March 18, 2008

Honorable Mike Kerns, Chair Sonoma County Board of Supervisors Sonoma County Administration Building 575 Administration Drive, Room 100A Santa Rosa, CA 95403-2887

Subject: PG&E and Sonoma: A Green Community Partnership

Dear Chair Kerns and Members of the Board of Supervisors:

Like Sonoma County, Pacific Gas and Electric Company (PG&E) recognizes that the potential consequences of climate change are serious and the need for action is urgent. PG&E is committed to proactively taking serious, concrete measures to reduce greenhouse gases and working for the development and implementation of responsible policies. We have pursued opportunities to reduce Green House Gas (GHG) emissions from our operations and have helped our customers do the same. We are also taking a leadership role at both the state and federal levels to advance mandatory caps on GHG emissions.

A logical extension of our commitment is a partnership with the residents, businesses, governments and community organizations in Sonoma County to reduce energy consumption and identify new sources of local green power. Sonoma County is fortunate to have elected leaders such as yourselves and many city council members who share this commitment and who are determined to ensure that Sonoma County is a state, national, and international leader in climate change efforts. It was our pleasure to work with Supervisors Kelley and Brown, Mayor Mackenzie of Rohnert Park, and Councilman Cohen of Sonoma, as well as Sonoma County Water Agency (SCWA) General Manager Poole to forge the components of this joint effort.

Together, PG&E and Sonoma County can develop programs that will help reach GHG reduction goals moving towards a zero net carbon and an economically robust Sonoma County. PG&E would be proud and honored if the County and SCWA were to recognize PG&E as a partner in climate change efforts, especially as it develops the geothermal heat pump program.

Program Summary

Working with the County of Sonoma and its agencies and cities, PG&E will offer its expertise and its resources across a broad range of programs to make Sonoma County a greener place to live and work. Our partnership proposal includes:

- **Offering** design and technical assistance to the Sonoma County Water Agency as it explores the use of geothermal heat pumps.
- **Education** programs for children and adults, such as Solar Schools, energy efficiency initiatives and Solar Workshops.
- **Energy efficiency and incentive** programs for businesses and residents to help reduce energy and water usage in the most cost-effective way possible such as the Embedded Energy Water Program.
- **Encouraging adoption** of PG&E's ClimateSmart program which enables residents and businesses to make the energy they use "climate neutral".
- **Expanding** power production from clean generation sources such as fuel cells, wind turbines, and photovoltaic systems through PG&E's Self-Generation Incentive Program (SGIP), California Solar Initiative (CSI) program and Sonoma's Green Energy Loan program.
- **Transportation** programs to help Sonoma residents understand, evaluate, and implement clean air vehicle technologies.

With this partnership and programs successfully in place, we anticipate achieving GHG reductions that would provide significant progress toward the County's 2015 reduction goal of 322,000 tons for the electric and gas sector. Working together, we can reach our goals of reducing GHG emissions and creating a zero net carbon community.

Sincerely,

Nancy E. McFadden

"I believe climate change, and its implications, is one of the most pressing issues of our time. It is clear that the link between greenhouse gas emissions and the Earth's warming climate is convincing, the potential consequences serious and the need for action urgent ...

Peter Darbee, Chairman, CEO and President, PG&E Corporation speaking at US Climate Action Partnership press conference on January 22, 2007

Current Partnership Efforts to Improve the Quality of Life in Sonoma County

Clean Generation Incentive Programs:

PG&E provides financial incentives to local schools, businesses and residents of Sonoma County who install solar panels and wind turbines that generate clean-on-site renewable energy. The Sonoma County Water Agency is one of 1,500 PG&E customers in Sonoma County that participates in this program. Together, these customers generate 14,700 kilowatts of power, and their renewable energy efforts help prevent about 5,736 tons of GHGs from being released into the atmosphere. PG&E representatives are working with other Sonoma residents and businesses to expand this program.

