

Cash Flow Estimates (Net Meter)

Job: Sanda Residence
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 Revised: 7/15/2015



Extended Price with Sales Tax \$ 52,847
 Utility Rebate \$ (13,200)
 Cost Basis \$ 39,647

System Type Residential
 System Size 13.2 DC kW
 Predicted Annual Production 18,303 AC kWh PVWatts - adjusted deratings, proper azimuth and tilt.

Price of electricity \$ 0.111 per kWh Residential
 CAGR electricity 5.60% Five-year average annual increase in SC

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 15	Year 20	Year 25	Year 30
Federal Tax Credit	30%	\$ 11,894													
SC Tax Credit	25%	\$ 3,500	\$ 3,500	\$ 2,912	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Annual production (kWh)	-0.4%	18,303	18,230	18,157	18,084	18,012	17,940	17,868	17,797	17,725	17,655	17,304	16,961	16,624	16,295
Cumulative Production (kWh)		18,303	36,533	54,690	72,774	90,786	108,726	126,594	144,390	162,116	179,770	266,989	352,478	436,270	518,400
Electric Rate (per kWh)	5.6%	\$ 0.111	\$ 0.117	\$ 0.123	\$ 0.130	\$ 0.138	\$ 0.145	\$ 0.154	\$ 0.162	\$ 0.171	\$ 0.181	\$ 0.237	\$ 0.312	\$ 0.409	\$ 0.538
Production		\$ 2,027	\$ 2,132	\$ 2,242	\$ 2,358	\$ 2,480	\$ 2,609	\$ 2,744	\$ 2,886	\$ 3,035	\$ 3,192	\$ 4,109	\$ 5,288	\$ 6,807	\$ 8,761
Cumulative Production		\$ 2,027	\$ 4,158	\$ 6,400	\$ 8,758	\$ 11,238	\$ 13,847	\$ 16,590	\$ 19,476	\$ 22,511	\$ 25,703	\$ 44,321	\$ 68,284	\$ 99,128	\$ 138,827
Inverter Replacement (yr 20)													\$ -		
Annual Cash Flow		\$ (22,226)	\$ 5,632	\$ 5,154	\$ 2,358	\$ 2,480	\$ 2,609	\$ 2,744	\$ 2,886	\$ 3,035	\$ 3,192	\$ 4,109	\$ 5,288	\$ 6,807	\$ 8,761
Cumulative ROI		\$ (22,226)	(16,595)	(11,441)	(9,083)	(6,603)	(3,995)	(1,251)	1,635	4,670	7,862	26,480	50,443	81,287	120,986

Internal Rate of Return (30 yr)

Year 30 Net ROI \$ 120,986

17.1% Notes: * Expected life of current production PV modules is between 30 and 35 years (or more). First generation PV modules are still producing near their original output power after 25-30 years in the field. With currently available technologies and demonstrated improvements in near-term degradation performance, 30-35 year lifetimes are readily achievable. Reference: 1) http://www.homepower.com/article/?file=HP118_pg12_AskTheExperts_1, 2) "Long Term Photovoltaic Reliability", John H. Wohlgemuth, BP Solar, NCPV and Solar Review Meeting 2003, NREL/CD-520-33586, pp. 179-182.

Annual Cash Flow and Cumulative ROI

