# Testimony of Steven L. Kline Vice President, Corporate Environmental and Federal Affairs PG&E Corporation

#### Before the

## Select Committee on Energy Independence and Global Warming United States House of Representatives

Legislative Hearing on "Negawatts: The Role of Efficiency Policies in Climate Legislation"

#### May 8, 2008

Chairman Markey, Ranking Member Sensenbrenner, and Members of the Select Committee, I am very pleased to appear before you this morning to offer my views on the role of energy efficiency policies in climate legislation. I believe climate change 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 sufficient to warrant an aggressive response, as the potential consequences are serious and the need for action urgent.

PG&E Corporation is an energy holding company headquartered in San Francisco, California and the parent company of Pacific Gas and Electric Company. Pacific Gas and Electric Company is California's largest utility, providing electric and natural gas service to more than 15 million people throughout northern and central California. PG&E is a recognized leader in energy efficiency and has among the cleanest mix of electric power of any utility in the country.

Our work on energy efficiency and support of clean generating technologies is part of a broad portfolio designed to provide advanced energy solutions for our customers.

Through technology and innovation we help our customers to meet their energy needs, while providing unique opportunities for them to manage their energy use, reduce costs, promote new technologies and address climate change.

### Energy Efficiency Must be a Frontline Response to Address Global Warming

Existing energy efficiency technologies can dramatically and quickly help the U.S. to slow and stop current emissions trends and do so in a way that will increase the overall productivity and efficiency of the economy. For example, the American Council for an Energy Efficient Economy estimated that the energy efficiency measures focused on the building, residential and commercial sectors included in the Energy Independence and Security Act of 2007 could result in emissions reductions on the order of 250 million metric tons per year by 2030. A McKinsey Global Institute (McKinsey) study of world-wide ghg reduction opportunities concluded that, through energy-efficiency, it is possible to reduce the growth rate of global energy consumption by more than 50 percent over the next 15 years. And McKinsey said this can be done using the technology that is available today. Finally, PG&E was an underwriter of a recent follow-on study undertaken by McKinsey on the potential for energy efficiency savings in the U.S. The study found that energy efficiency improvements in residential and commercial buildings (including the appliances inside) make up the largest cluster of negative-cost greenhouse gas abatement opportunities, on the order of 710 megatons annually. Most improvements use existing technologies; 70 percent (500 megatons) are available before 2020. Together, these opportunities could offset 70 percent of the incremental power load forecast in McKinsey's reference case forestalling the need to build many new power plants projected through 2030.

These important abatement opportunities represent potential opportunities, however, meaning that regulatory and market barriers exist to realizing this potential. This is why the hearing today is so important, as there are significant ways by which Congress can facilitate these efforts.

For example, in its recommendations to Congress as part of a comprehensive climate policy, the United States Climate Action Partnership (USCAP), of which PG&E is a founding member, provided a listing of policies that could complement a federal climate bill, including the following:

 Aligning financial and regulatory incentives with utilities' business interests to pursue energy efficiency;

- Developing and implementing stronger energy efficiency codes and standards for whole buildings and for equipment and appliances;
- Providing incentives and reforming tax policies to facilitate deployment of, and advance the
  infrastructure necessary to support, new "smart" and highly-efficient technologies and
  distributed generation; and
- Creating incentives to go beyond existing standards to produce additional energy savings.

For convenience, attached please find the USCAP recommendations for energy efficiency.

Comprehensive climate change legislation can also utilize emissions allowance allocations and auction revenues to advance energy efficiency and dismantle market and regulatory barriers. For example, the Lieberman-Warner Climate Security Act, as reported from the Senate Environment and Public Works Committee, uses allowances and auction revenues in this manner. The bill includes numerous provisions that provide significant incentives for states, utilities, manufacturers and consumers to aggressively pursue energy efficiency, such as: providing incentives for states to pursue policies that "decouple" electric utility revenues from sales and implement aggressive building codes and standards; targeting of auction revenues to "buy-down" costs of new energy efficient end-use technologies; and providing allowances to load serving entities for the amount of electricity their customers save

#### California and Energy Efficiency

California has been a leader in energy efficiency for more than three decades. Consistent and dedicated efforts by policy makers and utilities to increase energy efficiency in the state have achieved remarkable results. Moreover, the state's *per capita* electricity consumption has remained flat over the last three decades, while *per capita* electricity consumption for the United States during the same period has increased by approximately 50 percent.

