

Date of Assessment: 4/23/2007
 Client: Joe Smith
 Client Phone #: 555-123-4567
 Client E-mail: solardude4763@hotmail.com
 Assessment Address: Smith Residence, Hegins, PA
 Assessment ZIP CODE: 17938

Site Description: SITE 3. This site is on the northern border of the property about 100' east of the utility pole. See photo below.



Potential System: Four 3 kW (DC) two-axis tracked solar array.

Estimated Installed Cost:	\$120,000
Rebates:	\$0
Tax Credits:	\$40,000
Cost to Client:	\$80,000
Current Electric Rate:	\$0.090 per kW-hr
Estimated Annual Electric Rate Hike:	10 %
Est. Annual Solar Electricity Generated:	15,536 kW-hr (AC)
Avg CO ₂ emissions per kW-hr grid electricity produced in the US:	1.34 lb

Year	Electric Rate (per kW-hr)	Cumulative Savings	Cumulative CO ₂ Savings (lbs)
1	\$0.090	\$1,398	20,818
2	\$0.099	\$2,936	41,636
3	\$0.109	\$4,628	62,455
4	\$0.120	\$6,489	83,273
5	\$0.132	\$8,536	104,091
6	\$0.145	\$10,788	124,909
7	\$0.159	\$13,265	145,728
8	\$0.175	\$15,990	166,546
9	\$0.193	\$18,987	187,364
10	\$0.212	\$22,284	208,182
11	\$0.233	\$25,911	229,001
12	\$0.257	\$29,900	249,819
13	\$0.282	\$34,289	270,637
14	\$0.311	\$39,116	291,455
15	\$0.342	\$44,426	312,274
16	\$0.376	\$50,266	333,092
17	\$0.414	\$56,691	353,910
18	\$0.455	\$63,759	374,728
19	\$0.500	\$71,533	395,547
20	\$0.550	\$80,084	416,365
21	\$0.605	\$89,491	437,183
22	\$0.666	\$99,838	458,001
23	\$0.733	\$111,220	478,820
24	\$0.806	\$123,741	499,638
25	\$0.886	\$137,513	520,456





Marc Edward LLC Solar Site Analysis Report

Report Title Smith Residence near Hegin PA
Image File SITE 3.JPG
Report Date Monday, April 23, 2007
Declination -11d 33m
Latitude/Longitude 40.688 / -76.539
Analysis Site HEGINS, PA, Zipcode: 17938
Weather Station HARRISBURG, PA, Elevation: 106 m
Station/Site Distance 6.49 miles

Array Type TwoAxis
Tilt Angle 0.00 degrees
Cost of Electricity 9 cents/kWhr
DC Rate 12.00 kW
Derate Factor 0.77
Azimuth (180 = south) 0.00 degrees

Month	Unshaded % of Ideal Site Azimuth=180.0 Tilt=40.7	Ideal Solar Rad w/o Shading Azimuth=180 Tilt=40.7 KWH/m ² /day	Actual Solar Rad w/ Shading Azimuth=180.0 Tilt=0.0 KWH/m ² /day	Ideal AC Power (KWH) w/o shading Azimuth=180.0 Tilt=40.7	Actual AC Power (KWH) w/ shading Azimuth=180.0 Tilt=0.0	Actual Solar Savings
January	67.40%	4.21	2.69	1231.0	791.7	\$71.25
February	67.00%	5.02	2.97	1330.0	787.71	\$70.89
March	79.40%	5.76	4.39	1645.0	1258.44	\$113.26
April	97.20%	6.99	6.59	1901.0	1792.7	\$161.34
May	96.60%	7.17	6.73	1914.0	1797.2	\$161.75
June	94.90%	8.19	7.29	2067.0	1838.45	\$165.46
July	96.40%	8.03	7.46	2075.0	1924.7	\$173.22
August	97.60%	7.08	6.73	1829.0	1739.0	\$156.51
September	93.20%	6.24	5.58	1591.0	1421.16	\$127.90
October	69.40%	5.37	3.47	1460.0	942.85	\$84.86
November	66.20%	3.59	2.30	990.0	644.0	\$57.96
December	65.90%	3.06	2.00	902.0	598.3	\$53.85
Totals	82.60%	--	--	18935.0	15536.21	\$1398.26
Unweighted Yearly Avg		Effect: 100% Sun Hrs: 5.89	Effect: 82.31% Sun Hrs: 4.85			

NOTES: This site is on the northern border of the property about 100' east of the utility pole.
 Above data is based on four 3 kW (DC) two-axis tracked arrays.
 Estimated installed system cost: \$120,000.

