

Request for Proposals

RFP-PTF-2019-001

Activity Title: “Providing equipment for Meteorological Measurement Stations for Wind and Solar Resource Assessments”

Issuance Date: February 21, 2019

Deadline for Receipt of Questions: February 28, 2019 at 06:00 PM Astana time

Closing Date and Time: March 22, 2019 at 06:00 PM Astana time

Issuance of this RFP does not constitute an award commitment on the Tetra Tech ES, Inc., nor does it commit to pay for any costs incurred in preparation or submission of comments/suggestions of a proposal. Proposals are submitted at the risk of the offerors. All preparation and submission costs are at the offeror’s expense.

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1. INTRODUCTION

The purpose of this RFP is to provide Power the Future Project within the Scope of Work (SOW) specified in the Attachment A – Technical Specification for Providing equipment for Meteorological Measurement Stations for Wind and Solar Resource Assessments funded by USAID and implemented by Tetra Tech ES, Inc.

2. BIDDER'S QUALIFICATIONS

Bidder must provide the following information and references in order to be qualified for the procurement process:

1. Company's information, including official registered title, type of business, address, and contact person information.
2. A short description of the company and of past similar experience in providing the services described in the Attached A -Technical Specification.
3. Overall technical approach to fulfill the specifications defined in Attachment A – Technical Specifications.
4. Certification that company is not owned or controlled in total or in part by any entity of any government.
5. Certification by any subcontractor engaged by the company for this project that the subcontractor is not owned or controlled in total or in part by any entity of any other government.
6. The Offeror shall complete and sign the Representation and Certifications found in Attachments C to this document, and include them with the Offeror's proposal. Proposals that do not include these certifications will not be considered.

3. SOURCE, ORIGIN AND NATIONALITY RESTRICTIONS

The USAID authorized geographic code for Power the Future project is 937. The authorized geographic code for procurement of goods and services under this award shall be "937". Local procurements are to be accomplished in accordance with AIDAR 752.225-71 and ADS 311.

4. SUBMISSION OF PROPOSALS

All proposals are due on March 22, 2019 by no later than 06:00 PM local time in Astana, Kazakhstan. Proposals must be submitted via e-mail at the address Abdissa.workneh@tetrattech.com in the following formats: Adobe Acrobat and Microsoft Word and/or Excel.

All proposals must fully respond to the Technical Specifications enclosed as **Attachment A**, and must include quotes in the format provided in the **Attachment B - Table 1 – Budget**. Proposals received after the above-stated due date and time will not be considered for this procurement.

5. QUESTIONS AND CLARIFICATIONS

All questions or clarifications regarding this RFP must be in writing and submitted, in English to Abdissa.workneh@tetrattech.com on February 28, 2019 no later than 06:00 PM local time Astana,

Kazakhstan. Questions and requests for clarification, and the responses thereto, will be circulated to all RFP recipients.

Only written answers from Tetra Tech will be considered official and carry weight in the RFP process and subsequent evaluation. Any answers received outside the official channel, whether received verbally or in writing, from employees or representatives of Tetra Tech, or any other party, will not be considered official responses regarding this RFP.

6. PROPOSALS PREPARATION INSTRUCTIONS

All Offerors must follow the instructions set forth herein in order to be qualified for the procurement process. If an Offeror does not follow the instructions set forth herein, the Offeror's proposal may be eliminated from further consideration or the proposal may be downgraded and not receive full credit under the applicable evaluation criteria.

Separate Technical and Cost Proposals must be submitted. All proposals should be submitted in English.

Technical Proposal

The suggested outline for the technical proposal is stated below:

A. Organization's Information

1. Organization's information, including official registered title, type of business, list of offices if applicable, address, telephone, fax and website.
2. Organization's DUNS number
3. Authorized point of Contact with phone number(s) and email address
4. Experience of the firm of at least 5 years in the public and private sector

B. Company Technical Capability

Description of organization, including of activities/qualifications carried out similar to the scope of work requested.

