

Low Carbon Fuel Standard (LCFS)

Supplement to the Annual Compliance Report for Regulated Parties for Electricity

Reporting Under 95484(a)(6)(A) Residential Electric Vehicle Charging

Reporting Party	Compliance Year
Pacific Gas and Electric Company	2012

1. *Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds?*

No credit proceeds were received in 2012.

2. *For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers.*

No credit proceeds were received in 2012.

3. *Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).*

In accordance with the guiding principles for utility education and outreach adopted by the California Public Utilities Commission, PG&E utilized the following channels for educating the public on the benefits of the electric vehicle transportation.

PG&E's Electric Vehicle Website

[\(http://www.pge.com/myhome/environment/whatyoucando/electricdrivevehicles/\)](http://www.pge.com/myhome/environment/whatyoucando/electricdrivevehicles/)

PG&E's electric vehicle website provides information on the environmental, driving, and financial benefits of owning a plug-in electric vehicle. The website also contains information on rate options and charging installation, customer service contact information, and a rate calculator that estimates average monthly electricity costs compared to gasoline costs.

Charge Across Town EV Expo Event

PG&E co-sponsored an informational EV exhibition event open to the public. As part of the event, ten electric and plug-in hybrid vehicles were displayed along with solar and EV charging solutions. Between 300-400 people participated in "Ride and Drives" as part of this event.

Local Outreach

PG&E met with numerous regional interest groups to educate customers on existing and future EV rates that are available to them.

Residential Service Assessments

PG&E's service planning department performed over 3,000 assessments on distribution infrastructure in neighborhoods with newly added EV loads to ensure that there are no significant impacts to the distribution system. System upgrades were made when necessary and the costs associated with the upgrades were socialized to ensure that customers did not incur additional unexpected costs for adopting an EV.

4. *Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.*

In 2012, PG&E offered two rate options for Electric Vehicle customers:

- E-9A is a whole house rate for EV customers charging through one meter. This is a tiered time-of-use rate option that incentivizes EV customers without a separate meter to charge during off-peak hours when the grid is less stressed and the cost is low (\$0.03 per kWh).
- E-9B is a separately metered option offered for charging-only service. This is a tiered time-of-use rate option that incentivizes EV customers with a separate meter specifically for EV charging to charge during off-peak hours when the grid is less stressed and the cost is low (\$0.03 per kWh).

5. *Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.*

In 2012, the costs associated with meeting the LCFS requirements were comprised of the time spent by individuals tracking, compiling, and reporting data for LCFS reports. Because no credits were sold and no revenue was distributed to EV customers, the costs to comply were minimal and treated as standard business operations costs.

Credits Generated (#)	Credits Sold (#)	Credits Banked (#)	EVs operating in service territory (#)
█	█	█	8,202 ¹

¹ EVs operating in service territory through Q4 2012

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Reporting Party	Compliance Year
ECotality	2012

1. Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds? **NO**
2. For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers.
3. Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).

Residential blink portal on the blinknetwork website provides blink cardholders with information on their use of charging infrastructure including greenhouse gas emission avoidance, gasoline use avoided and electrical energy disbursed.

4. Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.

The blink home charging unit has the ability at both the unit and via the blinknetwork, to program the charge start and stop times in order to take advantage of Time-Of-Use electrical rates. In addition, both the unit and blinknetwork can provide the user with cost impact of charging by inputting electrical service rates.

5. Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.

Costs associated with meeting LCFS reporting are incidental to reporting for public EV charging. Zero cost.

Credits Generated (#)	Credits Sold (#)	Credits Banked (#)	EVs operating in service territory (#)
██████	██████	██████	3,403

NOTE: EVs operating in service territory only include those that are participating in the EV Project and represent all of the residential charging above.

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Supplement to the Annual Compliance Report for Regulated Parties for Electricity

Reporting Under 95484(a)(6)(B) Public Electric Vehicle Charging

Reporting Party	Compliance Year
ECotality	2012

1. Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds? **NO**.
2. For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers.
3. Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).

