NEXTera ENERGY RESOURCES

Case Study

UC Irvine Increases On-Campus Solar Production Fourfold

In 2013, the University of California announced a bold new goal to be the first major university system to end its reliance on fossil fuels for all of its buildings and vehicles. The 10 UC campuses are implementing renewable energy and efficiency programs designed to achieve carbon-neutrality by 2025. UC Irvine has made on-site solar a major part of that initiative.

With more than 30,000 students and 192 degree programs, UC Irvine is known for academic achievement, premier research and innovation. On-site solar energy has become a major part of its commitment to UC's system-wide goal to become emissions-free. In 2014, the UC Irvine campus already was producing a little more than 1 megawatt (MW) of solar energy from three on-site installations when it decided to quadruple that amount by adding 11,700 solar panels to three rooftop parking structures.

Solar Systems Provide Shaded Parking and Emissions-Free Electricity

Working with a subsidiary of NextEra Energy Resources, UC Irvine:

- installed three solar-powered parking structures totaling 3.2 MW of solar energy at no upfront cost to the university;
- receives pricing below what UC Irvine would expect to pay a utility for electricity;
- protects the university from future electricity cost volatility;
- provides shaded parking for students, staff and visitors; and
- furthered its commitment to UC's carbon-neutrality goal.

Completed in 2014 and 2015, the system consists of three solar photovoltaic (PV) arrays on the rooftops of the university's Social Science, Student Center and Mesa Parking Structures. The roof-mounted systems were installed under a 25-year Power Purchase Agreement at no upfront cost to UC Irvine.

"We are pleased to be adding more renewable resources to our campus energy infrastructure in support of the University of California's goal of carbon neutrality by 2025."

– Wendell Brase
Vice Chancellor for administrative and business services
University of California, Irvine

Project Highlights

- Location: Irvine, Calif.
- 3.2-MW system on three rooftops
- 11,700 solar modules
- Cantilevered design extends beyond the perimeters of the parking structures, increasing production by as much as 8 percent
- Enough to power the equivalent of 1,800 homes
- The equivalent of 1,500 metric tons of carbon dioxide offset annually
- The equivalent of taking 320 cars off the road