



Agenda Report

Fullerton City Council

MEETING DATE: SEPTEMBER 21, 2021

TO: CITY COUNCIL / SUCCESSOR AGENCY

SUBMITTED BY: STEVE DANLEY, ACTING CITY MANAGER

PREPARED BY: MEG MCWADE, DIRECTOR OF PUBLIC WORKS
ELLIS CHANG, DIRECTOR OF ADMINISTRATIVE SERVICES
DAVID GRANTHAM, PRINCIPAL CIVIL ENGINEER

SUBJECT: ENERGY SERVICES AGREEMENT FOR
INFRASTRUCTURE MODERNIZATION AT VARIOUS CITY
OWNED FACILITIES AND PROPERTIES

SUMMARY

Public hearing to consider agreement with NORESKO, LLC, to implement \$8,458,191 in energy efficiency projects recommended by the Public Works Department and Infrastructure and Natural Resource Advisory Committee with annual energy / operational cost savings used to fund the cost of the projects.

RECOMMENDATION

1. Adopt Resolution 2021-XX.

RESOLUTION 2021-XX - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FULLERTON, CALIFORNIA, APPROVING AN ENERGY SERVICES AGREEMENT WITH NORESKO, LLC FOR THE DESIGN AND CONSTRUCTION OF ENERGY EFFICIENCY IMPROVEMENTS

2. Authorize Mayor to execute and City Manager, or designee, to administer an Energy Services Agreement with NORESKO, LLC for specific infrastructure modernization projects at various City owned facilities and properties, in a form approved by the City Attorney.
3. Authorize Director of Administrative Services to obtain project financing for approved energy savings projects.

4. Authorize Director of Public Works to approve any future change orders or purchase orders for construction and professional services within the approved project budget.

PRIORITY POLICY STATEMENT

This item matches the following Priority Policy Statement/s:

- Fiscal and Organizational Stability
- Infrastructure and City Assets.

FISCAL IMPACT

NORESCO recently completed a City Council-approved Investment Grade Audit (IGA). This IGA identified a portfolio of energy efficiency projects that would provide economic and operational benefits to the City with a \$8,458,191 construction cost. If City Council approves the Energy Services Agreement to implement these projects, the City will seek approximately \$8.9M in financing for the entire project budget - construction award, internal costs, project management, measurement and verification, contingency, cost of financing, etc.

The City will use the resulting annual energy savings from implementing equipment modernizing projects to offset the costs of the financing vehicle. Once the City has paid off the debt, the City will continue to benefit from ongoing energy savings throughout the useful life of the equipment. Staff anticipates the City will save approximately \$2M over the 25-year life of the project as well as establish and replace critical infrastructure equipment.

DISCUSSION

Background

A significant amount of the City's infrastructure is at or near the end of its useful life, resulting in costly and inefficient deferred and/or recurring maintenance problems. The City needs to make significant capital investment to replace and modernize the infrastructure.

City Council and staff looked for creative solutions to implement and fund the necessary infrastructure due to the City's fiscal issues. One such program is Energy Savings Performance Contracting (ESPC), a design-build program consistent with the provisions of California Government Code Sections 4217.10-4217.18 that provides vehicles to implement and fund energy savings projects. ESPC helps the City modernize infrastructure by funding project costs with the ongoing energy savings of the upgraded equipment. This enables necessary upgrades to occur without increasing the use of the City's general fund.

As this project utilizes the unique ESPC process to perform the improvements, the City engaged the services of Allie Bridge Energy Solutions, a consulting firm to build a Request for Proposal to obtain a qualified IGA contractor and then work with the contractor create an energy project portfolio in the best interest of the City.

Investment Grade Audit

The City engaged the services of NORESO, LLC in March 2021 to provide the Investment Grade Audit (IGA) - the first step for the ESPC Program. The IGA provides an extensive review of City facilities and services to identify a portfolio of energy efficiency projects that allow the City to use the ongoing annual energy savings to fund the debt service payments for the project.

As part of the IGA task, NORESO conducted comprehensive field visits of City facilities and buildings and interviewed City staff maintaining and utilizing those facilities. These field reviews and interviews enabled the consultant to obtain a clear understanding of City facilities and infrastructure needs and current operational practices to develop a list of practical and City-specific Energy Conservation Measures or ECM's.

Throughout the IGA process, NORESO and Public Works staff provided updates to and solicited input from the City's Infrastructure and Natural Resources Advisory Committee (INRAC). The preliminary IGA results recommended \$14 million in energy savings project improvements for consideration. However, INRAC and Public Works staff reduced the scope of the project to only those projects that would create significant energy cost savings and replace critical City infrastructure equipment near end of life due to deferred maintenance due to funding impediments. INRAC also recommended installation of solar facilities to reduce future energy consumption and the installation of additional electric vehicle charging stations for public use. At the July 19, 2021 INRAC meeting, staff presented the revised portfolio of Energy Conservation Measures (ECM's) and INRAC recommended moving the \$8.4M project forward for City Council consideration.

The final IGA Project involves the following four ECM categories recommended for implementation:

- ECM 1 – Lighting Upgrades
- ECM 2 – Renewable Energy and EV Charging
- ECM 3 – HVAC, Mechanical and Controls Upgrade
- ECM 4 – Plumbing and Irrigation Upgrades.

