



# Administrative Report

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M.1., File # 21-2534

Meeting Date: 6/1/2021

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**To: MAYOR AND CITY COUNCIL**

**From:** Ted Semaan, Public Works Director

## **TITLE**

DISCUSSION AND POSSIBLE ACTION REGARDING THE CITY'S PARTICIPATION IN SOUTHERN CALIFORNIA EDISON'S LS-1 OPTION E STREET LIGHT REPLACEMENT PROGRAM

## **EXECUTIVE SUMMARY**

Staff recommends that the City enter into an agreement to participate in Southern California Edison's LS-1 Option E street light replacement program. The City would fund the replacement of 3,182 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**

On May 18, 2021, the City Council discussed the possibility of the City participating in Southern California Edison's LS-1 Option E street light replacement program. The Council continued the item to June 1, 2021, and requested additional information regarding a proposal from Tanko Lighting. Tanko claims the City can achieve maximum lighting cost reductions by acquiring ownership of street lights and poles currently owned by SCE.

Of the 5,084 street lights located in Redondo Beach, 3,182 are owned by 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 amortize 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 3,182 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 3,182 high pressure sodium street lights with LED fixtures would reduce 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.

Attached is the proposal from Tanko Lighting. Through their proposed process, the City would take ownership of 3,182 lights. Of these lights, 27% include the poles only with the balance of 73% on wooden distribution poles owned by SCE. The City would then replace the existing HPS fixtures with LEDs and benefit from reduced energy usage and costs.

An evaluation of Tanko's proposal identifies several assumptions and has given staff the following concerns:

- SCE is opposed to selling street lighting assets. The utility formerly offered an acquisition program at a cost of \$10,000 to determine purchase price and which lights would be offered, but it was closed in August 2015.
- With SCE's purchase program closed, Tanko's proposal involves forcing SCE to relinquish street lights and poles through an eminent domain legal process.
- No cities in SCE's service area have successfully completed the eminent domain process for street light acquisitions initiated after SCE closed the program in 2015. According to SCE, only one city is currently attempting the process. Conversely, 130 cities are participating in the LS-1 Option E program.
- The City currently receives a Distribution Pole Credit from SCE that reduces lighting costs by \$127,000 per year. If the City took ownership of the poles and fixtures, the Distribution Pole Credit would no longer apply.
- Preliminary assessment by Tanko noted an acquisition cost and upgrade cost of \$2,711,983, of which \$1,121,983 is for the fixture upgrade from HPS to LED. The upgrade cost is similar to SCE's estimated conversion cost of \$1.2M.
- Tanko's estimated acquisition cost of \$500 per pole doesn't appear to be reliable. The actual cost can't be known because no cities have completed this process. However, when a number of cities acquired street lights through the formerly-offered acquisition process, the cost per unit was typically in the range of \$800-\$1,000 per pole.
- To get an audit and accurate analysis of the SCE owned street lights, the City would need to

enter into a contract with Tanko Lighting. A fee of \$60,000 would be payable to Tanko upon a court ordering SCE to sell lights and poles to the City through eminent domain. Additional costs would/may be necessary for legal services to conduct the eminent domain process.

Staff believes the City's best course of action is to sign up for LS-1 Option E at this time. Staff can continue discussions with Tanko Lighting to receive an in-depth proposal while receiving savings credits from SCE. If further research and analysis indicates that acquiring the street lights through eminent domain would result in greater cost savings, staff will return to City Council for consideration of entering into a contract with Tanko Lighting to pursue that option and ultimately reimburse SCE for the cost of replacing HPS fixtures with LED fixtures with a lump-sum payment.

### **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
- Tanko proposal