Solar Farm Project

SOLAR FARM

The 5.87 megawatt (MW) Solar Farm will increase the generation of renewable energy on campus and help meet goals outlined in the Illinois Climate Action Plan (iCAP).

The Solar Farm will produce an estimated 7.86 million kilowatt-hours (kWh) the first year or approximately 2% of the electrical demand for the Urbana campus based upon usage projections for fiscal year 2015.

PROJECT SPECIFICS:

Phoenix Solar South Farms, LLC will implement this project which includes:

- A 10-year power purchase agreement with Phoenix Solar, who will design, build, operate, and maintain the Solar Farm
- A 10-year land lease agreement of $1 per year
- Delivering all electricity produced to the campus grid
- University ownership of all renewable energy attributes

PROJECT LOCATION:

The site is on 20.8 acres, located along the south side of Windsor Road between First Street and the railroad tracks, to the west of the existing pond (see map at right).

ARRAY DETAILS:

System size (kwp dc): 5,873.28
Module type: crystalline
Module wattage: 305/310
Module dimensions (in): 39.1 x 77
Modules per string: 19
Total strings: 1,008
Total modules: 12,768/6,384
Module tilt (deg): 20
Module orientation: 2-up portrait
Inverter type: Power-One 1,560 kWAC
Total inverters: 3
Array azimuth (deg): 180
Ground coverage ratio (%): 60

PROJECT LEAD:

Kent Reifsteck, Director
Utilities & Energy Services

PROJECT CONTACT:

Morgan Johnston
Director of Sustainability, F&S

PROJECT TIMELINE:

Request for Proposal Publication:
February 2012

Board of Trustees Approval:
November 2012

State Approval of Award:
March 2014

State Approval of Agreements:
December 2014

Substantial Completion:
December 2015

University Ownership: 2025

MEDIA CONTACT

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Facilities & Services
UNIVERSITY OF ILLINOIS AT URBANA CHAMPAIGN

SOLAR FARM FREQUENTLY ASKED QUESTIONS

How much will this project cost?
The total cost of the project is estimated at $15.5M over 20 years, which represents a $5.3M premium for clean energy ($1.05M provided from the Student Sustainability Committee and $4.25M from the Campus Utilities Budget).

What is the lifespan for the type of solar panels to be used at the solar farm?
Solar energy researchers on campus estimate that the solar panels will continue to collect energy for up to 40 years.

Who will use the power from the solar farm?
All of the electricity generated by the solar farm will be used by the Urbana campus. The university also will own/receive any and all current or future Renewable Energy Credits (RECs) and emissions credits associated with energy from this project.

Are there any risks or dangers living near a solar farm? Will the panels be any kind of nuisance?
No. Solar PV panels are one of the least intrusive and cleanest forms of power generation available. Their heights vary from 6-to-12 feet above ground, lower than typical cornstalks. The panels are engineered to absorb light, rather than reflect it, in order to maximize energy output. They're covered in a dark, absorptive coating that enables them to gather as much of the available light spectrum as possible. These panels also will not noticeably affect the ambient temperature of the area. Following construction of the solar farm, including a security fence, general maintenance will be performed by the contractor and there will be limited on-site traffic.

What measures will be taken to protect the herons and other wildlife that visit or live on the property?
The university completed an Ecological Compliance Assessment Tool (EcoCAT) review request through the Illinois Environmental Protection Agency and will utilize the best methods to protect native and migratory species on the property, including birds and animals. The university will comply with all state and federal laws.