The following provides more detailed information on each ECM:

ECM 1 – Lighting Upgrades

- Interior LED Upgrades at City buildings
 - Upgrade approximately 5,538 fixtures to provide energy savings, improve lighting quality, reduce maintenance costs and alleviate disposal concerns for existing fixtures. Work will also include installation of occupancy sensors and occupancy dimming controls at City Hall.
- Exterior LED Upgrades at City buildings, parks and parking lots
 - Upgrade approximately 1,561 fixtures to provide energy savings, improved safety and security and reduced maintenance costs.
- Smart City Lighting Controls at various City parking lots

- Install controls on approximately 294 fixtures to allow remote adjustment of operating hours, monitor use and outage notification. Controls can expand to provide security video, parking lot usage monitors, Wi-Fi hotspots, etc.
- Streetlight Upgrade Engineering Design
 - Engineering design to convert the Richman Area high voltage streetlights to a low voltage system.
 - This will provide a 'shovel ready' project should funding become available and provides for future project programming and budgeting.

ECM 2 - Renewable Energy and EV Charging

- Photovoltaic (PV) Generation at City Hall staff parking lot, Main Water Plant and Police Department to provide electrical power to offset the energy consumption at each respective facility.
- Electric Vehicle (EV) Chargers in the City Hall parking lot, SOCO parking structure and Police Department to provide public charging stations at City Hall and SOCO parking structure, plus charging stations for current and future police vehicles.

ECM 3 – HVAC, Mechanical, and Controls Upgrades

- Chiller Replacement at City Hall and Library to replace end of life and high maintenance equipment.
- HVAC Controls Update at Basque Maintenance Yard, City Hall and Police Department to increase setting controls to save energy without affecting comfort.
- Duct Sealing at Police Department to significantly reduce losses in the system.
- Supervisory Control and Data Acquisition (SCADA) Historian Server Replacement for the Water System to move forward replacement of the antiquated server and provide data to better operate the water pumps.
- Pool Pump Variable Frequency Drives (VFDs) at Fullerton Community Center and Independence Park to operate the pump at a high efficiency.

ECM 4 – Plumbing and Upgrades

- Plumbing fixture upgrades at Administrative and City Service buildings and park restrooms to reduce the water demand at City buildings

The Energy Services Agreement (ESA) also includes NORESO's work with Southern California Edison (SCE) to convert approximately 600 SCE-owned streetlights to energy efficient lights. Converting lights to LED makes them eligible to receive a discounted rate from SCE. SCE staff completes the field work. NORESO has included coordination with SCE, calculation of energy savings and assistance to the City as part of their project cost. City staff will submit and process the application and documentation to SCE.

Project Benefits and Recommendation

This project enables the City to modernize energy equipment infrastructure with no upfront capital outlay. The proposed Project - as shown in Table D-2 of the IGA Executive Summary (Attachment 3) - will provide a positive net cash flow for the life of the project, with significant cost savings occurring after debt service repayment. Staff anticipates the guaranteed annual savings from the project, as proposed, will offset the capital financing and provide approximately \$2M in additional savings over the 25-year life of the project.

Because the State's 4217 process allows this design-build approach, project delivery will occur more quickly than the standard design-bid-build process, enabling the City to realize the energy savings sooner.

The ECM's will enhance and upgrade park lighting which increases safety as well as our resident's enjoyment of these public spaces. Staff will develop a final design for one of the City's series lighting projects as part of the lighting project, enabling the City to pursue grant funding with a defined project. The City does not have the capital for the critically needed replacement of the Library and City Hall chillers. The replacement will avoid the potential for a complete equipment failure which could impact the City's ability to utilize the facilities and conduct City business. The upgrade of control systems will enable the City to manage its energy usage in a more sustainable manner. The City will upgrade plumbing at various facilities, providing for modernizing equipment, reducing potential emergency repairs and conserving water usage.

Staff and INRAC recommend implementation of these projects through the award of the Energy Services Agreement (ESA) with NORESKO. The project proposes an annual cost for NORESKO to measure and verify the installed improvements provide the expected energy savings using industry standard protocols, calculations and measurements. Staff recommends NORESKO complete the Measurement and Verification Service for at least the first year. Based on the Measurement and Verification of each of the measures in the first year, the City can evaluate the actual missed and excess savings and the need to pay for additional measurement and verification in future years. Should the review indicate less than anticipated savings, NORESKO would fund the difference for each year of Measurement and Verification Service.

City staff will obtain and submit the proposed financing plan to City Council for consideration at a subsequent meeting, pending City Council approval of the ESA.

Public Hearing / California Environmental Quality Act

California Government Code Sections 4217.10 - 4217.18 require City Council hold a public hearing to consider this item. California Government Code Section 4217 requires the City to post separate public hearing notices for the Energy Services Agreement and Finance Agreement at least two weeks before City Council action. Staff posted these notices in accordance with the City's customary practice.

Staff prepared an environmental assessment in accordance with California Environmental Quality Act guidelines and determined that the project is categorically exempt.

Other Project Options

City Council has the option to reduce, remove or add tasks in each of the proposed ECMs. However, City Council must consider changes in the context of building an energy savings project portfolio that results in an overall savings. Therefore, any proposed changes would necessitate a review of the revisions to ensure the project remained economically favorable with adequate energy savings to assist with offsetting financing / debt service costs.

Attachments:

- Attachment 1 – PowerPoint Presentation
- Attachment 2 – Resolution 2021-XX
- Attachment 3 – IGA Executive Summary
- Attachment 4 – Project Budget Sheet
- Attachment 5 – Energy Services Agreement