

# City of Fresno

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# Legislation Details (With Text)

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Title: Actions pertaining to the Citywide replacement of high pressure sodium (HPS) streetlight fixtures with

more energy efficient light-emitting diode (LED) fixtures

1. CONTINUED HEARING to consider adoption of a Resolution to approve a Finance Agreement and Energy Services Contract with Pacific Gas and Electric Company (PG&E) for implementation of certain energy related services

2. Adopt a finding of Categorical Exemption per staff determination, pursuant to Section 15301 c of the California Environmental Quality Act Guidelines

3. RESOLUTION - To approve a Finance Agreement and Energy Services Contract with Pacific

Gas and Electric Company for implementation of certain energy related services

4. Approval of six agreement with Pacific Gas and Electric (PG&E) in the total amount of \$10,237,062 for a General On-Bill Financing (OBF) Loan

5. Approval of a Master Services Agreement and Work Order for Turnkey Services for the Installation of Light Emitting Diode (LED) Streetlights throughout the City of Fresno (Citywide), in substantially the form attached, and authorize the City Manager to execute the agreement

**Sponsors:** Public Works Department

Indexes:

**Code sections:** 

Attachments: 1. 18-0759 Citywide LED Streetlight Retrofit Presentation.pdf, 2. 18-0759 Resolution.pdf, 3. 18-0759

OBF No. 1.pdf, 4. 18-0759 OBF No. 2.pdf, 5. 18-0759 OBF No. 3.pdf, 6. 18-0759 OBF No. 4.pdf, 7. 18-0759 OBF No. 5.pdf, 8. 18-0759 OBF No. 6.pdf, 9. 18-0759 Master Services Agreement.pdf, 10.

18-0759 Work Order.pdf

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# REPORT TO THE CITY COUNCIL

July 26, 2018

**FROM:** SCOTT L. MOZIER, PE, Director

**Public Works Department** 

BY: ROBERT N. ANDERSEN, PE, Assistant Director

**Public Works Department** 

#### **SUBJECT**

Actions pertaining to the Citywide replacement of high pressure sodium (HPS) streetlight fixtures with more energy efficient light-emitting diode (LED) fixtures

1. CONTINUED HEARING to consider adoption of a Resolution to approve a Finance Agreement

- and Energy Services Contract with Pacific Gas and Electric Company (PG&E) for implementation of certain energy related services
- 2. Adopt a finding of Categorical Exemption per staff determination, pursuant to Section 15301 c of the California Environmental Quality Act Guidelines
- 3. RESOLUTION To approve a Finance Agreement and Energy Services Contract with Pacific Gas and Electric Company for implementation of certain energy related services
- 4. Approval of six agreement with Pacific Gas and Electric (PG&E) in the total amount of \$10,237,062 for a General On-Bill Financing (OBF) Loan
- 5. Approval of a Master Services Agreement and Work Order for Turnkey Services for the Installation of Light Emitting Diode (LED) Streetlights throughout the City of Fresno (Citywide), in substantially the form attached, and authorize the City Manager to execute the agreement

# RECOMMENDATION

Staff recommends the Council adopt the environmental findings, Resolution, OBF loan agreements and Master Service Agreement with accompanying Work Order with PG&E, in substantially the form attached for the Citywide replacement of HPS streetlight fixtures with energy saving LED fixtures; and authorize the City Manager or designee to sign the attached agreements on behalf of the City.

# **EXECUTIVE SUMMARY**

Staff recommends that the City Council approve a zero interest OBF loan agreement with PG&E in the amount of \$10,237,062 for the replacement of all remaining cobra head HPS streetlights throughout the City with energy efficient LED fixtures. The work will be accomplished through a total of six identical agreements, each in the amount of \$1,706,177. PG&E's On-Bill Financing (OBF) Program is funded by California utility customers and administered by PG&E under direction of the California Public Utilities Commission (CPUC). OBF provides qualified, non-residential PG&E customers with a means to finance energy-efficiency retrofit projects under select PG&E programs. This OBF program will provide a zero percent loan for up to \$2 million per agreement for local agencies to replace existing streetlights with more energy efficient fixtures. The loan, with PG&E as the electrical utility, is paid back by the City on the monthly street lighting utility bills from the energy savings achieved by the more energy efficient fixtures. With a projected annual energy savings of \$1.6 million, the return on investment would be 6.5 years, after which time the City will continue to reap the benefits of the energy savings and improved quality of lighting throughout the community.

