

**Jackson County Conservation**  
**Bidding Documents and Specifications - Solar Project**

**Notice to Bidders**

NOTICE IS HEREBY GIVEN: sealed proposals will be accepted for the installation of a solar photovoltaic (PV) array for a property operated by the Jackson County Conservation - Hurstville Interpretive Center located at 18670 63<sup>rd</sup> Street, Maquoketa, Iowa. Sealed proposals must be received no later than March 12, 2021 at 4:00 pm. The envelopes shall be clearly marked “Solar Array Proposals”. Email or faxed copies of proposals will not be accepted.

Proposal packets and questions or clarifications regarding this request for proposal should be directed to:

Jackson County Conservation  
Hurstville Interpretive Center  
18670 63rd St. Maquoketa, IA 52060  
Jessica Wagner, Environmental Education Coordinator  
(563) 652-3783 - [www.jacksonccb.com](http://www.jacksonccb.com)

\*Site assessments should be scheduled with Jessica at Jackson County Conservation at 563-652-3783.

For a full description of the bidding documents and specifications, please email Jessica Wagner at [jess@jacksonccb.com](mailto:jess@jacksonccb.com).

**Timeline**

Date	End Date	Action
	Feb. 13, 2021	Jackson County Conservation releases the RFP
Feb 13, 2021	March 12, 2021	Contractor site assessments scheduled and conducted
	March 12, 2021	Sealed bids are due at the location listed above by 4:00 p.m. (no electronic bids will be accepted)
	March 16, 2021	Bid opening at Jackson County Conservation Board Meeting in Maquoketa, IA.
March 16, 2021	April 15, 2021	Contract negotiation with winning bidder

Jackson County Conservation reserves the right to reject all bids, to waive technicalities or irregularities, abandon the RFP process and to enter into a contract with a vendor if it is deemed to be in the best interest of Jackson County Conservation.

## **Project description**

Engineer, design and install a ground mounted PV solar array based on the criteria listed below including, but not limited to, the following equipment and services; PV modules, inverters, racking, electrical components, fencing, permitting, interconnection, commissioning, monitoring equipment and any necessary site work and any other items necessary to make the array operational.

Jackson County Conservation is requesting 2 proposals for a turn-key PV ground mounted solar array:

1. 46 kW (DC) ground mounted solar array. Please see Attachment A.
2. 33 kW (DC) ground mounted solar array. Please see Attachment A.

Installation shall begin as soon as possible after July 1, 2021 and shall be completed no later than the agreed upon completion date.

## **Project Location**

Jackson County Conservation  
Hurstville Interpretive Center  
18670 63rd St. Maquoketa, IA 52060  
(563) 652-3783  
www.jacksonccb.com

## **Proposal Requirements**

Jackson County Conservation reserves the right to conduct interviews with individual vendors if additional information is required to assess the proposals.

A letter needs to summarize the vendor's proposal on the appropriate letterhead, signed by a qualified representative of the company with the authority to bind the vendor to a contract.

The following information should also be included in the proposal:

- 1) General system design details for the solar array including; nameplate rating, annual production estimate, (kWh), a detailed plot plan of the proposed layout, and an electrical one-line drawing. Any warranties included on the equipment and/or workmanship of the vendor.
- 2) Description of on-going monitoring equipment and/or services provided.
- 3) Detailed pricing quote. Cash price only.
- 4) Brief biographies of key individuals in the vendor's organization including their experience in the solar industry.
- 5) At least 5 references from companies or agencies for which the vendor has provided a similar scope of services for a 33 kW DC ground mounted solar array or above.

- 6) Projected electric utility savings over 25 years are to be calculated using a 2% per year utility inflation rate.

### **Evaluation Criteria**

- 1) Vendor qualifications including project experience, staff experience, project history, customer satisfaction and other preferred credentials listed above, will be scrutinized thoroughly, and play a substantial role in the selection process.
- 2) Pricing will be evaluated on a lifecycle cost basis; however proposed equipment must meet the requirements listed in equipment specifications section of this document. Vendors are encouraged, but not required, to include any financing offers the district may want to consider, including capital leases, power purchase agreements, or other solutions that minimize cost over time. If the vendor chooses to offer this option, a cash price/watt option must also be included.
- 3) Jackson County Conservation reserves the right to award the contract based on the overall value of the proposal including vendor qualifications and price but is not required to select the lowest priced quotation.
- 4) Project timeline for completion and commissioning of solar array.

#### **A. Contractor Qualifications**

1. Contractor is required to provide a full list, and document the qualifications of, all subcontractors they will utilize during the project.
2. Contractor is required to have completed at least 5 projects which are similar in size and nature to the proposed Jackson County Conservation project, (33 kW DC or above), or sufficiently demonstrate an understanding of the change in scale and capacity requirements required to complete the project.
3. Contractor is required to have a current PV Installation or Design Certification by the North American Board of Certified Energy Practitioners (NABCEP).
4. Contractor is required to have a Master Electrician on staff.

