

San Bernardino Valley College Solar WITHOUT PARKING LOT 11 Assumed CREB Net Interest Cost = 1.20%
General Fund Savings for 1900 kW-DC Solar PV System

Solar System Specifications and Assumptions	
System Size (kWp)	1,900
EPC Price (\$/Wp)	\$3.80
Solar Yield (kWh per kWp)	1,813
Annual Rate of PV Degradation	0.25%
Avg Avoided Cost (\$/kWh)	\$0.123
Annual Electricity Cost Inflation	3.50%
Solar System Cost =	\$ 7,220,950
Project Dev /Contingency Costs =	\$ 361,048
Cost of Issuance =	\$ 144,419
Total CREB Loan Amount =	\$ 7,726,417
First Year O&M Cost =	\$ 45,606
O&M Annual Escalation Rate =	3.00%

30 Yr Gross Savings = \$ 4,432,875
30 Yr NPV Savings = \$ 2,885,000

		GENERAL FUND SAVINGS (Utility Bill Reduction)			GENERAL FUND COST (Repay CREB Bonds)			NET GENERAL FUND SAVINGS	
Solar Year	Fiscal Year	Solar Generation (kWh)	X Avoided Utility Cost (\$/kWh)	= Utility Bill Savings	Operation & Maintenance Costs	CREB Repayment (after Subsidy)	Total Cost of Solar	General Fund Savings by Fiscal Year	Cumulative General Fund Savings
1	2017/18	3,444,364	\$ 0.128	\$ 440,146	\$ (45,606)	\$ (272,401)	\$ (318,007)	\$ 122,139	\$ 122,139
2	2018/19	3,435,753	\$ 0.132	\$ 454,413	\$ (46,974)	\$ (354,561)	\$ (401,535)	\$ 52,878	\$ 175,017
3	2019/20	3,427,164	\$ 0.137	\$ 469,141	\$ (48,383)	\$ (364,654)	\$ (413,037)	\$ 56,104	\$ 231,120
4	2020/21	3,418,596	\$ 0.142	\$ 484,347	\$ (49,835)	\$ (375,793)	\$ (425,628)	\$ 58,719	\$ 289,839
5	2021/22	3,410,049	\$ 0.147	\$ 500,046	\$ (51,330)	\$ (386,759)	\$ (438,089)	\$ 61,957	\$ 351,797
6	2022/23	3,401,524	\$ 0.152	\$ 516,254	\$ (52,870)	\$ (398,153)	\$ (451,023)	\$ 65,231	\$ 417,028
7	2023/24	3,393,020	\$ 0.157	\$ 532,987	\$ (54,456)	\$ (409,969)	\$ (464,425)	\$ 68,562	\$ 485,590
8	2024/25	3,384,538	\$ 0.163	\$ 550,262	\$ (56,090)	\$ (422,801)	\$ (478,891)	\$ 71,371	\$ 556,961
9	2025/26	3,376,077	\$ 0.168	\$ 568,098	\$ (57,772)	\$ (435,431)	\$ (493,203)	\$ 74,894	\$ 631,856
10	2026/27	3,367,636	\$ 0.174	\$ 586,511	\$ (59,505)	\$ (448,460)	\$ (507,966)	\$ 78,545	\$ 710,401
11	2027/28	3,359,217	\$ 0.114	\$ 382,216	\$ (61,291)	\$ (278,624)	\$ (339,914)	\$ 42,302	\$ 752,702
12	2028/29	3,350,819	\$ 0.118	\$ 394,605	\$ (63,129)	\$ (286,510)	\$ (349,639)	\$ 44,965	\$ 797,668
13	2029/30	3,342,442	\$ 0.122	\$ 407,395	\$ (65,023)	\$ (294,599)	\$ (359,623)	\$ 47,772	\$ 845,439
14	2030/31	3,334,086	\$ 0.126	\$ 420,599	\$ (66,974)	\$ (302,888)	\$ (369,862)	\$ 50,738	\$ 896,177
15	2031/32	3,325,751	\$ 0.131	\$ 434,232	\$ (68,983)	\$ (311,701)	\$ (380,685)	\$ 53,547	\$ 949,724
16	2032/33	3,317,436	\$ 0.135	\$ 448,307	\$ (71,053)	\$ (320,702)	\$ (391,755)	\$ 56,552	\$ 1,006,276
17	2033/34	3,309,143	\$ 0.140	\$ 462,837	\$ (73,184)	\$ (330,039)	\$ (403,223)	\$ 59,615	\$ 1,065,891
18	2034/35	3,300,870	\$ 0.145	\$ 477,839	\$ (75,380)	\$ (339,799)	\$ (415,179)	\$ 62,660	\$ 1,128,550
19	2035/36	3,292,618	\$ 0.150	\$ 493,327	\$ (77,641)	\$ (350,004)	\$ (427,645)	\$ 65,682	\$ 1,194,232
20	2036/37	3,284,386	\$ 0.155	\$ 509,317	\$ (79,970)	\$ (360,672)	\$ (440,643)	\$ 68,674	\$ 1,262,907
21	2037/38	3,276,175	\$ 0.160	\$ 525,825	\$ (82,370)	\$ (371,826)	\$ (454,195)	\$ 71,630	\$ 1,334,536
22	2038/39	3,267,985	\$ 0.166	\$ 542,868	\$ (84,841)	\$ (383,487)	\$ (468,327)	\$ 74,541	\$ 1,409,078
23	2039/40	3,259,815	\$ 0.172	\$ 560,464	\$ (87,386)	\$ (395,677)	\$ (483,063)	\$ 77,401	\$ 1,486,479
24	2040/41	3,251,665	\$ 0.178	\$ 578,630	\$ (90,007)	\$ (408,422)	\$ (498,430)	\$ 80,201	\$ 1,566,679
25	2041/42	3,243,536	\$ 0.184	\$ 597,385	\$ (92,708)	\$ (421,747)	\$ (514,454)	\$ 82,931 (CREBs Paid-Off)	\$ 1,649,610
26	2042/43	3,235,427	\$ 0.191	\$ 616,748	\$ (95,489)		\$ (95,489)	\$ 521,259	\$ 2,170,869
27	2043/44	3,227,339	\$ 0.197	\$ 636,738	\$ (98,354)		\$ (98,354)	\$ 538,385	\$ 2,709,254
28	2044/45	3,219,270	\$ 0.204	\$ 657,376	\$ (101,304)		\$ (101,304)	\$ 556,072	\$ 3,265,326
29	2045/46	3,211,222	\$ 0.211	\$ 678,684	\$ (104,343)		\$ (104,343)	\$ 574,340	\$ 3,839,667
30	2046/47	3,203,194	\$ 0.219	\$ 700,681	\$ (107,474)		\$ (107,474)	\$ 593,208	\$ 4,432,875
25 Years		83,574,667		\$ 12,338,052	\$ (1,662,761)	\$ (9,025,680)	\$ (10,688,441)	\$ 1,649,610	
30 Years		99,671,120		\$ 15,628,279	\$ (2,169,724)	\$ (9,025,680)	\$ (11,195,405)	\$ 4,432,875	

New Time of Use Periods take effect in Year 11, resulting in decreased solar savings.

CREBs = Clean Renewable Energy Bonds