The blinknetwork website provides blink cardholders with information on their use of charging infrastructure including greenhouse gas emission avoidance, gasoline use avoided and electrical energy disbursed.

4. Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.

Currently the access fee rate for blink charge infrastructure is intended to encourage away from home vehicle charging by establishing a single cost per hour for access to charging. This approach encourages EV drivers to use their vehicles for a greater percentage of their transportation needs, thus displacing more carbon-based fuel. The network has the ability to change rates at each station and will do so in the future in order to encourage off-peak charging as well as meet local market variations in energy cost and real-estate values.

5. Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.

Initial costs to establish energy use reports occurred in 2011. Ongoing costs in 2012 required to complete LCFS reporting include labor to set up and execute energy use report, validate results and actually report five times per year (once per quarter and annual). Total labor hours estimated at 5 per report; 25 for the year. Approximate cost \$3,000.

Credits Generated (#)	Credits Sold (#)	Credits Banked (#)	Operating EV Charging Stations (#)	EV Charging Incidents (#)
█	█	█	700	66,095

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Reporting Under 95484(a)(6)(A) Residential Electric Vehicle Charging

For Direct Metered Electricity Only

Reporting Party	Compliance Year
Sacramento Municipal Utility District (SMUD)	2012

1. Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds? No
2. For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers. N/A
3. Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).
 - SMUD website information on charging, vehicles, and dedicated EV charging rates at smud.org/PEV
 - Met with area car dealers on several occasions
 - Conducted a dedicated training session with sales personnel from John L. Sullivan Chevrolet and Roseville Toyota on December 13.
 - Met with representatives from SacEV/GSEAA (Local Driver's Organization) on multiple occasions and hosted two of their regular membership meetings.
 - Conducted Outreach where PEV material was provided at the following events in 2012:
 - Green Day at the Grove, April 7
 - Essence of Rosemont, April 13
 - Folsom Lake College Earth Day, April 18
 - REACH, April 21
 - Crest Film Festival, April 27
 - Girl Scout 100 Year Anniversary Celebration, April 28
 - Festival de la Familia, April 29

Elk Grove Western Festival, May 5-6
Strawberry Festival, May 19-20
Wicked, May 23
Wounded Veteran Run, May 28
Carbon Cube Event, June 26
CA State Fair, July 26 - 29
Elk Grove City Celebration, August 18
9/11 Memorial Run, September 9
Picnic at the Park, September 22
National Plug-in Day, September 23
Career GPS, October 10 - 11
Reigning Cats & Dogs Gala, October 13
International Auto Show, October 19-21
Cleanstart Showcase, October 22

4. Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.

One rate, RTEV (Residential Time-of-use Electric Vehicle), offered in 2012.

- Off-peak charging discount of 2.43¢ per kWh during the winter months (October 1 – May 31)
- Off-peak charging discount of 2.71¢ per kWh during the summer months (June 1 – September 30)
- Winter on-peak is weekdays 7am to 10pm and 5pm to 8pm
- Summer on-peak is weekdays between 2pm and 8pm

5. Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.

LCFS compliance activities are not tracked separately at SMUD and are included in our general customer service activities. Separate costs associated with LCFS transactions have not occurred given that no credits have been sold to date.

Credits Generated (#)	Credits Sold (#)	Credits Banked (#)	EVs operating in service territory (#)
■	■	■	Approx. 350

Low Carbon Fuel Standard (LCFS)

Supplement to the Annual Compliance Report for Regulated Parties for Electricity

Reporting Under 95484(a) (6) (A) Residential Electric Vehicle Charging

Reporting Party	Compliance Year
LADWP	2012

1. Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds? **No**
2. For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers. **N/A**
3. *Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).*

With at least a dozen models of EVs entering the market, the LADWP's Electric Vehicle (EV) Program is ensuring the seamless integration of EVs into Los Angeles' electric grid. The program upgrades and expands LADWP's existing electric charging infrastructure, while also encouraging at-home, off peak charging of EVs through discounted rates for EV owners and offers subsidized charger installation for the first 1,000 approved EV customers.

