



TOWN OF FAIRFAX

STAFF REPORT

October 7, 2015

TO: Mayor and Town Council

FROM: Garrett Toy, Town Manager *GT*

SUBJECT: Discussion/consideration of retrofitting streetlights with LED fixtures and participating in PG&E programs to manage and finance the retrofit project.

RECOMMENDATION

Discussion/consideration of retrofitting streetlights with LED fixtures and participating in the PG&E LED Street Light Turnkey Replacement Program and the PG&E On-Bill Financing program to finance and manage the retrofit project.

DISCUSSION

The Town's Climate Action Plan (CAP) has a recommended action item: "EN-12. Continue to replace street lights and parking lot lights with energy-efficient technologies, such as LED lighting." The CAP estimates replacing street lights with LED lamps would reduce Gas House Gases (GHG) by 10.5 metric tons CO₂e.

The Town has approximately 550 street lights that have not been retrofitted with LED lamps. The Town previously retrofitted 48 streetlights in the downtown area with LED lamps. Attached is a map which shows the approximate locations and types of fixtures for all the streetlights in Town.

Under the PG&E program parameters, the Town would be able to replace approximately 400 cobra-head streetlights (all of them) and approximately 70 of the "top-hat" streetlights in downtown. The location of the "top-hat" streetlights to be replaced would be primarily in the downtown area. The actual number may vary due to possible discrepancies in the map and final cost estimates. The replacement of approximately 470 lights would maximize the Town's participation in the PG&E financing program without requiring the Town incur "out-of-pocket" expenses to retrofit the streetlights. After rebates (approximately \$19,000), the cost to be financed is approximately \$155,000. Under the On-Bill program, PG&E finances the retrofit at 0% over a 10 year period. The Town continues to make the same energy payments for streetlights and PG&E applies the estimated energy savings from the retrofit (approx. \$15,000/yr.) toward the repayment of the loan. The out-of-pocket costs to the Town to retrofit the remaining 70 streetlights not covered by the program would be approximately \$63,000. The "pay-back" period from the energy savings would be 30 years. The reason

for the longer pay-back period is that the "top-hat" fixtures are approximately 4 times as expensive as the cobra-head LEDs.

PG&E also offers a LED Street Light Turnkey Replacement Service program in which they offer a "One-Stop" project price which includes fixtures/materials, distributor and shipping costs, sales tax, installation, inspection, PG&E administration costs, and project management costs. The Town would enter into an agreement with PG&E for the total project costs and the On-Bill program would directly pay for the costs.

Before staff tries to work out all the details with PG&E, we are seeking Council concurrence on: 1) maximizing the retrofit of streetlights without the Town incurring "out-of-pocket" expenses and 2) participating in PG&E's LED Street Light Turnkey Replacement Service (Turnkey") and On-Bill Financing Programs. While the "Turnkey" program does have administrative costs, it would enable the Town to implement the project much quicker and cost effectively because of our limited staffing to manage such projects. It should be noted that less streetlights would be retrofitted unless the Town paid the administrative cost "out-of-pocket."

Based on the Council's direction, staff would return to the Council for approval of the required PG&E agreements including detailed cost estimates and the estimated number of streetlights that would be retrofitted.

FISCAL IMPACT

The significant benefits to the Town under the Turnkey program are that Town does not have to make upfront payments and the entire project is managed by PG&E. The only additional costs to the Town would be the installation of lighting shields if needed. This would probably not exceed a few thousand dollars. After the 10 year repayment period, the Town would continue to receive the benefit of reduced energy costs. In addition, the Town would immediately save approximately \$4,000 per year on reduced maintenance costs for the LED lights.

ATTACHMENT

Map of streetlights

Fairfax Streetlight Fixtures

Legend

FixtureTyp, LampType

- Cobra, HPS 100W
- Cobra, HPS 150W
- Cobra, HPS 200W
- Cobra, HPS 70W
- Globe, HPS 100W
- Globe, HPS 70W
- ◇ Hat, HPS 100W
- ◆ Hat, HPS 70W
- ◆ Hat, LED 25W
- ⊕ Lantern, HPS 70W
- ☆ Other, HPS 200W
- ☆ Other, HPS 70W

