



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Barry Ng  
Jennifer A. Maguire

**SUBJECT:** ENERGY SERVICE COMPANY  
PROGRAM APPROPRIATION

**DATE:** October 13, 2017

Approved

Date

10/20/17

## RECOMMENDATION

Adopt the following 2017-2018 Appropriation Ordinance and Funding Source Resolution amendments in the General Fund:

- a) Increase the estimate for Other Revenue in the amount of \$2,234,000; and
- b) Increase the Energy and Utility Conservation Measures Program City-Wide Expenses appropriation to the Public Works Department in the amount of \$2,234,000.

## OUTCOME

Approval of these recommendations will allow previously approved projects under the Energy Service Company (ESCO) Agreement to proceed as designed and scheduled, utilizing the current Council approved financing plan, to complete all procurement and installation work.

## BACKGROUND

On May 19, 2014, the City executed an Energy Services Agreement (Agreement) with Chevron Energy Solutions (Chevron) for a contract amount of \$21,093,029 to design and implement various energy conservation improvements, including the conversion of 15,000 sodium streetlights to light-emitting diode (LED) lamps. The Agreement was amended on May 30, 2014 to include the conversion of an additional 3,127 sodium streetlights to LEDs and to increase the maximum compensation to \$23,482,781. Chevron was subsequently acquired by Oaktree Capital Management and the organization began operating as OpTerra Energy Services (OpTerra) later that same year.

In addition to the streetlight conversions, the Agreement included solar photovoltaic system installations, Heating, Ventilation, and Air Conditioning (HVAC) projects, and facility lighting upgrades at various City facilities. These improvements were included in the Agreement based on an investment grade audit undertaken by OpTerra in November 2013. The purpose of the

audit was to identify a bundle of energy conservation improvements that, in their aggregate, would create savings in utility costs that equal or exceed the improvement costs over the financing term and within the expected life of the improvement. In total, the initial project budget for the streetlight improvements and City facilities improvements was \$27.1 million.

Funding for projects included within the Agreement were financed through a Master Equipment Lease-Purchase Agreement with Banc (sic) of America Public Capital Corp (BAPCC), authorized by Council in 2014, and commercial paper (CP) notes. The most recent total cost estimate of \$25.8 million was revised downward based on adjustments to the project's scope and shared with the Council at their meeting on June 21, 2016, which also included the authorization by the by Council and the City of San José Financing Authority Board to issue up to \$10 million in CP notes, of which approximately \$7.8 million was issued in 2016-2017. However, based on conditions discussed below, the total project cost is estimated to rise to \$28.8 million. There is capacity in the CP authorization to address the higher cost.

## ANALYSIS

From the Council approved scope of work awarded to OpTerra, the conversion of 18,127 streetlights to LEDs was completed in summer 2015, and the installation of seven solar photovoltaic systems, equating to the generation of 1.3 megawatts of clean power, was completed in spring 2017. The remaining projects are anticipated to be completed in 2017 – 2018 and are consistent with the original scope of work that has been awarded to OpTerra. Staff is working to complete these projects as they provide energy savings and utility cost savings to the City and assist in replacing equipment that has reached their serviceable life. The remaining projects include the replacement of the HVAC package units at the Shirakawa Community Center, the chiller unit replacement at the Museum of Art, and facility lighting improvements at the South Corporation Yard and the Berryessa Library.

The project cost estimate shared with the Council on June 21, 2016, assumed a total project cost of \$25.8 million. However, as described below, the total cost estimate has increased by \$3.0 million. This increase is the result of the following activities:

- \$2.3 million increase in solar photovoltaic project costs due to additional design, specialty engineering, and unforeseen landscape restoration work
- \$1.6 million increase in HVAC system replacement costs due to current market conditions
- \$269,000 increase for facility lighting replacement costs due to design change work

**Total Increase: \$4.2 million**

The above items resulted in a higher expenditure amount for these projects, however, in light of these cost increases, the City expects to realize savings from the following:

- \$1.2 million overall cost reduction for the streetlight conversion project due to lower direct costs and lower City costs through staffing and work efficiencies.

**Total Decrease: \$1.2 million**



A comparison between the previous estimate and the revised amount are detailed in the attachment titled "ESCO Project Costs."

The Energy and Utility Conservation Measures Program appropriation was established with an initial budget of \$27.1 million in 2013-2014, offset with the project's financing proceeds. At the end of 2016-2017, approximately \$555,000 was uncommitted. By comparing the original project appropriation amount to the revised estimate, the minimum amount needed to complete the ESCO program is \$1.8 million as shown below:

Initial Estimated Project Cost – May 2014:	\$27,063,135
<u>Total Revised Estimated Cost – October 2017:</u>	<u>\$28,840,529</u>
Net Cost Increase:	\$1,777,394

To cover the cost increase, the recommended action also includes the increase of revenue for commercial paper by \$2.2 million. On June 21, 2016, the City Council and City of San José Financing Authority authorized the use of commercial paper in an amount not to exceed \$10.0 million. Through 2016-2017, \$7,776,000 has been issued, leaving a remaining authorized balance of \$2,234,000. Staff recommends increasing both expense appropriation and recognizing commercial paper proceeds for 2017-2018 in the amount of \$2,234,000, which provides a contingency of \$456,606 to address any future unforeseen project change orders within the remaining scope of work. The City's practice is to only issue CP notes for the amount expended; if all or a portion of the contingency is not needed, the amount of CP notes will be reduced accordingly.

