

REQUEST FOR PROPOSALS

**SOLAR ELECTRIC GENERATING SYSTEM INSTALLATION
AND PROVIDER SERVICES
EN 17-001**

Addendum No. 1

Date: September 26, 2016

From: Drew Bryck, Department Representative

Subject: Addendum No. 1 to Solicitation No. EN 17-001

Bid Deadline: October 20, 2016 (**REVISED DATE**), 3:00 p.m. (local time, Phoenix, Arizona)

SCOPE

This Addendum forms a part of the Contract and clarifies, corrects, or modifies the original Request for Proposals document prepared by the City of Avondale. Acknowledge receipt of this Addendum in the space provided on the attached "Acknowledgment of Addenda Received" form. This acknowledgement must accompany the submitted proposal. Failure to do so may subject the Vendor to disqualification.

This Addendum No. 1 consists of modifications to (i) the solicitation schedule (ii) Section A, Part II, Subsection 2.2(E), (iii) Exhibit A (Scope of Work) and (iv) Exhibit D (Site Maps) for the Request for Proposals No. EN 17-001, released on September 7, 2016.

ADDENDUM

1. The Final Date for Inquiries is deleted in its entirety and replaced with the following:

September 29, 2016

2. The Proposal Due Date and Time is deleted in its entirety and replaced with the following:

October 20, 2016
3:00 p.m. (local time, Phoenix, Arizona)

3. Section A, Part II, Subsection 2.2(E)(2) is deleted in its entirety and replaced with the following:
 - (2) Describe the Vendor's ability to monitor the installed System. Explain if the collected data reflects System performance, System availability, average and accumulated output, capacity factor and degradation. Provide a sample report. Indicate if the monitoring system complies with requirements outlined in Section 2.16 of the Scope of Work.
4. The following is added as Section A, Part II, Subsection 2.2(E)(3):
 - (3) Describe any alternate approaches if it is believed that such an approach would best suit the needs of the City. Include rationale for alternate approaches, and indicate how the Vendor will ensure that all efforts are coordinated with the City's Representatives.
5. The Scope of Work attached as Exhibit A is deleted in its entirety and replaced with the Scope of Work attached hereto as Exhibit 1 and incorporated herein by reference, to add new Subsections 1.4 and 2.8.
6. The SRP Electrical Meter Locations map attached as Exhibit D is deleted in its entirety and replaced with the SRP Electrical Meter Locations map attached hereto as Exhibit 2 and incorporated herein by reference.

EXHIBIT 1
TO
ADDENDUM NO. 1
TO
REQUEST FOR PROPOSALS
FOR
SOLAR ELECTRIC GENERATING SYSTEM INSTALLATION
AND PROVIDER SERVICES

[Scope of Work]

See following pages.

SCOPE OF WORK

Solar Electric Generating System Installation and Provider Services EN 17-001

1. Introduction; Background.

1.1 The Site sits on approximately 23.2 acres, inclusive of all buildings and equipment. It is anticipated that the System be located within the large retention basin on the south side of the plant which is approximately 2.0 acres in size. However, the City is open to all proposals that make the best economic case. Site Maps, which show additional utility, electrical and meter information, are attached hereto as Exhibit D and incorporated herein by reference.

1.2 The Site is to be leased to Contractor pursuant to a site lease agreement. All electric power generated by the System will be sold to the City for use at the Site to effectively generate electricity at a cost lower than currently available through current traditional electrical providers now and into the future. The System will be appropriately sized to avoid excess generation and will be delivered on a net metering basis.

1.3 Annual electric consumption for the Site is approximately 7,000,000 kWh, which is serviced by the following SRP meters:

<u>Meter No.</u>	<u>SRP Rate Rider</u>	<u>Account No.</u>	<u>Annual kWh</u>
1	E36	280603008	2,930,000
2	E32	923101002	808,800
3	E61	823101002	3,218,614

Historical electrical usage for the Site (interval demand data consisting of 1 year of 15 min interval data and 2 years of monthly billing data) is available on the City's Procurement FTP Site and can be accessed as follows:

<ftp://ftp.avondale.org>

→UserName: ProcurementFTP

→Password: P7ocu7e@FTP!

→Once logged in, choose: "RFP EN 17-001_ Solar Electric Generating System Installation and Provider Services."

