Silicon Valley Power (SVP) EV Charging Technical Assistance Program:

Multifamily Properties

Brought to you by SVP; Administered by CLEAResult
9/21/22

TODAY'S AGENDA

- Program Overview
- EV Charging Overview
- Rebates
- Considerations Discussion
- Questions

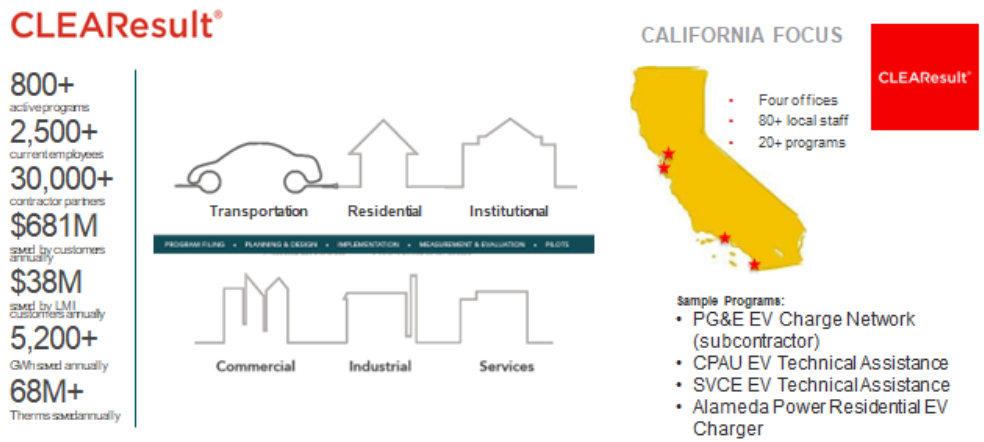
INTRODUCTION

- SVP Personnel
  - Arielle Romero Cox – Program Manager
  - Scott Anderson – Principal Electrical Estimator
- CLEAResult Personnel
  - Jacob Abramson – Program Manager
  - Sam Mackintosh – Account Manager

SVP AND CLEARESULT

- Silicon Valley Power hired CLEAResult to implement their EV Charging Technical Assistance Program.
- Across **Santa Clara** and **San Mateo** Counties, CLEAResult has designed over **130 EV charging projects** over the past 2 years.
- CLEAResult is the largest provider of emission-reducing energy solutions across North America.

