



NEWS RELEASE ◦ For Immediate Release
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PYRON SOLAR ACHIEVES MILESTONE FOR ITS FLOATING CPV POWER PRODUCTION SYSTEM AT PROTOTYPE TEST SITE

Pyron's power-producing solar system reaches 1,200 suns at cell level

SAN DIEGO, CA. – The world's first full-scale installation for Pyron Solar's (www.pyronsolar.com) unique concentrated photovoltaic (CPV) solar energy system has achieved a milestone with performance results from a prototype test site that measured the power-production of Pyron's floating CPV system. Pyron Solar's numbers published are significantly stronger than those from any conventional solar technology in the global renewable energy market.

Pyron Solar President Stephanie Rosenthal reported, "The synchronization of our modules to the daily and seasonal movement of the sun and the cooling and balance advantages delivered by our floating power-production arrays demonstrate an output per cell improvement of more than 19 percent over other commercially available CPV systems for utilities and commercial applications. These results confirm Pyron's long-standing belief that our water cooled technology could be a game-changer in large-scale solar energy production."

The Pyron Solar system is producing power from an array of solar cells exposed to highly concentrated sunlight. Large magnifying lenses along with the secondary optic create a flux on the solar cells 1,200 times greater than natural levels - which double the published concentration levels of competitor systems. Achieving high concentration levels while maintaining low cell temperatures is a key technical issue to commercially viable CPV systems. By comparison, most air-cooled CPV systems in the marketplace are generating electricity at around 500-600 suns.

Under contract to San Diego Gas & Electric, Pyron Solar built and is testing its first field prototype system to demonstrate its technology for potential broad commercial applications.

Pyron Solar's proprietary system is suspended in and cooled by water and is specially designed for utility and commercial scale projects. The Pyron low-profile system has been designed to provide an efficient and cost-effective source of renewable power, and can employ potable water or wastewater.

The output of the Pyron Solar system was measured delivering up to 20 watts per cell during standard operating conditions – more than 19 percent greater power per cell than any CPV manufacturer has published to date. Because of the unique cooling properties of the cells' water environment, the solar cells are able to produce electricity from highly concentrated sunlight while being maintained at relatively low operating temperature compared to typical air cooled systems.

During five months of operation, the Pyron system shows continuous readings at targeted power generation levels. In varying weather conditions that included periodic storms and high winds, the Pyron system tracked the sun within +/- 0.25 degrees of accuracy.

“The results show that because the cells are cooled and balanced by their water environment, multi-junction cells perform at an optimal performance level. We are very encouraged to come closer to our goal of delivering electricity for less than 10 cents per kilowatt-hour before incentives. The land usage efficiencies and low-profile design of Pyron's system will produce cost savings to help renewable energy become a cost-competitive and serious alternative to fossil fuels.” Rosenthal said.

A one-megawatt installation of the Pyron Solar system would consist of approximately 50 arrays that can be placed on 3.1 acres – by far the smallest footprint in the CPV industry.

ABOUT PYRON SOLAR

*The key to harnessing the sun's power reliably can be found in **Pyron Solar's** unique and proprietary 20kWp DC CPV generating system with dual axis solar tracking. The system is comprised of one 20 kWp DC floating array whose tracking system in azimuth is driven by a single small 12 Volt DC motor. One array is 15 meters diameter. Pyron has the lowest profile dual axis tracking system in the industry, and accomplishes this by nesting its modules, ideally spaced, on a floating ring array. Several features distinguish the **Pyron Solar System**. The proprietary lens system sets a new standard of excellence. The dual axis tracking system captures the maximum possible sun power regardless of season or time of day. The innovative use of water, with its highly efficient cooling properties, also provides a perfect horizontal solar tracking reference and eliminates potential interruption due to wind or damage from earthquakes. A low-profile, scalable design that also maximizes land use and allows for easy maintenance, positions Pyron Solar as the affordable, reliable, and alternative CPV solution.*