

# SOLAR PROCUREMENT UPDATE

Prepared by: ARC Alternatives November, 2020

Prepared for: Cameron Park Community Services District







## Background

- Cameron Park Community Services District released a pricing solicitation on June 8, 2020 for solar projects at three District facilities.
- The pricing solicitation was sent to 40 potential solar vendors and the District received pricing proposals back from four vendors

Solicitation Asked For:

- Cash purchase and Power Purchase Agreement (PPA) pricing for solar at the following locations:
  - Community Center
  - Fire Station 89
  - Fire Station 88
- Energy production targets specified, not system size
- Preferred system locations, consistent with Feasibility Study, identified in solicitation







			First Year	r Values		Life Cycle Values					
Proposer	Proposed Solar Capacity (kW-DC)	First Year Solar Production (kWh)	First Year Usage Offset	First Year Utility Savings <i>before</i> <i>costs</i> [1]	First Year Bill Offset Percent	Life Cycle Solar Production (kWh)	Life Cycle Usage Offset	Life Cycle Utility Savings <i>before</i> <i>Costs</i> [1]	Life Cycle Bill Offset Percent		
SunWorks	263	433,989	93%	\$103,335	85%	10,223,034	87%	\$3,879,718	82%		
Solar Norcal	266	413,356	88%	\$99,723	82%	9,736,988	83%	\$3,745,548	79%		
Cal Solar	261	414,857	89%	\$100,255	82%	9,772,352	84%	\$3,765,095	79%		
Brighton Energy	262	392,707	84%	\$96,176	79%	9,250,585	79%	\$3,604,540	76%		

[1] Utility bill savings or revenue generated by the installed systems (either first year or life cycle) before considering project costs.

• Cal Solar not evaluated further due to system costs on a \$/W basis and lack of detail in their response



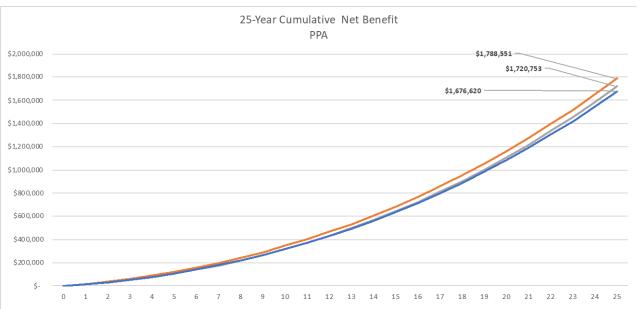
## Financial Modeling Results – PPA

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SunWorks	Proposed Solar Capacity (kW-DC)	PPA Rate (\$/kWh)	First Year Net Benefit		Lif	fe Cycle Net Benefit
Community Center	198	\$ 0.198	\$	12,762	\$	1,416,155
Fire Station 89	55	\$ 0.198	\$	3,993	\$	372,396
Fire Station 88	10	Did not propose	not propose n/a		n/a	
TOTAL	263		\$	16,755	\$	1,788,551
TOTAL				-		
SolarNorcal	Proposed Solar Capacity (kW-DC)	PPA Rate (\$/kWh)		t Year Net Benefit		fe Cycle Net Benefit
	Proposed Solar Capacity	(\$/kWh) \$ 0.198	\$		\$	Benefit 1,397,867
SolarNorcal	Proposed Solar Capacity (kW-DC)	(\$/kWh)		Benefit		Benefit
<b>SolarNorcal</b> Community Center	Proposed Solar Capacity (kW-DC) 205	(\$/kWh) \$ 0.198	\$	<b>Benefit</b> 13,303	\$	Benefit 1,397,867

Brighton Energy	Proposed Solar Capacity (kW-DC)	PPA Rate (\$/kWh)		First Year Net Benefit		ife Cycle Net Benefit
Community Center	198	\$ 0.208	\$	10,936	\$	1,282,378
Fire Station 89	55	\$ 0.191	\$	4,397	\$	374,368
Fire Station 88	9	\$ 0.189	\$	817	\$	62,685
TOTAL	262		\$	16,149	\$	1,719,431

## • Pricing for 25-year 0% escalation rate



Sunworks SolarNorcal Brighton



SunWorks	Proposed Solar Capacity (kW- DC)	Upfront System Cost		5-1	Year O&M Costs	fe Cycle vM Costs
Community Center	198	\$	599,603	\$	12,067	\$ 60,335
Fire Station 89	55	\$	282,000	\$	5,028	\$ 25,140
Fire Station 88	10	\$	36,915	\$	3,018	\$ 15,090
TOTAL	263	\$	918,518	\$	20,113	\$ 100,565
	\$/W	\$	3.49			

SolarNorcal	Proposed Solar Capacity (kW- DC)	Upfront System Cost		5-1	'ear O&M Costs	e Cycle M Costs
Community Center	205	\$	574,601	\$	14,365	\$ 71,825
Fire Station 89	50	\$	161,169	\$	4,025	\$ 20,125
Fire Station 88	10	\$	34,033	\$	-	\$ -
TOTAL	266	\$	769,803	\$	18,390	\$ 91,950
	\$/W	\$	2.90			

Brighton Energy	Proposed Solar Capacity (kW- DC)	Upfront System Cost		5-۱	/ear O&M Costs	e Cycle M Costs
Community Center	198	\$	514,800	\$	10,941	\$ 54,704
Fire Station 89	55	\$	144,040	\$	3,061	\$ 15,306
Fire Station 88	9	\$	23,166	\$	492	\$ 2,462
TOTAL	262	\$	682,006	\$	14,494	\$ 72,471
	\$/W	\$	2.60			

- Roughly \$13M in CEC funding still available, loan max is \$3M
- Competitive program based on first come first serve basis
- Assumed 12 year payback period

## Net Benefit Comparison

- The table below shows the cumulative 25-year net benefit for the four scenarios analyzed
- All figures are presented as 25-year totals and include 25 years of O&M

	First Year Net Benefit											
Proposer	РРА		CEC Loan		Umpqua					y PPA Buyout V/ Umpqua Lease		
SunWorks	\$	16,755	\$	17,704	\$	(46,128)	\$	16,755				
SolarNorcal	\$	13,766	\$	27,649	\$	(25,848)	\$	13,766				
Brighton Energy	\$	16,149	\$	31,903	\$	(15,493)	\$	14,332				

	25-Year Net Benefit												
Proposer	РРА				CEC Loan		PPA CEC Loan Lease		PPA CEC Loan				y PPA Buyout V/ Umpqua Lease
SunWorks	\$	1,788,551	\$	2,799,843	\$	2,761,065	\$	2,304,279					
SolarNorcal	\$	1,720,753	\$	2,832,845	\$	2,800,346	\$	2,295,280					
Brighton Energy	\$	1,719,431	\$	2,785,445	\$	2,756,652	\$	2,194,485					

#### CEC 1% Loan

- Roughly \$13M in CEC funding still available, loan max is \$3M
- Competitive program based on first come first serve basis
- Assumed 12 year payback period

#### Umpqua Bank Lease

• Financing rate of 2.96% for 7 years

### Hybrid Early PPA Buyout w/ Umpqua Lease

- Financing rate of 2.96% for 7 years after year 10 of PPA
- The PPA option has a lower overall cumulative net benefit but does not have the district incur debt and results in year one positive net benefit.



# ALTERNATIVES

## Next Steps

• Finalize vendor recommendation and path forward

If board approves selection and moving forward with PPA:

- Continue to negotiate contract
- Return to Board with:
  - Negotiated contract
  - Government Code 4217 findings
  - > Updated financial plan and cash flow if PPA rate changes

