



City Council Report

Date: March 15, 2021
To: City Council
Through: Michael Kennington, Deputy City Manager/Chief Financial Officer
Marc Heirshberg, Deputy City Manager
From: Frank McRae, Energy Resources Department Director
Edward Quedens, Business Services Director
Matt Bauer, Procurement Administrator
Anthony Cadorin, Energy Resources Program Manager
Subject: 25-Year Term Power Purchase Agreement for Four Downtown Mesa Solar Projects (**District 4**)

Purpose and Recommendation

Council is requested to approve the award as recommended.

A committee representing the Energy Resources, Environmental Management and Sustainability and Engineering Departments, and Purchasing evaluated responses. The evaluation committee recommends authorizing the City Manager or designee to negotiate and execute a 25-year Power Purchase Agreement (PPA) to the highest scored proposal from SOLON Corporation (Solon) to design, construct, own and operate solar photovoltaic (PV) generating systems (Projects) at four sites in downtown Mesa for a price not to exceed the Bid Prices plus reasonable adjustments.

The projects will be constructed at the Arizona State University building (ASU Building), the ice rink maintenance and restroom facilities at The Plaza at Mesa City Center (The Plaza), the parking lot for the Municipal building at 55 N Center Street (Municipal Lot) and the parking lot to the north of Mesa City Plaza (MCP Lot).

Background

Mesa is interested in including additional renewable energy in its utility portfolio and at City facilities and developing PV projects across various sites. Mesa issued a Request for Proposals (RFP) for Downtown Mesa Solar Projects. In the RFP, Mesa provided four sites within the Electric Utility's Electric Service Area (ESA) for the solar providers to evaluate as candidates for the installation of PV generating systems.

The four sites are all located in the area bound by 1st Street, Main Street, Center Street, Centennial Way. Mesa is working to transform this area into a downtown governmental, lifestyle, and event space through the construction of three separate projects, on which these solar Projects will be overlaid:

Project Site List

Site:	Mesa Transformation Project	Proposed Installation	Size (kW-DC)
ASU Building	ASU At Mesa City Center (CP0871ASU)	Solar Panels on Steel superstructure on roof	413 kW
The Plaza	The Plaza at Mesa City Center (CP0920)	Solar Panels on Steel superstructure on roof	69 kW
Municipal Lot	Downtown Parking and Lighting Improvements (CP0972)	Carport Shade Structure	125 kW
MCP Lot		Carport Shade Structure	210 kW

Total: 817 kW-DC

The awarded vendor is expected to be able to privately finance, develop, design, construct, own, report online, operate, and maintain the PV systems at the proposed sites. In addition, they are expected to understand that the aesthetics of the installed systems will be critical to the completion of projects that meet the intention of the RFP. They will also be expected to understand the critical scheduling and coordination challenges inherent to working within the scope and timeline of the surrounding construction projects.

The solar energy that is generated will then be purchased by Energy Resources for use in its electric supply portfolio.

Mesa received three proposal responses of which, all vendors met the minimum qualifications. The evaluation committee evaluated the proposal responses in accordance with Mesa's established policies and procedures. The evaluation team completed scoring of the responses against the scoring criteria in the solicitation. Based upon the evaluation results, the committee recommends award to the highest scored respondent, Solon. The evaluation was conducted, and points were awarded by consensus by the evaluation committee.

During the RFP process, Mesa received a letter from Strategic Solar Energy Inc. (SSE) notifying Mesa that one or more of the Projects may potentially infringe upon one or more existing SSE patent(s). Solon has approached SSE to resolve this patent issue and is willing to indemnify Mesa against liability regarding the construction and design of the Projects.

Discussion

After the selection of Solon as the winning bidder for the Projects, Mesa utilized a prior PPA as the basis for beginning negotiations with Solon. As such, contract negotiations are still ongoing, however, Mesa and Solon have agreed to the major deal points which will be inherent to the Projects. The following terms have been negotiated and agreed to with Solon:

1. Energy Purchase Rates and the Term of the Agreement
 - a. Mesa will pay no greater than the following Bid Price for the energy generated by the Projects for a term of 25 years.
 - ASU Building: \$0.0908/kWh
 - The Plaza: \$0.1387/kWh
 - Municipal Lot: \$0.0891/kWh
 - MCP Lot: \$0.1108/kWh