Energy Efficiency – Audits, Rebates and Incentives:

Energy efficiency is the fastest, most cost-effective way to reduce GHG emissions and combat climate change. PG&E is a national leader in helping our customers and communities do just that, while saving them money at the same time. Trained PG&E personnel visit Sonoma County businesses to audit their heating, cooling and lighting systems as well as their appliances. When visiting low-income customers, PG&E makes energy efficiency improvements on the spot. We also provide rebates to customers who want to upgrade to more energy efficient appliances. Since 2006, PG&E has helped customers save nearly 50 million kilowatt hours of electricity and 356,990 therms of natural gas in Sonoma County. This translates into more than 29,523 tons of GHG emissions avoided, the equivalent of 4,107 cars removed from the road.

Compressed Natural Gas:

Nearly 1,300 tons of harmful emissions were avoided in Sonoma County during 2006, thanks to the use of approximately 935,000 therms of Compressed Natural Gas (CNG). This displaced approximately 696,000 gallons of petroleum. The conveniently located Santa Rosa CNG refueling station on Occidental Road is one of PG&E's 27 operating CNG stations open to the public and one of 36 stations in total. With vehicles readily available, it's clear that CNG is a viable clean alternative fuel.

PG&E is a current partner with Sonoma County Transit which operates a fleet of 45 transit buses that are fueled 100 % by CNG. In 2006 Sonoma County Transit buses displaced 584,008 gallons of diesel fuel. They also avoided 890 tons of GHG's by using CNG; this is equal to taking 124 passenger vehicles off of the road.

CFL Distribution:

PG&E distributed more than 10,000 Compact Fluorescent Bulbs (CFLs) at various community events in Sonoma County in the fall of 2007. If the more than 170,000 households in Sonoma County replaced just one incandescent light bulb with a CFL, this would equate to a reduction in GHG emissions of 2,930 tons a year – or 14,650 tons over five years.

Energy Reduction in Waste Water Treatment Plants:

PG&E seeks to optimize the use of electricity by providing technical support services and incentives to all municipal and industrial water treatment facilities in Sonoma County. The objective here is to promote the installation of energy efficient equipment and better process control. One good example of this program can be found in Petaluma, where PG&E is working with the city to build a new energy efficient wastewater recycling facility on Lakeville Highway. Three major energy efficiency measures are included in the plant design. The total expected electricity savings from this project will be 1.3 million kilowatt hours per year. The energy cost savings for Petaluma will be about \$132,712 per year, and the incentive through PG&E's Savings By Design program will be \$75,000.

Green Grants:

Each year, PG&E makes grants to non-profit organizations to further their work in educating the public about ways to improve the environment and save energy. In 2008, PG&E will continue to provide grants to allow for more education on energy efficiency and environmental responsibility.

<u>New Partnership Programs to Help Sonoma Create a More Sustainable Community and</u> <u>Reach its GHG Reduction Goals</u>

SCWA's Proposed Geothermal Heat Pump Development:

PG&E is very interested in the SCWA's plan for development of ground source heat pump use.

PG&E will provide technical assistance through the Western Energy Cooling Center Institute in Davis and Customer Energy Efficiency Segment Specialists in San Francisco. PG&E will partner with the Sonoma County Water Agency to coordinate and leverage all existing and future self generation, energy efficiency and demand response programs with business park/winery customers. This will include leveraging and coordination of all applicable third party programs for the benefits of the end-use customer.

PG&E will also partner with SCWA to identify any possible sources of grant funding and assist in coordination of these efforts.

Embedded Energy Water Pilot Program:

This innovative pilot program is focused on the connection between water and energy. A limited number of incentives will be available to select commercial customers for saving water. The pilot program targets embedded energy. This is the energy used to transport water from its source; to treat the water and distribute it to consumers; and finally to treat the wastewater and transport it to receiving waters.