1.4 The berm around the plant is not approved by the Flood Control District as a levy, so the actual retention basis within the plant is technically in the flood plain. The City estimates that in the event of the 100 year flood the depth of water would be between 0 feet and 1.5 feet at different parts of the berm on the outside. It is improbable that flood water would enter the plant unless the berm was somehow breached. However, the retention basin in the plant is still technically in the flood plain. Any additional insurance requirements will be the responsibility

of the Contractor. A copy of the Federal Emergency Management Agency's Letter of Map Revision is available on the City's Procurement FTP Site, referenced in Section 1.3 above.

1.5 The Site is currently undergoing capital projects to improve the functionality of the treatment processes and remodel the operations building. These improvements will include the construction of a new 100-foot diameter primary clarifier and a 90-foot diameter secondary clarifier along with other work. The respective project teams have been made aware of the potential for a solar installation at the Site. Contractor will need to work with these project teams to avoid any conflicts. A copy of the Master Plan, which allows for future process expansions up to a capacity of 15 MGD, is included in Exhibit D. The System will need to account for the future expansion of the treatment processes.

1.6 The City currently has one solar demonstration project (13.5 kW) located on a carport structure in the parking lot of the Avondale Civic Center Library. This demonstration project is linked to three TV screens in the City Hall building lobby displaying real time energy usage which is intended for resident education.

2. Project Requirements.

2.1 The Proposal must provide for a complete 'turnkey' System including private ownership, engineering, procurement, installation, financing, operation and maintenance, utility coordination and interconnection agreements, all labor and materials and any temporary or interim facilities required to maintain essential existing functions throughout the term of the SSA. The Contractor will receive all federal and state tax credits and utility incentives and is expected to factor those rebates into the Proposal.

2.2 Renewable Energy Certificates will be assigned to the Contractor who will then transfer them to SRP in order to qualify for any approved PBIs.

2.3 Although the installed System will be privately owned, it must (A) comply with Arizona and local utility company metering and interconnection standards and construction guidelines and (B) be suitable for allowing maximum output sales to the City over the term of the SSA.

2.4 Contractor is responsible for evaluating relevant Site conditions, cost/benefit analyses, financing models, renewable energy incentives and appropriate System size. Contractor will be required to design and install a System that fully meets the known electric load (including peak demands) generated at the Site over the term of the SSA. Failure of the System to generate the guaranteed kWh will result in the Contractor reimbursing the City for the cost of any differences in guaranteed and actual kWh production.

2.5 A professional structural engineer, registered in the state of Arizona, must provide sealed structural plans and calculations for proposed roof mounted and ground mounted installations relative to the applicable live and dead loads in accordance with the 2012 International Building Code and the 2011 National Electrical Code, as amended by the City.

2.6 A professional electrical engineer, registered in the State of Arizona, must provide sealed electrical plans and specifications.

2.7 The Contractor shall be fully responsible for all aspects of the design, construction, operation and maintenance of the System in accordance with all laws, the requirements of all applicable construction and safety codes, City design standards, bonding requirements for construction work, this RFP and Contractor's Proposal.

2.8 The height of the panels shall be a minimum of seven feet off the bottom of the retention basin to allow maintenance staff access to the bottom of the retention basin for weed control. The equipment may be above seven feet due to the maximum volume of the retention basin and/or flood plain elevation.

2.9 Maintenance costs shall include all costs associated with the performance of the SSA including ongoing inspection, maintenance, panel replacement costs resulting from damage, vandalism, theft and routine inverter replacement costs. Failure of Contractor to comply with the agreed-to operations and maintenance plan may result in a breach of the SSA that will allow the City to terminate the SSA for cause.

2.10 Any System repairs necessary as part of a rooftop installation must be performed by the original roofing contractor (if still under warranty) and coordinated with the City representative.

2.11 The Contractor shall secure from governing agencies and SRP all required rights, permits, approvals, and interconnection agreements at no additional cost to the City.

2.12 The Contractor shall complete and submit in a timely manner all documentation required to qualify the System for available rebates and incentives.

2.13 The Contractor shall supply and install all equipment required to interconnect the System to the City's distribution system. Contractor shall fulfill all application, study and testing procedures to complete the interconnection process. All costs associated with utility interconnection shall be borne by the Contractor.

2.14 The Contractor shall complete a video/photo inventory of the Site within the project limits and provide a copy of the video to the City prior to the start of construction. The Contractor shall restore all materials and facilities in "like kind" and will be responsible for repairing any damage to facilities that are within the project limits or were disturbed or damaged as a result of the Contractor's work.

