

Solar Technology That Follows The Sun

Solar passively captures the sun's energy with "no" waste or toxic by-products. In just one second, the sun emits more energy than humans have used in the last 10,000 years. To fully harvest this power, solar energy integrators have to find a way to capture as much sunlight as possible. One new type of device can follow the sun from east to west and also from north to south, depending on the time of year.

Solar-powered production is maximized when the solar modules are pointed directly at the sun. However, the sun's position in the sky changes from season to season and through the course of the day as the sun moves across the sky. That's why a device that can change position to keep solar panels focused on the sun as they attempt to capture solar energy will increase production.

One of the latest developments in this field is called a bidirectional solar tracker. Trackers stand approximately four stories tall. They are 45 feet wide and require a 44,000-pound ballasted mounting system. The system is designed so each solar array—the element that captures the sunlight and changes it into electricity—tracks the sun by using a GPS.

Premier Power Renewable Energy, Inc., the first to install these massive trackers in North America, contends that these dual-axis solar trackers make it possible to increase photovoltaic solar energy production by more than 35 percent when compared to fixed installations. The term "photovoltaic" refers to technology that converts sunlight to electricity.

One of the first applications of this technology is in the Delano-Earlimart Irrigation District,



Solar-powered equipment works best when it is pointed toward the sun and can change direction as the sun changes its location.

approximately 56,500 acres located on the east side of California's San Joaquin Valley. The District serves over 400 landowners, with an average farm size of 135 acres. The company has completed the installation of the first two large-scale trackers—the largest technology of this type in the nation.

Premier Power used its "Leave No Trace" installation methodology for this project. These trackers are ballasted and sit on top of the ground. Therefore, Premier Power does not have to dig massive holes in the earth and inject tons of concrete into the earth that would be there for hundreds of years into the future.

This "green" way of installation allows the system to be completely reused and recycled in 40 years and "Leave No Trace" on the Earth's surface.

Premier Power Renewable Energy, Inc. (OTCBB: PPRW) is a leading global provider of small-to large-scale solar-power systems to commercial, agricultural and residential customers throughout North America and Spain. To learn more, visit the Web site at www.premierpower.com.