

Presented by:  
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## Solar Electric Investment, Incentive and Energy Savings Analysis

Proposal for:  
 Default and Ms Default Customer February 7, 2013

Site Location:  
 123 Main St  
 Tulare, CA 93274

Utility: SCE  
 Current Rate Schedule: D-10 Basic -- Residential Tiered-kWh  
 New Solar Rate Schedule: TOU-D-1-10 Basic -- Residential TOU  
 Historical Usage: 11,040 kWh/yr

System Information	Cost Information
Proposed System Size <b>5.0 kW DC (STC)</b>	Proposed System Cost per rated Watt <b>\$3.85 per DC (STC) Watt</b>
System's CEC Rating <b>4.3 kW AC (CEC)</b>	Estimated Federal Tax Bracket <b>28.0%</b>
20 Suntech Power STP250S-20/Wdb modules and 1 SMA America SB5000US (240V) inverters	Current Utility Rate are as high as <b>32.8 ¢/kWh</b>
Location's Avg Sun Hours <b>5.7 Sun Hours</b>	Current Utility Rate Average <b>21.8 ¢/kWh</b>
<b>Estimated Annual Production 7,705 kWh/yr</b>	<b>Estimated First Year Utility Savings \$2,255 per year</b>

Gross System Cost with Sales Tax	\$19,228
<b>Rebate</b>	Rebate: \$0.22 per CEC AC Watt <b>-\$973</b>
	<b>\$0</b>
	<b>\$0</b>
	<b>\$0</b>
<b>30% Federal Tax Credit (ITC)</b>	<b>-\$5,477</b>
	<b>\$0</b>
<b>Net System Cost with Tax Benefits &amp; Incentives</b>	<b>\$12,779</b>

### Payback / Return on Investment

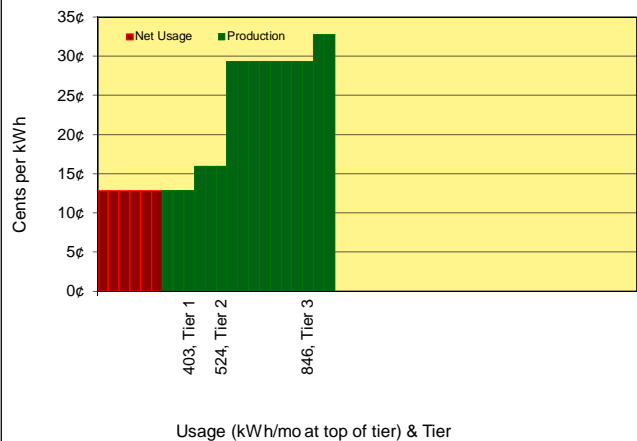
**5.4 Years**

Year	Average Utility Rate ¢/kWh	Utility Savings \$/year	Net Utility Savings, sRECs, PBIs, etc. after tax & maintenance	Tax & Rebate Incentives	Cost / Payback Schedule (Cumulative Cash Position)
0				\$973	(\$18,256)
1	21.8	\$2,255	\$2,207	\$5,477	(\$10,572)
2	22.6	\$2,334	\$2,285		(\$8,287)
3	23.5	\$2,416	\$2,365		(\$5,922)
4	24.5	\$2,501	\$2,447		(\$3,475)
5	25.5	\$2,588	\$2,533		(\$942)
6	26.5	\$2,679	\$2,622		<b>\$1,679</b>
7	27.5	\$2,772	\$2,713		<b>\$4,393</b>
8	28.6	\$2,870	\$2,808		<b>\$7,201</b>
9	29.8	\$2,970	\$2,907		<b>\$10,108</b>
10	31.0	\$3,074	\$3,008		<b>\$13,116</b>
11	32.2	\$3,181	\$3,114		<b>\$16,230</b>
12	33.5	\$3,293	\$3,223		<b>\$19,452</b>
13	34.9	\$3,408	\$3,335		<b>\$22,788</b>
14	36.2	\$3,527	\$3,452		<b>\$26,240</b>
15	37.7	\$3,651	\$73		<b>\$26,313</b>
16	39.2	\$3,779	\$3,698		<b>\$30,011</b>
17	40.8	\$3,911	\$3,827		<b>\$33,839</b>
18	42.4	\$4,048	\$3,961		<b>\$37,800</b>
19	44.1	\$4,189	\$4,100		<b>\$41,900</b>
20	45.9	\$4,336	\$4,244		<b>\$46,144</b>
21	47.7	\$4,488	\$4,392		<b>\$50,536</b>
22	49.6	\$4,645	\$4,546		<b>\$55,082</b>
23	51.6	\$4,807	\$4,705		<b>\$59,787</b>
24	53.7	\$4,976	\$4,870		<b>\$64,656</b>
25	55.8	\$5,150	\$5,040		<b>\$69,696</b>

