



Solar Surplus Production and Rate Plan Choice Overview

September 10, 2016

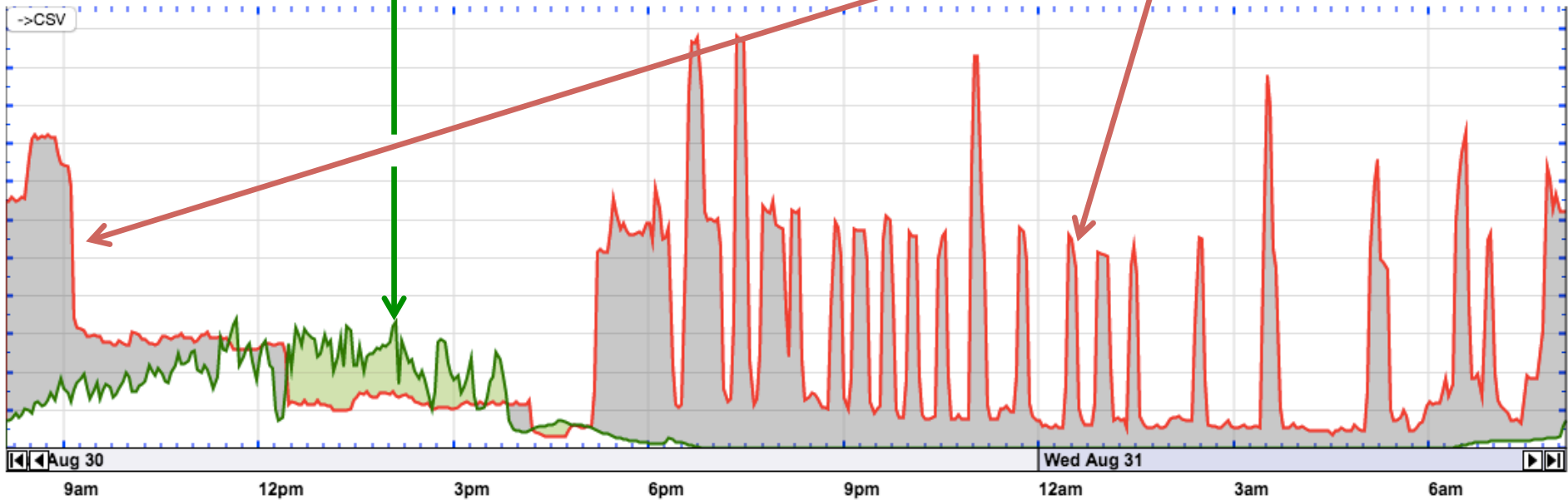
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Typical One Day Example of a Home with Solar PV - REP Billing Methodology

REP's Solar Surplus Production Credit from a Buy Back Plan is everything above the **Red Curve** and below the **Green Curve**

REP's Basic Electrical Consumption Charge is everything below the **Red Curve** and above the **Green Curve**



Red Curve = Home Electricity Consumption

Green Curve = Solar Electricity Production

Y Axis = KwHr

X Axis = Sample Day 8/30/2016 8am to 8/31/2016

Residential Solar PV System in Bellaire, TX



Installed in 2012

Size = 4.59 Kw

Panels facing South and West

Spanish Tile Roof

Appx Annual Production 5,900 KwHr

TO SEE SOLAR PRODUCTION AND HOME CONSUMPTION PERFORMANCE:

Monitoring of System's Solar Production (green curve) and Home Consumption (red curve):

<http://lg991.d.lighthousesolar.com/>

Basic
Electrical
Consumption
Charge

kWh Usage	1,605
Days in Cycle:	29
Energy Charge 1,605 kWh @ \$0.130023 /kWh	\$208.69
Renewable Rewards Credit - 115 kWh	- 14.95
Utility - Other Credit	- 0.67
Advanced Metering Charge	3.05
PUC Assessment	0.35
Gross Receipts Tax Reimbursement	3.92
The average price you paid for electric service this month (per kWh): \$0.132	
Current Charges	\$200.39
Previous Amount Due	\$229.65
Payment 08/01/2014	-229.65
Balance Forward	0.00
Amount Due	\$200.39

Solar Surplus
Production
Credit from
REP Buy Back
Plans

Base Charge	\$	9.95
Energy Charge (1200 kWh x \$0.08800000)	\$	105.60
Energy Charge (364 kWh x \$0.04400000)	\$	16.02
Smart Savings	\$	15.00 CR
DRG Surplus Payment (87 kWh x \$0.07500000)	\$	6.53 CR
Subtotal	\$	110.04
<u>Other Fees and TDU Surcharges</u>		
CENTERPOINT TDU Delivery Charges	\$	63.93
Gross Receipts Reimb	\$	3.41
Subtotal	\$	67.34
Sales Tax	\$	0.00
Service Address Charges Subtotal	\$	177.38
Current Charges	\$	177.38

Actual Electricity
Bills of REPs with
Solar Buy Back Plans

Retail Electric Provider Spot Rate Plan Comparison for a Home with a Small Solar Photovoltaic System

