



Solar PV & Resiliency Community Information Meeting

Presented by Dan Zaich, Zoe
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December 2022

Agenda

- Solar & Resiliency Project Background
- District and Community Benefits
- Project Details and Schedule
- Site Layout and PV Examples
- Q&A

Project Background

- SRCS is committed to reducing its environmental impacts with cost effective energy efficiency & renewable generation projects
- District completed first pilot PV projects at San Pedro Elementary and Glenwood Elementary
- District participated in PG&E's EV Charge program to install EV chargers with no infrastructure cost to SRCS
- In 2021, SRCS conducted an updated district-wide solar feasibility study and identified an additional 6 sites for solar PV

Community Benefits

- Provides locally generated, clean, renewable energy
- Provides shade as an amenity on campus
- Provides teaching example of solar energy to learn in class
- Generates ~\$8.6M in cost savings over 25 years
- Frees up General Fund \$\$ to be used in classrooms
 - Better Schools = Higher Property Values
- Statement of environmental stewardship for students & public

The Value of Resiliency

An Area of Priority for SRCS Bond Measures B & C:

- Value of Resiliency is priceless. Resiliency means keeping critical electrical circuits operational during a power outage, i.e., communications, refrigeration, lighting.
- Adding batteries and a microgrid to a solar system affects the economics of the project, i.e., the added costs are not as quickly recovered or offset.
- Batteries may also be discharged daily into the school during peak consumption periods (4-9pm) to avoid paying for high priced electricity.
- Offset utility cost savings from solar PV systems can be used toward the cost of batteries and microgrid components.

Project Overview

Sites	Approximate Size (kW)
1. Bahia Vista ES	154
2. Davidson MS	379
3. Sun Valley ES	120
4. Terra Linda HS*	855
5. Venetia Valley K-8	202
6. San Rafael HS*	1,010
Total	2,720 kW

**Site will have battery storage and microgrid component*

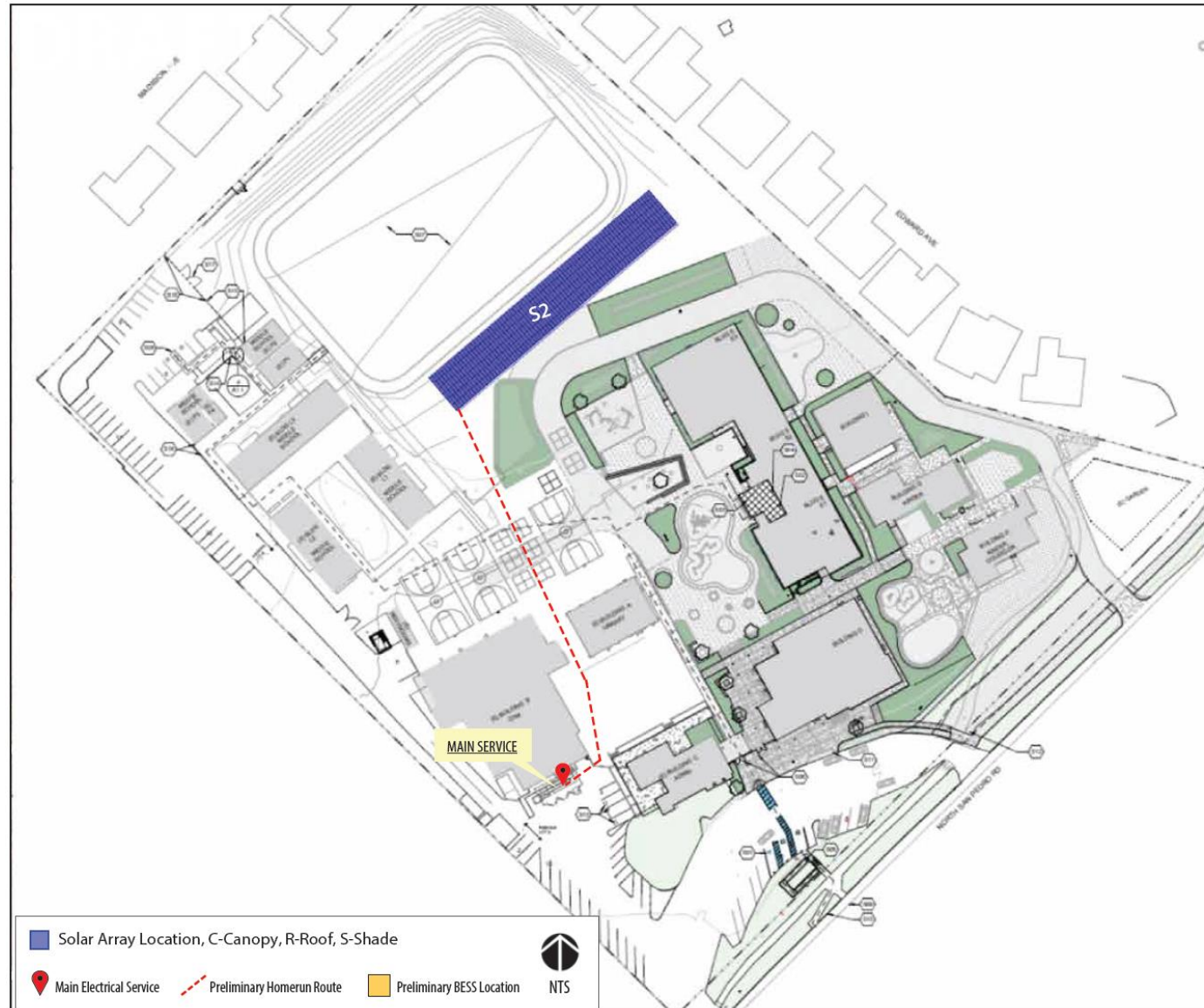
Current Schedule

Event	Timeline
Community Engagement Meetings	December 2022
RFP Process	January – February 2023
Design	Spring 2023
Construction	Beginning Summer/Fall 2023
Final Completion & Operation	Early 2024