### Results

Old Monthly Electric Bill	<b>\$200</b>
Estimated New Electric Bill	<b>\$12</b>
<b>% Bill Offset</b>	<b>93.8%</b>
Monthly Cash Flow in 1st Year with Loan	<b>\$132 per month</b>
Monthly Cash Flow in 5th Year with Loan	<b>\$145 per month</b>
Monthly Cash Flow in 10th Year with Loan	<b>\$182 per month</b>
<b>\$124,101 Net Present Value with 0% Discount Rate</b>	
<b>The IRR over 25 years is 33.4%</b>	
<b>Over 25 years it will provide total savings of: \$82,475</b>	
including bill savings, sRECs, maintenance, & inverter replacement (net after-tax values)	
<b>It will pay for itself in 5 years</b>	
<b>This project could increase your home's value by: \$44,147</b>	
Source: The Appraisal Journal, www.ongrid.net/AppraisalJournalPVValue10.98.pdf	

**Residential Tiered Usage With Solar**



### Carbon Dioxide and Environmental Benefits

Based on estimated production, this system will reduce emissions by:

**151 tons of CO2 over 25 years**

It's the environmental equivalent of:

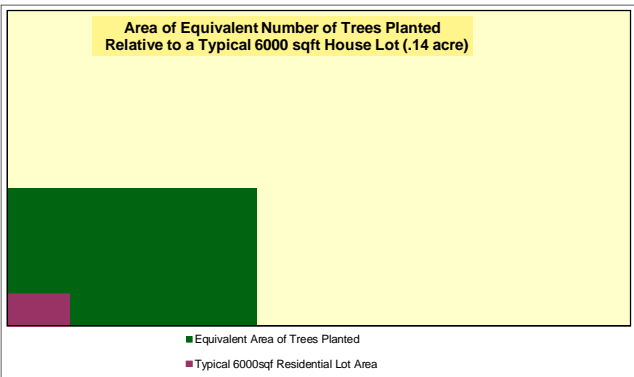
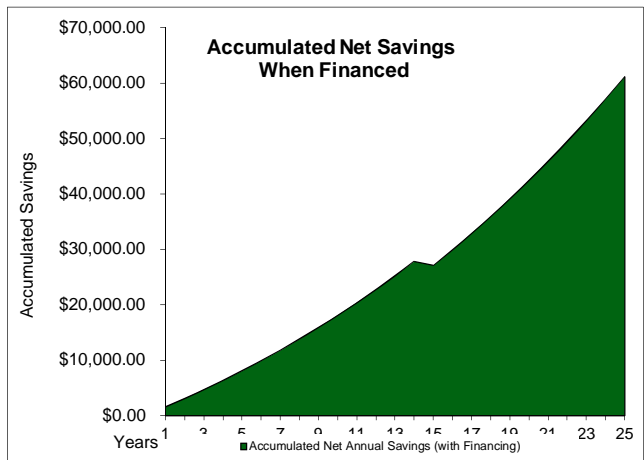
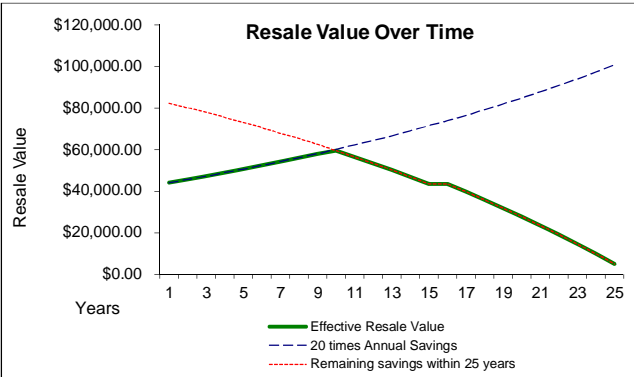
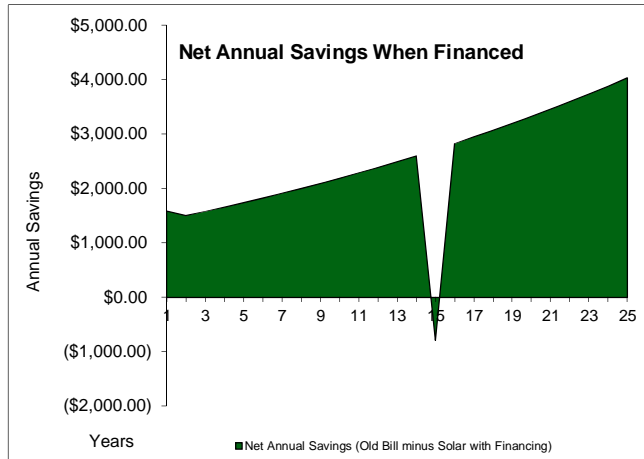
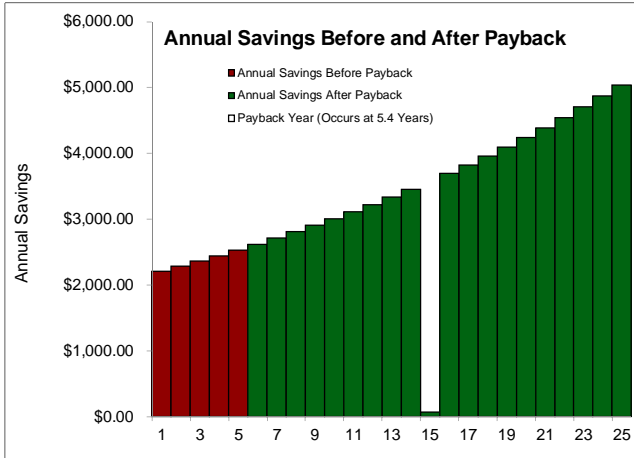
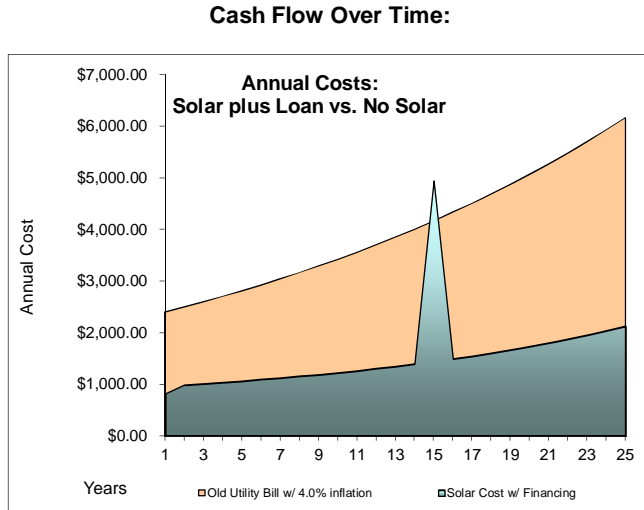
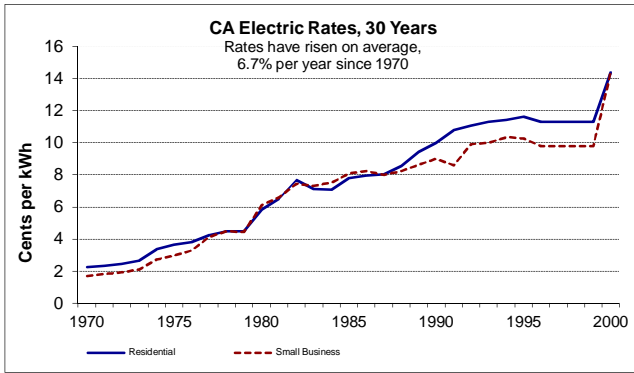
**491,641 miles not driven  
 or 2.6 acres of trees planted**

Incentives and energy savings depend upon several factors that may not be represented in this analysis.

A trusted tax professional should verify the figures provided.

AltSys Solar Inc. provides assistance with applications for incentives and rebates.

AltSys Solar Inc. does not take responsibility for any future changes in tax law or other incentives.







