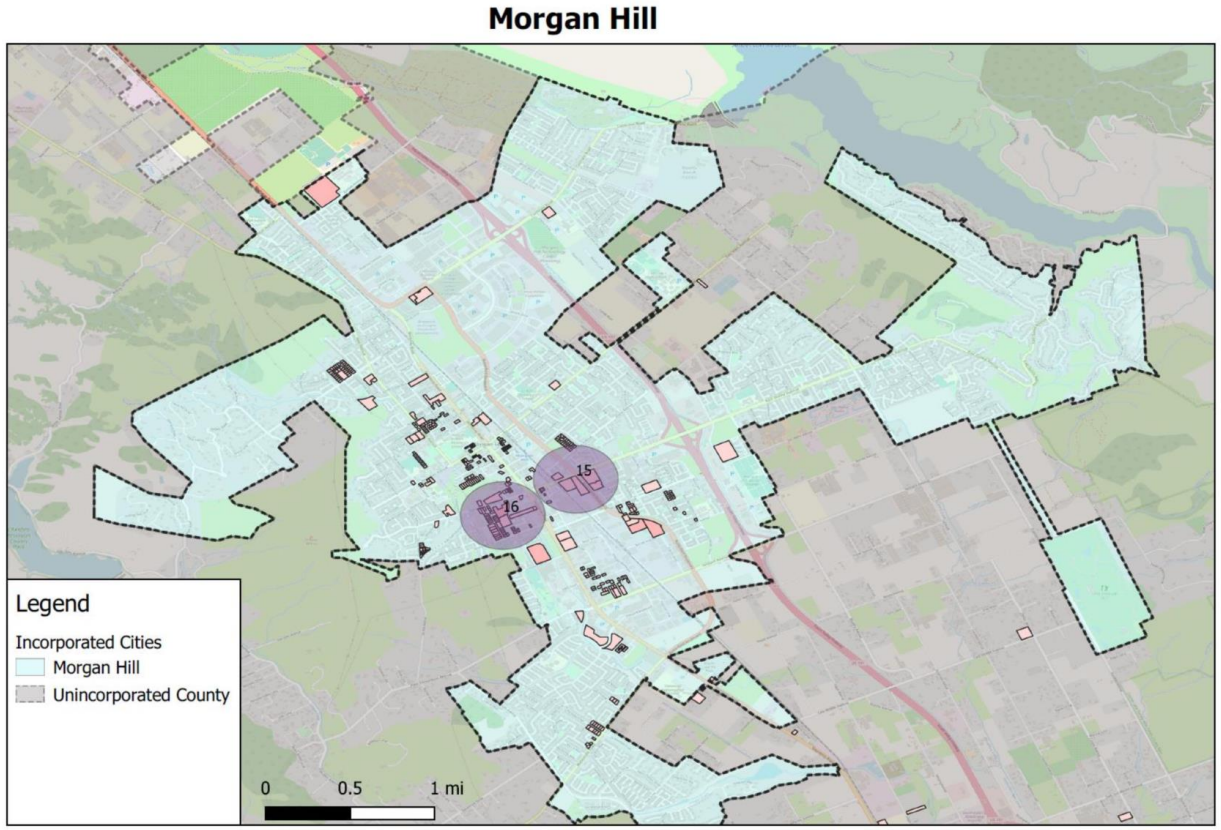


# Program Snapshot: Priority Zone DCFC 2.0 (PZDCFC 2.0)

Executive Committee Meeting
April 26, 2024
*Hannah Gustafson, Senior Programs Specialist*

SILICON VALLEY CLEAN ENERGY

# You may remember Priority Zone DCFC 1.0…




Example PZDCFC 1.0 selection map in Morgan Hill

- Implemented 2019-2021
- Defined 29 Priority Zones near older multifamily
- Participating sites must receive CALeVIP funding first
- No grants awarded, no installations