2.15 Any and all required permits, easements and associated costs for this project are to be included in the project scope and are the responsibility of the Contractor.

2.16 Contractor shall be responsible for all costs involved in the development and implementation of a comprehensive monitoring system (the "Monitoring System") that will track technical and financial information for the installed System. The Monitoring System shall be a

web-based system that is non-proprietary, commercially available, capable of being used with photovoltaic system equipment from various manufactures and tracks technical and financial information of one or more systems. The Monitoring System shall have the following features:

- A. Available to the City online, 24/7 for the term of the SSA.
- B. Provides accurate information at the module-level, string-level and system-level regarding photovoltaic performance monitoring, fault detection and troubleshooting, maintenance management, site profitability and provides logical and physical photovoltaic site visualization.
- C. Provides near real time data, historical and aggregated data and comparative analysis.
- D. Automatically detects problems and issues status reports and alerts via e-mails to the Contractor and the City.
- E. All data is logged and can be securely reviewed and analyzed at any time from any location using a personal/portable computer or a mobile handheld device, and the data can be downloaded to the City in Excel format.
- F. Tracks energy production, energy usage, photovoltaic input voltage and current, solar cell temperature, irradiance, weather conditions and System warnings or faults on a daily, weekly, monthly, yearly, lifetime and date range basis.
- G. Provides information on the System energy savings to the City in terms of one or more of the following: cost, CO2 off-set, equivalent power savings per home or similar comparison.
- H. Monitoring data is displayed graphically using visual meters, graphs, bar charts, or other similar displays.
- I. The Monitoring System data shall be available for display on the City's website.
- J. The monitoring software must be interconnected with the existing television display located within the City Hall lobby, as discussed in Section 1.5 above, so as to be visible to visitors.

2.17 The City will be eligible to purchase the System at any time after the System has been in place for a minimum of six years based on the buy-back schedule provided as determined at the end of year 6, 10, 15 and 20 year milestone dates. If purchased at any other period, the parties will agree on a purchase price based on the System's fair market value. If the City elects not to purchase the System at the end of the SSA term, the Contractor shall be responsible for any and all costs to disassemble and remove the System apparatus and return the Site to its original condition. The City also reserves the right to negotiate an extension of the SSA.

2.18 All components of the System shall be approved, listed and labeled by an acceptable third party and meet the requirements of the 2012 International Building Code and the 2011 National Electrical Code, as amended by the City.

2.19 Commissioning and acceptance testing by the Contractor will be required before acceptance of the System by SRP and the City. During this testing, SRP and the City (or its independent agent) shall observe and verify System performance. Before the Contractor can sell electricity to the City, the System must be fully tested and commissioned to ensure reliability and comply with established commercial practices. The “Commercial Operation Date” is defined as the date after which all testing and commissioning has been completed and is the initiation date to which the Contractor can start producing electricity for sale. Required commissioning and acceptance test services include:

A. Starting up of all the components of the System, including the solar panel, inverter and interconnect equipment until it achieves the performance requirements.

B. Conducting the successful delivery of power for seven consecutive days within the first 30 days following completion of the System. The Monitoring System shall also be fully operational during the entire seven day power delivery period.

C. Orientation on how the System will be disconnected in the event of emergency.

D. Providing all necessary training and coordination with both SRP and City staff.

E. Providing two complete sets of the operations and maintenance manuals and one set of as-built drawings in an electronic format required by the City Engineering Division.

EXHIBIT 2
TO
ADDENDUM NO. 1
TO
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[SRP Electrical Meter Locations Map]