Over the next several years, California is poised to build on this success by meeting approximately one half of its expected growth in electricity demand through energy efficiency. PG&E expects to meet this aggressive goal and will do so through a variety of measures and programs, which are supported by established regulatory structures and other efforts.

The following summarizes what has helped California be successful to date, as well as what PG&E is doing to achieve these aggressive energy efficiency goals going forward:

A supportive regulatory structure and environment. Many rate designs create financial disincentives for utilities to promote energy efficiency. California's model of "decoupling" removes these disincentives: utility revenues and earnings are independent of actual energy sales. Decoupling eliminates the financial incentives that are found in some state regulatory schemes for selling ever-increasing amounts of energy (i.e., the financial incentives are "coupled" with growth in power sales). Under California's decoupling framework, the state's utilities collect no more and no less than the revenues necessary to run their business and provide a fair return to shareholders. If sales rise above these levels, the extra revenues go back to customers, rather than to the bottom line of the company; if sales fall below intended levels, utilities are assured they can recover the shortfall going forward. Energy efficiency goals can be achieved even more effectively if decoupling is combined with incentives that help motivate utilities to promote and embrace energy efficiency and put it on par with similar investment opportunities, such as building new generating facilities. California pioneered such incentives in the 1990's, and has recently adopted a system whereby utilities' shareholders can earn if the company delivers real energy savings to customers

In addition to properly aligning incentives for utilities, California has recognized the need for long-term commitment to energy efficiency and has established a consistent regulatory environment for the development and support of leading energy efficiency efforts. For example, California's current cycle for program development and investment is three-years. By providing PG&E with a three-year energy savings target and the authority to fund these efforts over this time period, we are able to establish programs and measures, and engage

with customers on some high-value efforts that have longer lead-times. We are also working on provisions for the next funding cycle that will allow us to work with customers who are designing new facilities many years in the future. By making commitments to enhanced energy efficiency early in the design process, customers can have assurance that the incentives will be available to them even though construction will be completed several years in the future. One example is the expected longer lead-time reconstruction of a significant number of California hospitals.

By having an established savings target and consistent level of funding over multiple years, we are also able to work with manufacturers and distributors of products and energy efficient equipment, because we can make multi-year commitments to support commercialization and deployment efforts.

And, finally, California has put significant emphasis on developing evaluation, monitoring and verification (EM&V) programs to track and account for these savings. California is continuing to refine EM&V methodologies to be transparent, consistent and understandable, and to further acceptance of energy efficiency investments by customers and utility shareholders.

• Partnerships with other utilities, regulators, customers, and other stakeholders. California's success with energy efficiency is the result of a cooperative working environment at all levels. For example, PG&E has partnered with local governments to help them reduce energy usage, save money, achieve environmental goals and provide additional community benefits. One example is our partnership with Sonoma County, which established the Sonoma County Energy Watch Partnership. Through this program, which is one of 22 local and statewide partnerships throughout our service area, PG&E will work with county representatives to improve energy efficiency and reduce greenhouse gas emissions from residences, schools, colleges, retail stores, office buildings, the high-tech sector and agricultural interests. Some of the key activities include facilitating "building tune ups," supporting energy efficiency retrofits in wastewater and water treatment facilities, conducting outreach to realtors and

home inspectors to use inspections to identify energy saving opportunities, and conducting targeted energy audits, outreach, and training.