Financial Proposal

Tetra Tech intends to award a Fixed Price contract to accomplish the objectives of this RFP.

A. Detailed Budget

Bidder shall complete the **Table 1 of the Attachment B "Detailed Budget"** in order to allow Tetra Tech ES, Inc. to compare all quotes and make a competitive selection. The budget should be provided in Excel format with unlocked cells.

A price must be provided for each item to be considered compliant with this request. The price proposal shall also include a budget narrative that explains the basis for the estimate of every cost element or line item. Supporting information must be provided in sufficient detail to allow for a complete analysis of each



cost element or line item. Tetra Tech reserves the right to request additional cost information if the evaluation committee has concerns of the reasonableness, realism, or completeness of an Offeror’s proposed price.

Bidder shall provide unit pricing in local Kazakhstan Currency. Prices quoted in this document shall be valid for a 30-day time period, include all taxes and other costs and the VAT tax originated in the Republic of Kazakhstan.

B. Proposed Billing Rates Certification

Document on company letterhead certifying the labor rates being proposed are standard rates and have been previously billed to clients for similar work.

C. Representations and Certifications

These documents can be found in Attachments C of this RFP and must be submitted as part of the Cost Proposal.

Under no circumstances may cost information be included in the technical proposal. No cost information or any prices, whether for deliverables or line items, may be included in the technical proposal. Cost information must only be shown in the cost proposal.

7. EVALUATION CRITERIA

Award will be made to the bidder representing the best value in consideration of past performance, qualifications and price factors. Technical criteria are more important than cost, although prices must be reasonable and will be considered in the evaluation. Bidders are encouraged to provide a discount to their standard commercial rates.

Tetra Tech reserves the right to conduct discussions with selected bidder(s) in order to identify the best value offer. Award of any resulting Subcontract Agreement shall be made by Tetra Tech on a best value basis. Tetra Tech reserves the right to request a test assessment from bidders to assess their qualifications.

The submitted technical information will be scored by an evaluation committee using the following technical evaluation criteria (60 points) and cost proposal (40 points).

Proposals will be scored on a 100 point scale. Available points for each evaluation factor are given below.

Technical Proposal (60 points)

Evaluation Criteria for Technical Proposal	Points
I. Technical Capability	30
II. Company Past Experience	30
TOTAL	60

Financial Proposal (40 points)

Bidder shall complete the **Table 1 of the Attachment B “Proposed Detailed Budget”** in order to allow Tetra Tech ES, Inc. to compare all quotes and make a competitive selection. The budget should be provided in Excel format with unlocked cells.

Bidder shall provide unit pricing in *local Kazakhstan currency*. Prices quoted in this document shall be valid for a 30-day time period, include all taxes and other costs and the VAT tax originated in Indonesia.

8. TERMS OF PAYMENT

Payment terms for the awarded Subcontract Agreement shall be net forty-five (45) days after satisfactory completion and acceptance and of services and deliverables and approval of the Chief of Party of Power the Future Activity project. Payment shall be made by Tetra Tech ES, Inc. via bank wire transfer. No advance payments will be provided.

9. DUNS NUMBER AND SAM.GOV REGISTRATION

If the proposed fixed price is above \$30,000, the successful bidder will be required to furnish a DUNS number and proof of SAM.gov registration within 24-48 hours of notice of award. Information regarding obtaining a DUNS number may be found here: <https://fedgov.dnb.com/webform>

10. NEGOTIATIONS

Best offer proposals are requested. It is anticipated that a subcontract will be awarded solely on the basis of the original offers received. However, Tetra Tech reserves the right to conduct discussions, negotiations and/or request clarifications prior to awarding a subcontract. Furthermore, Tetra Tech reserves the right to conduct a competitive range and to limit the number of offerors in the competitive range to permit an efficient evaluation environment among the most highly-rated proposals. Highest-rated offerors, as determined by the technical evaluation committee, may be asked to submit their best prices or technical responses during a competitive range.

