

SDRES Position Paper on:

SDG&E Charging Residential Customers with PV Systems a Network Use Charge

Summary

The San Diego Renewable Energy Society (SDRES) recommends that the California Public Utilities Commission (CPUC) reject the “network use charge” proposed by San Diego Gas and Electric (SDG&E) as the proposed charge will:

- increase rates disproportionately for SDG&E customers that already have installed solar photovoltaic (PV) systems in violation of Net Energy Metering (NEM) law,
- discourage the purchase of solar PV systems by other residents in SDG&E territory,
- threaten California’s goals to have:
 - 3,000 MW of distributed solar energy systems installed by the end of 2016 for the Million Solar Roofs Initiative,
 - 33% of retail electricity demand served by renewable sources by 2020 for Executive Order S-14-08 and the California Air Resource Board’s AB 32.

SDRES further recommends that the CPUC and California Energy Commission (CEC) investigate the actual costs incurred by SDG&E and their customers with solar PV systems before making any rulings to adjust utility rates. SDRES believes the rules that allow the CPUC to pass proposed rate increases need to be revised with respect to the current state of distributed generation made possible by residential solar PV systems.

Background

California leads the nation in promoting and *requiring* renewable energy solutions for electricity generation. San Diego leads the State in solar PV systems that generate clean and renewable electricity. The wider territory covered by SDG&E contains 11 of the 100 top solar cities in California. Today, there is more than 30MW of residential and over 36 MW of non-residential installed solar PV capacity in San Diego County¹.

Further, California's legislative and executive governments are committed to increasing the use of renewable energy sources in the state, which includes solar PV systems. California's governor enacted Executive Order S-14-08 requiring that "...[a]ll retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." The governor's intent was supported by the California Air Resource Board's AB32 authority to regulate activities to achieve this goal.²

NEM rates were introduced for the potential benefit of both SDG&E and the electricity customers in their area. Residents with PV systems and SDG&E signed net-metering agreements under the billing arrangements in place at the time. Part of this arrangement included text to prevent fees being charged to SDG&E customers with PV systems that did not apply to SDG&E customers without PV systems. NEM law section 2827(g) states:

"Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or any other charge that would increase an eligible customer-generator's costs beyond those of other customers who are not eligible customer-generators in the rate class to which the eligible customer-generator would otherwise be assigned if the customer did not own, lease, rent, or otherwise operate a renewable electrical generation facility is contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs."

SDG&E already charges customers a monthly meter fee, regardless of whether the customer generates or consumes electricity.

In October of 2011, SDG&E proposed a rate increase that would charge residential customers with PV systems a "network use charge" in addition to their net metering rates and meter fees.

Issue

Net metering laws are still being interpreted as if the entire electrical grid was the sole property of the utility, but times have changed. Now, residents with PV systems are both supplier to and customer of the electrical grid, and have become an integrated part of the grid in San Diego. The NEM agreement signed by SDG&E did not specify adding additional charges for network use.

¹ Solar In Action, San Diego, California, Solar Cities America, U.S. DOE, September 2011
(www.solaramericacommunities.energy.gov) and Go Solar California
(http://www.californiasolarstatistics.org/reports/locale_stats/)

² California Energy Commission, California Renewable Energy Overview and Programs, April 21, 2011
(<http://www.energy.ca.gov/renewables/>)

SDG&E receives significant financial benefits from the large amount of residential solar PV systems that residents purchased. Net metering allows SDG&E to buy excess electricity from customers at approximately \$0.04 per kWh and sell it for approximately \$0.18 per kWh or more. SDG&E profits from residential customer's PV systems though the electricity generated from one residence flows to the nearest draw, which is usually the neighbor next door. This scenario does not use transmission lines or the wider distribution grid, yet SDG&E profits significantly.

In addition, SDG&E receives major cost reductions and avoided costs from customer PV systems. Residential PV systems represent over 30MW of peak generation that SDG&E avoided building. SDG&E spends less on maximum power ratings for transmission and distribution lines since the electricity generated by customer PV systems is transmitted to the nearest neighbors. These lower costs for SDG&E come at the expense of customers that decide to install PV systems.

Impact

The proposed "network use charge" by SDG&E will make residential investment in PV systems more expensive for San Diegans. The proposed rate increase is outside the agreement signed by SDG&E with PV system customers, and will decrease the value and incentives for residents to purchase PV systems. This threatens the regional leadership and statewide ability to meet CEC targets for renewable energy generation.

SDG&E has already received over \$1.2 million from the CEC to invest in power storage and other grid improvements³. SDG&E also receives financial benefit from net-metering agreements. SDG&E has invested in smart meters and grid control infrastructure to make residential PV panel scalable across their territory, and this cost is recovered through the meter fee. The "network use charge" appears to have significant financial benefit to SDG&E without a clear explanation of the costs to SDG&E or the benefits to customers with PV systems.

It is not clear what new benefit is being received from the "network use charge". SDG&E customers with PV systems benefit from the electrical grid because the grid acts as a battery for their PV panels, allowing those customers to offload unused electrical power during the day and use the electrical power from the grid at night. Customers already pay for this benefit through the net metering pricing and meter fees.

Conclusion

SDRES recommends that the CPUC reject the "network use charge" proposal from SDG&E.

SDRES further recommends that the CPUC and CEC undertake a definitive study to quantify the costs on both the utility and customer sides, and only adjust rates to reflect the associated costs and benefits to each side. Customers that invest in PV systems should not subsidize SDG&E, and likewise SDG&E should not incur real costs that are not covered by their existing charges.

³ Energy Commission Awards SDG&E \$1.2 Million for Research into plug-in electric vehicles and energy storage, Sept 2011 (http://www.energy.ca.gov/releases/2011_releases/2011-09-23_SDGE_Award_nr.html)