



Administrative Report

H.5., File # 21-2382

Meeting Date: 5/18/2021

To: MAYOR AND CITY COUNCIL

From: Ted Semaan, Public Works Director

TITLE

APPROVE AN AGREEMENT WITH SOUTHERN CALIFORNIA EDISON FOR THE CITY'S PARTICIPATION IN THE LS-1 OPTION E STREET LIGHT REPLACEMENT PROGRAM, WHICH WOULD REDUCE STREET LIGHTING COSTS BY APPROXIMATELY \$120,000 PER YEAR

EXECUTIVE SUMMARY

Approval of the recommended action would authorize the City's participation in Southern California Edison's LS-1 Option E street light replacement program. The City would fund the replacement of 3,180 Edison-owned high-pressure sodium street lights with energy efficient LED fixtures. The City would pay for the fixtures out of energy cost savings over a 20-year period. Participation in the program would reduce the City's street lighting costs by approximately \$120,000 per year during the 20-year payback period and by approximately \$180,000 per year in subsequent years. Edison would continue to own and maintain the lights.

BACKGROUND

Of the 5,084 street lights located in Redondo Beach, 3,180 are owned by Southern California Edison (SCE). The City currently pays approximately \$487,000 per year for SCE to operate and maintain the lights, which are primarily located on residential streets. SCE currently uses high pressure sodium (HPS) fixtures, which are not energy efficient.

SCE offers a program known as LS-1 Option E, whereby cities can pay the cost for SCE to replace HPS fixtures with energy efficient LED fixtures and immediately benefit from reduced energy usage and costs. There is no upfront expense to participate in the program as cities pay for the replacement fixtures through on-bill energy cost savings over a 20-year period. SCE continues to own, operate and maintain the street lights and would be responsible for replacing light fixtures as needed. LED fixtures have an expected lifespan of 8-10 years. SCE is responsible for future fixture replacements as needed with no additional compensation.

Staff has analyzed the LS-1 Option E program, including meeting with the program administrator, and concluded that participating would be of great benefit to the City. If the City were to participate, upon implementation street lighting costs would be reduced by approximately \$120,000 per year. The cost to replace 3,180 light fixtures, at roughly \$375 per fixture including installation by SCE, would be approximately \$1.2 million. This cost would be paid over a 20-year period, with an annual cost of roughly \$60,000. However, the immediate cost savings resulting from using energy efficient fixtures would be approximately \$180,000 per year. As a result, the City would have a net savings of roughly

\$120,000 per year during the payback period and then \$180,000 per year in subsequent years. There are no up-front costs and no interest is charged during the payback period.

Staff sees only positives associated with the City's participation in the program. In addition to the significant cost savings, there would also be environmental and aesthetic benefits. Replacing 3,180 high pressure sodium street lights with LED fixtures would greenhouse gas emissions by approximately 788 metric tons per year. In addition, LED fixtures give off a clean white glow that is widely considered more aesthetically pleasing than the yellow/orange glow of high-pressure sodium fixtures. When the City replaced approximately 1,300 City-owned HPS fixtures with LEDs in 2013, staff received only positive feedback regarding the aesthetic change.

As a number of cities have already entered into agreements with SCE and are in line to have their street lights replaced, there would be a wait time of approximately five months to have fixtures replaced in Redondo Beach.

COORDINATION

This report was prepared by the Public Works Department. The City Attorney's office prepared and approved the agreement as to form.

FISCAL IMPACT

There would be no up-front costs associated with the City's participation in the LS-1 Option E Program. The cost for SCE to replace 3,180 street light fixtures would be approximately \$60,000 per year for 20 years. The resulting energy costs savings would be approximately \$180,000 per year, for a net annual cost reduction of \$120,000 during the payback period.

APPROVED BY:

Joe Hoefgen, City Manager

ATTACHMENTS

- Option E Agreement
- Savings projections