Understanding Your LPEA Bill with Solar PV

LPEA

August/September 2015

Understanding Your LPEA Bill with Solar PV

- Interconnection / Net Metering
- Solar PV Generation
- Electric Service Monthly Bill
- Net Meter Bank
- Enhanced Data Upgrade
- Your Electric Consumption

Interconnection / Net Metering

- Solar PV systems are Interconnected to the grid with a Net Meter
- Net Meter allows electricity to flow to & from a service location
- Meter goes backwards = Solar PV Generation flows onto grid
- Meter goes forward = Electric Consumption from the grid

Solar PV Generation - Example

- Solar Photovoltaic (PV) system installation
- 9 kilowatt (kW) DC nameplate capacity
- Total Electric Generation only available to system owner
  - Inverter display
  - Generation meter
  - Online monitoring program
- Estimated Annual Generation 14,454 kilowatt hours (kWh)
  - Calculated based on average daily production of 5.5 hours and 80% production factor
  - NREL PV Watts Calculator

Electric Service Basic Data – April Bill

Meter Number	Rate Description	Previous Read Date	Present Read Date	Days	Previous Reading	Present Reading	kWh Use	kW Demand	Mult.	Rate	Total
A6000768	RESIDENTIAL SERVICE	02/12/2015	03/16/2015	32	6283	7589	1,306	0.000	1	10	155.41

Service Summary	
Previous Balance	174.00
Payments	174.00 CR
Adjustments	0.00
Balance Forward	0.00

Current Service Detail	
Total Energy Charges	155.41
Base Charge	20.50
County Tax	7.04
Roundup Contribution	0.05
Current Charges Due By 04/16/2015	183.00
Previous Balance Was Due 03/23/2015	0.00
PAID BY CREDIT CARD	183.00

Electric Service Basic Data – May Bill

Meter Number	Rate Description	Previous Read Date	Present Read Date	Days	Previous Reading	Present Reading	kWh Use	kW Demand	Mult.	Rate	Total
A6000768	RESIDENTIAL SERVICE	03/16/2015	04/14/2015	29	7589	7218	0	0.000	1	10	

Service Summary	
Previous Balance	183.00
Payments	183.00 CR
Adjustments	0.00
Balance Forward	0.00
Net Meter Bank = 371	

Current Service Detail	
Base Charge	20.50
County Tax	0.82
Roundup Contribution	0.68
Current Charges Due By 05/19/2015	22.00
Previous Balance Was Due 04/22/2015	0.00
PAID BY CREDIT CARD	22.00

Net Meter Bank

Previous Read	7589
Present Read	7218
kWh Use	0
Net Meter Bank	**371 kWh** (May Bill)

Electric Service Basic Data – June Bill

Meter Number	Rate Description	Previous Read Date	Present Read Date	Days	Previous Reading	Present Reading	kWh Use	kW Demand	Mult.	Rate	Total
A6000768	RESIDENTIAL SERVICE	04/14/2015	05/16/2015	32	7218	6945	0	9.522	1	10	

Service Summary	
Previous Balance	22.00
Payments	22.00 CR
Adjustments	0.00
Balance Forward	0.00
Net Meter Bank = 644	

Current Service Detail	
Base Charge	20.50
County Tax	0.82
Roundup Contribution	0.68
Current Charges Due By 06/16/2015	22.00
Previous Balance Was Due 05/25/2015	0.00
PAID BY CREDIT CARD	22.00

Net Meter Bank

Previous Read	7589
Present Read	7218
kWh Use	0
Net Meter Bank	371 kWh (May Bill)

Previous Read	7218
Present Read	6945
kWh Use	0
Net Meter Bank	273 kWh (June)

Net Meter Bank 371 + 273 = **644 kWh** (June Bill)

Enhanced Data Upgrade – July Bill

Meter Number	Rate Description	Previous Read Date	Present Read Date	Days	Previous Reading	Present Reading	kWh Use	kW Demand	Mult.	Rate	Total
A6000768	NET CONSUMPTION 1 PH	05/16/2015	06/17/2015	32	11076	11832	756	0.000	1	NET C	
A6000768	NET GENERATION 1 PH	05/16/2015	06/17/2015	32	4131	5479	1,348	0.000	1	NET G	
A6000768	RESIDENTIAL SERVICE	05/16/2015	06/17/2015	32	0	99408	0	0.000	1	10	

Service Summary	
Previous Balance	22.00
Payments	22.00 CR
Adjustments	0.00
Balance Forward	0.00
Net Meter Bank = 1,236	

Current Service Detail	
Base Charge	20.50
County Tax	0.82
Roundup Contribution	0.68
Current Charges Due By 07/16/2015	22.00
Previous Balance Was Due 06/22/2015	0.00
PAID BY CREDIT CARD	22.00

YOUR 2014 CC ALLOCATION IS $79.00.

Enhanced Data Upgrade

- Net Consumption = Electric Consumption from the grid
- Net Generation = Solar PV Generation fed onto the grid
- Residential Service kWh Use =
    - *If* Net Generation is greater than Net Consumption, *then* kWh Use = 0 and the balance is added to the Net Meter Bank
    - *If* Net Consumption is greater than Net Generation and Net Meter Bank is available, *then* kWh Use = 0 or the difference is Energy Charge

Enhanced Data Upgrade – August Bill

Meter Number	Rate Description	Previous Read Date	Present Read Date	Days	Previous Reading	Present Reading	kWh Use	kW Demand	Mult.	Rate	Total
A6000768	NET CONSUMPTION 1 PH	06/17/2015	07/19/2015	32	11832	12170	338	0.000	1	NET C	
A6000768	NET GENERATION 1 PH	06/17/2015	07/19/2015	32	5479	6988	1,509	0.000	1	NET G	
A6000768	RESIDENTIAL SERVICE	06/17/2015	07/19/2015	32	99408	98237	0	0.000	1	10	

Service Summary	
Previous Balance	22.00
Payments	22.00 CR
Adjustments	0.00
Balance Forward	0.00
Net Meter Bank = 2,407	

Current Service Detail	
Base Charge	20.50
County Tax	0.82
Roundup Contribution	0.68
Current Charges Due By 08/18/2015	22.00
Previous Balance Was Due 07/22/2015	0.00
PAID BY CREDIT CARD	22.00

Your Electric Generation vs Consumption

- Start with August Bill Read Dates 6/17 – 7/19
- Add the daily generation from solar PV system for 6/17 – 7/19

Electric Generation	1900 kWh (system owner)	PV
Electric Consumption*	729 kWh (391 kWh from PV)	House
	1171 kWh	

Net Generation	1509 kWh (August bill)	PV to Grid
Net Consumption	338 kWh (August bill)	Grid to House
	1171 kWh	
Net Meter Bank	1171 kWh (Added in August bill)	

* 1900-1509=391+338=729

Questions

Thank you for attending and

This Presentation will be on the LPEA Website

Contact Information

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