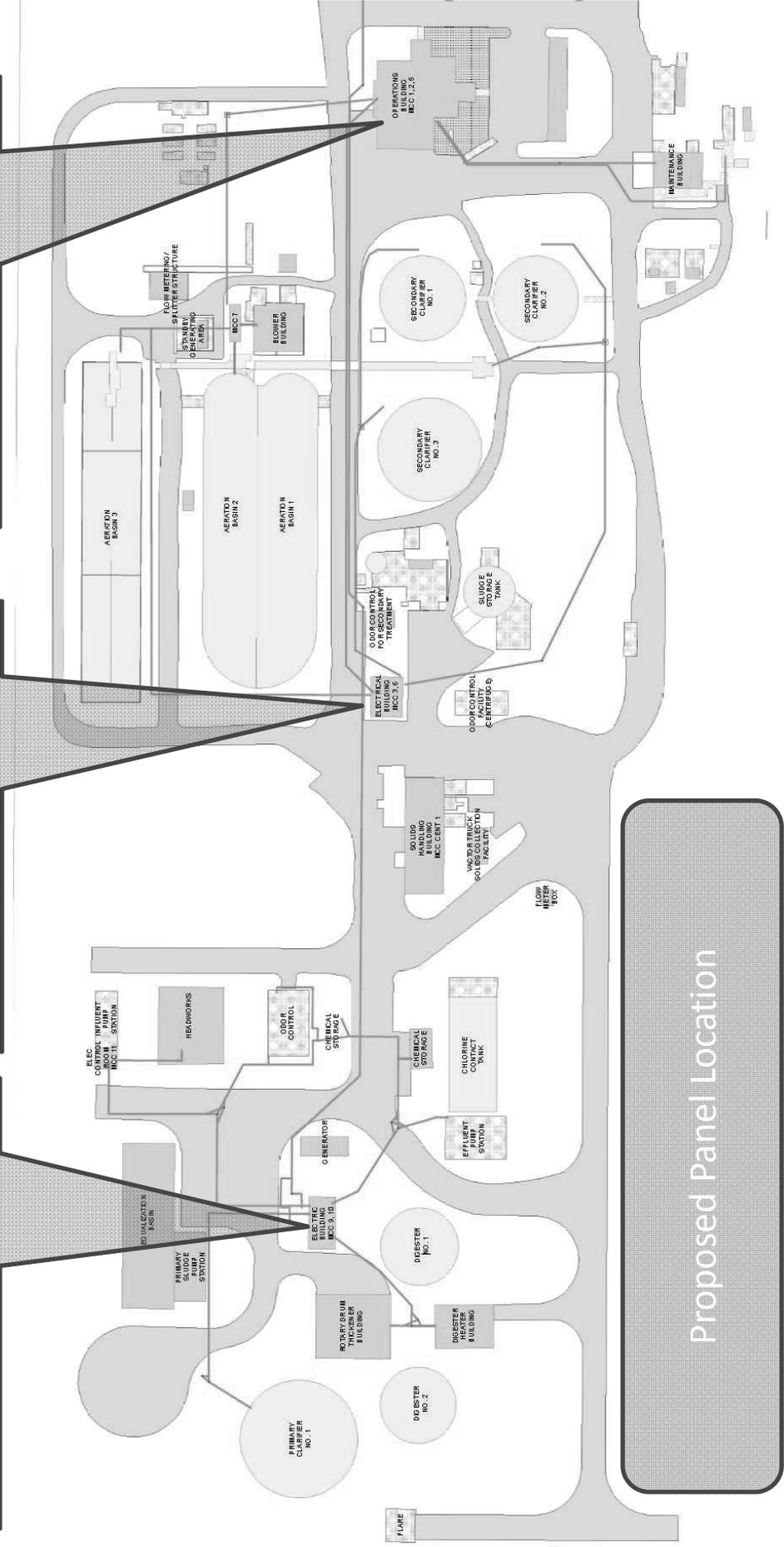
See following page.

Wolf Water Reclamation Facility SRP Electrical Meter Locations

Account 280-603-008
E36 Plan
S/N: 02316730
2014 Avg Monthly Demand and Use:
541 kW and 253,233 kWh

Account 923-101-002
E32 Plan
S/N: 12364110
2014 Avg Monthly Demand and Use:
154 kW and 71,316 kWh

Account 823-101-002
E61 Plan
S/N: 12364110
2014 Avg Monthly Demand and Use:
394 kW and 269,164 kWh



Proposed Panel Location

**CITY OF AVONDALE
ACKNOWLEDGMENT OF ADDENDA RECEIVED
REQUEST FOR PROPOSALS**

**SOLAR ELECTRIC GENERATING SYSTEM INSTALLATION
AND PROVIDER SERVICES
EN 17-001**

Addendum No. 1

_____, affirms that ADDENDUM No. 1 has been
(Name of Vendor/Designee)
received and that the information contained in ADDENDUM No. 1 has been incorporated in
formulating the Vendor's Proposal.

_____, _____ 2016
Signed Date

Print Name

Title

Company Name

Address

City, State, Zip Code

END OF ADDENDUM No. 1