Staff also recommends the approval of the Master Services Agreement and accompanying Work Order, in substantially the form attached which establishes the work to be done by PG&E Contractors, the types of LED fixtures that will replace the old HPS fixtures, the disposition of said HPS fixtures and the responsibilities of the City during construction. The Work Order also outlines the Third Party Warranties.

#### BACKGROUND

Staff recommends that the City Council approve a zero interest loan agreement with PG&E in the amount of \$10,237,062 for the replacement of all remaining HPS streetlights throughout the City with energy efficient LED fixtures and the Master Services Agreement and accompanying Work Order which allows for the installation of the new LED fixtures.

The City of Fresno has been diligently replacing the HPS streetlights with the more efficient LED

fixtures for a number of years as funds become available. All new development projects are required to install LED fixtures and all City capital improvement projects utilize LED fixtures as well. Through a Federal grant project, the City will be converting several major street corridors to LED fixtures in 2019, converting approximately 3,000 streetlights in the process. The currently approved CDBG projects will also be improving lighting quality in several neighborhoods with brighter LED fixtures. Between projects funded by Federal transportation funding and CDBG, the City will convert roughly 4,000 lights to LED fixtures, leaving approximately 35,400 cobrahead HPS streetlights to convert to LED through the PG&E OBF loan project. Staff wishes to change out all of these lights to LED fixtures as soon as possible allowing the City of Fresno to more quickly realize the savings impact in electrical usage. The estimated annual savings on electrical usage is \$1.6 million.

Post-top decorative streetlights will be addressed by a future project, due to dramatically longer return on investment periods and the technology still catching up for post-top LED conversion kits. For the near future, the City's 2,800 decorative post-top lights will remain with their current fixtures.

On June 9, 2016, Council approved a zero percent On-Bill Financing Loan with PG&E to finance up to \$250,000 for the replacement of some of our highest wattage HPS fixtures. On December 8, 2016, Council approved a contract with Siemens Industry for \$273,310 to replace 887 HPS streetlights with LED's. The annual savings on electricity usage for those lights are estimated to be \$69,000, with a return on investment in approximately 4 years.

PG&E has developed an On-Bill Financing program for the City of Fresno to provide a zero percent loan for up to \$2 million per agreement, to replace existing streetlights with more energy efficient fixtures. The loan, with PG&E as the electrical utility, is paid back by the City on the monthly utility bills from the energy savings achieved by the more energy efficient fixtures.

The City will also benefit from over 35,000 brand new fixtures. Currently, the vast majority of HPS fixtures in the Citywide system are well beyond their service life. The City has gone without a proactive, preventive maintenance program to relamp areas of the City for more than ten years due to the recession and declining revenues for maintenance. As such, the current streetlight repair program is largely reactive rather than proactive and must deal with 12 to 15 percent of the bulbs failing any given year. This LED replacement will allow City maintenance crews to focus their efforts on the hundreds of locations with no power to the lights, wooden poles that have failed and been removed without replacement, and other types of major streetlight repairs.

A requirement for the use of the zero percent loan proceeds is that the City participates in the current PG&E turnkey program that installs the LED streetlights. PG&E has been replacing fixtures throughout their territory for a number of years, having gone through a very thorough procurement process and rigorous testing of fixtures. Currently, PG&E is using Cree LED fixtures for the replacement project, which is one of the products currently accepted by the City of Fresno.

In the past ten years PG&E has completed two procurement processes for choosing LED Streetlight Fixtures. The process they went through was open to all lighting manufacturers. The Request for Proposals was published and received by thirty-three bidders. Ten bids were received back and vetted by the technical committee. Two bidders met the minimum technical requirements. Cree lighting was the awarded manufacturer. Some of the criteria used to choose were Safety and Ethics, Technical Specifications, Warranty, Financial Stability and Price.

The PG&E installation contractors went through a similar process to be vetted by PG&E. The criteria

used for contractors include their safety record, service capability, training and diversity initiatives. Currently there are three qualified contractors to bid on the projects.