LADWP conducts education and outreach efforts to help create positive experiences for EV adopters. LADWP has a comprehensive EV program to educate customers about Time of Use (TOU) rates offered and the benefits of charging off-peak. This campaign is primarily executed online through a dedicated section of LADWP's website, where informational fact sheets can be downloaded on specific aspects of LADWP's EV program. The website link is as follows: https://www.ladwp.com/ladwp/faces/ladwp/residential/r-gogreen/r-gg-driveelectric?_afrcState=10831601xu_4&_afrcLoop=213060828428000

In addition, LADWP provides information and outreach via a U-tube video available at: <http://www.youtube.com/watch?v=BjBcd2CAwRs&feature=youtu.be>

Generally, LADWP's education and outreach efforts target existing and likely residential EV adopters. LADWP's EV group works closely with local governments, charging infrastructure providers, electricians, and car dealers to expand the program and develop customer awareness about the benefits and implications of utilizing electricity as transportation fuel.

The following is an excerpt from the website of the environmental benefits and costs of EV charging as compared to gasoline regarding the environmental benefits:

“EVs benefit both the environment and the economy. By using electricity rather than gasoline – a carbon-based fossil fuel – EVs produce less GHG emissions and reduce LADWP’s carbon footprint. The cost on a per-mile basis for charging versus paying for gasoline is less than \$1 per gallon, approximately 50% - 75% less. In other words, a family who currently spends about \$60 per week for gasoline for one car – a common fill-up amount – instead, could pay as little as \$15 on their electric bill with a discount rate by charging at night.”

Specifically, LADWP conducted the following public outreach and education activities in 2011 that relate to residential charging customers:

- Maintained an extensive LADWP/EV web site which covers charger installation, EV incentives, and public charging stations.
 - LADWP maintains public information on the website which explains the various benefits of EVs.
 - LADWP has a video on the website for EVs
 - LADWP maintains and promotes an EV rate that encourages off peak charging.
4. *Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.*

LADWP provides rebates to residential customers for the cost of EV chargers and installation. The rebate covers up to \$2,000 of out-of-pocket expenses when purchasing or leasing a new EV. This rebate is available to LADWP residential customers with a Level 2 (rapid) charger with the SAE J1772 charging plug. For details LADWP refers customers to the website. EV Rate options for residential customers are provided here as an excerpt from the website:

OPTION 1 ELECTRIC VEHICLE TIME-OF-USE

Customers can install a separate service exclusively for the electric vehicle while the rest of the household remains on our standard residential rate.

- Qualifies for up to \$2,000 Charge Up L.A.! rebate for charger equipment and installation.
- Discount of 2.5 cents/kWh for night and weekend charging.
- Requires a qualified electrician to install a second power service for the electric vehicle charger.
- \$10 monthly minimum use charge.

OPTION 2 RESIDENTIAL TIME-OF-USE

Customers can put energy consumption for their entire household, including EV charging, on a time-of-use rate.

- Requires a meter change by LADWP.
- \$8 monthly service fee.

OPTION 3 STANDARD RESIDENTIAL RATE

EV charging is regarded as additional energy consumption in the customer's home.

- Existing three tier structure applies in summer and energy rates increase as usage increases.
- This rate does not qualify for the Home Charger

5. *Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.*

As the scope of our efforts for EV education and outreach includes both residential and non-residential customers, we do not separately track LCFS-related expenses for residential customers only. Additional costs LADWP incurred for LCFS compliance include, but are not limited to, staff time for the tracking and reporting of LCFS credits. We expect LCFS compliance costs to increase now that LADWP has opted into the program and the number of vehicles is increasing exponentially. At this time, we are not specifically tracking the time our staff spends on tracking and reporting LCFS credits.

2012 Table (as of 12/31/2012)

<i>2012 Credits Generated (#)</i>	<i>Credits Sold (#)</i>	<i>Credits Banked (#)</i>	<i>EVs operating in service territory (#¹)</i>
■	■	■	2,059

¹ Estimated number of PEVs provided by CARB to LADWP on Feb 8, 2013 for the purpose of reporting LCFS credits generated.