Technical Assistance Lead

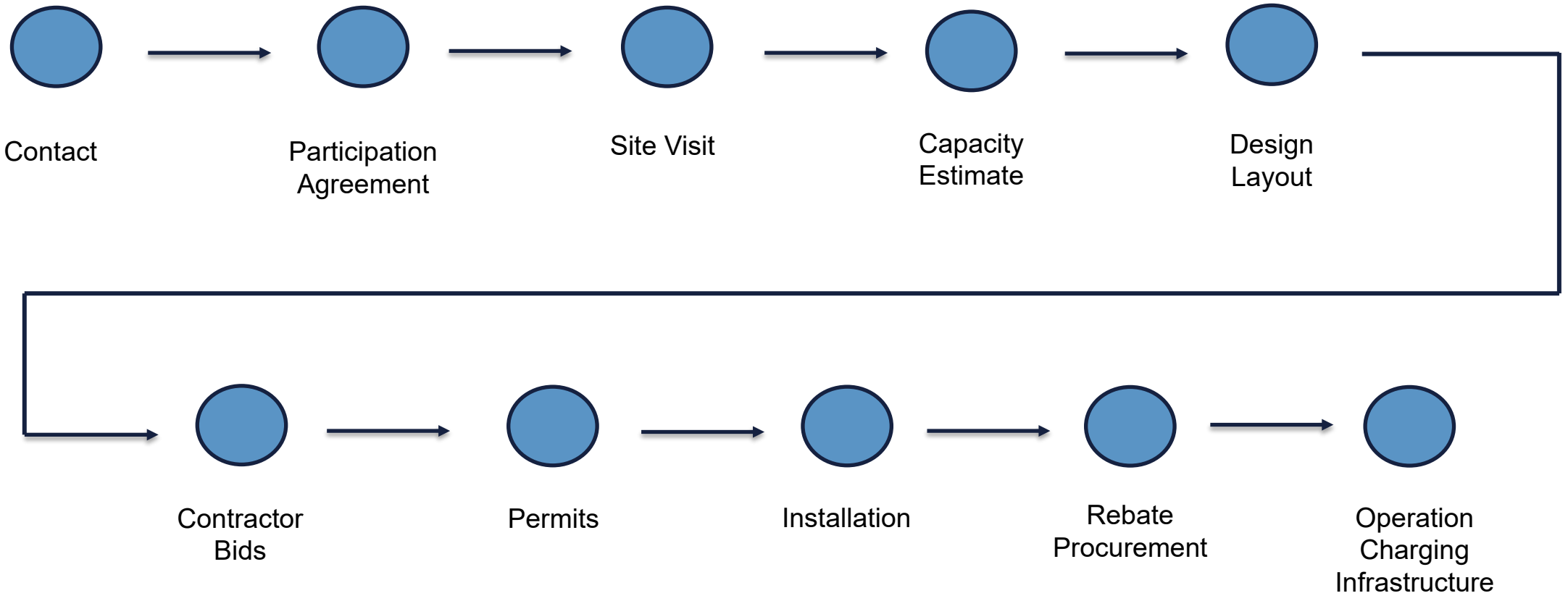


Participant Poll

PROGRAM OVERVIEW

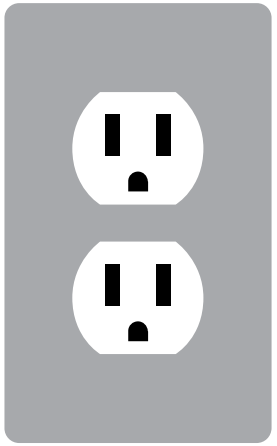
- The Program provides multifamily properties with electric vehicle (EV) charging technical assistance from vendor-agnostic consultants.
- $250 copay for multifamily properties with more than 50 units
- This includes:
  - Load Analysis
  - Site Visit
  - Installation
  - Charging Evaluation Report
  - Contractor Bid Support
  - Support
  - Rebate Assistance

HOW EV TECHNICAL ASSISTANCE WORKS



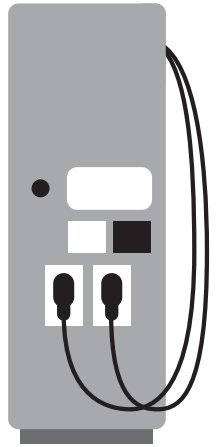
ELECTRIC VEHICLE CHARGING EQUIPMENT

An EV charging station or EV charging outlet safely charges the battery of an electric vehicle



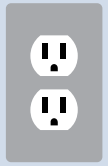
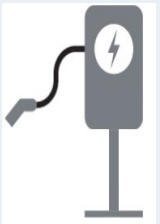
Level 1

Level 2



Level 3 (DC Fast Charger)

EV CHARGING LEVEL COMPARISON

Type of charger		Electric supply	Electrical Upgrades Needed?	Miles of Range per Hour	Use Case
	**Level 1 Outlet**	120-volt wall outlet	Less likely	2-5 miles	Overnight/All day Parking
	**Level 2 Charger**	208-240-volt circuit	More likely	20-30 miles	2+ Hour parking
	**DC Fast Charger**	480-volt	Probable	100-200 miles	Quick Charging <1 hour

CURRENT REBATE: MULTIFAMILY SITES

- Up to **75%** of installation costs
- Rebate of up to **$3,000** per L2 EV charging station
- Limit of 6 charging station rebates per address
- The charging station(s) must be:
  - Installed in a shared parking location
  - Available to tenants, owners, employees, and guests
- Must operate for useful life

PROPOSED REBATE: MULTIFAMILY

- Up to **85%** of installation costs
- Rebates up to:
  - **$2,000** per L1 EV charging outlet
  - **$5,000** per L2 EV charging connector (aka port)

PROPOSED REBATE: MULTIFAMILY

Port Type	Port Incentive	Incentive Cap
Level 1 outlet	$2,000	None
Level 2 - 0-4 connectors	$4,500	Up to 75% of project cost, maximum $40,000 per property
Level 2 - 5-7 connectors	$5,000	Up to 80% of project cost, maximum $50,000 per property
Level 2 - 8+ connectors	$5,000	Up to 85% of project cost, maximum $75,000 per property

CURRENT REBATE: LOW-INCOME MULTIFAMILY

- Up to **75%** of installation costs
- Rebate of up to **$3,000** per L2 charging station (limit 6 total per address)
    - Rebate of up to **$1,000 grant adder** per L2 charging station
    - Limit of 1 charging station grant per 10 shared parking spaces
- Rate Requirements
    - Minimum 15% of all units on the Financial Rate Assistance Program OR
    - Minimum 15% of all units are below market rate
- The charging station(s) must be:
    - Installed in a shared parking location
    - Available to tenants, owners, employees, and guests
- Must operate for useful life

PROPOSED REBATE OVERVIEW: LOW-INCOME MULTIFAMILY

- Up to **100%** of installation costs
- Rebate of up to:
  - **$2,500** per L1 EV charging outlet
  - **$6,500** per L2 charging connector (aka port)