To further benefit the City of Fresno, the PG&E team has been able to negotiate a \$1.5 million reduction in fixture costs through their requirements contract with Cree, dropping the project cost from the original estimate of \$11.7 million down to the current proposal at \$10.2 million. PG&E will manage the project and perform all work with either PG&E crews or PG&E subcontractors. The traffic control associated with the streetlight replacements will be performed by local traffic control companies. PG&E has completed or is performing similar turnkey, on-bill finance projects for the City and County of San Francisco, City of San Jose, City of Bakersfield, State of California, California State University system and Fresno Unified School District. The City of Fresno is the largest agency in PG&E's service territory that has not undertaken a large-scale LED lighting retrofit project.

City staff and PG&E have remained committed to the objective of providing the most efficient and cost-effective project possible for Fresno which included discussions on the desire to use local resources. PG&E has safely converted over 210,000 streetlights in over 100 cities and counties throughout their service territory. To ensure that the project is expedited and efficient, PG&E will use its existing qualified and experienced crews from the International Brotherhood of Electrical Workers (IBEW) who have been successfully performing this work for the past 9 years. For the duration of the project, PG&E remains committed to using appropriately qualified local resources as the need arises. In the event additional labor needs are identified, the local IBEW 1245 hiring hall will be used. PG&E has also committed to utilizing local traffic control companies on the project, wherever lane or shoulder closures are required. Lastly any significant tree trimming work associated with providing access for PG&E LED retrofit crews will be performed by local labor.

If Council approves the On-Bill Financing Loan and the Master Services Agreement/Work Order with PG&E, work on the replacement of fixtures could begin as early as September 2018. The estimate for completion is December 31, 2019.

The process that will occur is that PG&E will give the City of Fresno bid packages to their prequalified installation contractors. PG&E will receive the bids and come to the City of Fresno Public Works Director to make the final choice of the contractor. The City may use the competitive bidding requirements in Charter Section 1208 to select the lowest responsive and responsible bidder and may elect to choose two contractors to achieve an earlier completion date.

Without the PG&E turnkey project agreement and zero percent OBF loan agreement, the alternative delivery method would involve the City obtaining its own financing, bidding to private contractors and managing its own construction contracts. Assuming the City could successfully obtain up to \$3 million in low-interest financing at one percent through the California Energy Commission and finance the balance at 2.5 to 3 percent interest rates, the City would spend an additional \$3.4 million on the project. Although this would still yield a beneficial project, the return on investment would stretch out to 8.5 to 9 years and be much less desirable than the PG&E OBF agreements being recommended for approval.

The On-Bill Financing Loan Agreement has been approved as to form by the City Attorney's Office. The Master Services Agreement and accompanying Work Order will be approved as to form prior to execution by the City Manager.

#### **ENVIRONMENTAL FINDINGS**

Staff has performed a preliminary environmental assessment of this project and has determined that it falls within the Categorical Exemption set forth in CEQA Guidelines Section 15301(c) (existing facilities), which exempts the repair, maintenance, or minor alteration of existing structures or facilities, with no further expansion of existing use. Furthermore, staff has determined that none of the exceptions to Categorical Exemptions set forth in the CEQA Guidelines, Section 15300.2 apply to this project.

# **LOCAL PREFERENCE**

Local Preference does not apply to this item because the agreements are for a loan and a Master Services Agreement for work performed by PG&E hired contractors which are included in this report.

#### FISCAL IMPACT

There will be no impact to the General Fund. All proposed costs for the loan repayment will be paid back through the saving achieved by the reduction in energy costs due to the fixture replacement to energy efficient LED's. Although the streetlight power bill will remain constant, the portion dedicated to the OBF loan repayment, approximately \$1.6 million per year, will need to be funded by Measure "C" Flexible revenues due to State prohibitions against the use of gas tax for debt service or loan repayments. The corresponding savings in gas tax will be utilized for activities such as repairs of concrete curbs, gutters, sidewalks and neighborhood street work. Starting in FY 2025, the City can anticipate an annual savings of \$1.6 million in streetlight energy costs currently paid for by gas tax revenues.

# Attachments:

Citywide LED Streetlight Retrofit Presentation

Resolution

On- Bill Financing Loan Agreements No. 1

On- Bill Financing Loan Agreements No. 2

On- Bill Financing Loan Agreements No. 3

On- Bill Financing Loan Agreements No. 4

On- Bill Financing Loan Agreements No. 5

On- Bill Financing Loan Agreements No. 6

Master Services Agreement

Work Order