11. MULTIPLE AWARD/NO AWARD

Tetra Tech ES, Inc. reserves the right to issue multiple awards. Tetra Tech ES, Inc. also reserves the right to issue no awards.

ATTACHMENT A – TECHNICAL SPECIFICATION

Scope of Work

1.1 WIND MEASUREMENT STATION

Description

- 1 Wind met-mast**
 - a. Galvanized steel 60-meter tubular or lattice mast with a life of at least 5 years under local environmental conditions
 - b. The lengths of all booms and stubs used for sensor installation should meet IEC 61400-12-1 (2017) standards
 - c. Grounding kit with copper or copper coated ground rod and lightning spike, connection cable and connectors.
 - d. Mast shall be painted with corrosion resistant epoxy paint of color red and white and meet National Aviation Standards.
 - e. Metal enclosure for data logger and GSM modem with lock. The enclosure should be installed at least 5m above the ground level and should be corrosion resistant and suitable for outdoor.
 - f. For tubular tower, provide all the equipment required to lower the met-mast including one set for of gin pole and winch for the project
 - g. The met-tower system manufacturer must be accredited, with certifications from IEC standards and internationally recognized wind industry bodies

 - 2 Anemometers.** Six 3-cup model Class-1 MEASNET calibrated anemometer, per tower
 - Range: 0 m/s to 75 m/s (0 mph to 168 mph)
 - Temp. range: -35 °C to 60 °C (-31 °F to 140 °F)
 - Humidity range: 0 to 100% RH

 - 3 Wind vane sensors.** Two calibrated wind vanes per tower
 - Signal type: Analog DC voltage from conductive plastic potentiometer, 10K ohms.
 - Range:360° mechanical, continuous rotation
 - Measuring Accuracy: 0,25% (1°)
 - Temp. range: -35 °C to 60 °C (-67 °F to 140 °F)
 - Humidity range:0 to 100% RH
 - accuracy: potentiometer linearity within 1%

 - 4 Temperature and Humidity Sensor** with weather and heat radiance shield
 - Temperature range -35 °C to 52.5 °C (-40 °F to 126.5 °F)
 - Humidity range: 0 to 100% RH
 - Accuracy: ±0.43°C (±0.77°F)

 - 5 Barometric Pressure Sensor.**
 - Range:15 kPa to 115 kPa (4.43 inches to 34.0 inches Hg)
 - Accuracy: +/- 1.5 kPa (15 mb) max.
 - Powered by own rechargeable battery
-

Description

- 6 Li-Cor Pyranometer Calibrated**
- Range: 0 to 3000 W/m²
 - Response time: 1 μ s
 - Linearity: Maximum deviation of 1% up to 3000 W/m²
 - Operating range: -40 °C to 65 °C
 - Humidity range: 0 % to 95 %, non-condensing
- 7 Complete data logger kit** with 16 channel including data retrieving software. Sampling rate capability of 1 second and average data stamping every 10 minutes. Memory card capability for storing at least 1 year of all data. Battery powered. All measuring equipment must be compatible with the data logger. Grounding kit for the datalogger.
- 8 Complete GSM modem kit** with own PV power supply and rechargeable battery. Suitable for outdoor and corrosion resistant. Quad band operation for GSM 850/900/1800/1900 MHz
- 9 Air traffic safety light** (Red) installed with own PV powered system and according to FAA standards. Needs to flash day and night, 20 times per minute.
- 10 Accreditation of Instrument manufacturers.** Certifications from IEC standards and internationally recognized wind industry bodies. The bidder must provide complete specifications, and warranties for the instruments. At least two year warranty for all the sensors, data loggers and wireless modems.
- 11 Spares and other accessories (shared between the two met-masts)**
- i. 2 Class one calibrated anemometers
 - ii. 1 Wind vane
 - iii. One complete set of tools required to replace faulty sensors; with copy of Instructions manual for replacing sensors
 - iv. One gin-pole and one winch for lowering and lifting tubular met-tower
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1.2 SOLAR MEASUREMENT STATION

