

EXHIBIT A

ATTACHMENT 1

BUDGET DETAIL/ PROJECT COST AND SAVINGS

This loan is made to the City of Duarte ("Borrower") for an Energy Savings Project. The project consists of HVAC equipment retrofits, building (HVAC) controls retrofits, lighting equipment retrofits, lighting control retrofits and installation of vending machine misers to be installed at the City Center, Duarte Park Recreation Building, North Yard, Old City Hall, Royal Oaks Park Recreation Building, Senior Center, South Yard and Teen Center in the City of Duarte.

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

TABLE 1: Summary of Project Cost and Savings:

Energy Efficiency Projects	Estimated Total Project Cost	Energy Commission Loan	Estimated Annual Energy Cost Savings	Payback* (Years)
Building Controls (13 Programmable Thermostats)	\$24,941		\$1,617	
HVAC Replacement (11 Units/79 Tons)	\$282,840		\$4,273	
Lighting and Lighting Controls (877 Fixtures)	\$122,916		\$14,416	
Vending Machine Misers (2 Units)	\$1,168		\$300	
GRAND TOTAL ALL MEASURES	\$431,865	\$226,666	\$20,606	11.0

* The payback based on the loan amount is 11 years.

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. 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 : August 23, 2010

Telephone:(916) 654-4996

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

Subject: STAFF RECOMMENDATION TO APPROVE A \$226,666 LOAN WITH ARRA FUNDS TO THE CITY OF DUARTE FOR ENERGY EFFICIENCY UPGRADES TO BE CONSIDERED AT THE OCTOBER 20 BUSINESS MEETING

Summary of Item

The City of Duarte has requested a loan for \$226,666 for energy efficiency upgrades at eight city buildings. Energy efficiency upgrades included in this project are:

- 1) Upgrade HVAC controls
- 2) Upgrade Lighting controls
- 3) Upgrade HVAC equipment
- 4) Retrofit Lighting equipment
- 5) Install controls on vending machines
- 6) Commission new equipment and controls
- 7) Retrocommission existing equipment and controls

The projects will reduce the City's annual energy use by an estimated 152,119 kWh and 717 therms. This will save approximately \$20,606 annually in energy costs. The total project estimated installation cost is \$431,865 of which \$226,666 will be financed with the Energy Commission loan at an interest rate of three percent.

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

Table 1 - Summary of Project Cost and Savings

Project	Annual Electric Savings (kWh)	Annual Natural Gas Savings (therms)	Annual Cost Savings	Project Installation Cost	Simple Payback (Years)
HVAC Controls	22,508	260	\$1,617	\$24,941	15.4
HVAC Equipment	27,368	138	\$4,273	\$282,840	66.2
Lighting Equipment and Controls	102,243	--	\$14,416	\$122,916	8.5
Vending Machine Controls	--	--	\$300	\$1,168	3.9
	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
Total	152,119	398	\$20,606	\$431,865	21.0
Simple payback based on loan amount is 11 years					
				Energy Commission Loan	\$226,666
				Total Project Cost	\$ 431,865

Justification for Action Requested:

Energy Commission staff has determined that the loan request for the City of Duarte is technically justified and meets the requirements for a loan under ECAA. The program requires repayment of the loan, both interest and principal, within 15 years; this is equivalent to projects having a simple payback of 11 years or less. As this loan has an average simple payback of 11 years, it meets the requirement of the loan program. Further, this loan will allow the City of Duarte to supplement utility grant funding and Energy Efficiency Block Grant funds to implement energy projects that it otherwise may not have been able to complete.

Project Manager

Haile Bucaneg, Special Projects Office

Oral Presentation

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

Business Meeting Participants

Haile Bucaneg, 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 Duarte
Loan Amount: \$226,666

Pros and Cons

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

Pros:

- The projects are technically feasible and will help the City of Duarte reduce their energy consumption, cost and help improve the environment. This loan also allows the City of Duarte to take full advantage of EECBG funds allocated to the City.
- 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.

Cons:

- None