#### **B. Scope of Work**

1. Contractor shall be responsible for the design, optimization, specify and furnish the equipment and materials which shall include, but not be limited to, PV modules, inverters, racking, inverter DC wiring harnesses, combiner boxes, and ancillary hardware required to connect and operate listed equipment in a safe, efficient manner.
2. Contractor shall be responsible for project design engineering and drawing packages for permitting, interconnection agreements, installation and “as-built” documentation. Drawings and calculations may be required to be PE stamped once in final form.

3. Contractor shall design and install entire system in accordance with all applicable federal, state, and local ordinances and standards.
4. Contractor shall be responsible for obtaining, and providing to owner, all permits necessary to support construction and project installation.
5. Contractor shall provide documentation of appropriate soil tests. (if necessary)
6. Contractor shall be responsible for project construction including all site work, installation of all components, electrical, mechanical, and monitoring/control systems unless, otherwise noted.
7. Contractor shall be responsible for project and construction management, including quality control with associated documentation, site safety and documentation, site material control and management of all subcontractors.
8. Contractor shall be responsible for the electrical connection (ac) to the point of connection provided on-site and as agreed to by Alliant Energy and as described in the interconnection agreement.
9. Contractor shall be responsible for scheduling all applicable inspections by the proper federal, state, or local agencies.
10. Contractor shall be responsible for project testing and commissioning.
11. Contractor shall be responsible for project turnover including an owner's manual, owner training, and project operations and maintenance documentation.

### **Design Criteria**

1. Contractor shall design to maximize value (lowest Net Present Value Cost of 25 years of production, utilizing a 4% discount rate) for Jackson County Conservation.
2. Contractor may provide a PPA financing option with an identified / qualified investor but must also provide a turnkey cash bid.
3. Contractor shall provide a project energy production estimate using a generally accepted production modeling tool. (PV Watts or similar)
4. Contractor shall design, including electrical (ac), to follow current applicable codes and standards.

### **Equipment Specifications**

1. PV Modules
  - a. Module spec sheet to be included with proposal

- b. Manufactured to ISO 9001 quality and ISO14001:2004 environmental standards, NEC code requirements and UL listing specifications.
  - c. Modules to be warranted with a linear degradation of no more than 2% the first year and .5% each subsequent year for 25 years.
  - d. Modules to be delivered in power tolerance of no worse than -0W and +3W as measured at the factory.
  - e. Modules must be Tier 1 rated. (no exceptions)
  - f. Modules may be used from the following vendors, without the approval of Jackson County Conservation.
    - i. Axitec
    - ii. JA Solar
    - iii. Silfab
    - iv. VSun
2. Inverters
- a. Inverter spec sheet to be included in the proposal.
  - b. Installation must comply with NEC 2017 Code.
  - c. Manufacturer must provide a minimum of a 10-year warranty with an option for an extended warranty of up to 20 years.
  - d. A minimum CEC efficiency rating of 97%.
  - e. UL 1741 listed and IEEE 1547 compliant.
  - f. Inverters may be used from the following vendors without the approval of Jackson County Conservation.
    - i. Solectria
    - ii. SolarEdge
    - iii. Fronius
    - iv. Enphase
3. Racking
- a. Readily available on the open market and have been used in a similar project and with a design life equal to or greater than 25 years.
  - b. Designed and tested to a 100-mph wind load.
  - c. Designed and tested to 20 lbs/sq ft snow load.
  - d. Racking may be used from the following vendors without the approval of Jackson County Conservation.
    - i. IronRidge

- ii. Unirac
  - iii. PLP Solar
4. Electrical (AC) point of connection
    - a. Contractor shall determine the proper electrical point of connection which must be in compliance with the utility interconnection agreement and all Federal, State & local regulations and codes.
    - b. Contractor shall be responsible for the cost of the balance of system components including but not limited to; transformers, conduit, wire, circuit breakers, disconnects, etc.
  5. Monitoring & Maintenance
    - a. Contractor shall provide a web-based client portal which displays the array production (kWh) information. Access to the data provided will be available to students offering authentic curricular enrichment in math, science, and other disciplines as appropriate.
    - b. Contractor shall provide details of any on-going, long-term maintenance the contractor will perform during the life of the solar array.

### **Exclusions**

- Jackson County Conservation will provide internet connectivity at the array using shielded, outdoor rated, CAT 6 cable at the array location.
- Jackson County Conservation will provide acceptable access to the construction site and accommodate equipment staging.
- Jackson County Conservation will be responsible for any upgrades in the existing electrical service that may be required by Alliant Energy.
- Jackson County Conservation will be responsible for tree removal and ground preparation. (if necessary)

**Attachment A:**

**Solar Electric (PV) System: 33 kW DC / 46 kW DC (Ground Array)**

