

**LOAN AWARD REQUEST**

CEC-271 (Revised 02/10)

CALIFORNIA ENERGY COMMISSION

To: Grants and Loans OfficeDate: 09 / 4 / 2010Project Manager: Adel SuleimanPhone Number: (916) 653-1004Office Special Projects OfficeDivision: Fuels and TransportationMS- 23Project Title: County of Alameda**Type of Request:** (check one)

<input checked="" type="checkbox"/> <b>New Agreement:</b> (include items A - F from below)	Agreement Number: <u>Assigned by the G&amp;L Office</u>
Program: <u>3% Loan Program ARRA and/ or ECAA</u>	
Solicitation Name: <u>ECAA/ARRA Loan Program</u>	
Legal Name of Recipient: <u>County of Alameda</u>	
Recipient's Full Mailing Address: <u>399 Elmhurst Street</u> <u>Hayward, CA 94544</u>	
Recipient's Project Officer: <u>Paul Keener</u>	Phone Number: <u>(510) 670-6452 ext.</u>
Email Address <u>paulk@acpwa.org</u>	
Agreement Start Date: <u>10 / 20 / 2010</u>	Agreement End Date: <u>03 / 31 / 2012</u>
Annual Energy Savings: <u>\$ 279,641.00</u>	Total Loan Amount: <u>\$ 3,000,000.00</u>
Number of Repay Periods: _____	

<input type="checkbox"/> <b>Amendment :</b> (Check all that apply)	Agreement Number: _____
<input type="checkbox"/> Term Extension – New End Date: _____ / _____ / _____	
<input type="checkbox"/> Change of Scope (include items A – G from below, as applicable)	
<input type="checkbox"/> Loan Augmentation: <u>\$ 0.00</u>	

**ITEMS TO ATTACH WITH REQUEST:**

- |   |  |                                 |
|---|--|---------------------------------|
| A. Loan information including application and budget details. | D. CEQA Compliance Form.               | F. ECM Codes, if applicable.    |
| B. Recipient Resolution.                                      | E. Other Documents as applicable.      | G. Justification for Amendment. |
| C. Special Conditions, if applicable.                         | • Copy of Pre-Award Correspondence     |                                 |
|   | • Copy of All Other Relevant Documents |                                 |

<b>California Environmental Quality Act (CEQA)</b>	
<input checked="" type="checkbox"/> CEC finds, based on recipient's documentation in compliance with CEQA:	
<input checked="" type="checkbox"/> Project exempt: <u>Section 14 CCR 15301</u>	NOE filed: _____ / _____ / _____
<input type="checkbox"/> Environmental Document prepared: _____	NOD filed: _____ / _____ / _____
<input type="checkbox"/> Other: _____	
<input type="checkbox"/> CEC has made CEQA finding described in CEC-280, attached	

<b>Funding Information:</b>					
Source #1: <u>ARRA/ ECAA</u>	Amount: <u>\$ 3,000,000.00</u>	Statute: <u>2009</u>	FY: <u>2009</u>	Budget List #: <u>901.003D</u>	
Source #2: _____	Amount: <u>\$ 0.00</u>	Statute: _____	FY: _____	Budget List #: _____	
Source #3: _____	Amount: <u>\$ 0.00</u>	Statute: _____	FY: _____	Budget List #: _____	

<b>Business Meeting Approval:</b> (refer to Business Meeting Schedule)	Date due to Secretariat: <u>09 / 13 / 2010</u>
Proposed Business Meeting Date: <u>10 / 20 / 2010</u>	<input type="checkbox"/> Consent <input checked="" type="checkbox"/> Discussion
Business Meeting Participant: <u>Adel Suleiman</u>	Time Needed: <u>5 minutes</u>

<b>Agenda Notice Statement:</b> (This is the description that will appear on the agenda)
Possible approval of a \$3,000,000 loan to the County of Alameda to retrofit 7,500 street light fixtures from High Pressure Sodium lamps (HPS) to Light Emitting Diode (LED) lamps. This retrofit will reduce energy consumption by approximately 2.3 million kWh and save the city approximately \$280,000 annually in reduced energy cost. The simple payback of this retrofit is approximately 11 years based on the loan amount. The County is also receiving approximately \$500,000 in rebates from PG&E.

Project Manager _____	Date _____	Office Manager _____	Date _____	Deputy Director _____	Date _____
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Executive Director _____	Date _____	Presiding Policy Committee _____	Date _____	Associate Policy Committee _____	Date _____
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**EXHIBIT A**

**BUDGET DETAILS**

This loan is made to the County of Alameda (“Borrower”) for an Energy Savings Project. The project consists of:

- 1) Retrofit 7,500 street light fixtures from HPS to LED as detailed in table 1 below.