Example PV Canopies



Preliminary Design



Renderings



Renderings



Questions?

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THANK YOU

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Reference Slides

Historical Energy Usage

Site No.	Site Name	Historical Annual Usage, kWh
1	Bahia Vista ES	279,000
2	Coleman ES	227,000
3	Davidson MS	666,000
4	San Rafael HS ²	1,540,000
5	Sun Valley ES	207,000
6	Terra Linda HS ³	1,096,000
7	Venetia Valley ES	349,000

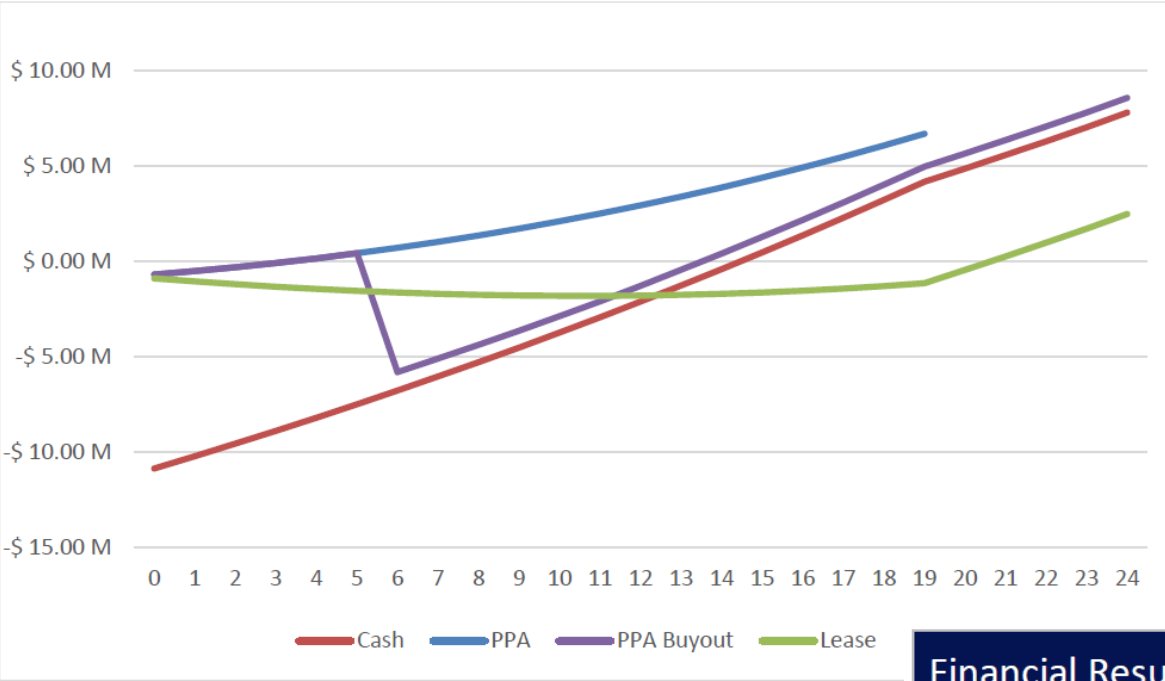
Utility Consumption Information	FY2019
Annual Electric Consumption, kWh	~4,600,000
Annual Electric Cost (Modeled), \$	\$1.06M

Feasibility Results

Table 4-4: Utility Tariff Analysis Results

Site Name	Year-1 Savings	Bill Offset, %	Value of Energy, \$/kWh
Bahia Vista ES	\$44,000	66%	\$0.2385
Coleman ES	\$20,000	32%	\$0.2647
Davidson MS	\$110,000	69%	\$0.2398
San Rafael HS	\$243,000	68%	\$0.2187
Sun Valley ES	\$50,000	93%	\$0.2595
Terra Linda HS	\$185,000	70%	\$0.2149
Venetia Valley ES	\$60,000	62%	\$0.2769
Total	\$712,000	66%	\$0.2447

25-Year Cash Flows



Financial Results	Units	Cash	PPA	PPA-Buyout	TEML
Year 1					
Value of Solar	\$/kWh	\$0.1762			
Value of Solar	\$	\$713,000			
Annual Energy Cost After Solar	\$	\$347,000			
25-year P50 Results, Solar PV					
Nominal Returns	\$	\$7.5M	\$6.7M	\$8.6M	\$2.2M
NPV Returns, 2% Discount Rate	\$	\$3.1M	\$5.1M	\$5.3M	\$0.74M

PPA Buyout Cash Flow

