



Cosmetics company L'Oreal has now achieved 100 percent renewable energy for its U.S. manufacturing plants, thanks to the recent completion of a 1.2-MW solar project near its plant in Arkansas.

By Paul
MacDonald

The L'Oreal Group is all about beauty, being one of the top cosmetics companies in the world. And employees working at the company's manufacturing plant in Arkansas can now see something beautiful in renewable energy: a 1.2-MW solar array right next to the plant.

With another solar power facility at a company plant in Kentucky, L'Oreal has now achieved 100 percent renewable energy for its U.S. manufacturing.

The company has been a long-time leader in solar energy, having been named one of the top 25 companies for U.S. solar capacity by the Solar Energy Industry Association (SEIA).

The solar project in North Little Rock, Arkansas, was developed by Scenic Hill Solar. Blue Oak Energy, a wholly owned subsidiary of Coronal Energy, was the EPC on the project. It has 4,000 SolarWorld solar panels mounted on

NEXTracker single-axis tracking systems on eight acres of land adjacent to the L'Oreal plant. At 1.2 MW, it is the largest commercial solar project in Arkansas and the state's fourth-largest solar project.

Lonnie Smith, senior manager of Distributed Generation for NEXTracker, said the L'Oreal project in Arkansas was exciting for the company as it marked the first application of its Gen 2 self-powered controller system (SPC) on its trackers. Now completely self-contained, the Gen 2 SPC can withstand extreme temperatures.

"And it went without a hitch," says Smith. "We were very excited to get it up and running. We had put a lot of time and effort into developing this next generation of controllers. It all came together very quickly and very well."

NEXTracker worked very closely with Blue Oak Energy on the project, in defining a laydown area and working





with them on procedures. "We wanted to establish best practices on how to lay things out to build the L'Oreal project in the most efficient manner," explained Smith.

Smith said that from NEXTracker's perspective, a key to a successful project is planning.

"Advanced planning is always the biggest part of a project's success," he said. "We get involved at a very early stage with projects and customers, usually three or four months in advance during the design phase. Once the project is ready to go, and the components are on order, we'll do a bit of a kick-off with clients, going through the project from start to finish and identifying any areas of concern that need to be addressed."

Both NEXTracker and Blue Oak Energy have plenty of experience in solar projects. NEXTracker has completed, or is working on, a large number of projects ranging in size from 0.5 MW up to large utility-scale projects. The company has started supplying its advanced single-axis trackers to the largest solar power plant in the Western Hemisphere, a grid-connected project of over 750 megawatts that will deliver energy to northern Mexico under a long-term contract.

Blue Oak brings more than a decade of experience and an extensive portfolio of 1,000-plus MW of operational solar facilities. Its projects span the Americas, and the company has worked with utility companies and permitting agencies in 43 states.

Mark Brill, project manager on the L'Oreal solar project for Blue Oak Energy, said that they talked directly with the CEO of Scenic Hill Solar, Bill Halter, about the project and put together a proposal to do the EPC work.

to page 14

MORE CHOICES, MORE VALUE.

WHAT'S IN YOUR LAMINATOR?

Let Smartech help you find the best diaphragm for your laminator:

- Seamless widths up to 3500mm
- Three different durometers + Steinbach's EVA-resistant Lambran®
- Textured or smooth surfaces

Lower your production costs by choosing quality Steinbach materials.



SmartechOnline.com
704 362 1922



from page 13

"We were a pretty good fit for the L'Oreal project," he says. "Projects of 1 to 5 MW are right in our wheelhouse."

Brill added that Blue Oak Energy has literally done gigawatts of solar project designs and takes pride in tackling some of the most complicated and cutting edge solar project designs in the U.S.

Normally, he explained, they would be involved in any front-end prep or civil work on a project such as the L'Oreal Arkansas solar array.

"But it really was an ideal project site in that it was a relatively flat extra parcel of land that L'Oreal had—before the project. It was being hayed by a local farmer. It really did not need much site prep at all, just setting up a construction entrance and a staging area."

The site and the factory are on the

the south side of I-40, near a major exit. The construction entrance was set up off the frontage road leading to the highway. "So everything was well suited for deliveries," said Brill.

In addition to the NEXTracker system, another highlight of the project was it marked the first use of a 1500-volt string inverter in the U.S., added Brill. Huawei supplied the 1500-volt string inverter.

"The higher voltage was something we found and took to Scenic Hill and to L'Oreal," he said. Both were quick to agree to the new system, once Blue Oak Energy outlined the benefits.

"One of the things we stressed to them is that this is something they could be proud of being involved with, that this technology is helping to move the industry forward." Rather than using technology and components that might leave the project dated in a few years, they are using

Employing advanced planning, and with a best practices construction plan in place, the L'Oreal project was completed quickly. With a 49-day construction schedule, they started the project in mid-January and completed it in early-March.

more cutting edge equipment that keeps the project ahead technology-wise, he says.

