

## SDG&E TO TEST INNOVATIVE WATER-SUSPENDED SOLAR POWER TECHNOLOGY

### Increased Efficiencies, Reduced Costs Expected

SAN DIEGO, Oct. 23, 2009 – San Diego Gas & Electric (SDG&E) today announced it has joined with Pyron Solar of San Diego to test an advanced concentrated solar-power system that floats in a shallow pool of water and is expected to generate electricity at higher efficiencies and lower costs than conventional flat-panel photovoltaic systems.

The objective of the 18-month demonstration project is to validate the technology for potential broad commercial applications.

Now being installed at SDG&E's Mission Control/Skills Training Center in Mission Valley, the technology utilizes acrylic lenses and a dual-tracking system floating in water to concentrate the sun's rays and focus the sunlight on a proprietary glass optic. The glass optic spreads the sunlight evenly over advanced photovoltaic cells to generate electricity.

According to Pyron Solar, the new technology has the potential to cut solar power costs by more than half, as compared with typical commercial rooftop flat-panel photovoltaic systems. The savings are due, in part, to the use of concentrating optical devices, rather than more expensive semi-conductor material. Water is used as a passive coolant to disperse the heat generated by the photovoltaic cells to prevent overheating of critical system components and for increased efficiencies.

When fully operational later this year, the resulting 20 kilowatts of solar-generated electricity will be used to help power SDG&E's Mission Control/Skills Training Center.

Today's announcement is another step forward in SDG&E's plan to develop green technologies, meet its renewable energy goals and reduce greenhouse-gas emissions. Since July 2008, SDG&E has announced plans for San Diego's largest solar power initiative; added 1 megawatt of clean energy to the San Diego region through its Sustainable Communities projects and voluntarily agreed to become the first California utility to have 33 percent of its portfolio from renewables by 2020.

-more-

## **SDG&E to Test Innovative Water-suspended Solar Power Technology /Page 2**

“The increased use of renewable energy is critical to meeting the state’s environmental goals and San Diego is at the forefront of solar and other green technology development,” said Hal D. Snyder, vice president of customer solutions for SDG&E. “We are excited about the potential of this advanced solar system to provide cost savings, sustainable energy and lead to the creation of green jobs at commercialization.”

The Pyron Solar HE Optics System is designed for large-scale users such as utilities, industrial customers, universities and military bases. The system is meant to be installed on the ground, rather than on rooftops, to reduce susceptibility to extreme weather conditions and earthquakes. According to Pyron Solar, the concentrated solar-power system could produce nearly twice the electricity of conventional flat-panel photovoltaic systems.

“We are very excited to have the opportunity to install Pyron Solar’s first beta system in the United States in partnership with San Diego Gas & Electric,” said Stephanie Rosenthal, Pyron Solar’s president and chief operating officer. “This is a major step towards the commercialization of our solar power generator that we believe will be a leader in providing large scale solar installations as an efficient and cost-effective source of renewable power.”

SDG&E is a regulated public utility that provides safe and reliable energy service to 3.4 million consumers through 1.4 million electric meters and more than 840,000 natural gas meters in San Diego and southern Orange counties. The utility’s area spans 4,100 square miles. Exceptional customer service is a priority of SDG&E as it seeks to enhance the region’s quality of life. SDG&E is a subsidiary of Sempra Energy (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego.

###