- b. These rates will be subject to reasonable adjustments as reviewed and approved the City Manager or designee due to reasonably unforeseen project challenges. Change orders have already been discussed for:
 - ASU Building:
 - Significant steel cost increases since July 2020.
 - Change in scope: addition of penthouse connections.
 - Change in scope: requirement for pin connections at main support columns; connections cannot carry moments.
 - Change in scope: welded connections at all joints in superstructure instead of bolted.
 - Change in scope: additional utility disconnect.
 - Change in scope: transfer of stub column work from Solon's responsibility to DPR to accommodate roofing schedule.
 - Change in design: reduced panel tilt, change to bifacial modules.
 - The Plaza:
 - Change in design: reduced panel tilt, change to bifacial modules.
 - c. The Projects are also subject to a lower production limit. If the Project produces significantly less energy than expected, Solon will pay Mesa as recompense for failing to deliver energy.
2. Tax Attributes and Renewable Energy Certificates
 - a. Solon will receive the applicable investment tax credits, production tax credits, tax deductions, accelerated depreciation and other benefits under the Internal Revenue Code or applicable federal, state or local laws.
 - b. Mesa will receive all Renewable Energy Certificates (REC) and other environmental attributes created by the production of renewable energy by the Project for the term of the PPA.
 3. Early Purchase Options
 - a. If Mesa determines it is in its best interest to own the system, the PPA provides for purchase of the system in the 6th, 10th, 15th 20th year and at the end of the term 25th year of the PPA.
 - b. At the end of the term of the PPA, if Mesa does not want to purchase the system, Solon must remove the system and return the property to its original condition.
 4. Planning and Construction of the Project – Because of the sensitivity of the project sites to disruption of activities and critical construction schedules Mesa has delineated construction milestones, specifically when Solon must begin construction and finish construction on the various Projects. Delays to either of those dates are potentially subject to performance penalties.
 5. Maintenance of the Project – Mesa will only be paying Solon for energy produced by the Project, so Solon is responsible for all maintenance associated with the energy generating system and so is motivated to keep it in good working order.

6. Assignment – It is common throughout the solar industry for these projects to be developed by a solar development company who specializes in contracting, designing, and constructing these projects (such as Solon) and then for the projects to be assigned to a PPA holder/operator who has the specialization of operating and maintaining these projects for the terms of the agreements. Ultimately, whether Solon, or some other entity, the PPA holder will be responsible for all terms in the PPA. Solon cannot assign the PPA without Mesa's prior written consent, and any assignee must have comparable experience in operating and maintaining PV systems and must have the financial capability to maintain the Project.

Alternatives

Taking no action will result in the termination or suspension of negotiations with Solon for this Power Purchase Agreement and the potential for significant delays in the construction of the downtown transformation projects.

Fiscal Impact

Mesa will be purchasing the energy output from the Projects which will reduce the amount of energy that Mesa will need to purchase on the wholesale energy markets and this change in cost will be passed through directly to Mesa's electric customers through the Electric Energy Cost Adjustment Factor (EECAF). The first-year energy payments for the energy from the Projects based on the Bid Prices are estimated to be \$144,784, but this will vary based on how much energy the Project actually produces (based on the amount of solar insolation and final efficiency of the equipment installed on the Project). This will offset an estimated \$34,122 of market purchases, resulting in a net cost increase to the electric supply portfolio of \$110,662 in the first year. Because the solar PPA price is fixed and Mesa's market purchase costs are expected to increase over time, the impact of these solar costs is expected to decrease each year. If reasonable pricing adjustments impact the project to increase costs, these price increases will be incorporated to the final negotiated PPA price and therefore will affect this net cost increase. The cost increases from the purchase of the energy output are minimal in the scope of the total electric supply portfolio (\$11.5 million in FY19/20) and are an order of magnitude less than swings in market power prices across the summer months.

The Projects hold other ancillary benefits which have some offsetting monetary value.

- The RECs from the Projects hold a value in attracting large, sustainability-minded corporations to Mesa's electric service territory or could be sold on the open REC market if Mesa did not intend to count this energy as renewable.
- The shade from parking lot structures (The Plaza, Municipal Lot and MCP Lot) is valued as a premium parking spot; something that other cities have monetized.
- The solar carport structures will support lighting that otherwise would have been replaced and so saves the expense of replacing poles and fixtures.
- The known, fixed price of the solar energy will help to provide a stabilizing effect for Mesa's electric customers during the term of the PPA.

Purchase Information

Action: Award
Procurement Type: Request for Proposals
Contract Number: 2020192
Local Consideration: Policy did not apply to this procurement method
Initial Contract Term: 25 Years
Funding Source: Energy Resources Department (Electric Operations and Maintenance)

Proposal Responses / Final Scoring

Respondent	Total Points Possible / 1,000
SOLON Corporation (Recommended) Tucson, AZ	<u>891</u>
SunRenu Solar, LLC Scottsdale, AZ	778
Harmon Solar – Harmon Electric, Inc. Phoenix, AZ	647

Coordinated With

Engineering Department
Energy Resources Department
City Attorney’s Office
Environmental Management & Sustainability Department