As noted, part of what distinguishes Blue Oak Energy is that it works on the more challenging projects. "We don't just follow the pack," explained Brill. "The industry needs to keep innovating to stay relevant, and we do that all the time. I think moving to the 1500-volt string inverter is a good example of that, and something that we were able to bring to the project."

That approach has been encouraged and supported since Coronal Energy's initial investment in Blue Oak Energy in 2015. The acquisition led to Blue Oak Energy expanding services, enabling customers to achieve their renewable energy goals.

With advanced planning, and a best practices construction plan in place, the L'Oreal project was completed quickly—with a 49-day construction schedule, they started in mid-January and completed the project in early-March.

"By all metrics, the project was a success," says Brill.

Assisting Blue Oak Energy were two regional contractors, B & K Electrical Contractors of Bryant, Arkansas, and Sunshine Solar of Marietta, Georgia.

ESA
ENERGY STORAGE
28TH ANNUAL CONFERENCE & EXPO

April 18-20, 2018
Hynes Convention Center | Boston, MA

Energy storage is **Proven. Ready for Business** and the 28th Annual Energy Storage Association Conference and Expo (#ESACon18) is where that business happens. See what the buzz is all about at the most influential event in the industry!

Save 10% with code SPONFRNDAC18 and REGISTER NOW at
www.energystorage.org/readyforbusiness

One change on the project from the original specs involved the steel posts supporting the tracking system. Geotech work revealed a subsurface clay seam that required lengthening the steel posts by six feet. As a result, exterior posts were 20 feet and interior posts were 18 feet.

The biggest challenge to the project, though, was weather. "It rained early—and frequently," Brill reports. "Basically, it was a grass field with a clay base. Driving on the grass once was OK, driving twice was sort of OK. But driving three times, well, the grass went away, and it turned into a really large mud pit."

The site being flat was helpful in terms of construction, but less helpful in terms of water drainage—especially when it was raining every second day. "There really was nowhere for the rainwater to go," says Brill.

Blue Oak Energy employed a few techniques meeting environmental requirements to deal with the wet conditions, including building roads with timber lags, pulling down straw, smoothing out ruts and, in certain spots, putting down gravel.

"I think the lesson learned is that when you are working in this part of the country, and you're working in winter, it's good to plan ahead for more gravel road."

Brill said the cooperation and input Blue Oak Energy received from L'Oreal and Bill Halter of Scenic Hill Solar was instrumental in the successful construction of the solar project. "I can't say enough about their support," he added. "Both were completely invested in this project. The L'Oreal people, almost on a daily basis, went out of their way to make this project a success."

The project's developer, Scenic Hill Solar, may be relatively new to the solar industry, having been set up in 2015, but it brings plenty of management heft. Bill Halter, CEO of Scenic Hill Solar, has led business and government organizations in Arkansas and Washington, DC, having served as lieutenant governor of Arkansas, chief operating officer of the Social Security Administration, in the White House Budget Office, as a trustee of Stanford University, and on the board of directors of 12 technology companies (five of which were public companies with a market capitalization of over \$20 billion).

Halter noted that some parts of

the project changed as it proceeded, but added that Scenic Hill Solar is flexible to deal with such changes.

"Initially, the thought was that Scenic Hill was going to own the solar project and provide power under a long-term contract. But L'Oreal became more interested in owning the assets outright, with us building it for them and providing operations and maintenance for them under a long-term contract—so we just pivoted to meet their needs."

Halter said a big part of the business approach at Scenic Hill is their focus on the customer. "We are always trying to focus on what our clients want and not just one thing. Some clients are more focused on the environmental aspects, some on energy price stability, and others being on the forefront of technology."

"We try to listen very carefully to what our clients' overarching goals and priorities are, and only then do we put together the solar power project that is honed on those objectives."

Halter said Scenic Hill took great pride in the project and worked to involve the community and the com-

pany's employees. Scenic Hill made charitable contributions in the names of L'Oreal employees to a total of 66 different local charities in North Little Rock.

There were a total of 562 I-beams driven into the soil to support the trackers and solar panels. In a neat twist, Scenic Hill put the name of individual L'Oreal employees on the I-beams. At the official opening, employees were posing beside "their" beams to get their pictures taken.


Halter said he is very proud of the project, and the fact that it features cutting edge solar components, such as the new NEXTracker and Huawei equipment, and American-manufactured solar panels from SolarWorld.

"It really was a great project—and it is now over-producing electricity, turning out eight percent more power than it was contracted for."

"Overall, we see solar projects as a triple win—it's a good business to be in, it's good for the customer, and good for the environment." And solar projects can be a thing of beauty for companies such as L'Oreal. **e**

VISIT US AT
 THE 2018 AIA
SOLARPOWER
 CONVENTION
 SAN DIEGO CONVENTION CENTER
 MAR 27-28

THERE'S A LOT OF LIFE IN ONE BATTERY.



Rolls
BATTERY ENGINEERING

YOUR RELIABLE OFF-GRID SOLUTION.
 PREMIUM DEEP CYCLE FLOODED AND MAINTENANCE FREE
 AGM & GEL

ROLLSBATTERY.COM