

I ILLINOIS
Facilities & Services

Solar Farm 2.0 Request for Proposals

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SOLAR FARM 2.0 PRESENTATION
REQUEST FOR PROPOSALS (RFP) PRE-CONFERENCE MEETING
MARCH 14, 2019

DR. MOHAMED ATTALLA, MBA, P.ENG
EXECUTIVE DIRECTOR, FACILITIES & SERVICES

Agenda

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INTRODUCE UNIVERSITY TEAM MEMBERS

SOLAR FARM 2.0 RFP

QUESTIONS AND ANSWERS

SITE VISIT

(THERE IS A BUS FROM NORTH SIDE OF THIS BLDG.)

University Team Members

- Facilities & Services (F&S)
- Prairieland Energy, Inc. (PEI)
- University Counsel

Campus Energy System

SOLAR INSTALLATIONS

The Solar Farm produces about two percent of the annual electrical demand of the Urbana-Champaign campus. There also are small-scale solar installations on rooftops of several campus buildings.



ENERGY MANAGEMENT CONTROL CENTER

Integrated data and control systems deliver improved demand and consumption forecasting. The display of building energy systems helps discover inefficiencies, triage problems, and dispatch corrective work effectively.



ENERGY MARKET PARTICIPANT

The university purchases about half of the electricity used on campus through Prairieland Energy, Inc.

WIND POWER PURCHASE AGREEMENT

Through 2026, the university is purchasing approximately seven percent of its annual electrical demand from Rail Splitter Wind Farm, LLC



CAMPUS ELECTRICAL DISTRIBUTION SYSTEM

Utilities distribution maintains 58 miles of electrical transmission lines.



ABBOTT POWER PLANT

This state-of-the-art co-generation power plant produces both steam and electricity simultaneously, supplying the majority of energy for campus.

ELECTRICITY

STEAM

CHILLED WATER



CAMPUS CHILLED WATER SYSTEM

Regional chilled water plants serve a central distribution system which provides cooling for the majority of buildings on the central campus.



THERMAL ENERGY STORAGE TANK

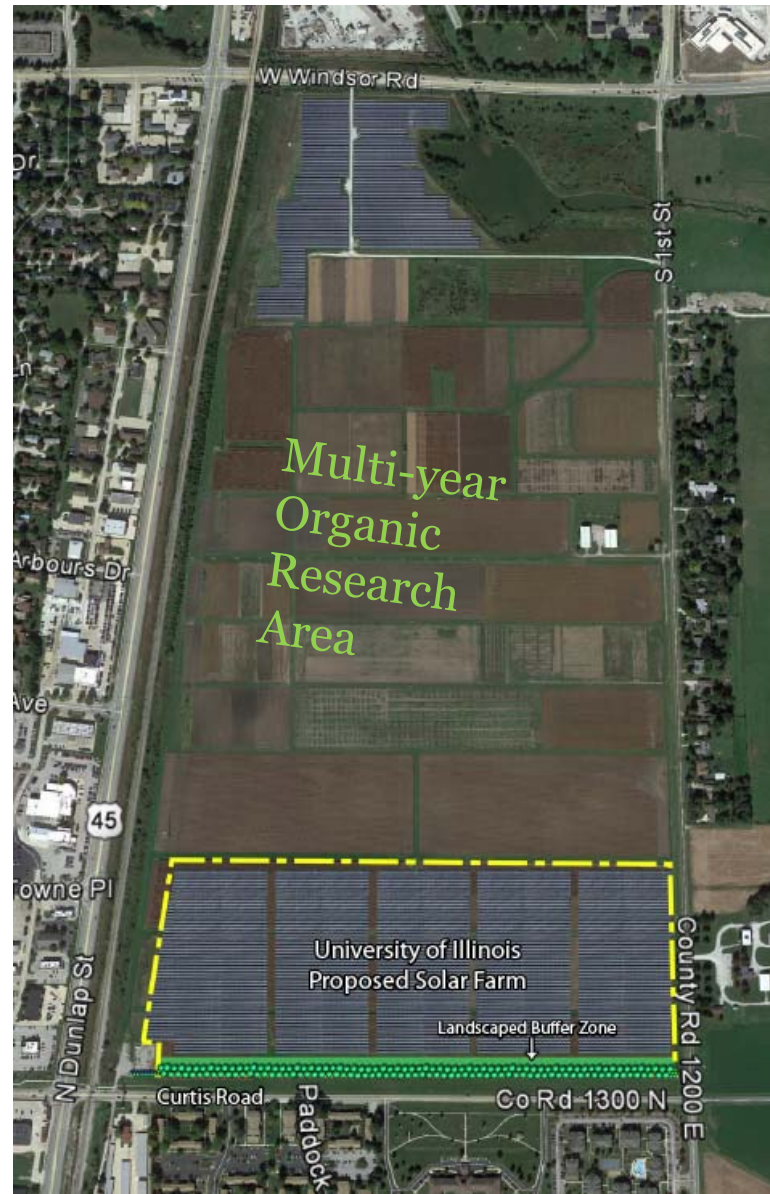
A 6.5 million gallon water tank allows cooling water produced at night (low cost) to be stored and used to serve air conditioning loads during peak demand.