Item	Description
1	<p>Solar Met-mast</p> <ul style="list-style-type: none"> a. Galvanized steel tubular mast of height of about 2.2 meters with a life of at least 5 years under local environmental conditions b. Booms and stubs of appropriate length for mounting sensors c. Grounding kit with copper or copper coated ground rod and lightning spike, connection cable and connectors d. Metal enclosure for data logger and GSM modem with lock and shall be corrosion resistant and suitable for outdoor. e. Barbed-wire fence around the tower and anchors to prevent intruders. Fence should be sturdy with foundation for galvanized steel posts, horizontal braces and a gate with lock. The height of the fence should be at least 6 ft. The top of the fence should be at an outward angle of 45 degrees with a barb wire extension arm that can hold three wires.
2	<p>Secondary Standard Pyranometer, Calibrated</p> <ul style="list-style-type: none"> - Two pyranometers per tower; one shall be installed on plane of array mounting boom, and other on normal horizontal boom. The plane of array mounting boom will be oriented at an angle corresponding to the latitude of the location - Meets the ISO 9060 standard for solar radiation measurement device - Operating range: -40 °C to 65 °C - Humidity range: 0 % to 95 %, non-condensing - Time to reach 95% response: < 30s
2	<p>Anemometers. 3-cup model Class 1 MEASNET calibrated anemometer</p> <ul style="list-style-type: none"> - One anemometer per tower, to be installed on side-mounted booms. The booms and stubs shall meet IEC 61400-12-1 standards - Range: 0 m/s to 75 m/s (0 mph to 168 mph) - Temp. range:-35 °C to 60 °C (-31 °F to 140 °F) - Humidity range: 0 to 100% RH
3	<p>Wind vane sensors.</p> <ul style="list-style-type: none"> - One wind vane per tower, to be installed on side-mounted boom. The booms and stubs shall meet IEC 61400-12-1 standards - Signal type: Analog DC voltage from conductive plastic potentiometer, 10K ohms. - Range: 360° mechanical, continuous rotation - Measuring Accuracy: 0,25% (1°) - Temp. range: -35 °C to 60 °C (-67 °F to 140 °F) - Humidity range:0 to 100% RH - accuracy: potentiometer linearity within 1%

- 4 Temperature/Humidity Sensor** with weather and heat radiance shield.
 - One per tower

 - Temperature range -35 °C to 52.5 °C (-40 °F to 126.5 °F)
 - Humidity range: 0 to 100% RH
 - Accuracy: $\pm 0.43^{\circ}\text{C}$ ($\pm 0.77^{\circ}\text{F}$)

 - 5 Barometric Pressure Sensor.**
 - One per tower

 - Range: 15 kPa to 115 kPa (4.43 inches to 34.0 inches Hg)
 - Accuracy: ± 1.5 kPa (15 mb) max.
 - Powered by own rechargeable battery

 - 6 Rain gauge.**
 - One per tower
 - Resolution: 0.01 inch of rain

 - Accuracy $\pm 2\%$, up to 2 inches per hour
 - Operating range: 0°C to 45 °C

 - 7 Soiling measurement kit**
 - One per tower

 - Soiling ratio accuracy < 1%

 - Operating range: -40 °C to 65 °C

 - Humidity range: 0 % to 100%

 - 8 Complete data logger kit** with 16 channels and data retrieving software. Sampling rate capability of 1 second and average data stamping every 10 minutes. Memory card capability for storing at least 1 year of all data. Battery powered. All measuring equipment must be compatible with the data logger.

 - 9 Complete GSM modem kit** with own PV power supply and rechargeable battery. Suitable for outdoor and corrosion resistant. Quad band operation for GSM 850/900/1800/1900 MHz
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ATTACHMENT B – DETAILED BUDGET

Table 1 - PROPOSED DETAILED BUDGET

NO	ITEMS	Delivery period, days	PRICE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	TOTAL		

Payment shall be based upon delivery and acceptance of items described in the Attachment A.