The Table below summarizes the estimated project cost(s), saving(s) and simple payback(s) for the entire project.

TABLE 1: Estimated Energy Efficiency Project Savings:

Project Description	Estimated project cost	CEC Loan Amount	Estimated Annual Cost Savings	Simple Payback* (Years)
Replace (4,430) 70-watt HPS fixtures with (4,430) 23-watt LED fixtures	\$2,392,200		\$138,641	
Replace (1,769) 100-watt HPS fixtures with (1,769) 49-watt LED fixtures	\$955,000		\$64,449	
Replace (785) 150-watt HPS fixtures with (785) 77-watt LED fixtures	\$423,900		\$38,641	
Replace (250) 200-watt HPS fixtures with (250) 105-watt LED fixtures	\$135,000		\$16,530	
Replace (266) 250-watt HPS fixtures with (266) 135-watt LED fixtures	\$143,640		\$21,380	
<b>Total</b>	<b>\$4,049,740</b>	<b>\$3,000,000</b>	<b>\$279,641</b>	<b>10.7</b>

\*Payback is based on the loan amount.

The Borrower shall implement all projects in Table 1. Failure to implement all projects may reduce the approved loan amount. If necessary, the reduced loan amount will be determined by multiplying the annual energy cost savings by 11 or the total project cost, whichever is less. If the Borrower has received disbursements that exceed the amount of the reduced loan, the Borrower shall refund the difference to the Energy Commission.

# Memorandum

To: Melissa Jones  
Executive Director

Date: September 4, 2010

Telephone: 916- 653-1004

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

Subject: STAFF RECOMMENDATION TO APPROVE A \$3,000,000 LOAN WITH THE AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) FUNDS TO THE COUNTY OF ALAMEDA TO CONVERT THE COUNTY'S HIGH PRESSURE SODIUM LIGHTING SYSTEM WITH A MORE ENERGY EFFICIENT LIGHT-EMITTING DIODE (LED) LIGHTING SYSTEM TO BE CONSIDERED AT THE OCTOBER 20<sup>TH</sup>, 2010 BUSINESS MEETING.

## Summary of Item

The County of Alameda has requested a \$3,000,000 loan to convert 7,500 street light fixtures from high pressure sodium lamps to LED lamps. The County's total project cost is approximately \$4 million of which \$3 million will be financed by the Energy Commission's loan. The remaining balance of \$1 million will be funded by internal funds and an estimated \$500,000 Pacific Gas and Electric Utility (PG&E) incentive. This street light conversion project will save the County approximately \$280,000 annually in energy costs, resulting in over 65 percent cost savings when compared to the existing lighting system. This project will also reduce the County's maintenance cost and increase system reliability and public safety since the new LED lamps will have approximately 4 times more life than the existing high pressure sodium lamps and provide better quality light levels.

The following table summarizes the project savings.

Organization	Estimated Energy Savings (kWh/year)	Estimated Annual Cost Savings	Total Project Cost	Loan Amount Requested	Simple Payback (years)
County of Alameda	2,283,935	\$280,000	\$4,000,000	\$3,000,000	10.7*

\* Simple payback is based on the loan amount.

Melissa Jones

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**Justification for Action Requested:** The County of Alameda is committed to reducing their energy consumption and to the reduction of greenhouse gas. This retrofit project, when completed will remove approximately 787 tons a year of harmful carbon dioxide emissions. LED lighting will benefit the general public due to its high light quality creating brighter roads, clearer traffic signals and street signs, and a greater sense of security.

The loan will help the county replace its inefficient street light fixtures, reduce its maintenance needs and save approximately \$280,000 annually in reduced energy costs. This loan has a simple payback of 10.7 years.

Energy Commission staff has determined that the loan request for the County of Alameda is technically justified and meets all requirements for a loan with the American Recovery and Reinvestment Act (ARRA) 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 10.7 years, it meets the requirement of the loan program. Additionally, the life of the LED lamp is estimated to be approximately 18 years which will exceed the estimated loan term of 15 years. As a result, staff recommends approval of the loan to the County of Alameda.

The interest rate for the loan will be 3.00 percent. The funding for this loan will come from the ARRA funds.

#### Project Manager

Adel Suleiman, Special Projects Office

#### Oral Presentation

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

Melissa Jones  
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Business Meeting Participants

Adel Suleiman, Special Projects Office, Fuels and Transportation Division

Commission Action Requested

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

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Pat Perez, Deputy Director  
FUELS AND TRANSPORTATION DIVISION

