

San Mateo Medical Center Solar PV Feasibility

Forefront Power Solar PV PPA Lifecycle Analysis Summary

Assumptions

Metric	Units	Value
Discount Rate	%	3.5%
Annual Utility Escalation Rate	%	3.0%
PPA Price Escalator	%	0.0%
Annual CPI	%	2.0%
Project Development Contingencies	\$	\$0
Annual Admin + Link Energy Consumption	Source	Taylor Design 2023-03-01
Pre-PV Utility Tariff (PG&E, PCE)		B-10S
Post-PV Utility Tariff (PG&E, PCE)		B-10S

SOLAR PV SUMMARY

Metric	Units	SMMC
Project Details		
Solar PV System Size	kWp	637.5
Modeled Production	kWh, Year-1	1,005,495
Yield	kWh/kWp	1,575
% Yr-1 Energy Offset	%	105%
Average Blended Cost of Energy	\$/kWh, Year-1	\$0.32
Average Value of Solar Energy	\$/kWh, Year-1	\$0.24
Savings Analysis		
PPA Price	\$/kWh	\$0.2013
Year-1 Gross Savings	\$, Year-1	\$241,000
Year-1 Net Savings	\$, Year-1	\$36,000
20-Year Net Lifetime Savings, Nominal	\$	\$2,139,000
20-Year Net Lifetime Savings, NPV	\$	\$1,395,000
Project IRR	%	n/a

Notes:

1. Estimated annual energy consumption assumed to be 957282 from WeAreTaylor on 3/1/23.
2. Peninsula Clean Energy (PCE) currently compensates solar PV exports at full retail value + \$0.01/kWh for net export each billing cycle.
3. Solar PV system size based on Forefront Power PVSyst performance modeling, dated 06.21.2023 (rooftop) and 06.29.2023 (canopy)

20-Year Cashflow, \$0.2013/kWh 0% Esc.

Year	Estimated Utility Usage (kWh)	Annual Estimated Utility Cost w/o PV	Utility Energy Cost w/PV	PV Operating Costs	PPA Payments	Net Annual Savings	Cumulative Project Cash Flow
						\$0	\$0
2025	957,000	\$305,000	\$64,000	\$3,000	\$202,000	\$36,000	\$36,000
2026	957,000	\$314,000	\$68,000	\$3,000	\$201,000	\$42,000	\$78,000
2027	957,000	\$323,000	\$71,000	\$3,000	\$199,000	\$49,000	\$127,000
2028	957,000	\$333,000	\$76,000	\$3,000	\$198,000	\$56,000	\$183,000
2029	957,000	\$343,000	\$81,000	\$3,000	\$196,000	\$63,000	\$246,000
2030	957,000	\$353,000	\$85,000	\$400	\$195,000	\$73,000	\$319,000
2031	957,000	\$364,000	\$90,000	\$400	\$193,000	\$80,000	\$399,000
2032	957,000	\$375,000	\$96,000	\$400	\$192,000	\$87,000	\$486,000
2033	957,000	\$386,000	\$101,000	\$400	\$191,000	\$94,000	\$580,000
2034	957,000	\$397,000	\$106,000	\$400	\$189,000	\$102,000	\$682,000
2035	957,000	\$409,000	\$111,000	\$400	\$188,000	\$109,000	\$791,000
2036	957,000	\$422,000	\$118,000	\$400	\$186,000	\$117,000	\$908,000
2037	957,000	\$434,000	\$124,000	\$500	\$185,000	\$125,000	\$1,033,000
2038	957,000	\$447,000	\$130,000	\$500	\$184,000	\$133,000	\$1,166,000
2039	957,000	\$461,000	\$137,000	\$500	\$182,000	\$141,000	\$1,307,000
2040	957,000	\$475,000	\$144,000	\$500	\$181,000	\$149,000	\$1,456,000
2041	957,000	\$489,000	\$151,000	\$500	\$179,000	\$158,000	\$1,614,000
2042	957,000	\$503,000	\$158,000	\$500	\$178,000	\$166,000	\$1,780,000
2043	957,000	\$519,000	\$167,000	\$500	\$177,000	\$175,000	\$1,955,000
2044	957,000	\$534,000	\$174,000	\$600	\$175,000	\$184,000	\$2,139,000
Totals	19,140,000	\$8,186,000	\$2,252,000	\$21,900	\$3,771,000	\$2,139,000	