Solar Schools:

PG&E's Solar Schools Program is teaching the value of alternative energy by turning school buildings into hands-on science experiments. This award-winning program is making science fun and teaching students how their everyday actions can impact the environment. As part of this program, up to 40 Northern California schools each year will receive donations of a new 1 kilowatt photovoltaic system that converts sunlight into electricity. But more importantly, it serves as a symbol and resource of environmental stewardship and study.

Solar Workshops:

PG&E has a two-hour *Solar Power Basics Workshop* where attendees hear about current marketready solar power technologies and the key steps necessary to own a solar electric system for their home. We would like to bring this workshop to Sonoma by partnering with Sonoma County and/or other local organizations to identify an appropriate venue and market the program to interested residents.

ClimateSmart:

Sonoma residents can neutralize the impact their electricity and natural gas consumption has on global warming through PG&E's ClimateSmart program. Voluntary contributions are invested in a host of environmental projects, including those that restore forests and capture methane gas

from dairy farms. These efforts reduce the amount of carbon dioxide and other GHGs in the air. To ensure the integrity of the program, all of ClimateSmart's GHG reduction projects will be independently audited and verified, registered and retired with the California Climate Action Registry.

Varying levels of GHG emissions could be achieved based on the level of ClimateSmart participation by Sonoma households and businesses. To achieve 100,000 tons of reduction, just 9% of Sonoma households would need to participate.

Solar Water Heating:

PG&E supported AB1470, the Solar Water Heating and Efficiency Act of 2007, which provides incentives to achieve the goal of installing 200,000 solar water heating systems in the state by 2017. As the implementation process for this legislation moves forward, PG&E would like to work with Sonoma County to identify appropriate sites for solar water heating systems and prescreen these sites so that when the program is launched, these sites can be ready to move through the process.

Million Solar Roofs:

As part of California's Million Solar Roofs Program, California has set a goal to create 3,000 megawatts of new, solar-produced electricity by 2017 - moving the state toward a cleaner energy future and helping lower the cost of solar systems for consumers. As part of this initiative, PG&E is pleased to provide financial incentives for solar projects that can be installed on homes or businesses. PG&E expects to provide approximately \$950 million in financial incentives for existing and new homes and businesses. A partnership with Sonoma will help increase knowledge about this program and increase the installation of solar projects.

Sonoma Green Energy Loan Program

PG&E is a supporting sponsor of the new Sonoma County Green Energy Loan program. This is a partnership with the Sonoma County Water Agency, First Community Bank, Exchange Bank, North Coast Bank, Sonoma National Bank, North Bay Corporation, Environmental Technology Center, Freidman Brothers and Climate Protection Campaign. This is a program where people can apply for a Green Energy Loan (GEL) with a participating lender, review their historic energy and water use, have a performance audit and GEL audit of their home, have an energy retrofit which could include both Photovoltaic and solar thermal, and then track their carbon footprint reduction.

Green Fleet Partnership

PG&E is proposing a continuing partnership with the County of Sonoma and its cities on developing a plan to green their fleets. PG&E has worked local government agencies of Sonoma County (including Sebastopol, Santa Rosa and Windsor Unified School District) to add CNG vehicles to their fleets to reduce emissions. PG&E will continue to support those who have already adopted alternative fuel vehicles in their fleet by aiding them to look at other ways to green their fleet. For the other cities that are not currently operating alternative fuel vehicles, PG&E is proposing a partnership to help develop a plan to green their existing fleet. PG&E will

aid the County of Sonoma and its cities to assess their current fleet needs, along with helping the fleets understand and evaluate all alternative fuel technology. In addition, as plug-in hybrid technology is developed in the coming years, PG&E will work with Sonoma County to evaluate the appropriate use of the vehicles that come to market and work to identify sources of funding so the County can secure these vehicles as appropriate.

Other Opportunities

PG&E and SCWA will work together to maximize utilization of LED lighting technology in the County and utilize Smart Meter deployment to maximize energy savings.