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## Solis Energy Offers Power Solutions to Bridge Energy Gaps



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**CEOCFO:** *Mr. Reynolds, the first thing I see on the Solis Energy site is "Solis Energy is Power when you need it." Would you please explain?*

**Mr. Reynolds:** Solis Energy is a manufacturer of outdoor power products. We have 3 general categories of products. If no AC grid power is available, we have our solar. If AC power is available, and you are looking for brownout/blackout protection, we have outdoor UPS's or Uninterruptible Power Supplies.

The third, which we sell the most of, is what we call our Power Bridge. Most parking lot lights, and streetlights do not have power during the day, and what the power bridge does is it powers the equipment all the time off a battery. Then at night when the power comes back to the streetlight, it recharges the battery. It is almost like solar in reverse.

**CEOCFO:** *Is the Power Bridge and using a battery a new concept?*

**Mr. Reynolds:** We initially introduced the Power Bridge in 2007. We received several requests for a solution with the Power Bridge's capabilities and a UPS does not serve the bill. There are two main differences. The first is the batteries are cycled daily and the second is the batteries have relatively little time to recharge, versus a traditional UPS which cycles its batteries infrequently and has days or weeks between cycles to recharge. This means that the CPB requires a much more robust charge controller and battery bank to cope with the increased demands.

**CEOCFO:** *What are some of the uses for the Power Bridge?*

**Mr. Reynolds:** The most common uses for it are for security and surveillance, or WiFi in a parking lot. For example, a hospital may want to ensure the safety of their patients entering or exiting the hospital or provide Wifi as an amenity.

We also have several in Hudson River Park in Manhattan, New York, where the city and the park want to ensure the safety of all the citizens while they are using the park; whether it is for jogging, walking a dog or just enjoying the outdoors. The light poles are all on timers, so there was no power there during the day when the park received the majority of its use. Therefore, they installed our devices to be able to power the surveillance cameras as well as the wireless communications to transmit the video.

**CEOCFO:** *Is it typical to offer both solar and battery products, or is that something you have developed at Solis to round out your offerings?*

**Mr. Reynolds:** We initially started as a solar company. To give you a little history of Solis, my background is actually in telecommunications. I was working down in South Florida after the hurricanes had come through in 2004 and while I was down there my son was in middle school and wanted to do a project with solar. We created and kept refining a small solar system to run my computer or his video games. I started telling the folks down where I was working in South Florida what I was doing and as a result they came back and said, "We have some available project money that we may be able to use to put solar on some of our communications equipment. Can you design something for us?"

That particular project did not come to fruition, but it opened our eyes to what the business model was, and we did our first project up in the Central Florida area with solar. About 2 weeks after the install was completed, we had a call from a large radio manufacturer who said, "We are not actually interested in a solar solution, but we have a new radio we are releasing and we need an outdoor UPS for it; an outdoor battery backup system for it. Can you make one for us?" That is essentially how we came to be, from the beginning.

Over the past 15 years we have enhanced, modified, and improved our product suite. What sets our products apart from the competition is that we are known for being rugged and reliable. Our systems are designed for being put into the toughest conditions. We have equipment deployed from the tops of mountains in Canada to the rain forests in Central America, and deserts in the Middle East; pretty much all over the world, although the US is our primary market.

**CEO CFO: *What is the key to having products that will really withstand the elements?***

**Mr. Reynolds:** It is the system design. We use NASA-provided environmental data to predict the worst scenarios the system will experience and use that as our starting point. From a manufacturing perspective, our enclosures are rugged. They are made of aluminum and stainless for durability and corrosion resistance. We also use the best in class, high-end components to build our systems to meet the rigorous needs of the industrial or telecommunications markets.

**"We are committed to developing reliable products that provide solutions to our customers to take control over all their outdoor power requirements. We have developed not only high-quality products, but high-quality relationships with some of the top manufacturers within our industries. We have tens of thousands of systems currently deployed in the field continuously working. In fact, we have many systems that have been up and running in the field for over 10 years and are still powering the devices and doing the role that they were originally designed for. We have been in the business for a while and we intend to stay for the long haul. We have a commitment to, not only our customers, but our partners as well." Robert Reynolds**

**CEO CFO: *What are some of the newer technologies, materials, and ideas that you can take advantage of today?***

**Mr. Reynolds:** One technology that is getting much press is the various battery technologies. There are the traditional rechargeable lead-acid batteries now, along with newer technology that allows for better performance in the temperature extremes as well as variations of lithium batteries. It does not sound very exciting, but from performance and durability, there are quite a few new technologies within the battery space.

Also, solar panels are becoming more and more powerful as time goes on. For example, a few years ago a standard 72 cell solar panel, a common size in our systems, could output about 300 watts of power. Today that same size 72 cell panel can put out closer to 360 watts.

