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Summer 2007: Solar Energy Hits the Major League

The AT&T Park will be first Major League Baseball stadium to sport a photovoltaic solar system when completed in July.

by [Sara Parker, Staff Writer](#)

San Francisco, California [RenewableEnergyAccess.com]

Although modest in terms of its size, the logistics of designing and overseeing a potential 120-kilowatt photovoltaic (PV) solar array for a Major League Baseball (MLB) stadium are a bit trickier than one might think.

First there's the issue of balancing the need to achieve the proper solar access with the baseball park's unique structure and surfaces -- since situating an array in center field is pretty much out of the question. It doesn't help matters that the stadium is the AT&T Park in San Francisco, which means special design consideration for seismic activity in the area has to be taken into account.

Next, custom-fabricated structural steel must be ordered and added to the facility to support the large arrays, scaffolding setup, cranes brought in, and oh, by the way, don't forget there's a ballgame on Tuesday.

"It's quite a challenge logistically even though by today's standards it's still a modest-sized array," said Steven J. Strong, a noted solar advocate, author and the founder of Solar Design Associates.

Strong's Massachusetts-based company was commissioned to design the array and oversee the installation process, which is expected to be completed by the time the MLB All Star Game rolls around in July. The project, a joint partnership between the San Francisco Giants and Pacific Gas and Electric Company (PG&E), will include panels in three areas of the baseball park -- along the Port Walk on McCovey Cove, on a newly erected canopy over the Willie Mays pedestrian ramp, and on the roof of the Giants Building.

After the approximately 590 Sharp solar panels are installed, PG&E will connect the 120 kilowatts (kW) of power generated from the solar array into San Francisco's power grid.

"The score board will also be receiving photovoltaics, which is kind of an exciting addition to the program because it will showcase the technology in a highly visible way -- while also helping to power the scoreboard," said Strong.

The first large-scale PV system installed at a MLB stadium, the project is another sure sign that the U.S. renewable energy industry is slowly but surely making

headway into mainstream consciousness. From last month's Superbowl Championship Game at Dolphin Stadium being powered by 100% renewable energy credits to the Indianapolis 500 race set to run on 100% fuel-grade ethanol in May, partnerships between renewable energy businesses, utility companies and the multi-billion dollar sport industries have been on the rise -- and increasingly publicized -- in 2007.

"We are thrilled to partner with PG&E to bring green power to San Francisco," said Peter Magowan, Giants president and managing general partner during a press conference last week with PG&E CEO Tom King, San Francisco Mayor Gavin Newsom and Giants Executive Vice President Laurence Baer. "Through this partnership, we hope to raise awareness about the importance of using energy wisely and efficiently and about the need to develop and utilize renewable energy sources."

Although the final design concept still needs to be approved by the Giant's organization and the City of San Francisco, which Strong expects to happen within the coming weeks, the biggest challenge will be working around the Giant's home game schedule to ensure the project is completed before July 10th, when the All-Star game will be played at AT&T Park.

"The baseball schedule is the whole driving force. Obviously that takes precedence and we just have to work around it," said Strong, whose company has designed solar arrays for high-profile projects such as the Olympics, White House, Tiger Woods Learning Center and two eco-friendly Wal-Mart stores. "But this is what we do. We are focused on architectural applications that are not just plain vanilla. They all come with some degree of complexity and subsequent challenge."

Since its inception, the Giants have made energy conservation a priority in AT&T Park's design and daily operations. The Park was designed to be an energy efficient facility -- utilizing fluorescent lighting, motion sensor lighting and energy management systems. For example, along with being powered by solar, the new Diamond Vision scoreboard will use 78% less energy than the ballpark's original scoreboard.

"Outdoor stadiums are a natural fit for solar power with the unobstructed, open roofs and natural light. People out in the open air appreciate it, and other cities should follow suit. They should consider using solar power in their stadiums or on any new [municipal] construction project," said Ron Kenedi, vice president of Sharp Solar Energy Solutions Group.

A self-proclaimed baseball and solar "nut", Kenedi notes this isn't the first time that Giants fans have seen Sharp solar panels on display at the stadium. Although a much smaller PV array, a 4.5-kW residential system was installed some years back at an adjoining restaurant with a kiosk in left field that provided information about the potential for solar in the Bay Area.

"That we're now going to be putting a solar system on the stadium is just marvelous to me," said Kenedi, who attended the press conference at AT&T Park last week. "It was amazing to see the mayor, all of the high level officials from PG&E and Peter

Magowen, the Giant's president, all praising solar power. It just made me feel terrific."

For Further Information

- » [Solar Design Associates](#)
- » [Sharp Solar Energy Solutions Group](#)
- » [Pacific Gas and Electric Company \(PG&E\)](#)
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