Through the administration of the streetlight conversions, solar energy installations, and remaining energy conservation projects, the City is expected to reduce more than 7-million kilowatt-hours of electrical use annually, resulting in an anticipated \$51.5 million in reduced utility expenditures over the life of the systems, netting the City \$13.5 million in savings after all project costs have been paid through the financing term (including this action if approved).

### **EVALUATION AND FOLLOW-UP**

The remaining projects are currently scheduled to be completed within 2017-2018. No additional Council follow-up action is expected at this time. An ESCO progress update will be shared at the November 6, 2017, Transportation and Environment Committee Meeting.

### **PUBLIC OUTREACH**

OpTerra was selected as the City's ESCO through a competitive RFP in 2012. To solicit subcontractors for all projects, OpTerra is required to administer a competitive bid process for equipment and labor to be in compliance with the Municipal Code.

This memorandum will be posted on the City's website for the October 31, 2017, City Council agenda.

### **COORDINATION**

This project and memorandum were coordinated with the City Attorney's Office and the Finance Department.

### **COMMISSION RECOMMENDATION/INPUT**

This item does not have input from a board or commission.

### **FISCAL/POLICY ALIGNMENT**

The projects within the ESCO program align with the City's Green Vision Goals, including the reduction of per capita energy use (Goal #2), receiving 100% of electrical power from clean renewable sources (Goal #3), building or retrofitting 50 million square feet of green buildings (Goal #4), replacing 100% of City streetlights with smart, zero emission lighting (Goal #9), and the overall focus to reduce greenhouse gas emissions within the City, which helps to drive the City's environmental leadership locally, regionally, and nationally.

### **COST SUMMARY/IMPLICATIONS**

1. TOTAL AMOUNT OF RECOMMENDATION: **\$2,234,000**
2. COST ELEMENTS OF APPROPRIATION ADJUSTMENT:

Estimated Project Cost Increase	\$1,777,394
Contingency	<u>\$456,606</u>
Total	<b>\$2,234,000</b>
3. SOURCE OF FUNDING: General Fund, via the previously authorized issuance of commercial paper. The debt service associated with the issuance of the full \$10.0 million of commercial paper, \$757,000, was factored into the 2017-2018 Adopted Budget and 2018-2022 General Fund Five-Year Forecast.
4. OPERATING COSTS: As referenced in the February 11, 2014, staff report, the proposed costs of implementing the projects identified in the Agreement had been reviewed and were not anticipated to have a significant impact on the General Fund Operating Budget once the projects have been installed and are generating energy and utility cost savings. However, a General Fund commitment to pay associated debt service is included in the financial strategy.



**BUDGET REFERENCE**


The following table identifies the fund and appropriation proposed to fund the contract recommended as part of this memorandum and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn Name	Current Total Appn	Rec. Budget Action	2017 – 2018 Operating Budget Page	Last Budget Action (Date, Ord. No.)
001	R130	Other Revenue	\$0	\$2,234,000	N/A	N/A
001	3057	Energy and Utility Conservation Measures Program	\$555,000	\$2,234,000	912	10/17/2017, 30014


**CEQA**

Not a Project, File No. PP17-004, Government Funding Mechanism or Fiscal Activity with no commitment to a specific project which may result in a potentially significant physical impact on the environment.

/s/  
BARRY NG  
Director of Public Works

  
JENNIFER A. MAGUIRE  
Budget Director/  
Senior Deputy City Manager

I hereby certify that there will be available for appropriation in the General Fund in Fiscal Year 2017-2018 monies in excess of those heretofore appropriated therefrom, said excess being at least \$2,234,000.

  
JENNIFER A. MAGUIRE  
Budget Director/  
Senior Deputy City Manager

Attachment: ESCO Project Costs

For questions, please contact Joe Garcia, Deputy Director of Public Works, at (408) 535-1298.

**ATTACHMENT**  
**ESCO PROJECT COSTS**

Energy Measure	Engineer's Estimate Direct Cost	OpTerra Overhead	City Cost	Total	Revised Direct Cost (Bids received and updated estimates)	OpTerra Overhead	City Cost	Change Orders with OpTerra Overhead	Total	Difference (Engineer's Estimate Vs. Revised Cost)
Streetlights	\$11,264,264	\$4,336,741	\$2,892,536	\$18,493,541	\$10,497,672	\$4,041,604	\$1,728,218	\$1,024,589	\$17,292,083	\$1,201,458
Photovoltaics	\$4,263,744 <sup>1</sup>	\$1,641,542	\$639,562	\$6,544,848	\$4,263,744	\$2,570,333	\$1,769,939	\$257,814	\$8,861,830	(\$2,316,982)
HVAC	\$227,975	\$87,770	\$34,196	\$349,941	\$1,291,196 <sup>2</sup>	\$497,110	\$193,679	\$0 (to date)	\$1,981,986	(\$1,632,045)
Facility Lighting	\$284,123	\$109,387	\$42,618	\$436,128	\$284,123	\$109,387	\$42,618	\$268,502	\$704,631	(\$268,503)
<b>TOTALS</b>	<b>\$16,040,106</b>	<b>\$6,175,440</b>	<b>\$3,608,912</b>	<b>\$25,824,458</b>	<b>\$16,336,735</b>	<b>\$7,218,435</b>	<b>\$3,734,455</b>	<b>\$1,550,905</b>	<b>\$28,840,529</b>	<b>(\$3,016,072)</b>

<sup>1</sup>Actual Bid Amount Received

<sup>2</sup>Actual Bid Amount Received for Shirakawa Community Center and Engineer's Estimate for Museum of Art