Solar Farm 2.0 RFP

Solar Farm 2.0

- Illinois Climate Action Plan (iCAP)
- Annual Production: at least 18 GWh/year
- 54 acres at Curtis Road
- 10- or 20-year PPA
- \$1.00/year Land Lease Agreement



Solar Farm 2.0 Site Requirements

- University-owned land: site is pre-approved
- If not using the full site, start on the south end.
- Access must be from First Street



Solar Farm 2.0 Pollinator Habitat

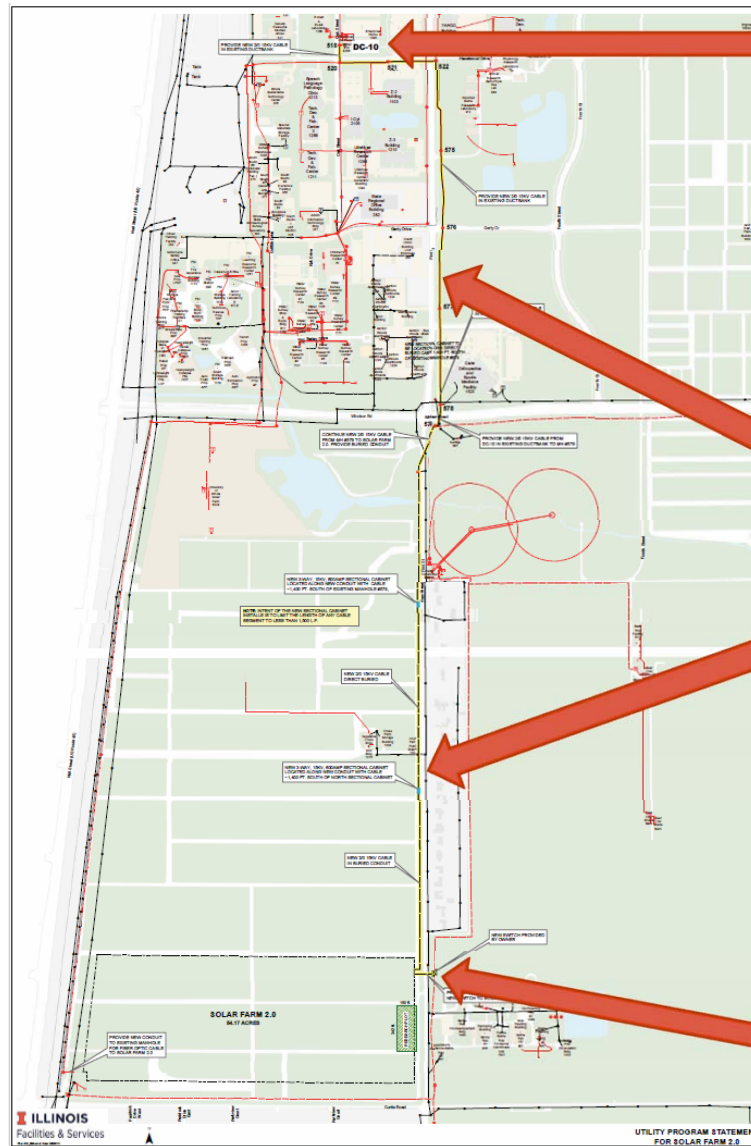
- Vendor shall establish and maintain the specified seed mix:
 - turf type tall fescue,
 - dutch white clover,
 - lanceleaf self-heal, and
 - creeping thyme
- Landscape areas are designed to be maintained with occasional mowing and minor use of chemical weed control.
- Note: Pollinator Scorecard is being finalized

Solar Farm 2.0 Utility Program Statement

- Ameren is not involved
- Delivery connection is directly to campus 13.8 KV system
- No additional “interconnect fee”
- The available circuit can accept up to 435 Amps
- If solar output peak is over 435 A, the vendor must provide a second circuit



Solar Farm 2.0 Utility Program Statement



To DC-10

North
along
First
Street

From Solar
Farm here

Solar Farm 2.0 Additional Specs

- Minimize noise impacts
 - Noise Attenuation
 - Inverters locations
- Revenue-grade meter for custody transfer
- Project Security Fencing
- Preference for blue solar panels
- Drainage tiles are a vital aspect of University South Farms operations – vendor is responsible for restoration if damaged

Solar Farm 2.0 Mandatory Pricing

- Three fixed-price bids as \$/MWh
 1. delivered on site solar farm energy with no Solar Renewable Energy Certificates (RECs)
 2. delivered on site solar farm energy bundled with and including the associated Solar RECs generated on this site
 3. delivered on site solar farm energy that includes alternative REC swaps in an equal quantity as generated on site
- Termination Values
 - Provide a schedule of termination values for each year of the term.
 - Both for a 20-year and a 10-year PPA

Solar Farm 2.0 Optional Pricing

- Buy-Out Options
 - Provide a schedule of buy out options for years 6, 10, and 15.
- Donation Options
 - Indicate availability of donation options for years 6, 10, 15, and 20.

Solar Farm 2.0 Credit Rating

- Minimum credit rating
 - BBB- (Standard & Poor's) or Baa3 (Moody's), and
 - market capitalization of \$500 million
- Can meet this requirement by providing a Parental Company Guaranty from a qualifying parent
- Provide annual report and audited financial statements
 - Most recent fiscal year
 - Include Balance Sheet
 - Include Income Statement



Questions and Answers

Site Visit

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- **GO TO NORTH SIDE OF THIS BUILDING**
 - **THREE BUSES ARE READY FOR US**
- **ONE WILL RETURN WHENEVER THE FIRST GROUP THAT NEEDS TO RETURN**
- **PLEASE DO NOT DRIVE YOURSELF, AS THERE IS VERY LIMITED VEHICLE SPACE**

Thank you

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DR. MOHAMED ATTALLA, MBA, P.ENG

**UNIVERSITY OF ILLINOIS
FACILITIES & SERVICES**

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