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Reporting Party	Compliance Year
San Diego Gas & Electric Company	2012

- 1. Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds?**

No credit proceeds were received by San Diego Gas & Electric Company during 2012.

- 2. For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers.**

No credit proceeds were received by San Diego Gas & Electric Company during 2012.

- 3. Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).**

In 2012 SDG&E educated the public on the benefits of electric transportation through several means such as printed and digital/online collateral, website, web tools, call center, utility-hosted seminars and in various venues such as SDG&E's Energy Innovation Center, community events, in person meetings and training. Topics covered include:

- Rates, metering and billing analysis (service choices)
- Safety and reliability
- Line extension rules
- Basic information about electric vehicles, information resources, electric vehicle supply equipment and support services
- Environmental and financial benefits (AB32, off-peak charging)

Highlights and examples of public education on the benefits of electric vehicle transportation in 2012 include:

- Participated in more than 200 events that focused key messages on the benefits of electric vehicles and time-of-use rates to key stakeholders such as customers, trade associations, the media, policy makers, employers, car dealers and multi-family property managers, among others.
- Increased presence on Facebook and Twitter with key electric vehicle messages.
- Partnered with the San Diego Dealers Association and California Apartment Association to consistently share key messages with dealers and property managers about the benefits of using SDG&E's electric vehicle rates as a selling point for electric vehicles and residences with electric vehicle charging.
- Increased presence at the SDG&E Annual Energy Showcase in the clean fleet transportation industry and from that launched the first SDG&E Clean Fleet Roundtable. Four Clean Fleet events were hosted for more than 200 guests and many are considering converting a portion of their fleets to electric.

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4. Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.

San Diego Gas & Electric Company offers two rate options for residential customers with electric vehicles:

- EV-TOU for separately metered electric vehicle charging, and
- EV-TOU-2 for electric vehicle charging combined with household load.

Both rates contain a super off-peak period (midnight to 5am), an off-peak period, and peak period. Pricing is lowest during the super-off peak period and highest during the peak period.

San Diego Gas & Electric Company also offers three temporary, experimental rates for separately metered electric vehicle load as part of a PEV Pricing and Technology Study: EPEV-X, EPEV-Y, and EPEV-Z. These rates contain a super off-peak period (midnight to 5am), an off-peak period, and peak period. Pricing is lowest during the super-off peak period and highest during the peak period. The rates differ only in the ratio of on-peak to off-peak prices. The experimental rates are available only to customers who agree to participate in the study. Customers who agreed to participate in the study were randomly assigned to one of the three rates for the duration of the study (ending December 2013). After 2013 these customers will move to the existing, permanent residential rate of their choice.

5. Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.

Pursuant to CPUC Decision 11-07-029, San Diego Gas & Electric Company’s education and outreach efforts for electric vehicles encompass all customer segments, not just residential customers. SDG&E does not separately track LCFS-related expenses for residential customers, and many of SDG&E’s efforts overlap customer segments. Additional costs SDG&E incurred for LCFS compliance include, but are not limited to, staff time for the tracking and reporting of LCFS credits in 2012. These incremental activities are currently absorbed by existing staff, but activity will increase as credits are sold and the proceeds returned to electric vehicle customers. SDG&E does not track the time spent on tracking and reporting LCFS credits.

Credits ¹ Generated (#)	Credits Sold (#)	Credits ² Banked (#)	EVs operating in ³ service territory (#)
█	█	█	2,930

¹ Credits generated in 2012.

² Includes credits generated in 2011 and 2012.

³ Provided to SDG&E by the CA Air Resources Board on February 8, 2013 for the purpose of reporting electricity used as a transportation fuel that is not directly metered.