PROPOSED REBATE OVERVIEW: LOW-INCOME MULTIFAMILY SITES

Port Type	Port Incentive	Incentive Cap
Level 1 outlet	$2,500	None
Level 2 - 0-4 connectors	$6,000	Up to 100% of project cost, maximum $50,000 per property
Level 2 - 5-7 connectors	$6,500	Up to 100% of project cost, maximum $60,000 per property
Level 2 - 8+ connectors	$6,500	Up to 100% of project cost, maximum $85,000 per property

SAMPLE PROJECT COST

Multifamily Property

A typical installation with four L2 charging stations could cost:

PROJECT	COST
Hardware & Install	$20,300
Behind the Meter	$25,000 (Panel upgrade, restriping of spaces, conduit/trenching)
Permit	$575
Budget (Hardware & Install, Behind the Meter, Permit)	$46,800
Less Rebates of $3,000 per L2 charging station	-$12,000
Out of Pocket	**$34,800**

EV CHARGING EVALUATION REPORT

- Informs property owner of existing electrical capacity
- Assesses feasibility of desired chargers against existing capacity
- Identifies likely electrical upgrades
- Provides estimated project budget
- Can be used as basis for installer bids

	Solution 1		Solution 2		Solution 3	
	This is exactly what you asked for		This is the best deal, with optimal delivery for your existing capacity		This is the plan that will prepare you for the future	
Category	Quantity	Est. Cost	Quantity	Est. Cost	Quantity	Est. Cost
Level 1 Outlet	4	$ 2,500	6	$3,800	8	$5,000
Level 2 Charging Station	4	$ 12,300	16	$47,800	40	$153,200
Level 2 Make-Ready	0	-	8	-	12	-
Design and Infrastructure	1	$ 59,600	1	$114,200	1	$228,900
SVP/Building Division Costs	-	TBD	-	TBD	-	TBD
Project Cost	$107,800		$199,200		$420,500	
Incentive	$72,000		$146,000		$420,500	
Net Project Cost	$35,800		$53,200		$244,500	
Cost per Port	$3,978		$1,773		$4,075	

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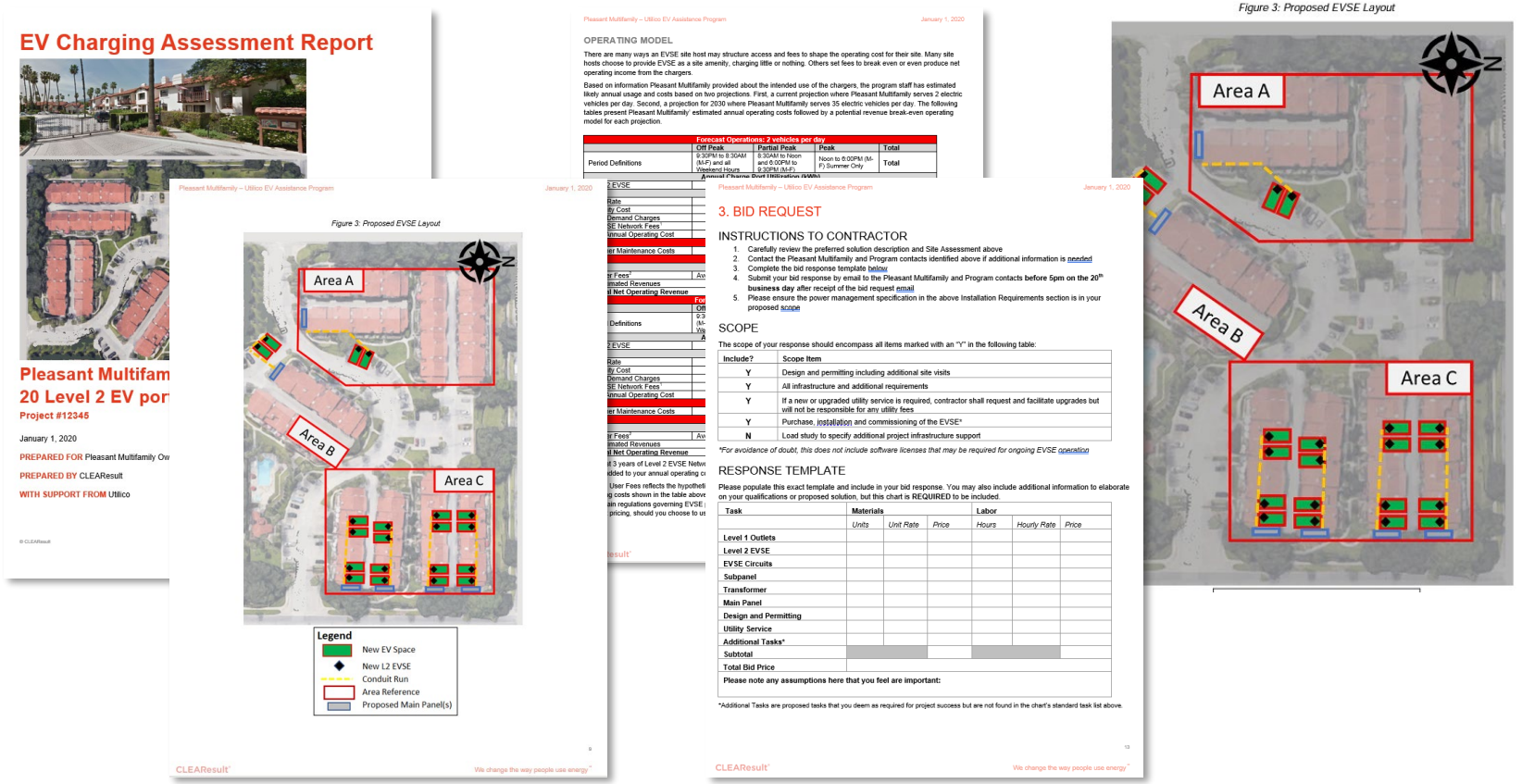
EV CHARGING EVALUATION REPORT