New developments in manufacturing brought about by maker culture, like the proliferation of 3D printing technologies, have allowed us to start using small-scale optimizations in our systems that weren't previously economically viable. For example, we can now produce small runs of custom equipment mounts without having to tool custom molds for injection molding.

**CEO CFO: *As solar keeps getting better and better, how does a company know when they should be jumping in? If you are going to use solar in a project, do you do it now or wait 6 months when there might be something a little bit better?***

**Mr. Reynolds:** While the technologies are on a steady forward march, their development has matured enough that we aren't going to get any of the booms that we had when the solar craze was really kicking off and you'd see dramatic drops in solar prices over the span of a few months. At this point the costs of not having equipment up for several months will likely be far greater than the savings you could see by waiting a few months for the technology to improve.

In this vein, the initiation of a solar or battery project is usually triggered by something to do with one of our technology partners, who are mostly manufacturers of wireless communication equipment, cameras, and sensors. We work closely with our technology partners to make sure that we understand exactly what their equipment needs, so we can make sure that our systems work together flawlessly since power products aren't terribly useful on their own. It doesn't matter how much power my little box can provide if the customer doesn't have any equipment to turn on. So our timelines are usually based more on criteria like "We need the parking lot WiFi radios running before our facility opens in two months" rather than "We are going to start this project once a standard 72 cell panel can provide 390 watts of power."

We typically compete not so much against new technologies as we do against other technologies. Instead of deploying a solar power plant along a fence line of an airport, let us say, an alternative technology may be trenching and pulling power out to that location, which could be extremely expensive. In that case, solar might be a much more cost-effective solution than trenching. In addition, if I need to have a solution up in a short period of time, a solar unit is very quickly deployed. The actual deployment can be done in a couple of hours, whereas trenching power out to a location could take weeks or more.

**CEOCFO:** *Are you known to potential customers? Do they recognize the depth of Solis Energy? How do you reach out? How do you help people understand you are a cut above?*

**Mr. Reynolds:** That is a good question! Within our base markets I believe we are fairly well known. We go through multiple distribution channels, primarily the wholesaler to the integrators to the customers. Going back to the technology partnerships, if we go out and sell a solution, those partnerships enable us to cover the power, cover the communications link, and cover the sensors.

We sell to the customer an actual solution to their problem. That is the way we try going out to market, verses going out and saying, "We have the best solar power plant, buy our solar power plant." Let us face it, no one goes out and just buys a battery backup system to put out on their light pole solely for its aesthetic beauty. It is always there powering another device.

**CEOCFO:** *We came across Solis and your participation in the GSX 2021 trade show. How do you stand out among competitors? Everyone has something they think is good. What have you learned over the years, perhaps, about how to present what you are and what you do?*

**Mr. Reynolds:** I am going to go back to my prior comment about going out and presenting a solution. We had a very successful show and went out and talked about, parking garage safety call boxes, construction site surveillance, and perimeter security of a large industrial site. In our booth, we showed our power solutions to GSX attendees which was very well received. We had representatives from several of our technology partners in the booth with us, showing proven solutions for a successful project design and deployment.

We had in our booth Code Blue Corporation, with an integrated solution with the Solis Energy products for emergency call boxes. We also had an integrated solution with Axis Communications who manufactures cameras, showing security for construction sites along with parking garage type security as well. We had another section within the booth combining with Siklu Communications for their backhaul communications, for high bandwidth communications. And finally, we had Cradlepoint for remote site 5G/LTE communications.

We focus on solving the customer's problems as part of a complete solution. They know that when it comes to designing our part of the solution, we have the relationships and knowledge for the proper design. In addition, they know we have the support from these partners ensuring a proper solution.

**CEOCFO:** *Are you able to ramp up as needed, should a number of projects come your way at the same time?*

**Mr. Reynolds:** Absolutely! We scale quite well, whether it is a single unit or 250 units or 2,000 units. We are able to quickly scale up and down and we have done it. We have numerous successful projects under our belt.

Part of how we do that is our consistent design. When a customer comes to us, they know they are getting a consistent product over and over again; one that is very reliable, and very high quality. That gives us that ability to scale up, scale down, and provide that same level of quality to our customers out there.

**CEOCFO:** *There are many companies to look at; why Solis Energy?*

**Mr. Reynolds:** We are committed to developing reliable products that provide solutions to our customers to take control over all their outdoor power requirements. We have developed not only high-quality products, but high-quality relationships with some of the top manufacturers within our industries that also recommend our products and the solutions that we build together for Solis.

We have tens of thousands of systems currently deployed in the field continuously working. In fact, we have many systems that have been up and running in the field for over 10 years and are still powering the devices and doing the role that they were originally designed for. We have been in the business for a while and we intend to stay for the long haul. We have a commitment to, not only our customers, but our partners as well.

