

# **Pojoaque Regional Fire Station - Solar Photovoltaic Project**

**2015-0281-PW/IC**

## **Scope of Work and Specifications (as amended 6/8/2015)**

Santa Fe County is interested in acquiring a grid-tied solar photovoltaic (PV) electric project on the **vehicle bay pitched roof** of the Pojoaque Regional Fire Station (17919 US Highway 84/285). This purchase is to be a turn-key installation and shall consist of all necessary work including the design, permitting, construction and interconnection with the relevant electric utility. Santa Fe County is using New Mexico Statewide Price Agreement #40-000-13-00016 to solicit price quotes from vendors on the price agreement list. This Request for Quotes and the solar projects must comply with all of the terms and conditions of the Statewide Price Agreement (SPA).

**A mandatory pre-proposal meeting will be held at the Pojoaque Fire Station at 17919 US Highway 84/285 on Monday, 06/08/2015 at 2:00pm.**

The following are the scope of work and specifications that shall be met for the project, in addition to those requirements and specifications noted in the Statewide Price Agreement.

- **Size and Type:** The system shall be designed and constructed to be approximately 10 kilowatts (kW) DC in size. If the identified roof area is not adequate to accommodate a 10 kW system, the system shall be sized as large as possible for the identified roof area, with the azimuth of the panels oriented to within **33** degrees of due south (180 degrees).
- **The panels for the PV system shall be installed on the southwest facing half of the pro-panel roof over the vehicle bays. Contractor shall install panels so as not to directly cover any of the vehicle bay skylights.**
- ~~It shall be a ballasted PV system with no roof penetrations.~~ Contractor will be liable for any damages to the roof. Disturbance to the roof in contact with or adjacent to the PV mounting systems shall be repaired to original condition at the expense of the Contractor. Contractor shall provide structural engineering verification that the roof has sufficient structural integrity to accommodate the solar system.
- The first year's electric generation (as alternating current) shall be projected using DOE's PV Watts modeling tool with default "system losses" and inverter efficiency percentages, using Santa Fe Airport for the site data. Actual values for the following parameters may be used with appropriate documentation: light-induced degradation, name plate rating, inverter efficiency and DC-to-AC size ratio. Contractor is to enter proposed system size, module type, Array type, Tilt and Azimuth. **(In order to ensure consistent modeling, the vehicle bay ridgeline is assumed to be pointing at an azimuth of 147 degrees. The orientation of the panels and azimuth of the PV-Watts modeling shall be 147 degrees.)**
- Provide a schematic plan of the solar system – location and layout of the panels, inverter and connection to the electrical service.
- Include solar panel type (manufacturer, model name/number, output), number of panels and manufacturer and model of inverter(s) to be used.
- Full system service warranty: shall be a minimum of 6 years. (3 years required under the SPA plus incorporation of Additive Alternate No. 2 – Extend Warranty an Additional 3 years).
- PV Module Warranty: Each PV module shall be warranted by the manufacturer for at least 90% of its minimum rated power for 10 years and at least 80% of its minimum rated power for 20 years from the date of system acceptance (SPA, Specifications C.1.b.)
- Inverter(s) Warranty: The inverter shall have at least a 5 year repair or replacement warranty from the manufacturer (SPA, Specifications, C.2.d.)
- Contractor shall provide/be responsible for all tasks necessary for successful project completion including but not limited to the following:

- Obtain interconnection, net metering, and any other necessary agreements with Jemez Mountains Electric Cooperative.
- Acquire all required development, electrical and building permits.
- Install a meter that will measure instantaneously and totalize the amount of electrical generation of the solar system (to be manually read on-site).
- Maintain a clean and orderly job site during construction and clean up job site upon completion.
- Educate relevant County personnel on system operation, maintenance and safety, including provision of owner's manual.
- Complete and submit all required warranty forms.
- Complete the project within 90 days of notice to proceed, unless necessary equipment and material acquisition is delayed.
- Provide other relevant information at the discretion of the contractor.

All quotes must meet or better the pricing in the Statewide Price Agreement. Quotes will be evaluated based on conformance with the pricing in the Statewide Price Agreement as well as the total cost/kWh of delivered AC electricity in the first year of operation of the project as modeled by PV Watts. This scope of work has been amended and reissued following the mandatory site meeting.

**Quotes are due no later than Friday, June 12, 2015 at 2:00 PM (MT).** Please use the quote sheet provided to submit quotes to (electronic submission via email is acceptable):

Iris Cordova  
Santa Fe County Purchasing Division  
142 W. Palace Ave. (Second Floor)  
Santa Fe, NM 87501  
Phone (505) 986-6337  
[icordova@santafecountynm.gov](mailto:icordova@santafecountynm.gov)

**Quote Sheet – Firm Name -**

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**Bid Items from NM Statewide Price Agreement # 40-000-13-00016**

Note: The price for each Bid Item shall not exceed the price indicated on the Statewide Price Agreement for Zone 5. Bids are only being accepted from vendors that have agreed to not charge for Base Bid Item. #1 – preparation of the Site Specific Proposal.

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**Item 2 – Price per Watt DC, Output up to 10kW**

Price per watt: \$ \_\_\_\_\_ x # of watts DC: \_\_\_\_\_ = \$ \_\_\_\_\_

**Item 3 - Wiring, Conduit, and Utility Interconnection, Output up to 10kW**

PV Array Junction to Inverter, Above Grade

Price per lineal foot: \$ \_\_\_\_\_ x # of feet: \_\_\_\_\_ = \$ \_\_\_\_\_

Inverter to Electrical Panel

Price per lineal foot: \$ \_\_\_\_\_ x # of feet: \_\_\_\_\_ = \$ \_\_\_\_\_

Utility Grid Interconnection

Price per lineal foot: \$ \_\_\_\_\_ x # of feet: \_\_\_\_\_ = \$ \_\_\_\_\_

Item 3 Total Price: \$ \_\_\_\_\_

**Additive Alternate #2 – Extend Warranty an Additional 3 Years** \$ \_\_\_\_\_

Additional Item: Totalizing Meter \$ \_\_\_\_\_

**Total Project Quote:** \$ \_\_\_\_\_

**Cost of Performance, Payment and Labor Bond (A.11 SPA):** \$ \_\_\_\_\_

**Total Quote:** \$ \_\_\_\_\_

**Additional Required Information: (beyond that required under the SPA)**

1	Brand and Model of Solar Panels	
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2	Brand & Model of Inverter	
3	DC Wattage of Each Panel	
4	Number of Panels	
5	Total System DC Wattage (row 3 x row 4)	
6	First year system AC power production estimate in kWh (using PV Watts)	
7	Total Quote (from above)	\$
8	First year cost/kWh (line 7 divided by line 6)	\$

Is PV Watts printout included? Yes \_\_\_\_\_ No \_\_\_\_\_

Is PV panel specification sheet (including confirmation  
(of 10 year warranty included?) Yes \_\_\_\_\_ No \_\_\_\_\_

Is mounting system specification sheet included? Yes \_\_\_\_\_ No \_\_\_\_\_

Is inverter specification (including confirmation of  
5 year warranty) included? Yes \_\_\_\_\_ No \_\_\_\_\_

Is schematic plan of solar system included? Yes \_\_\_\_\_ No \_\_\_\_\_

Firm name: \_\_\_\_\_

Address / City / State / Zip: \_\_\_\_\_

Phone Number / Email: \_\_\_\_\_

Qualifying Party Name / Lic: \_\_\_\_\_

Contractor License: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

Printed Name of Authorized Official: \_\_\_\_\_

Signature of Authorized Official and date: \_\_\_\_\_