



City Manager's Report
June 11, 2019 City Council Meeting
Prepared By: Cleve Morris, City Manager

Item#: 12.2

Subject: Adopt a resolution approving an agreement with the California Energy Resources Conservation and Development Commission for an Energy Conservation Assistance Act Loan for Energy efficient lighting and replacement of outdated, inefficient HVAC Units for a total loan amount of \$732,846, and authorizing the City Manager to execute the same.

Purpose: The purpose of this item is to request Council approval of a loan agreement with the California Energy Commission (CEC) for Lighting and HVAC Improvements throughout the City. The cost of proposed improvements will be paid for through energy cost savings.

Background: In 2015, the City entered into an agreement with Johnson Controls Inc. (JCI) for Water and Energy Efficiency Project Development. The Agreement involved a unique public/private partnership; an approach that allows for a streamlined solution to implementing energy and infrastructure replacement projects. The program is divided into four phases.

1. Preliminary Analysis
2. Detailed Design Analysis and Cost Analysis
3. Installation
4. Performance Guarantee Term

A major objective of JCI's process is to minimize risk to the City. JCI does this in a number of ways. First, the City expends no funds until the City has a co-authored solution. Second, Project cost is a guaranteed maximum price. Finally the annual savings are guaranteed and backed by the financial stability of a fortune 100 company (JCI).

On March 30, 2015, the City entered into the first phase of the agreement with JCI to perform a preliminary analysis of City operations and facilities at no cost for their work if the City decided not to pursue the project. Since that time, Staff has worked with JCI to develop potential projects. Staff began conversations with JCI about available funds or incentives for water and energy efficiency projects. At that point, the following list of projects was identified as potential water and energy efficiency projects:

1. Waste Water Treatment Plant Operations
2. Photovoltaic
3. SCADA
4. Water Storage
5. AWWA Water Meter Audit
6. HVAC
7. Roofing

8. Indoor/Outdoor Lighting

On November 24, 2015, the City entered into Phase 2 of the project development agreement with a \$374,742 encumbrance for JCI's work should the project efficiencies be verified and the City decides to not pursue Phase 3 of the Installation of the Performance Contract. The following is a final list of improvement measures that were identified with the Sewer Enterprise Fund, General Fund, and Water Enterprise Fund:

Sewer Enterprise Fund:

1. Photovoltaic Array
2. Modify Anaerobic Digestion Process
3. Add smaller blower and install VFD on blower
4. Installation of Sludge Drying Oven
5. PG&E Automatic Demand Response (ADR)
6. Peak Demand Limiting

General Fund:

1. Optimize Electric Rate Tariffs
2. Solar for Irrigation systems
3. Interior/Exterior Lighting Retrofit
4. Parking Garage Lights
5. Replace HVAC
6. Replace Standard Telephone Service with VoIP
7. Solar for the Parking Garage
8. Solar RESBCT for General Buildings

Water Enterprise Fund:

1. List of Project for the Water Funds:
2. AMI Meter Installation
3. Identify Pipe Replacement/Leak repairs/replace
4. Leak Detection Study
5. Water Storage Tank

The detailed analysis confirmed certain infrastructure improvements will result in water and energy savings of \$217,188, annual energy savings that is guaranteed by JCI. Certain Water efficiency projects may be pursued in a second phase. The remaining projects were shown not to realize the necessary efficiencies to justify the project. However, staff and JCI prioritized and finalized the improvement measures scope of work and project costs for this phase. The improvement measures as of that time for the contract were valued at:

Sewer Enterprise Fund Contract:	\$3,263,050
General Fund	<u>660,597</u>
Total Contract Value:	<u><u>\$3,923,647</u></u>

In March of 2017, the City entered into a Performance Agreement to move forward with the following list of projects:

Waste Water Enterprise Fund:

1. Solar Photovoltaic (PV) for the WWTP

2. Interior/Exterior Lighting Retrofit

General Fund:

1. Interior/Exterior Lighting Retrofit
2. Replace HVAC Equipment – City Hall
3. Replace HVAC Equipment – Old Town Hall
4. Replace HVAC Equipment – Public Safety

Since that time, the City has been in the process of exploring different options to fund the projects. Financing needed to be secured which demonstrated that energy savings would cover the debt service. Staff looked at several different financing options including bonds, federal energy efficiency loans, state loans and other similar financing methods. In the end, two programs were identified, both involving state loans.

Discussion: For the past year, staff has been working on applications to file for loans to perform the project. At this time, an application is being reviewed for the Solar project at the Water Reclamation Facility. That project is not being considered at this meeting but will be brought back at later date.

In October of 2018, the City made application to the California Energy Commission (CEC) for a loan to perform the lighting and HVAC improvements. The CEC approved the loan in February of this year. The loan terms are for 15 years with a 1% Interest Rate. Based on the analysis performed, the energy savings will cover the cost of debt service. The project will include the following:

Lighting: JCI shall provide lighting retrofit work, including all necessary labor, materials, equipment, disposal, fixture cleaning, transportation and storage for fixtures as identified in Lighting Scope of Work. The Lighting Line by Line Scope, will be modified to reflect the actual post construction conditions, and shall be used for the purposes of as-built drawings.

JCI will provide the necessary sample installations, for the purpose of acquiring the Customers approval of the color rendering of the lamps and/or fixtures, prior to beginning the installation.

HVAC: This project replaces existing packaged “roof-top”, ground and floor mounted air-cooled air-conditioning, split condensers, furnaces and fan coil equipment which are aged or inefficient, with new higher efficiency equipment, in a “like for like” manner. The existing connections for ducting, condensate, electrical, signal wiring, flue and refrigerant will be reused unless specified otherwise.

The total loan cost is \$732,846. Attached are three documents. The first is the agreement to be approved today. The second is a summary of the Energy Efficiency Measures. The third is a summary of the debt service.

Staff is requesting Council approval to enter into the loan agreement and authorize JCI to begin the project.

Options:

1. Authorize staff to proceed as directed.
2. Direct staff to negotiate changes to the loan agreement and bring back for consideration.
3. Direct staff not to proceed with the loan or project at this time.

Cost: The estimated annual payment is \$52,734.02. Annual cost savings are estimated at \$56,550.38. The JCI Performance agreement guarantees cost savings. If the savings are not realized, JCI is required to make up the difference. In addition, the agreement with the CEC has a provision that states:

In the event annual energy cost savings resulting from the Project, as determined by the Energy Commission, fail to equal or exceed the amount due under this Agreement, this Agreement may be renegotiated to assure that the repayment amount does not exceed the actual energy savings or avoided costs resulting from the Project, and the Promissory Note will be revised accordingly.

Budget Impact: In the proposed budget the existing costs are included. It is expected that the project will be completed Fall of 2019. Savings will begin to accrue at that time. As shown in the attached documents, the first payment is not due until June of 2021. Therefore, it is anticipated that there will be some energy savings realized this year. However at this time staff has taken a conservative approach and is not showing those savings in the budget. If the savings are realized this year, a budget adjustment can be made at mid-year or at year-end.

Recommendation: Adopt a resolution approving an agreement with the California Energy Resources Conservation and Development Commission for an Energy Conservation Assistance Act Loan for Energy efficient lighting and replacement of outdated, inefficient HVAC Units for a total loan amount of \$732,846, and authorizing the City Manager to execute the same.



M. Cleve Morris, City Manager



Dave Warren, Assistant City Manager/
Director of Finance

Attachments:

1. Resolution
2. Cover Page and Loan Agreement
3. Summary of Energy Efficiency Measures
4. Loan Amortization Schedule