



TANANA CHIEFS CONFERENCE REQUEST FOR QUOTES FOR BADGER RD. SOLAR PANEL INSTALLATION

ADDENDUM NUMBER TWO (2)

July 15, 2024

The following corrections, changes, additions, deletions, revisions, and /or clarifications are hereby made a part of the Request for Quotations (RFQ) for Solar Panel Installation at 2605 Badger Road, North Pole, Alaska.

Firms providing a quote will acknowledge receipt of this addendum via email to Cortnie Doan at the following;
cortnie.doan@tananachiefs.org

Final quote to be sent via email to cortnie.doan@tananachiefs.org

1. Adding in the Full Electrical Install to be part of the Solar Panel Installation

SCOPE OF WORK

Provide all labor, materials and equipment to meet the requirements of the Project Information and any other items as described in the Project Documents. Each bidder shall thoroughly examine the work area and be familiar with the contract documents. The failure or neglect of a bidder to receive or examine any contract document or any part thereof shall in no way relieve it from any obligation with respect its quote or to the contract. No claim for additional compensation shall be allowed which is based upon a lack of knowledge of any contract document.

1. Procurement and installation of both DC and AC electrical equipment for the 1.188 MW DC / 1MWAC grid tied solar PV system integrated into the GVEA electrical distribution system targeted installation date October 1, 2024.
 - a. A list of equipment that has already been purchased is shown in Table 1
2. Installation of communication equipment to connect PV Array with GVEA controls, as well as Ethernet connection at "inverter connex".
3. Trenching and burial of conduit is expected to be completed by the selected contractor.
4. Contractor must be working under Alaskan Electrical Administrators License per Alaskan code.
5. All work must be compliant to the latest edition of the National Electric Code.
6. Contractor will work with GVEA, and inform TCC, once the contractor is ready to commission the system.
7. Contractor will need to coordinate with TCC and selected Solar Install contractor for scheduling and site access.



Table 1. List of major construction components provided as general list only

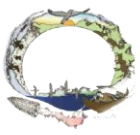
Description	TCC Provided	Contractor Provide & Install
Complete Polar Racking System with engineers stamp	X	
Surveyor, marking location trenching	X	
1. Inverters, SMA 125 kVa (x8) 2. DC Combiner, Shoals (x8) 3. Solar Panels, SEG 550W (2160) 4. Racking 5. Transformer 6. AC switchboard/ combiner panel, 480/277 V, 800 A, x2; with Shunt trip breaker 7. 40 foot container	X	
1. Thermostat 2. Heater 3. Conduit (all types) 4. DC, CU, XHHW-2 wire & all wire 5. PV wires (home run cables) 6. Communication cables 7. Grounding cables/hardware 8. All other electrical components unless otherwise mentioned		X
Integration Agreement with GVEA	X	
Any and all necessary hand tools/equipment		X
Certified Payroll Forms showing Compliance with Davis Bacon Wages		X

Preparation/Staking

- A. TCC will identify the racking corners for the placement of the solar array racks and ensure surveyor has staked out the specified areas for trenching, container and transformer placement.
- B. TCC will ensure that solar panels have been placed on the racking properly and the wires from each panel will be left unconnected to be connected and secured by the selected contractor.

Grounding Between Arrays

- A. Contractor to ensure that there is appropriate grounding between 'sub-arrays', as shown in E -1.1; bond racking of separate arrays in row together with lay-in lugs and #6 bare Copper wire as specified in the electrical plan set.



DC Electrical Installation

- C. Route all PV Module Cables through purlins on the back of the racking, string with the next module box cable. Follow stringing plan from the Mayfield engineering drawing.
- D. Wire strings to their respective DC combiner box that is located on the east end of each row of arrays; DC combiner box is provided by TCC
- E. Grounding at DC combiner box, per NEC 250.66 and associated plan set.
- F. Trenching between respective DC Combiner boxes to the equipment container (40 foot connex); following the source circuit home run schedule on E-1.1 on Mayfield's Drawing
- G. Combined DC output circuit will be electrically tied into the equipment container (see following section) by contractor. Trenching and wiring schedule is described in E-2.3.

Construction of Equipment Container Inverter Shelter

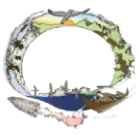
- A. TCC will provide a 40 foot connex container that the contractor will build out, clearances are described in E-2.0 of Mayfield's drawing, to house the following equipment:
 - a. 8 SMA 125 kVa inverters, TCC provided
 - b. SMA Data Manager Box
 - c. Two (480/277 V, 800 A) PV AC Switchboard, TCC provided
 - d. Remainder of material to be procured by selected contractor

AC Electrical Installation

- A. Contractor will be in charge of step up transformer installation, TCC provided, on the preformed concrete pad, TCC pad. Terminations are to be installed and torqued per manufacturer's instructions.
 - a. Contractor to work with GVEA on high-voltage electrical installation of transformer, once system is ready to be placed online.
- B. Contractor to provide AC electrical connection, as shown on E-1.2 from equipment container, between AC switchboards to transformer.
- C. Installation of bi-directional meter to be installed in coordination with GVEA.

Commissioning

- A. Megohm testing is performed on all conductors. Testing report to be provided as part of close commissioning docs.
- B. Measure and record output on each DC combiner; test independent string on each combiner
- C. Verify torque settings based on manufacturer settings.
- D. Contractor will test the functionality of all equipment, and ensure that the measure electrical output is correct.
- E. Verify Voltage of strings, transformers.
- F. Verify Continuity of fuses at disconnect.



- G. Verify Combined PV Voltage at Inverter; inverters are started up, confirm display voltage and output.
- H. Install NEC compliant placards on disconnect, DC combiner, Inverter, meter, and equipment container.
- I. Secondary inspection of commissioning, with TCC provided inspector.
- J. A report, with photographs, of all the previously mentioned commissioning items.
- K. TCC has submitted AK State Fire-marshal Permit for review.

ADDITIONAL DOCUMENTS

Through the submission of their response to this RFP the contractor acknowledges their receipt of the attached, additional document.

- A. TCC purchased equipment manuals

SCHEDULE

The anticipated project schedule is as follows;

Registration/Question Deadline	July 1, 2024
Final Addendum Issued	July 9, 2024
Deadline for Quote	July 31, 2024 2pm
Issue Notice of Intent to Award (NOITA)	August 6, 2024
Estimated execute Construction Contract /Notice to Proceed	August 16, 2024
Construction Completion	Sept. 30, 2024

All dates are approximate and contingent upon the completion of previous activities. Contractor shall submit a work schedule for approval, prior to the start of the work.

All times are Alaska Standard time.