ALL PLANS 100% RENEWABLE ENERGY												
		REP # 1 (with solar BB plan)			REP # 2 (with solar BB plan)			REP # 3 (with no solar BB plan)				
	Month	Rate	KwHr	Cost		Rate	KwHr	Cost		Rate	KwHr	Cost
Consumption	Dec-14	\$0.1520	1920	\$291.84		\$0.1090	1920	\$209.28		\$0.0850	1920	\$163.20
Solar	Dec-14	\$0.1520	282	-\$42.86		\$0.0750	282	-\$21.15		\$0.0000	282	\$0.00
Total	Dec-14	\$0.1520	1638	\$248.98		\$0.1149	1638	\$188.13		\$0.0996	1638	\$163.20
Consumption	Aug-14	\$0.1520	2370	\$360.24		\$0.1090	2370	\$258.33		\$0.0850	2370	\$201.45
Solar	Aug-14	\$0.1520	573	-\$87.10		\$0.0750	573	-\$42.98		\$0.0000	573	\$0.00
Total	Aug-14	\$0.1520	1797	\$273.14		\$0.1198	1797	\$215.36		\$0.1121	1797	\$201.45

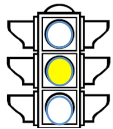
Based on the small solar system size (4.59 Kw) of this home, choosing REP # 3 with No Solar Buy Back Plan (and forgoing the Solar Surplus Credit) was the cheapest option

"POWER TO SHINE" - ELECTRICITY SAVINGS SCORECARD

Name name
 Address address
 City city
 State state
 Zip zip

	Current REP	Best Cheapest REP	Best Renewable REP
Retail Electric Provider (REP) Name =	current REP	REP option # 1	REP option # 2
REP Plan Name =	plan name	plan name	plan name
Contract Duration (must be 12) =	12 months	12 months	12 months
Contract Expiration =	09/10/15	n/a	n/a
AVG Rate (\$/KwHr) at 500 KwHr =	\$0.1310	\$0.1280	\$0.1120
AVG Rate (\$/KwHr) at 1,000 KwHr =	\$0.1040	\$0.0420	\$0.0870
AVG Rate (\$/KwHr) at 2,000 KwHr =	\$0.1010	\$0.0790	\$0.0840
Early Cancellation Fee =	\$200	\$200	\$175
Complaint Score (must be 4 or 5) =	4	4	4
Renewable Source =	11%	11%	100%
Taxes and Other Fees =	4%	4%	4%

SHINE'S RECOMMENDATION



PROCEED WITH CAUTION / CONSIDER TO CHANGE

Comments:
 -Change not mandatory but is recommended
 -Recommend switch to REP option # 1 plan name
 - This plan is less attractive however if your consumption drops much below 1000 KwHr per month

Billing Cycle Month	Forecast Year	Electricity Consumed (KwHr)	Current REP		Best Lowest		Best Renewable		
			Forecasted AVG Rate (\$/KwHr)	Forecasted Total Cost (\$)	Forecasted AVG Rate (\$/KwHr)	Forecasted Total Cost (\$)	Forecasted AVG Rate (\$/KwHr)	Forecasted Total Cost (\$)	
Aug	2015	2,110	\$0.1006	\$212.24	\$0.0810	\$170.97	\$0.0839	\$177.12	
Sep	2015	1,535	\$0.1016	\$155.95	\$0.0678	\$104.12	\$0.0849	\$130.40	
Oct	2015	1,049	\$0.1033	\$108.37	\$0.0454	\$47.62	\$0.0867	\$90.91	
Nov	2015	618	\$0.1249	\$77.16	\$0.1254	\$77.52	\$0.1065	\$65.84	
Dec	2015	992	\$0.1147	\$113.78	\$0.1220	\$121.00	\$0.0970	\$96.23	
Jan	2016	741	\$0.1204	\$89.20	\$0.1239	\$91.82	\$0.1023	\$75.83	
Feb	2016	659	\$0.1232	\$81.18	\$0.1249	\$82.28	\$0.1050	\$69.17	
Mar	2016	819	\$0.1182	\$96.84	\$0.1232	\$100.88	\$0.1003	\$82.17	
Apr	2016	1,120	\$0.1030	\$115.32	\$0.0499	\$55.88	\$0.0863	\$96.68	
May	2016	1,536	\$0.1016	\$156.05	\$0.0679	\$104.24	\$0.0849	\$130.48	
Jun	2016	2,030	\$0.1007	\$204.41	\$0.0796	\$161.67	\$0.0840	\$170.62	
Jul	2016	2,559	\$0.1001	\$256.20	\$0.0872	\$223.17	\$0.0835	\$213.60	
Total =		15,768	-	\$1,667	-	\$1,341	-	\$1,399	
Savings (\$) =		-	-	\$0	-	\$326	-	\$268	
Savings (%) =		-	-	-	-	20%	-	16%	
AVG Rate (\$/KwHr) =		-	-	\$0.1057	-	\$0.0851	-	\$0.0887	
Monthly AVG (KwHr) =		1,314							

Savings Delta



An independent rate plan comparison tool expanding on the capabilities of State of Texas "Power To Choose"