

## Wilmington Solar Project

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Year	Annual Energy kWhs	Savings \$/kWh	Annual Savings	Production Incentive	Annual Incentive	Total Savings	Estimated SREC price	Sale of RECs	Total Value
2012	68,136	\$ 0.092	\$ 6,269	\$ 0.022	\$ 1,499	\$ 7,768			\$ 7,768
2013	67,591	\$ 0.095	\$ 6,436	\$ 0.022	\$ 1,517	\$ 7,953			\$ 7,953
2014	67,050	\$ 0.099	\$ 6,608	\$ 0.023	\$ 1,535	\$ 8,143			\$ 8,143
2015	66,514	\$ 0.102	\$ 6,785	\$ 0.023	\$ 1,553	\$ 8,337			\$ 8,337
2016	65,982	\$ 0.106	\$ 6,966	\$ 0.024	\$ 1,571	\$ 8,537			\$ 8,537
2017	65,454	\$ 0.109	\$ 7,152	\$ 0.024	\$ 1,590	\$ 8,742			\$ 8,742
2018	64,930	\$ 0.113	\$ 7,343	\$ 0.025	\$ 1,609	\$ 8,952			\$ 8,952
2019	64,411	\$ 0.117	\$ 7,539	\$ 0.025	\$ 1,628	\$ 9,167			\$ 9,167
2020	63,895	\$ 0.121	\$ 7,741	\$ 0.026	\$ 1,647	\$ 9,388	\$ 0.08	\$ 4,792	\$ 14,180
2021	63,384	\$ 0.125	\$ 7,948	\$ 0.026	\$ 1,667	\$ 9,614	\$ 0.08	\$ 4,754	\$ 14,368
2022	62,877	\$ 0.130	\$ 8,160			\$ 8,160	\$ 0.06	\$ 3,773	\$ 11,933
2023	62,374	\$ 0.134	\$ 8,378			\$ 8,378	\$ 0.06	\$ 3,742	\$ 12,120
2024	61,875	\$ 0.139	\$ 8,602			\$ 8,602	\$ 0.05	\$ 3,094	\$ 11,696
2025	61,380	\$ 0.144	\$ 8,832			\$ 8,832	\$ 0.05	\$ 3,069	\$ 11,901
2026	60,889	\$ 0.149	\$ 9,068			\$ 9,068	\$ 0.05	\$ 3,044	\$ 12,112
2027	60,402	\$ 0.154	\$ 9,310			\$ 9,310	\$ 0.05	\$ 3,020	\$ 12,330
2028	59,919	\$ 0.160	\$ 9,559			\$ 9,559	\$ 0.05	\$ 2,996	\$ 12,555
2029	59,439	\$ 0.165	\$ 9,814			\$ 9,814	\$ 0.05	\$ 2,972	\$ 12,786
2030	58,964	\$ 0.171	\$ 10,076			\$ 10,076	\$ 0.05	\$ 2,948	\$ 13,024
2031	58,492	\$ 0.177	\$ 10,346			\$ 10,346	\$ 0.05	\$ 2,925	\$ 13,270
2032	58,024	\$ 0.183	\$ 10,622			\$ 10,622	\$ 0.05	\$ 2,901	\$ 13,523
2033	57,560	\$ 0.189	\$ 10,906			\$ 10,906	\$ 0.05	\$ 2,878	\$ 13,784
2034	57,100	\$ 0.196	\$ 11,197			\$ 11,197	\$ 0.05	\$ 2,855	\$ 14,052
2035	56,643	\$ 0.203	\$ 11,496			\$ 11,496	\$ 0.05	\$ 2,832	\$ 14,329
2036	56,190	\$ 0.210	\$ 11,804			\$ 11,804	\$ 0.05	\$ 2,809	\$ 14,613
2037	55,740	\$ 0.217	\$ 12,119			\$ 12,119	\$ 0.05	\$ 2,787	\$ 14,906
2038	55,294	\$ 0.225	\$ 12,443			\$ 12,443	\$ 0.05	\$ 2,765	\$ 15,207
2039	54,852	\$ 0.233	\$ 12,775			\$ 12,775	\$ 0.05	\$ 2,743	\$ 15,518
2040	54,413	\$ 0.241	\$ 13,117			\$ 13,117	\$ 0.05	\$ 2,721	\$ 15,837
2041	53,978	\$ 0.249	\$ 13,467			\$ 13,467	\$ 0.05	\$ 2,699	\$ 16,166
<b>30 Year Savings</b>			<b>\$ 282,874</b>		<b>\$ 15,814</b>	<b>\$ 298,688</b>		<b>\$ 69,119</b>	<b>\$ 367,807</b>

- (A) Estimated annual output based on PV Watts solar model developed by the National Renewable Energy Laboratory. Factors in energy production degradation based on the age of the system.
- (B) Based on the Generation and Transmission charge of DPL from April 2011. Escalated annually at 3.5%
- (C) (A) times (B)
- (D) Wilmington will Apply for the Department of Energy Renewable Energy Production Incentive before 12/31/11. If DOE funding is available Wilmington should receive these incentive payments for 10 years.
- (E) (A) times (D)
- (F) (C) plus (E)
- (G) Estimated price of a Solar Renewable Energy Certificate. Although difficult to predic future year prices, the price reflects is a conservative estimate.
- (H) Estimated revenues from selling Solar Renewable Energy Certificates. Hull retains the first 8 years of revenues to compensate if for paying the \$56,000 in matching funds required by the EECBG grant.
- (I) (F) plus (H)



AC Energy  
&  
Cost Savings



Wilimnton Solar Project

Station Identification	
City:	Dayton
State:	Ohio
Latitude:	39.90° N
Longitude:	84.22° W
Elevation:	306 m
PV System Specifications	
DC Rating:	58.0 kW
DC to AC Derate Factor:	0.770
AC Rating:	44.7 kW
Array Type:	Fixed Tilt
Array Tilt:	30.0°
Array Azimuth:	180.0°
Energy Specifications	
Cost of Electricity:	9.0 ¢/kWh

Results			
Month	Solar Radiation (kWh/m <sup>2</sup> /day)	AC Energy (kWh)	Energy Value (\$)
1	2.87	4100	369.00
2	3.39	4286	385.74
3	4.06	5574	501.66
4	5.29	6832	614.88
5	5.60	7157	644.13
6	5.89	7066	635.94
7	5.74	7092	638.28
8	5.85	7296	656.64
9	5.04	6153	553.77
10	4.61	6077	546.93
11	2.73	3593	323.37
12	2.22	3090	278.10
Year	4.45	68316	6148.44

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