



City Council Report

Date: June 3, 2024
To: City Council
Through: Michael Kennington, Deputy City Manager/Chief Financial Officer
Marc Heirshberg, Deputy City Manager
From: Scott Bouchie, Energy Resources and Sustainability Director
Edward Quedens, Business Services Director
Anthony Cadorin, Energy Resources Program Manager
Subject: 25-Year Term Power Purchase Agreement for the Energy and Environmental Attributes of Four Solar Projects on City-Owned Properties
(District 4)

Purpose and Recommendation

The Energy Resources and Environmental and Sustainability Departments request that Council approve the award in response to RFP No. 2024002 (“RFP”) for the purchase of solar energy and environmental attributes as recommended herein.

A committee representing the Energy Resources, Environmental and Sustainability and Engineering Departments, and Purchasing (“Evaluation Committee”) evaluated responses to the RFP. 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 received in response to the RFP which was submitted by Solon Development, LLC (Solon). Solon will design, construct, own and operate solar photovoltaic (PV) electric generating systems (Projects) at four sites in the Mesa electric service territory for a price not to exceed the Bid Prices plus reasonable adjustments and other additional terms deemed appropriate.

The Projects will be constructed at the CK Luster Building (CK Luster), the Mesa Main Library (Library), Solid Waste Building and Utilities Meter Shop (Solid Waste) and the north and south parking lots of the Transportation Building (Transportation). Pursuant to further detailed design and available electrical capacity, each of the Projects may be split into sub-projects.

Background

Mesa is interested in including additional locally produced renewable energy in its utility portfolio which can be achieved through the installation of the Projects at City facilities within the Electric Utility’s Electric Service Area (ESA). In conjunction with Purchasing, the Energy Resources Department issued the RFP soliciting for energy and associated environmental attributes produced through such Projects. The RFP identified four sites

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within the ESA for the solar providers to evaluate as candidates for the installation of the Projects.

Three of the sites are located in the area known as the West Mesa Service Center, which is an area that contains a number of City facilities bound by E 6th St and E 8th St from north to south and bound by N Mesa Drive and N Pasadena from east to west. The last site is the Library which is located at 64 E 1st St. The Projects all fit within the goals of both Energy Resources and the City to purchase energy from multi-beneficial projects that are locally generated, renewable, and provide ancillary benefits to the public and City employees (such as shaded parking and event space creation).

Project Site List

Site:	Proposed Installation	Size (kW-DC)
CK Luster	10' Carport Shade Structure	738 kW-DC
Library	10' Carport Shade Structure	577 kW-DC
Solid Waste	10' Carport Shade Structure and 13'6"+ Carport Shade Structure	561 kW-DC
Transportation	10' Carport Shade Structure and 13'6"+ Carport Shade Structure	North: 409 kW-DC South: 612 kW-DC
Total:		2,897 kW-DC

The awarded vendor is expected to be able to privately finance, develop, design, construct, own, report online, operate, and maintain the Projects at the proposed sites. In addition, they are expected to understand that the aesthetics of the Projects will be critical to meeting the requirements of the RFP. They will also be expected to manage 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 from the Projects will then be purchased by Energy Resources for use in its electric supply portfolio and will offset wholesale market purchases.

Mesa received two proposal responses to the RFP, both of which met the minimum qualifications. The evaluation committee evaluated and scored the proposal responses in accordance with Mesa’s established policies and procedures and the RFP scoring criteria. The consensus of the Evaluation Committee recommends award to the highest-scored respondent, Solon.

Discussion

Mesa has engaged Solon to finalize the PPA for use on these four sites. The following terms are included in the PPA that has been negotiated as a result of the RFP:

1. Energy Purchase Rates and the Term of the Agreement
 - a. Mesa will pay no greater than the following Bid Prices for the energy generated by the Projects for a term of 25 years, up to 2,950 kW of

nominal capacity¹.

- CK Luster: \$0.0954/kWh
- Library: \$0.0987/kWh
- Solid Waste: \$0.0929/kWh
- Transportation: \$0.0928/kWh

- b. These rates may be subject to reasonable adjustments as reviewed and approved by the City Manager or designee due to reasonably unforeseen project challenges up to a maximum price cap.
 - c. The Projects are also subject to production requirements. If a Project produces significantly less energy than expected, Solon will pay Mesa 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 tax benefits from the Projects 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 Projects for the term of the PPA.
 3. Early Purchase Options
 - a. If Mesa determines it is in its best interest to own the Projects, the PPA provides for purchase of the system during specified intervals during the term of the agreement 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 Projects, Solon must remove the system and generally return the property to its original condition.
 4. Planning and Construction of the Project – Solon must begin construction and finish construction by certain deadlines on the various Projects. Delays to either of those dates may be subject to performance penalties.
 5. Maintenance of the Project – Mesa will only be paying Solon for energy and environmental attributes produced by the Project and Solon is responsible for all maintenance associated with the Projects 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

¹ As noted in the Project Site List Table, the expected capacity of the Projects is 2,897 kW, however, during detailed design there can be some variability between the initial proposal and the final installed capacity.

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 Projects.

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. As a result, Mesa would be forced to continue to purchase this energy from the energy spot market.

Fiscal Impact

Mesa will be purchasing the energy output and associated environmental attributes 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 \$522,207. The final amounts paid will vary based on how much energy the Projects actually produce (based on the amount of solar insolation and final efficiency of the equipment installed on the Projects). The Projects are expected to offset an estimated \$236,094 of market purchases, resulting in a net cost increase to the electric supply portfolio of \$286,113 in the first year based on typical market conditions. Because the solar PPA price is fixed and Mesa's market purchase costs are expected to increase over time, the financial impact of these solar costs is expected to decrease each year and any large upward swings in the market (which will happen from time to time) will improve the economics of this solar energy. If reasonable pricing adjustments increase Project costs, price increases will be incorporated in the final negotiated PPA and the net cost will increase. The cost increases from the purchase of the energy output are minimal in the scope of the total electric supply portfolio (\$26 million in FY23/24) and significantly less than historic swings in market power prices across the summer months. Additionally, the energy prices of the Projects are all less than the energy prices for the four projects surrounding Mesa's downtown plaza that were completed in 2022.

The Projects hold other ancillary benefits which offset the increased costs.

- 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 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 especially during times of market volatility.

Coordinated With

Engineering Department
Energy Resources Department
City Attorney's Office
Environmental & Sustainability Department