

Memorandum

To: Melissa Jones
Executive Director

Date: February 11, 2011

Telephone: 654-4104

From: **California Energy Commission**
1516 Ninth Street
Sacramento CA 95814-5512

Subject: STAFF RECOMMENDATION TO APPROVE A \$425,000 LOAN WITH ENERGY CONSERVATION ASSISTANCE ACCOUNT (ECAA) FUNDS TO THE CITY OF PITTSBURG TO RETROFIT STREET LIGHTING SYSTEM TO BE CONSIDERED AT THE APRIL 6, 2011 BUSINESS MEETING.

Summary of Item

The City of Pittsburg has requested a loan for \$425,000 to retrofit 491 High Pressure Sodium (HPS) street lighting with higher efficiency light emitting diode (LED) street lighting and remove 134 HPS street light fixtures. All retrofitted fixtures will be of decorative type fixtures on metal and concrete poles located throughout the City.

This project will reduce the city's annual energy use by an estimated 342,900 kWh annually. This will save the city an estimated \$42,000 annually in reduced energy costs. The total project cost is estimated at \$ of which \$425,000 will be financed with an Energy Commission ECAA loan at an interest rate of three percent. The remaining project balance will be funded by a \$47,000 PG&E rebate and the city's own general funds.

Table 1 summarizes the project savings, cost and simple payback for each project.

Project/Location	Annual Electric Savings (kWh)	Annual Cost Savings (\$)	Estimated Total Project Cost (\$)	Loan Amount Requested (\$)	Simple Payback Based on Loan Amount (\$)
HPS to LED Streetlights	342,900	\$42,000	\$500,000	\$425,000	10.1 years

Justification for Action Requested:

The City of Pittsburg is committed to reducing their energy consumption and to the reduction of greenhouse gas emissions. This loan request, will allow the city to retrofit decorative HPS fixtures to LED.

Energy Commission staff has determined that the loan request for the City of Pittsburg is technically justified and meets all requirements for a loan with ECAA Funds. The program requires repayment of the loan, interest and principal, within 15 years. This is equivalent to projects having a simple payback of 11 years or less. As this loan has a simple payback of 10.1 years, it meets the requirement of the loan program. As a result, staff recommends approval of the loan to the City of Pittsburg.

The interest rate for the loan will be 3.00 percent. The funding for this loan will come from the ECAA Funds.

Project Manager

Karen Perrin, Special Projects Office

Oral Presentation

Staff will be prepared to discuss this recommendation and respond to any potential questions regarding the loan.

Business Meeting Participants

Karen Perrin, Special Projects Office, Fuels and Transportation Division

Commission Action Requested

Approve the loan and authorize the Executive Director to execute the loan documents.



PAT PEREZ, Deputy Director
FUELS AND TRANSPORTATION DIVISION

**City of Pittsburg
Street Lighting Project
Loan Amount: \$425,000**

The following are the Pros and Cons to the Energy Commission of providing a loan to the City of Pittsburg:

Pros:

- The lamp life of an LED lamp is expected to be (100,000 hours) versus the existing high pressure sodium (24,000 hours) will enhance system efficiency, reliability, and improve public safety.
- Consistent with the Energy Commission's *2007 Integrated Energy Policy Report* to reduce energy use, demand, and greenhouse gas emissions through efficiency and renewable energy programs and diversify California's energy sources.
- Meets the objective of the Energy Conservation Assistance Act (Public Resources Code Section 25412 et. seq.) which is to provide loans to public agencies to maximize energy use savings and implementation of cost effective energy efficiency measures.
- Consistent with the office's work plan goals of providing loans to public agencies for cost-effective energy saving projects.
- Provides a loan to help the City install energy efficiency and renewable energy projects that it may otherwise not be able to fund.

Cons:

- The initial higher cost of LED lamps versus high pressure sodium and mercury vapor lamps results in a slightly longer payback which could impact funds availability for potential shorter payback projects.

California Energy Commission
AGENDA INPUT FORM (GENERAL)



CEC 36 (Rev. 3-91)

Please print or type

DUE DATES: A listing of Commission Business Meetings and Contracts Office due dates are available from the Secretariat.

CONTACT PERSON: Karen Perrin

Date due to Contracts Office: Feb 28

PHONE NUMBER: 654-4104

Date due to Secretariat: March 14

MS: MS 23

Proposed Business Meeting Date: April 6

AGENDA ITEM SUBJECT AND DESCRIPTION – This is the description that will appear on the agenda)

Possible approval of a loan for \$425,000 to the City of Pittsburg for a streetlight retrofit project. The City will retrofit 491 street lights to a more efficient LED system. This project will save the city approximately 342,900 kWh or approximately \$42,000 annually. Based on the loan amount the simple payback is 10.1 years.

CONSENT

DISCUSSION

Time needed for presentation 5 Minutes

CHECK HERE IF YOU NEED A COPY OF YOUR SIGNED RESOLUTION/ORDER

SPECIFY AUDIO-VISUAL EQUIPMENT NEEDED FOR PRESENTATION

DEPUTY DIVISION DIRECTOR SIGNATURE

Pat Perry

2/23/11

Date: