

Using the Green Button for Solar



July 24, 2012



Pacific Gas and Electric Company (PG&E)

PG&E Service Territory

- San Joaquin Valley
- San Francisco Bay Area
- Sacramento Valley
- North Coast
- Sierra Nevada
- Central Coast



Company Facts

- Fortune 200 company located in San Francisco, CA
- \$15B in operating revenues in 2011
- 20,000 employees

Energy Supply

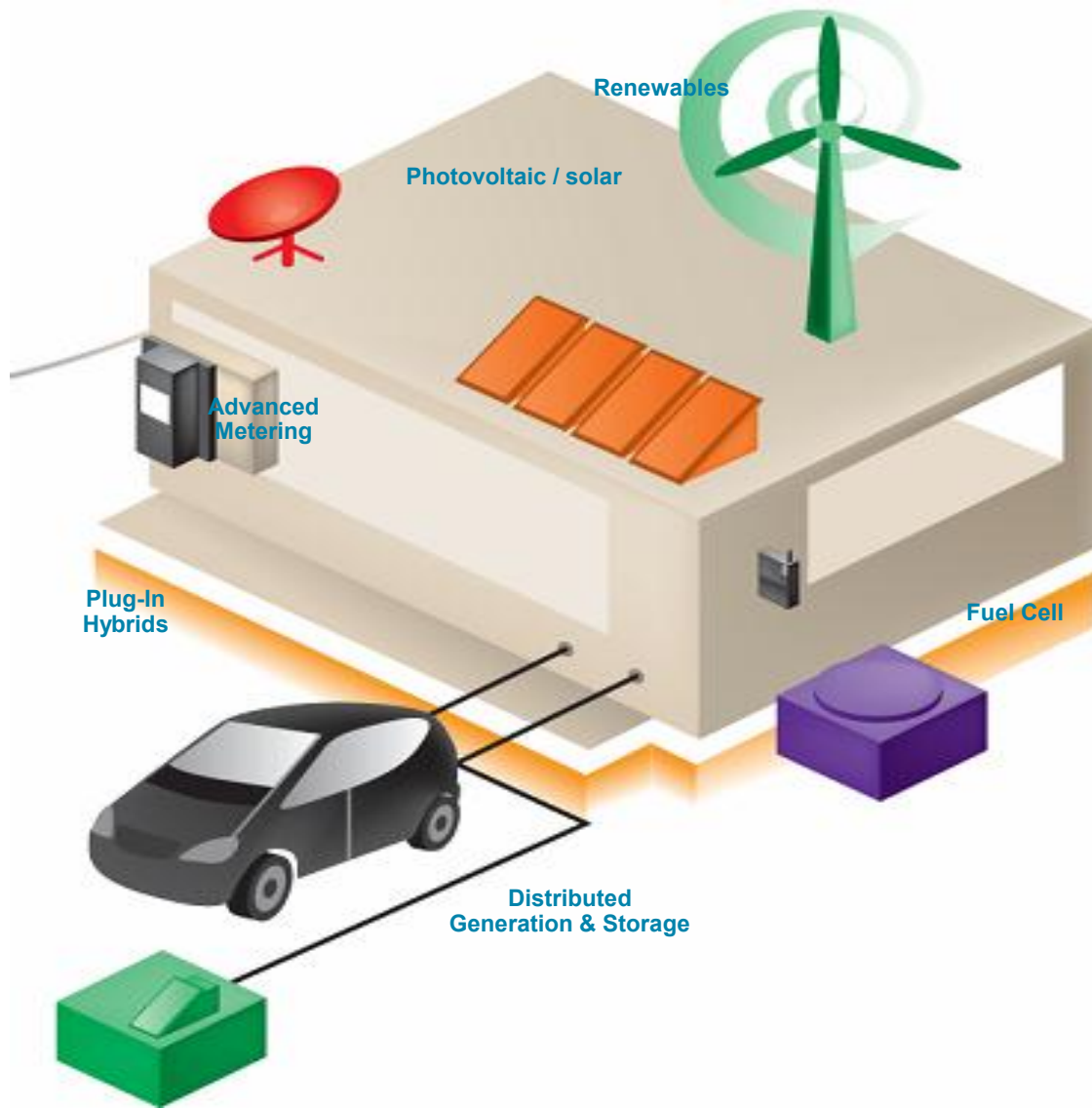
- Services to 15M customers:
 - 5.2M Electric accounts
 - 4.3M Natural Gas accounts
- Peak electricity demand: 20,000 MW
- Over 50% of PG&E's electric supply comes from non-greenhouse gas emitting facilities

Service Territory

- 70,000 sq. miles with diverse topography
- 160,000 circuit miles of electric transmission and distribution lines
- 49,000 miles of natural gas transmission and distribution pipelines



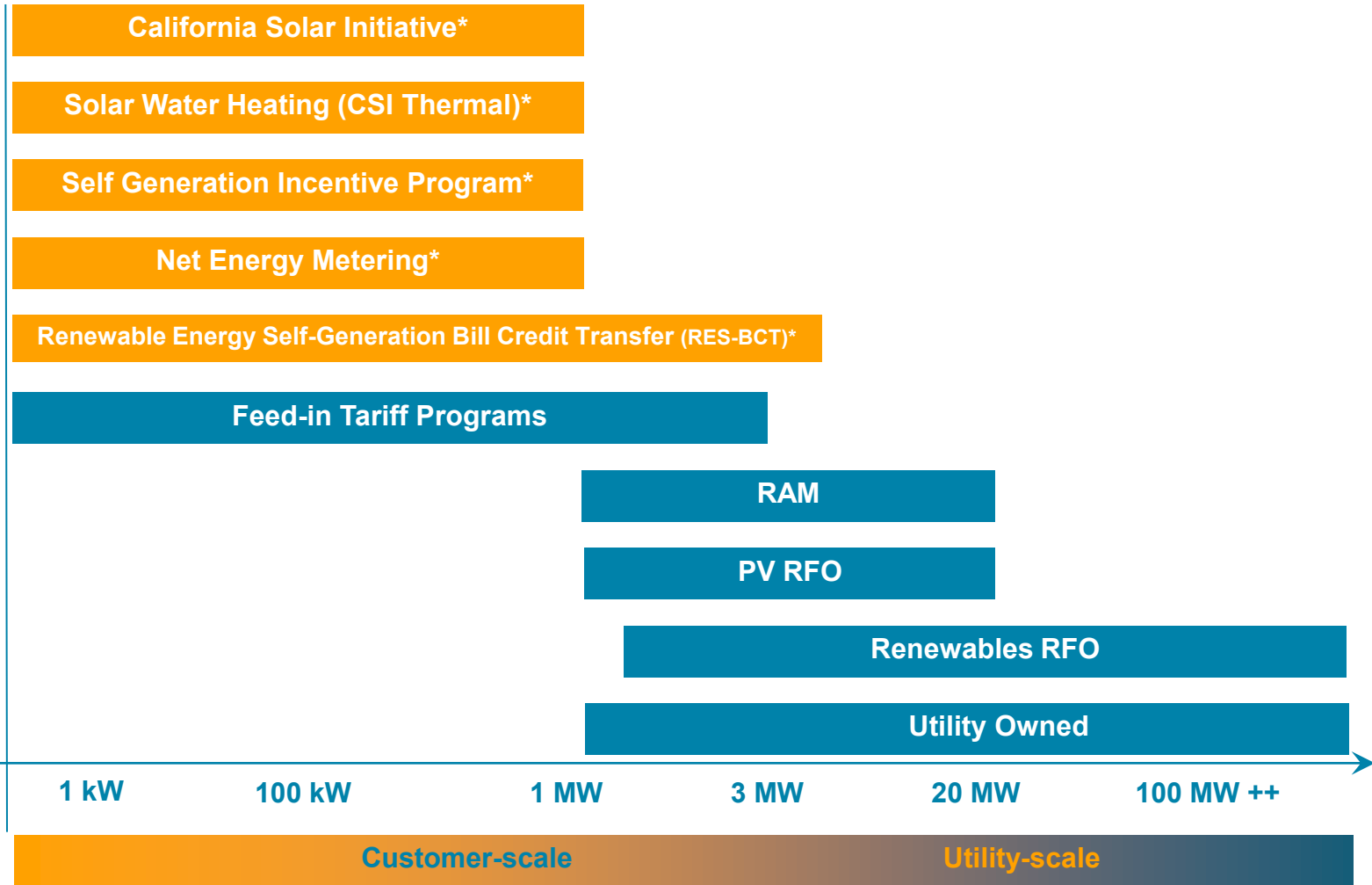
PG&E Customers Selecting Sustainable Options





Renewable Energy Programs

Available
PG&E
Programs



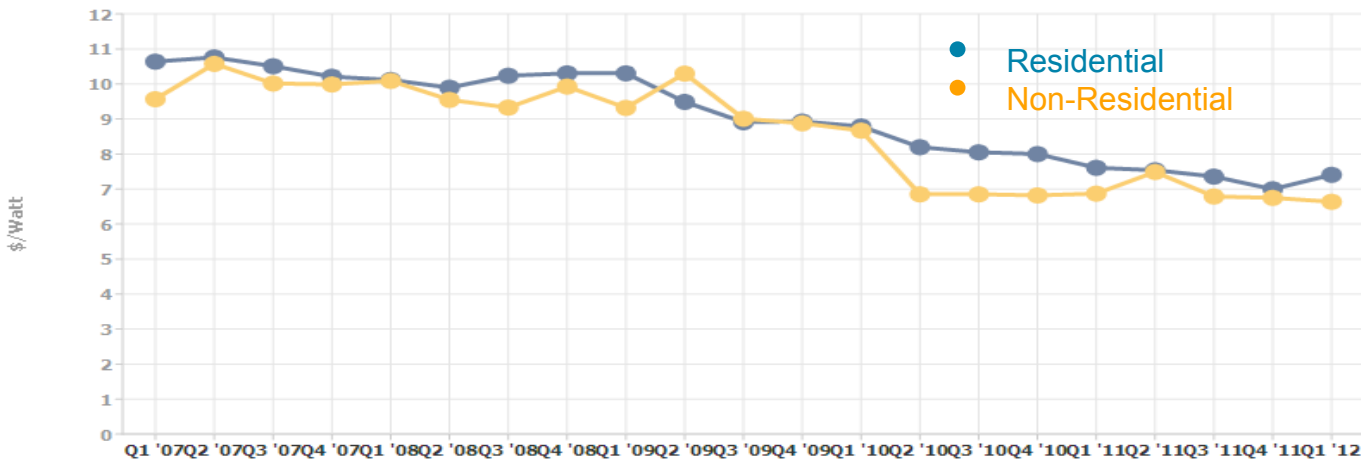
in regulatory proceeding

Note: not all programs count towards RPS requirements



Solar PV Update

- Over 65,000 PG&E customers have installed solar PV accounting for over 600 MW
 - Averaging over 1,000 new solar interconnections/month
- Solar PV costs for customers have declined by 30% since 2007
- Incentives are diminishing
- Sizing a PV system appropriately is key to making solar cost effective for the customer





Solar PV Sizing Requirements

Sizing Rules

- Per the Net Energy Metering (NEM) tariff
 - “a system intended primarily to offset part or all of the customer’s own electrical requirements”
- Per the California Solar Initiative (CSI) program
 - “system sizes does not exceed the actual energy consumed during the previous 12 months at the Site”

Issues

- Customers don’t always have the last 12 months of paper bills available
- Contractors need customer approval to obtain usage information through our Solar Call Center
- Oversizing a PV system under PG&E’s net energy metering program provides no value

Solution

- Customers can easily provide their energy usage data to solar contractors through the Green Button¹
 - Customers can download their personal energy usage data
 - Developers and third parties can receive energy usage data from customers in machine-readable form

¹ Customer needs to have a SmartMeter installed





Logging into My Energy

The screenshot shows the PG&E website with a blue header and a main content area. A search bar and 'Log in' button are in the top right. The main content features a blue banner with the text 'PG&E taxes and fees support California' and a bar chart showing payments for Santa Clara (\$15.7M), Alameda (\$14.3M), San Luis Obispo (\$13.3M), Contra Costa (\$12.4M), and Fresno (\$10.7M). A yellow login overlay is positioned on the right, containing fields for 'Username' and 'Password', a 'Remember username' checkbox, and a 'Login' button. Red arrows point to the 'Log in' and 'Sign up' links in the overlay. Below the banner, there are three columns of links: 'For My Home', 'For My Business', and 'About PG&E'.

County	Amount
Santa Clara	\$15.7M
Alameda	\$14.3M
San Luis Obispo	\$13.3M
Contra Costa	\$12.4M
Fresno	\$10.7M

PG&E's most recent payments were \$138 million in franchise fees and \$148 million in property taxes

Log in
Manage My Energy

Username
Password

Forgot your username or password?
New user? Register here.

Remember username **Login**

Existing My Energy user? [Log in](#)

New My Energy User? [Sign up](#)

For My Home »

- SmartMeter™ Opt-Out
- Mobile Bill Payment
- Outage Map
- Gas Pipeline & Safety

For My Business »

- Mobile Bill Payment
- Rebates
- Education and Safety
- Outage and Energy Status

About PG&E »

- Careers
- Community
- Newsroom
- Investors

Start at www.pge.com to Obtain Usage and Cost Information



My Energy New User Enrollment

Step 1: Enter Account Information

Step 2: Review and Submit

Register For My Energy

General Account Information

* Indicates required field

Account Holder First Name:*

Account Holder Last Name:*

Enter customer's PG&E Account Number

Account Type:*

Email Address:*

Confirm Email Address*

Create Username:*
(Minimum 5 characters)

Create Password:*

Confirm Password*

Hint Question:*

Answer:*

Verification

Phone Number* Meter Number*

Enter either the customer phone # on file with PG&E, or a meter # for the Account

Registration Benefits



Manage your accounts

Monitor and manage your energy usage, cost, and bills online.



Discover energy saving programs

Use PG&E programs that help you reduce your monthly bills and usage.



Check your status

Learn about any outages on your PG&E services.

< Cancel

Next

Enrolling in My Energy (after clicking “New User? Register here”)



Completing the My Energy Enrollment

Preview Your Registration

If your information is correct, please submit your registration.

General Account Information

Edit

Account Holder Name: John Doe
Primary Account Number: 126323-8
Account Type: Residential
Email Address: johndoe@pge.com
Username: kawaru49
Password: *****
Phone Number 415- 4853

Account Terms and Conditions

To establish a PG&E user account ("User Account") and access the online account and payment services, you must first read and accept the [Terms of Use](#). By checking the box below, I represent to PG&E that I have read the [Terms of Use](#) and agree to comply with its terms and conditions. I also understand my use of my User Account after PG&E has made changes to the Terms of Use signifies my acceptance of the new terms.

I Accept the Account Terms and Conditions

[← Cancel](#)

Previous

Submit

Registration Benefits



Manage your accounts
Monitor and manage your energy usage, cost, and bills online.



Discover energy saving programs
Use PG&E programs that help you reduce your monthly bills and usage.



Check your status
Learn about any outages on your PG&E services.

NOTE: by clicking "I Accept" you are certifying you are either the PG&E customer of record, or have received written permission from the customer of record to enroll and view their information



First Time My Energy User Page

Logged in as kawaru49 | Contact Us | Logout

PG&E My Energy

Overview | Pay & Manage | My Usage | Ways to Save | Community





Welcome to PG&E My Energy. Your Online Account Access is Now Active.
Your online account is now active. You can now pay bills, check usage, or find programs and tips to save energy and money.

[Click here to set your email preferences](#)

[Click here or here to go to the Overview page](#)

[Click here to go directly to the Usage/Green Button page](#)

Next Steps

-  **Take the My Energy Tour**
Discover the new features and benefits to better help you save energy and money. [Take the tour](#)
-  **View and Pay Your Bill**
My Energy allows you to easily view, compare, and pay your bills across all your accounts. [View bills](#).
-  **Try Energy Saving Tips**
Do even more to save money, energy, and help the environment by checking out these tips. [View tips](#).
-  **Add More Accounts**
Link your other PG&E accounts to My Energy and consolidate their management. [Add accounts](#).

Explore

Overview
This is the landing page of My Energy. You will be taken to this page every time you log in.
[Overview page](#)

Pay & Manage
Manage your Accounts, Services, and your profile.
[Pay & Manage](#)

My Usage
See detailed usage charts and graphs across your Accounts to identify opportunities to save.
[My Usage](#)

Ways to Save
View recommended programs and tips to save energy and money.
[Ways to save](#)

[Community](#)



Overview Page When Logging In 11

Logged in as kawaru49 | [Contact Us](#) | [Logout](#)

My Energy

Click for Green Button Page

OverviewPay & ManageMy UsageWays to SaveCommunity

Welcome, **John**

[Edit Profile](#) >

Welcome to a new way to manage your PG&E account.

My Bill

[Learn what you can do](#)

Your Account
1872926323-8

Last Payment	\$95.94
Current Amount Due	\$0.00
Due Date	05/31/12

This user is not eligible to make online payments for this account. Please log in as the user you enrolled in e-Bills with. If you need help, call 1-877-660-6789.

Account Options

- [View Bill](#)
- [Set up balanced payment plan](#)
- [Billing & Payment History](#)

My Energy is a handy set of tools designed to give you more control of the energy you use – and the money you save. Now you can manage your energy use—smarter and more efficiently than ever before.

Take the tour

See a map showing any natural gas transmission pipelines in your area »

Ways To Save

Switch to compact fluorescent light bulbs (CFLs)

CFLs use up to 75% less energy and last 10 times longer.

Featured Profile

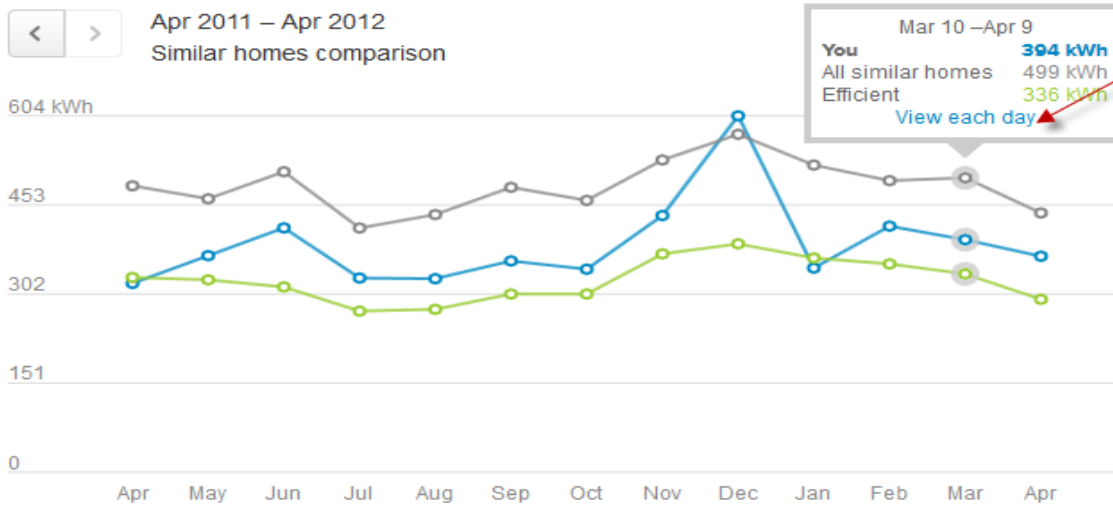
Where to Find the Green Button

[Overview](#) |
 [Pay & Manage](#) |
 [My Usage](#) |
 [Ways to Save](#) |
 [Community](#)

[Compare My Bills](#) |
 [My Goal](#) |
 [My Usage Details](#) |
 [My Rates](#)

My Energy Use

Show my electricity by year



Interval data are available if "View each day" appears when hovering over a dot representing a month

Find tips to reduce your use:

- Free steps to take
- Smart purchases
- Great investments

Similar homes |
 Usage |
 Costs |
 Weather

■ You
■ All similar homes
■ Efficient similar homes
 What homes are compared?

Click the Green Button to download usage and billing data for the Account



The graph displayed above depicts only usage and volumetric usage charges based on available interval data. The graph does not include other fees such as local utility user taxes and certain other taxes, surcharges and fees or medical baseline adjustments. As a result, the volumetric usage charges displayed in the graph will not reflect all of the charges on your bill.

Green Button Download Choices

Export your data close X

For your review in a spreadsheet program (.csv file)

Export all bill totals ← Billing cycle totals only

Export usage for a range of days: ← Interval usage and cost for a complete billing cycle

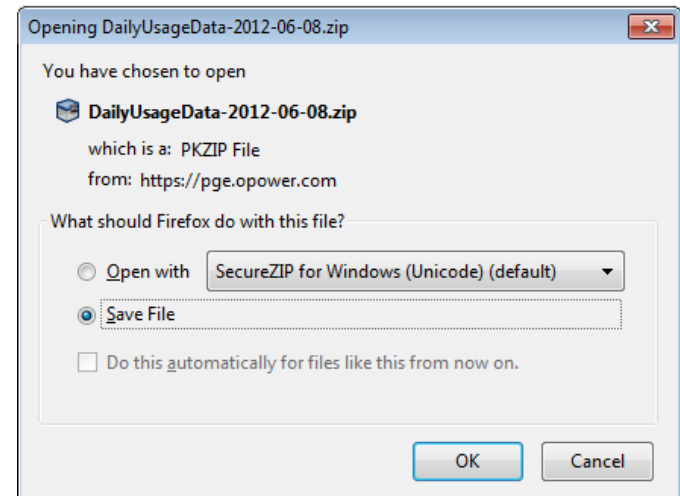
Since your last bill: May 10, 2012 – Jun 8, 2012 ▼

For developers and third parties (.xml file)

Export usage for specific days: ← Allows selection of any range of interval usage and costs for up to 13 months

From: 05/04/2012 To: 06/04/2012

Exported as a Zip file → Export





Residential Green Button Download Examples

.csv Interval Data – Single Billing Cycle

Name	JOHN DOE				
Address	Street Address, City, CA Zip Code				
Account Number	xxxxxx6323				

TYPE	DATE	START TIME	END TIME	USAGE	UNITS	COST
Electric usage	5/10/2012	0:00	0:59	0.33	kWh	\$0.04
Electric usage	5/10/2012	1:00	1:59	0.28	kWh	\$0.04
Electric usage	5/10/2012	2:00	2:59	0.25	kWh	\$0.03
Electric usage	5/10/2012	3:00	3:59	0.25	kWh	\$0.03
Electric usage	5/10/2012	4:00	4:59	0.26	kWh	\$0.03
Electric usage	5/10/2012	5:00	5:59	0.81	kWh	\$0.10
Electric usage	5/10/2012	6:00	6:59	0.4	kWh	\$0.05
Electric usage	5/10/2012	7:00	7:59	0.17	kWh	\$0.02
Electric usage	5/10/2012	8:00	8:59	0.17	kWh	\$0.02
Electric usage	5/10/2012	9:00	9:59	0.19	kWh	\$0.02
Electric usage	5/10/2012	10:00	10:59	0.17	kWh	\$0.02
Electric usage	5/10/2012	11:00	11:59	0.16	kWh	\$0.02
Electric usage	5/10/2012	12:00	12:59	0.16	kWh	\$0.02
Electric usage	5/10/2012	13:00	13:59	0.17	kWh	\$0.02
Electric usage	5/10/2012	14:00	14:59	0.2	kWh	\$0.03
Electric usage	5/10/2012	15:00	15:59	0.18	kWh	\$0.02
Electric usage	5/10/2012	16:00	16:59	0.19	kWh	\$0.02
Electric usage	5/10/2012	17:00	17:59	0.18	kWh	\$0.02
Electric usage	5/10/2012	18:00	18:59	0.27	kWh	\$0.04
Electric usage	5/10/2012	19:00	19:59	0.62	kWh	\$0.08
Electric usage	5/10/2012	20:00	20:59	0.77	kWh	\$0.10
Electric usage	5/10/2012	21:00	21:59	0.57	kWh	\$0.07
Electric usage	5/10/2012	22:00	22:59	0.28	kWh	\$0.04
Electric usage	5/10/2012	23:00	23:59	0.25	kWh	\$0.03
Electric usage	5/11/2012	0:00	0:59	0.29	kWh	\$0.04
Electric usage	5/11/2012	1:00	1:59	0.24	kWh	\$0.03
Electric usage	5/11/2012	2:00	2:59	0.23	kWh	\$0.03
Electric usage	5/11/2012	3:00	3:59	0.26	kWh	\$0.03
Electric usage	5/11/2012	4:00	4:59	0.23	kWh	\$0.03
Electric usage	5/11/2012	5:00	5:59	0.79	kWh	\$0.10
Electric usage	5/11/2012	6:00	6:59	0.41	kWh	\$0.05

Intervals are either 15 or 60 minutes depending on the SmartMeter

.csv Monthly Billing Cycles – up to 48 months

Name	JOHN DOE				
Address	Street Address, City, CA Zip Code				
Account Number	xxxxxx6323				

TYPE	START DATE	END DATE	USAGE	UNITS	COST
Electric billing	5/12/2010	6/10/2010	316 kWh		\$37.60
Electric billing	6/11/2010	7/12/2010	356 kWh		\$42.37
Electric billing	7/13/2010	8/11/2010	356 kWh		\$42.36
Electric billing	8/12/2010	9/10/2010	304 kWh		\$36.18
Electric billing	9/11/2010	10/11/2010	319 kWh		\$37.96
Electric billing	10/12/2010	11/9/2010	399 kWh		\$48.18
Electric billing	11/10/2010	12/10/2010	443 kWh		\$53.57
Electric billing	12/11/2010	1/10/2011	588 kWh		\$86.01
Electric billing	1/11/2011	2/9/2011	381 kWh		\$46.77
Electric billing	2/10/2011	3/11/2011	464 kWh		\$58.34
Electric billing	3/12/2011	4/11/2011	473 kWh		\$59.39
Electric billing	4/12/2011	5/11/2011	320 kWh		\$39.24
Electric billing	5/12/2011	6/10/2011	367 kWh		\$45.08
Electric billing	6/11/2011	7/12/2011	414 kWh		\$51.63
Electric billing	7/13/2011	8/10/2011	329 kWh		\$40.51
Electric billing	8/11/2011	9/9/2011	328 kWh		\$40.22
Electric billing	9/10/2011	10/10/2011	358 kWh		\$44.17
Electric billing	10/11/2011	11/8/2011	344 kWh		\$42.51
Electric billing	11/9/2011	12/8/2011	435 kWh		\$54.75
Electric billing	12/9/2011	1/9/2012	604 kWh		\$96.89
Electric billing	1/10/2012	2/8/2012	346 kWh		\$44.54
Electric billing	2/9/2012	3/9/2012	417 kWh		\$54.85
Electric billing	3/10/2012	4/9/2012	394 kWh		\$51.27
Electric billing	4/10/2012	5/9/2012	366 kWh		\$47.49

Usage is rounded to 1/100th of a kWh; costs rounded to the nearest penny. The XML download has usage to the watt level, costs to 1/1000th of a penny



What Does All This Mean?

- This data provides solar contractors with quick and easy access to a customer's historic usage information
- Solar contractors now have the information at their fingertips to “right size” a PV system for the customer
- This level of detail can also be used by solar contractors to perform more detailed modeling for a savvy customer
- Ultimately, it provides customers with an online tool to help them understand their usage

Questions?

[http://www.pge.com/myhome/myaccount/using
/thegreenbutton/](http://www.pge.com/myhome/myaccount/using/thegreenbutton/)