

**Gavilan College
Solar Cash Flow**

Base Case Economic Analysis for Public Hearing on May 9, 2017

Estimated Net Interest Rate = 1.050%

\$ 24,741

\$ 1.92

Fisc Yr

UTLITY BILL REDUCTION				-	REPAYMENT OF CREBs (Plus O&M)			=	GENERAL FUND SAVINGS	
System Size (kWp)		1,422		Solar System Cost =		\$ 4,620,624		25 Yr Gross Savings = \$ 3,610,780		
EPC Price (\$/Wp)		\$3.17		Project Dev /Contingency Costs =		\$ 777,376		30 Yr Gross Savings = \$ 6,930,917		
Solar Yield (kWh per kWp)		1,692		Cost of Issuance =		\$ 130,000		25 Yr NPV Savings = \$ 2,221,000		
Annual Rate of PV Degradation		0.25%		Total CREB Loan Amount		\$ 5,528,000		30 Yr NPV Savings = \$ 3,882,000		
Annual PG&E Electricity Rate Inflation		4.00%		First Year O&M Cost =		\$ 23,321				
				O&M Annual Escalation Rate =		2.00%				
Solar Generation (kWh)	X	Avoided Elec. Rate (\$/kWh)	=	Electricity Bill Savings	Operation & Maint Costs	CREB Repayment (after Subsidy)	Total Cost of Solar	General Fund Savings by Fiscal Year		
2017/18	601,658	\$ 0.106	\$	63,796		\$ (54,336)	\$ (54,336)	\$	9,460	
2018/19	2,406,631	\$ 0.111	\$	267,744	\$ (23,321)	\$ (199,671)	\$ (222,992)	\$	44,752	
2019/20	2,400,615	\$ 0.118	\$	283,099	\$ (23,787)	\$ (214,138)	\$ (237,925)	\$	45,174	
2020/21	2,394,613	\$ 0.125	\$	299,335	\$ (24,263)	\$ (230,432)	\$ (254,695)	\$	44,640	
2021/22	2,388,627	\$ 0.133	\$	316,502	\$ (24,748)	\$ (246,537)	\$ (271,285)	\$	45,217	
2022/23	2,382,655	\$ 0.140	\$	334,653	\$ (25,243)	\$ (264,447)	\$ (289,690)	\$	44,963	
2023/24	2,376,699	\$ 0.149	\$	353,846	\$ (25,748)	\$ (283,145)	\$ (308,893)	\$	44,953	
2024/25	2,370,757	\$ 0.158	\$	374,139	\$ (26,263)	\$ (302,620)	\$ (328,883)	\$	45,256	
2025/26	2,364,830	\$ 0.167	\$	395,596	\$ (26,788)	\$ (323,858)	\$ (350,647)	\$	44,949	
2026/27	2,358,918	\$ 0.177	\$	418,283	\$ (27,324)	\$ (345,842)	\$ (373,166)	\$	45,117	
2027/28	2,353,021	\$ 0.188	\$	442,272	\$ (27,870)	\$ (368,561)	\$ (396,431)	\$	45,840	
2028/29	2,347,138	\$ 0.166	\$	390,186	\$ (28,428)	\$ (316,204)	\$ (344,632)	\$	45,555	
2029/30	2,341,270	\$ 0.173	\$	404,779	\$ (28,996)	\$ (331,185)	\$ (360,181)	\$	44,598	
2030/31	2,335,417	\$ 0.180	\$	419,918	\$ (29,576)	\$ (345,977)	\$ (375,554)	\$	44,365	
2031/32	2,329,578	\$ 0.187	\$	435,623	\$ (30,168)	\$ (360,580)	\$ (390,748)	\$	44,875	
2032/33	2,323,755	\$ 0.194	\$	451,915	\$ (30,771)	\$ (376,989)	\$ (407,761)	\$	44,155	
2033/34	2,317,945	\$ 0.202	\$	468,817	\$ (31,387)	\$ (393,188)	\$ (424,575)	\$	44,242	
2034/35	2,312,150	\$ 0.210	\$	486,351	\$ (32,014)	\$ (410,175)	\$ (442,189)	\$	44,162	
2035/36	2,306,370	\$ 0.219	\$	504,540	\$ (32,655)	\$ (426,941)	\$ (459,595)	\$	44,945	
2036/37	2,300,604	\$ 0.228	\$	523,410	\$ (33,308)	\$ (445,481)	\$ (478,789)	\$	44,622 (CREBs Paid-Off)	
2037/38	2,294,852	\$ 0.237	\$	542,986	\$ (33,974)	\$	\$ (33,974)	\$	509,012	
2038/39	2,289,115	\$ 0.246	\$	563,293	\$ (34,653)	\$	\$ (34,653)	\$	528,640	
2039/40	2,283,393	\$ 0.256	\$	584,361	\$ (35,347)	\$	\$ (35,347)	\$	549,014	
2040/41	2,277,684	\$ 0.266	\$	606,216	\$ (36,053)	\$	\$ (36,053)	\$	570,162	
2041/42	2,271,990	\$ 0.277	\$	628,888	\$ (36,775)	\$	\$ (36,775)	\$	592,114	
2042/43	2,266,310	\$ 0.288	\$	652,409	\$ (37,510)	\$	\$ (37,510)	\$	614,899	
2043/44	2,260,644	\$ 0.299	\$	676,809	\$ (38,260)	\$	\$ (38,260)	\$	638,548	
2044/45	2,254,993	\$ 0.311	\$	702,121	\$ (39,025)	\$	\$ (39,025)	\$	663,096	
2045/46	2,249,355	\$ 0.324	\$	728,381	\$ (39,806)	\$	\$ (39,806)	\$	688,575	
2046/47	2,243,732	\$ 0.337	\$	755,622	\$ (40,602)	\$	\$ (40,602)	\$	715,020	
2047/48	2,238,122	\$ 0.350	\$	783,882	\$ (41,414)	\$	\$ (41,414)	\$	742,468	
Total	70,243,441		\$	14,859,772	\$ (946,079)	\$ (6,240,308)	\$ (7,186,386)	\$	7,673,386	