- Efficiency improvements in building codes and appliance standards. Approximately half of the energy savings achieved over the past three decades in California are the result of the State's aggressive building codes and energy efficiency standards for end-use equipment and appliances. These codes and standards provide the foundation for all other energy efficiency efforts and serve as a platform from which new technologies, programs and practices are established. PG&E has dedicated employees that support the efforts of the California Energy Commission, the U.S. EPA's EnergyStar Program and others through our Codes and Standards Enhancement program. The program advocates the inclusion of energy-efficiency measures in state codes for buildings and appliances and conducts studies that assess the costs and benefits of the proposed changes.
- Including manufacturers and distributors in efficiency efforts. PG&E works directly with manufacturers of energy efficient products and equipment as well as distributors to help develop and commercialize energy-efficient technologies. PG&E will use part of the nearly \$1 billion we will spend to support our energy efficiency efforts through 2008 to "buy-down" the costs of these products and equipment prior to them reaching the mass market. For example, PG&E works with both the manufactures of compact-fluorescent lamps (CFLs) as well as the retail outlets, such as Costco Wholesale Corporation, that sell the product to reduce the price paid by the consumer at the time of purchase. This helps to simplify the process for the consumer and make these highly-efficient bulbs more competitive. As a result of these efforts, we expect as many as 20 million CFLs to be purchased this year in our service area alone.

In addition to working to advance the market penetration of existing energy efficient products, PG&E operates an Emerging Technologies program to accelerate commercialization of new energy-efficient technologies. The program identifies promising technologies for PG&E to promote to our customers by screening and assessing newly-commercialized technologies, and identifying and establishing channels to deploy these new

energy efficiency solutions. With a \$3.7 million annual budget, PG&E's Emerging Technologies program is targeting more than 50 technologies, including light dimming fixtures for commercial building stairwells that go to full brightness when someone enters the stairwell, energy-efficient desktop computer power supplies, automated power management for commercial buildings and energy-saving cooling systems for computer data centers.

• Creating targeted customer programs, outreach and education efforts. PG&E has 85 dedicated energy efficiency programs and hundreds of measures available to provide energy solutions to our customers. This allows us to create targeted energy solutions that meet our customers' needs and maximize energy saving opportunities. These programs are segmented by customer class and type and supported by professionals knowledgeable about the customer segment being targeted. Some examples of programs and measures include comprehensive energy audits for industrial customers, refrigerator recycling programs for residential customers to facilitate deployment of more energy-efficient products, financial incentive programs for virtualization projects in data centers, air conditioner refrigerant charge and air flow checks for residential and small commercial customers in air-conditioning-intensive regions of our service area, and design assistance and incentives for refrigerated warehouses and other aspects of the agricultural and food processing sector.

In addition to these targeted programs, we work closely with the other utilities in California, state and federal agencies, energy efficiency and environmental groups, manufacturers and retailers, and other stakeholders to educate our customers about the environmental and cost-savings benefits of energy efficiency and the programs available to help customers. An aggressive education and outreach program is critical to overall success, as we must work closely with our customers and provide them with the necessary information so that they can make informed choices. We conduct these education and outreach efforts in multiple languages to ensure that all of our customers are able to participate fully and realize the benefits of these programs and measures.

#### The Time Is Now

Our country has a historic opportunity to change the way we produce and use energy in ways that will lower the threat of climate change, improve our environment and benefit our economy. Doing this will require a cooperation at all levels of government and a change in the practices and policies of the past. Being more energy efficient, more energy independent and advancing technologies that will be needed around the world is not only achievable, but also imperative if we are to successfully address global warming and have the U.S. regain its leadership position in the international community. PG&E is committed to being a pragmatic, responsible participant in this effort and looks forward to Congress building on the solid foundation of the Energy Independence and Security Act of 2007.

On behalf of PG&E, I want to thank you for the opportunity provided today. I appreciate the commitment of this Committee to advancing energy efficiency as a priority resource and addressing global warming.

Thank you.

###