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Reporting Party	Compliance Year
Southern California Edison	2012

1. *Were any credit proceeds received in the compliance reporting year? If so, what is the dollar amount of the proceeds?*

No

2. *For any credit proceeds received, itemize how those proceeds were used as direct benefits for current electric vehicle customers.*

N/A

3. *Itemize how the reporting party educated the public on the benefits of electric vehicle transportation (including environmental benefits and costs of EV charging as compared to gasoline).*

SCE's PEV Readiness group conducts education and outreach efforts to help create a positive experience for PEV adopters. The group developed a comprehensive campaign to educate PEV customers about PEV Time of Use (TOU) rates offered by SCE and the benefits of charging off-peak. This campaign is primarily executed online through a dedicated section of SCE's website and online advertising.

SCE's education and outreach efforts target existing and likely residential PEV adopters. The PEV Readiness team works closely with local cities, charging infrastructure providers, electricians, and PEV dealers to expand SCE's reach and develop customer awareness about the benefits and implications of fueling PEVs with electricity.

Specifically, SCE conducted the following activities in 2012 that relate to residential charging customers:

1. Maintained the SCE/PEV web content covering Residential, Business, Dealers, Installers, and Cities. In particular, The Residential segment covers: Charging Options, Installation, Tools and Resources, Electric

Vehicle Rates. The web content also includes a section which explains the various benefits provided by PEVs:

- Environmental benefits
 - Energy independence
 - Fuel cost savings
 - Federal and State rebate programs
2. Maintained an online advertisement campaign to expand awareness and drive traffic to the PEV website
 3. Developed an enhanced rate analysis package for PEV owners called the EV Power Plan
 4. Provided PEV training to over 220 dealer sales personnel, including education about:
 - The utility being the new fuel provider for PEVs
 - PEV rates & benefits of off-peak charging
 - Grid reliability
 - Encouraging the PEV customers to notify SCE about their new PEV
 - Various tools available for dealers and customers on sce.com/pev
4. *Itemize the rate options that are offered by the reporting party that encourage off-peak charging and minimize impacts on the grid.*

PEV Rate Options for Residential customers:

TOU-D-TEV (Home & Electric Vehicle Plan): The Home & Electric Vehicle Plan uses a single meter to measure energy used by the customer's entire home, including its electric vehicle. It offers "super low" rates from midnight to 6 a.m., low off-peak rates from 6 a.m. to 10 a.m. and from 6 p.m. to midnight, and higher on-peak rates on weekdays between 10 a.m. and 6 p.m. This rate plan is often selected by people who are able to shift both their household electricity consumption and their electric vehicle charging to off-peak, evening, and overnight hours.

TOU-EV1 (Electric Vehicle Plan): On the Electric Vehicle rate plan, electricity used to charge an electric vehicle is billed through a separate meter at a different rate than electricity used by the rest of a customer's home. Lower rates apply during off-peak hours of 9 p.m. to noon. Rates change seasonally, and are higher in summer.

5. *Summarize the costs that were associated with meeting the LCFS requirements in the compliance reporting year.*

As the scope of our efforts for PEV education and outreach includes both residential and non-residential customers, we do not separately track LCFS-related expenses for residential customers only. Additional costs SCE incurred for LCFS compliance include, but are not limited to, staff time for the tracking and reporting of LCFS credits in 2012. We expect LCFS compliance costs to increase when we begin selling and distributing the LCFS credits after the CPUC issues a decision in the LCFS proceeding. At this time, we are not specifically tracking the time our staff spends on tracking and reporting LCFS credits.

2012 Table (as of 12/31/2012¹)

<i>2012 Credits Generated (#)</i>	<i>Credits Sold (#)</i>	<i>Credits Banked (#)²</i>	<i>EVs operating in service territory (#)³</i>
■	■	■	6,394

¹ Both the Credits Generated in 2012 and the Credits Banked (from 2011) includes credits relating to fleet EVs, where SCE was deemed the regulated party for separately metered EVs under the 2010 adopted LCFS (until late 2012, when the Office of Administrative Law approved the December 2011 amendments to LCFS). These fleet EVs were separately metered under TOU rates EV-3 and EV-4.

² Includes LCFS credits from 2011.

³ Estimated number of PEVs provided by CARB to SCE on Feb 8, 2013 for the purpose of reporting LCFS credits generated.