Sebastopol Smart Meter Proposal

From the Energy Subcommittee May 2, 2021

Action Item: The Sebastopol Climate Action Committee recommends that the City of Sebastopol send the following request to PG&E:

Many PG&E customers in the city of Sebastopol have requested that SmartMeters be installed with their utility service. The City of Sebastopol would like PG&E to comply with the requests of those customers asking for this change to their service.

Due to the safety concerns of some Sebastopol citizens, the City of Sebastopol instituted a moratorium on new SmartMeeters in 2013. This moratorium was subsequently found to be unenforceable due to CPUC rulings which have removed the power to regulate SmartMeter installation by municipalities. Nevertheless, PG&E is currently in a holding pattern when it comes to the installation of SmartMeters. When customers request that they be installed at addresses within city limits, PG&E will not allow it.

Meeting our regional climate goals will be challenging for all cities, but Sebastopol faces an additional obstacle because this moratorium still exists.

It is not the intention of this proposal to mitigate or dispute the safety of SmartMeters. Individuals who are concerned about health effects of EMFs can use the opt-out program or make use of electromagnetic field guards that when installed, claim to block out ninety-eight percent of the EMF radiation.

While the public health effects of SmartMeters remain under-studied, the public health effects of climate change are well-documented and predicted to exponentially increase without rapid decarbonization. SmartMeters are tools that can help lead to lowering greenhouse gas emissions.

Benefits for Climate That Require SmartMeters

The following incentives from Sonoma Clean Power require SmartMeters:

- Heat Pump Water Heaters $700 - $1,000
- Smart Thermostats $50
- Grid Savvy Program $5/monthly bill credit
- Electric Vehicle Chargers $649 - $799

Grid-Savvy Programs Help Reduce Power Shut-off Events if Grid is Overloaded

- Rather than shutting off power to large numbers of consumers, providers can pinpoint non-essential electric use, (for example: dryers).
- Reduces the need for polluting gas powered generators

More Accurate and Comprehensive Reporting

- This has many benefits, including early detection of gas leaks or other issues

Balancing Electric Loads

- Helps electric grid operate more efficiently with less energy going to waste, saving money for customers
- Supports solar at the grid level

Time of Use (TOU) Rate Structure

- In most cases, lowers customer utility bills while helping to balance the loads on the grid

Implementing Efficient Microgrids

- SmartMeters accurately compensate renewable energy providers for providing power to the grid

Please see the appendixes below for more information.

Appendix A

How SmartMeters Work With Peak Load Reduction and Distributed Generation

SmartMeters are tools that can offer tremendous environmental benefits. *Peak load reduction* and *distributed generation* are two critical functions made possible by the control and communications of an appropriately engineered smart grid. These functions help to reduce energy consumption, especially at critical times. They also help to effectively integrate various renewable energy sources such as solar panels and windmills.

Utilities need to manage this fluctuating energy demand with few existing options for power storage. There are no large-scale batteries yet that store the amount of energy required by a city or large utility service area. A utility must have enough energy-producing facilities to meet peak demand quickly, and with enough margin to avoid brownouts.

Imagine a hot day and a complete implementation of SmartMeters with robust communication capability. As demand increases in the morning, smart meters are continuously transmitting real-time usage data to the parent utility. Any points of high consumption are quickly identified.

Equipped with this energy usage data, utilities are beginning to practice time-of-use (TOU) billing. Under TOU, users are charged higher rates for electricity during the evening hours when demand is higher but supply is lower. Consumers, businesses, and even data centers can elect to give the utility, or a third party, limited control of their electrical systems, thus conserving energy and lowering their bills.

Then as temperatures rise, the utilities will remotely adjust the thermostat on air-conditioning units for participating customers. This will save energy, while only slightly raising the temperature in a home or office. The end user will experience minor, automated disruptions in service.

At midday, the utility will have immediate feedback on the quantity and location of renewable energy generated by wind or solar. Described as points of distributed generation, these energy sources provide meaningful power to the grid and can be delivered to the closest point of consumption. By using distributed generation, the utility will activate fewer supplemental generators, which use fuels that are less environmentally friendly than renewable energy.

More accurate data and control mechanisms also let the utility operate with a smaller margin above the actual load. In the future as loads increase even further, electric vehicles plugged into charging stations can automatically be switched to become sources of energy back to the utility.

By the end of the day, this smart grid has reduced the peak load during the highest demand. It saved energy and it helped minimize the need for gas-fired power plants.

Appendix B
SmartMeters in Sebastopol

Sebastopol has taken a precautionary principle approach to SmartMeter installation, resisting automatic installation since 2010. In 2013, the city council adopted a temporary moratorium on SmartMeter installations. Later in 2013, the California Public Utilities Commission ruled that Sebastopol and other cities with similar resolutions lacked the legal authority to prevent SmartMeters from being installed.

In 2019, according to an article in the Sonoma County Gazette, the City of Sebastopol sent a letter to Fircrest Mobile home park management with a copy to PG&E, with a reminder that in 2013 the City of Sebastopol adopted a temporary moratorium on smart meter installations and related equipment.

In 2013**,** according to PG&E spokeswoman Brittany McKannay from an article in Sonoma West Times and News, approximately 7,100 SmartMeters have been installed in Sebastopol so far and 1,100 have so far been opted out. In the greater PG&E service area fewer than one-half of 1 percent of customers have opted out, she added.

Links to local news articles:

2019
https://www.sonomacountygazette.com/sonoma-county-news/city-of-sebastopol-defends-senior-residents-against-pge-smart-meters/

2017
https://www.sonomawest.com/sonoma_west_times_and_news/news/pg-e-smartmeters-installation-on-back-burner/article_c34133e0-2529-11e7-ab90-770b6cf2ab6a.html

https://www.sonomawest.com/sonoma_west_times_and_news/news/pg-e-to-begin-smartmeter-installation/article_f5739672-d2e1-11e6-a0db-0f649ad31fc3.html

2013
https://www.sonomawest.com/sonoma_west_times_and_news/news/smartmeter-ban-bites-county-resident/article_d9861c6c-bda2-11e2-8980-0019bb2963f4.html

https://www.pressdemocrat.com/article/news/pge-to-pay-390000-for-snooping-on-smartmeter-critics/

https://www.sonomawest.com/sonoma_west_times_and_news/news/smartmeter-moratorium-draws-rebuke-from-cpuc/article_56179f2c-8698-11e2-a6a6-0019bb2963f4.html

2012
https://www.pressdemocrat.com/article/news/pge-gets-earful-over-smartmeters-at-santa-rosa- hearing-2/

2010
https://www.sonomawest.com/sonoma_west_times_and_news/news/city-council-rejects-moratorium-on-smartmeters/article_49b55a4a-79e7-526b-a59b-4c7f43e7a818.html