# Priority Zone DC Fast Charging 2.0

## Objectives:

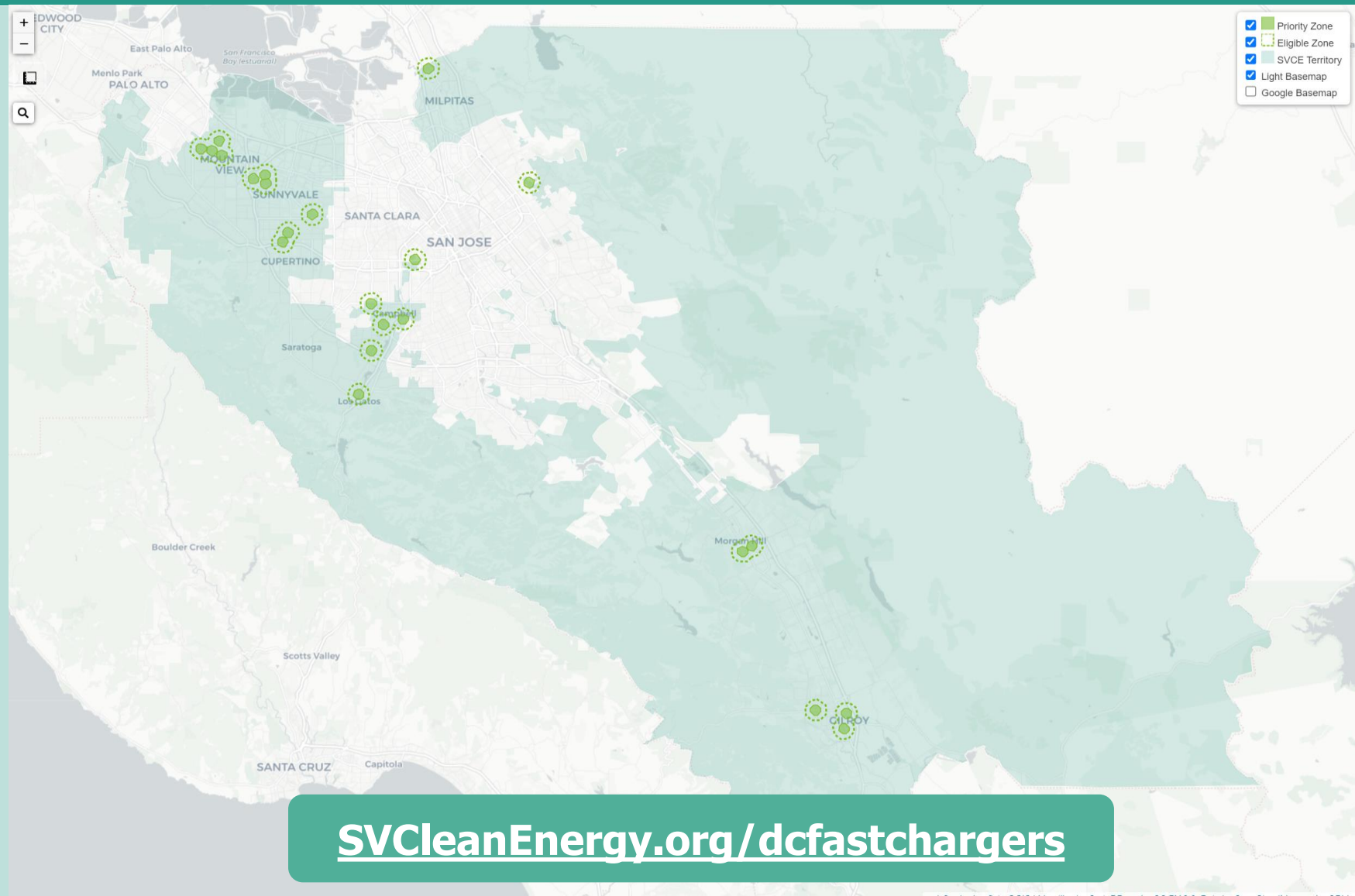
- Encourage new DCFCs near MUDs in charging deserts
- Support EVI in low-income and priority communities
- Assess effectiveness in accelerating MUD resident adoption of EVs

## Incentive:

- **Up to $50,000 per port** or 50% of total project cost
- **Goal**: 10 DCFC ports across 4 sites

## Program Funding:

- $875k




SVCleanEnergy.org/dcfastchargers

# Timeline

We are here

**July-Nov 2022**

Application window open

**Dec 2022**

Application Review and Award Selection

**Jan-March 2023**

Site Agreements Executed (4)

**April 2023-April 2024**

- Site Development Begins
- Resident outreach planning

**April-Aug 2024**

- Installations Completed
- Resident outreach & education

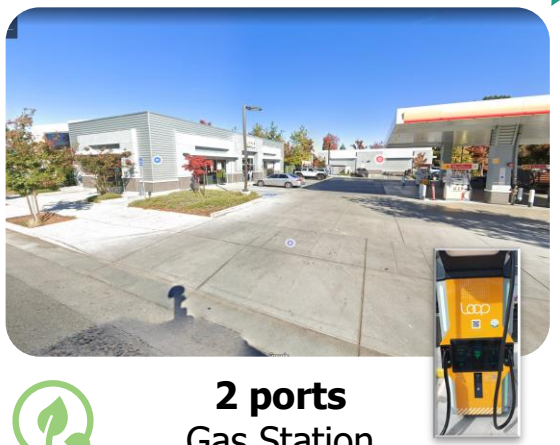
**Sep 2024**

- Program close and evaluation of impact

# PZDCFC 2.0 Sites have installed 10 ports


Now live!

**4 ports**
Monta Loma Plaza
Mountain View
1300+ MUD units



Now live!

**2 ports**
Gas Station
Mountain View
500+ MUD units


Now live!

**2 ports**
Gas Station
Milpitas
700+ MUD units


Coming soon!

**2 ports**
Public Parking Lot
Morgan Hill
700+ MUD units

# Early Learnings and Next Steps

- Early lessons learned:
  - Decoupling from CALeVIP simplified process
  - Applicants tend to be primarily EVSE vendors
  - Grant awards work for sites that are "shovel-ready"

- Evaluate and learn:
  - Conduct multifamily resident outreach & education
  - Assess how well DCFCs meet the needs of multifamily residents
  - Assess EV adoption rates among multifamily residents in Priority Zones over time


Dual port charger (200 kW) with integrated battery storage in Mountain View