



# City Council Report

**Date:** February 11, 2019  
**To:** City Council  
**Through:** John Pombier, Assistant City Manager  
**From:** Scott Bouchie, Environmental Management & Sustainability  
Department Director  
Laura Hyneman, Environmental Management & Sustainability  
Department Deputy Director  
**Subject:** Amendment to the Solar Participation Agreement with Salt River  
Agricultural Improvement and Power District  
Citywide

## Purpose and Recommendation

The purpose of this item is to request that the City Council authorize the City Manager to amend the Sustainable Energy Offer Solar Participation Agreement (SEO Agreement) with Salt River Project Agricultural Improvement and Power District (SRP) by increasing the subscription of 2.6 percent (approximately 2.6 megawatts (MW)) to 5.1 percent (approximately 5.1 MW) of a 100 MW nameplate capacity solar photovoltaic generating facility.

## Background

SRP entered into a 25-year power purchase agreement for the purchase of solar power at a 100 MW solar photovoltaic generating facility. This facility will be built near Coolidge, Arizona, by NextEra Energy, and is scheduled to be operational no later than June 1, 2021. December 5, 2018, Mesa signed the SEO Agreement to subscribe to 2.63% of the facilities output at \$.02730/kilowatt hour (kWh). This rate is SRP's cost plus an adjustment for transmission losses. The structure of the SEO Agreement is based on Mesa's commitment to purchasing a percentage of the solar generated at a fixed rate for 15 years. The accounting for this purchase is done through the monthly SRP bill, shown as a bill adjustment. The bill adjustment is the difference between the SEO Agreement contract price for solar and cost of SRP's Fuel and Purchase Power Adjustment Mechanism (FPPAM), similar to Mesa's electric energy cost adjustment factor (EECAF).

## Discussion

This SEO Agreement amendment furthers the City's commitment to clean, renewable energy and supports utility-scale solar. SRP is offering Mesa three options for additional shares of the power generated by the 100 MW system: 5.1 percent, 5.6 percent or 6.0 percent. Staff recommends 5.1 percent to ensure that

the City will not purchase more solar energy than the amount consumed by City buildings during the 15-year term of the contract. The recommendation anticipates the completion of planned energy efficiency projects, such as LED lighting retrofits, energy management systems, and HVAC replacements that will substantially reduce energy usage in City buildings. The recommendation also allows for the implementation of the Food Waste to Energy pilot project that is underway. The Food Waste to Energy project has the potential to produce a significant amount of the electrical power that will be consumed by Mesa's wastewater treatment plants on-site and will significantly reduce the power purchased from SRP.

At this time, Mesa has nine existing solar systems (both owned and managed with Solar Service Agreements) that offset approximately 2 percent (2,148 MWh) of the energy used by City Facilities. The SEO Agreement signed with SRP December 5, 2018 added 2.63 MW solar (7,322 MWh) to the portfolio, increasing the City's total solar offset to approximately 5.8 percent (8 percent daytime energy use) in the SRP service area.

<b>SRP SEO ENERGY OFFSET – BASED ON 2018 ENERGY USAGE</b>					
SRP SEO MW	SEO Annual Generation (MWh)	SEO/Annual Usage Daytime (SRP)*	SEO/Annual Usage (SRP)*	SEO/Annual Usage (SRP)**	Total solar energy offset (Existing plus SEO)
2.63 (existing)	7,322	8%	5.8%	5.8%	7.5%
5.1 (proposed)	14,198	15.6%	11.3%	11.2%	12.9%

\*Excluding streetlights

\*\*Including streetlights

Additionally, SRP is working on innovative energy generation and optimization projects, such as bio-mass fuel, battery storage and demand reduction. A 5.1 percent share ensures the City will have the capacity to participate in future SRP programs.

## **Fiscal Impact**

Mesa's facilities in the SRP service area, excluding streetlights, used 91,137 MWh electric energy in FY 17/18. Mesa's annual energy use, including streetlights, was 126,820 MWh, with an annual electric bill of \$12,021,000. The financial benefit of this agreement is a function of the difference between the Agreement contract price and cost of SRP's Fuel and Purchase Power and Environmental Projects Adjustment (FPPAM) Charges. Based on last year's rates, entering into this amended Agreement could save approximately \$13,150 per year. This difference will be seen as an adjustment on the monthly billing.

SRP SEO COSTS							
	FY18 Total Usage (kWh)	FY18 Total Bill (With FY18 Fuel Rates)"	Estimated SEO Annual Solar Gen (kWh)	Estimated SEO Solar /FY18 Total Usage"	Mesa Pays SRP per Agreement	Mesa Receives* per Agreement	Net Mesa Costs
Current SEO - 2.63% (current)	91,136,713	\$12,020,674	7,322,364	8.0%	\$199,901	\$206,667	(\$6,766)
Proposed SEO – 5.1%	91,136,713	\$12,020,674	14,198,000	15.6%	\$387,600	\$400,750	(\$13,150)

\* Includes recent 2% FPPAM rate reduction. NOTE: With 2% FPPAM rate reduction, it is financially beneficial to enter into the agreement with SRP at \$0.0273/kWh. The tipping point (City pays more for solar than standard fuel) occurs when overall annual FPPAM rate decreases slightly more than 5%

### **Coordinated With**

This amended Agreement has been coordinated with the City Attorney's Office and Energy Resources.