EV Charging Assessment Report

Pleasant Multifam
20 Level 2 EV por
Project #12345

January 1, 2020

PREPARED FOR Pleasant Multifamily Ow
PREPARED BY CLEAResult
WITH SUPPORT FROM Utilico

Pleasant Multifamily – Utilico EV Assistance Program January 1, 2020

OPERATING MODEL

There are many ways an EVSE site host may structure access and fees to shape the operating cost for their site. Many site hosts choose to provide EVSE as a site amenity, charging little or nothing. Others set fees to break even or even produce net operating income from the chargers.

Based on information Pleasant Multifamily provided about the intended use of the chargers, the program staff has estimated likely annual usage and costs based on two projections. First, a current projection where Pleasant Multifamily serves 2 electric vehicles per day. Second, a projection for 2030 where Pleasant Multifamily serves 35 electric vehicles per day. The following tables present Pleasant Multifamily' estimated annual operating costs followed by a potential revenue break-even operating model for each projection.

Forecast Operations: 2 vehicles per day				
	Off Peak	Partial Peak	Peak	Total
Period Definitions	9:30PM to 8:30AM (M-F) and all Weekend Hours	8:30AM to Noon and 6:00PM to 9:30PM (M-F)	Noon to 6:00PM (M-F) Summer Only	Total

Figure 3: Proposed EVSE Layout

Pleasant Multifamily – Utilico EV Assistance Program January 1, 2020

3. BID REQUEST

INSTRUCTIONS TO CONTRACTOR

1. Carefully review the preferred solution description and Site Assessment above
2. Contact the Pleasant Multifamily and Program contacts identified above if additional information is needed
3. Complete the bid response template below
4. Submit your bid response by email to the Pleasant Multifamily and Program contacts **before 5pm on the 20th business day** after receipt of the bid request email
5. Please ensure the power management specification in the above Installation Requirements section is in your proposed scope

SCOPE

The scope of your response should encompass all items marked with an "Y" in the following table:

Include?	Scope Item
Y	Design and permitting including additional site visits
Y	All infrastructure and additional requirements
Y	If a new or upgraded utility service is required, contractor shall request and facilitate upgrades but will not be responsible for any utility fees
Y	Purchase, installation and commissioning of the EVSE*
N	Load study to specify additional project infrastructure support

For avoidance of doubt, this does not include software licenses that may be required for ongoing EVSE operation

RESPONSE TEMPLATE

Please populate this exact template and include in your bid response. You may also include additional information to elaborate on your qualifications or proposed solution, but this chart is **REQUIRED** to be included.

Task	Materials			Labor		
	Units	*Unit Rate*	*Price*	*Hours*	*Hourly Rate*	*Price*
Level 1 Outlets						
Level 2 EVSE						
EVSE Circuits						
Subpanel						
Transformer						
Main Panel						
Design and Permitting						
Utility Service						
Additional Tasks*						
Subtotal						
Total Bid Price						
Please note any assumptions here that you feel are important:						

*Additional Tasks are proposed tasks that you deem as required for project success but are not found in the chart's standard task list above.

Figure 3: Proposed EVSE Layout

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PROPERTY CONSIDERATIONS

- Tenants' commuting habits
- Benefits of installing EV chargers
- Possible utility upgrades
- Cost calculations
- Building standards, green codes, and ADA requirements
- Planning or permitting timelines
- Assessments timelines
- Construction timelines
- Operating and managing the charging equipment

NEXT STEPS

- Enroll in Program
  https://siliconvalleypower.com/evexpert
- Submit Co-pay (if applicable)
- Pre-Evaluation Call
- Site Visit
- EV Charging Evaluation

Q&A | Participant Poll

THANK YOU!

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