**Default and Ms Default Customer, Default Customer Household**

**Financing & Resale Value Annual Detail**

**FINANCING:**

Year:	0	1	2	3	4	5	6	7	8	9	10	11	12
Line of Credit Balance	18,256	18,256	13,069	12,944	12,809	12,664	12,507	12,337	12,154	11,955	11,742	11,511	11,261
Payment (monthly)		(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
Interest (portion of payment)		(122)	(87)	(86)	(85)	(84)	(83)	(82)	(81)	(80)	(78)	(77)	(75)
Tax Deduction Benefit (monthly)		45	33	32	31	31	31	31	30	30	29	29	28
Net Monthly Financing Cost		(52)	(65)	(65)	(66)	(66)	(66)	(67)	(67)	(68)	(68)	(68)	(70)
Net Benefits Received (put towards paying down the next year's principal)		5,477											
Annual Electric Bill without Solar (including Lifestyle changes, but not Energy Efficiency)		2,403	2,500	2,600	2,704	2,812	2,924	3,041	3,163	3,289	3,421	3,558	3,700
New Net Annual Energy Cost (including new electric bill with tax effects, maintenance, inverter replacement)		196	215	235	256	279	303	328	354	383	413	444	477
Net New Annual Cost (Line of Credit plus New Net Energy Cost)		822	995	1,019	1,044	1,071	1,100	1,130	1,162	1,196	1,233	1,271	1,312
Cash Flow (annual) (Old less New Net Costs)		1,582	1,504	1,580	1,659	1,741	1,825	1,911	2,001	2,093	2,188	2,287	2,388
Cash Flow (monthly)		132	125	132	138	145	152	159	167	174	182	191	199
<b>ACCUMULATED FINANCING CASH FLOW:</b>		<b>1,582</b>	<b>3,086</b>	<b>4,666</b>	<b>6,326</b>	<b>8,066</b>	<b>9,891</b>	<b>11,802</b>	<b>13,803</b>	<b>15,896</b>	<b>18,084</b>	<b>20,371</b>	<b>22,759</b>

**INCREASED RESALE VALUE:**

Increased resale value factor: 20													
20 times Annual Savings		44,147	45,692	47,291	48,946	50,659	52,432	54,268	56,167	58,133	60,167	62,273	64,453
Remaining savings within 25 years		82,475	80,268	77,983	75,619	73,172	70,639	68,017	65,304	62,495	59,589	56,580	53,467
Effective Resale Value (lesser of 20x annual or remaining 25yr savings)		44,147	45,692	47,291	48,946	50,659	52,432	54,268	56,167	58,133	59,589	56,580	53,467

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Year:	13	14	15	16	17	18	19	20	21	22	23	24	25
Line of Credit Balance	10,992	10,701	10,386	10,047	9,680	9,285	8,857	8,395	7,897	7,358	6,776	6,148	5,469
Payment (monthly)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
Interest (portion of payment)	(73)	(71)	(69)	(67)	(65)	(62)	(59)	(56)	(53)	(49)	(45)	(41)	(36)
Tax Deduction Benefit (monthly)	27	27	26	25	24	23	22	21	20	18	17	15	14
Net Monthly Financing Cost	(70)	(71)	(72)	(73)	(73)	(74)	(76)	(77)	(78)	(79)	(81)	(82)	(84)
Net Benefits Received (put towards paying down the next year's principal)													
Annual Electric Bill without Solar (including Lifestyle changes, but not Energy Efficiency)	3,848	4,002	4,162	4,329	4,502	4,682	4,869	5,064	5,266	5,477	5,696	5,924	6,161
New Net Annual Energy Cost (including new electric bill with tax effects, maintenance, inverter replacement)	513	550	4,089	630	674	720	769	820	874	931	991	1,054	1,121
Net New Annual Cost (Line of Credit plus New Net Energy Cost)	1,355	1,401	4,949	1,501	1,556	1,614	1,675	1,740	1,809	1,882	1,959	2,041	2,128
Cash Flow (annual) (Old less New Net Costs)	2,493	2,601	(787)	2,828	2,946	3,068	3,194	3,324	3,457	3,595	3,737	3,883	4,033
Cash Flow (monthly)	208	217	(66)	236	246	256	266	277	288	300	311	324	336
<b>ACCUMULATED FINANCING CASH FLOW:</b>	<b>25,252</b>	<b>27,854</b>	<b>27,066</b>	<b>29,894</b>	<b>32,840</b>	<b>35,908</b>	<b>39,102</b>	<b>42,426</b>	<b>45,883</b>	<b>49,478</b>	<b>53,215</b>	<b>57,098</b>	<b>61,131</b>

**INCREASED RESALE VALUE:**

20 times Annual Savings	66,709	69,043	71,460	73,961	76,550	79,229	82,002	84,872	87,843	90,917	94,099	97,393	100,801
Remaining savings within 25 years	50,244	46,908	43,456	43,383	39,685	35,858	31,896	27,796	23,553	19,161	14,615	9,910	5,040
Effective Resale Value (lesser of 20x annual or remaining 25yr savings)	50,244	46,909	43,456	43,383	39,685	35,858	31,896	27,796	23,553	19,161	14,615	9,910	5,040

**FINANCING & RESALE:**  
**25-Year Accumulated Net Positive Financed Cash Flow: \$61,131**  
**Maximum Resale Value: \$59,589 occurs at Year 10**