

Department of General Services
Energy Efficient State Property Revolving Fund
Annual Legislative Report
January 1, 2013

Background

The American Recovery and Reinvestment Act of 2009 (ARRA) provided funds to the United States Department of Energy to make allocations to its existing programs. Accordingly, on June 25 2009, the California Energy Commission (CEC), in its role as the State Energy Office in California, received \$226,093,000 for distribution under federal guidelines.

On June 28, 2009, Governor Schwarzenegger signed Assembly Bill 11 from the Fourth Extraordinary Session of the 2009-2010 Session (ABX4 11), adding sections 25470 through 25474 to the Public Resources Code (PRC), and creating the Energy Efficient State Property Revolving Fund (Loan Fund). Under the terms of the statute, the CEC transferred \$25 million to the Department of General Services (DGS) to administer the Loan Fund and finance energy efficient retrofits at state facilities. Participating state agencies would use the savings realized through the retrofits to service their debt to the Loan Fund. PRC Section 25473 requires the DGS to provide the Legislature with an annual report on the projects identified and planned for each fiscal year.

Fiscal Years 2009 – 2010 through 2011 – 2012

The DGS allocated the original \$25 million to nine departments in 12 loans, funding 70 projects at over 400 buildings. Most of these projects are closed or in the process of closeout. Three projects, a heating and air conditioning upgrade at the Department of Developmental Services Sonoma campus, a chiller replacement at the DGS-managed CalTrans District 11 office building, and a lighting upgrade at the Department of Water Resources visitor center at Vista Del Lago, remain open due to unexpected incongruities that contractors are working to adjust. These loans will remain open until the problems are resolved. The table that follows this section contains information about the projects funded through the Loan Fund during fiscal years (FY) 2009-2010, through FY 2011-2012.

Fiscal Year 2012-2013

The first repayments on the inaugural loans took place in February 2012. The Loan Fund also received additional funds from the CEC due to the passage of Assembly Bill 1392 (Chapter 488, Statutes of 2011), which added section 25471(d)(1) to the PRC and authorizes the CEC to transfer up to \$50 million to ensure the effective expenditure of the funds it received through the ARRA. The CEC consequently transferred funds in June and July. The current balance of the fund breaks down as follows:

Transfer from CEC 6/28/12		\$ 1,500,000.00
Transfer from CEC 7/20/12		1,130,724.62
Principal payment 2012	2,811,836.91	
Interest payment 2012	<u>468,807.42</u>	
Total repayment 2012		3,280,644.33
Unallocated funds from original \$25 million (approx.)		<u>480,000.00</u>
Total funds		\$ 6,391,368.95
Less Allocation for 2012-13 Admin		<u>(529,590.17)</u>
Total available for loan allocations 2012-13		\$ 5,861,778.78

Currently, the following projects are in the development stage:

- The Department of Public Health (DPH) Richmond Lab facility is replacing a boiler that is in violation of the local air quality management district's standards with a replacement boiler that not only meets local emission standards, but is also more efficient. The project is in the design phase, so a final cost remains unknown; however, the DPH can submit a placeholder application for the current estimate.
- The Department of Corrections and Rehabilitation (CDCR) will apply for a loan for a lighting retrofit at the Richard J. Donovan Correctional Facility in San Diego to meet the California Public Utilities Commission's request that state facilities reduce their electrical load in the San Diego area as much as possible to ease transmission problems in the electrical grid. The CDCR has a second lighting project already designed and ready to go into construction at the Salinas Valley State Prison. Both of these projects will proceed once the appropriate accounting procedures are in place at the CDCR.

<u>Potential Projects:</u>	<u>Estimated Project Cost</u>
DPH Richmond Lab	\$ 3,800,000.00
CDCR RJ Donovan	500,000.00
CDCR Salinas Valley	<u>800,000.00</u>
Total earmarked for allocation	\$ 5,100,000.00
 Remaining balance available	 \$ 761,778.78

In February 2013, a second annual repayment will occur. Meanwhile, work is underway to release in January 2013 several Requests for Proposals for additional projects to energy service companies in a qualified pool established under the authority of Public Utilities Code section 388. The Statewide Energy Efficiency Program in the Special Programs Section of the DGS Real Estate Services Division's Professional Services Branch is working with several interested departments to develop candidate projects. Once these projects are ready to apply for funding, the DGS will allocate the entire amount of available funds to the most attractive projects. Project evaluation will rest primarily on scope of work and payback terms. The following departments are interested in receiving loans through the DGS Statewide Energy Efficiency Program:

Department of Fish and Game
Department of Parks and Recreation
Department of Fish and Game
California Highway Patrol
Department of Motor Vehicles
Department of Food and Agriculture
California Conservation Corps
CalFire
Department of Veterans Affairs

ARRA Energy Efficient State Property Revolving Fund Loan Status Revised December, 2012						
Project/Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings			Simple Payback (years)
			kWh	Therms ¹	Dollars	
OPEN LOANS						
DEPARTMENT OF DEVELOPMENTAL SERVICES - LOAN 120						
Fairview	Lighting Upgrade	\$1,373,695	2,101,987		\$257,624	5.3
	Web-Based Monitoring					
Sonoma	Lighting Upgrade	\$2,421,021	2,160,715	36,114	\$429,240	5.6
	HVAC Upgrade - Nelson					
	HVAC Upgrade - EJOR					
Porterville	Web-Based Monitoring	\$764,289	1,069,858	79,560	\$139,020	5.5
	HVAC - VAV Conversion					
TOTAL DDS - LOAN 120		\$4,559,004	5,332,560	115,674	\$825,884	5.5
DEPARTMENT OF WATER RESOURCES - LOAN 118						
Bryte Chemical Lab	Lighting Upgrade	\$428,531	247,165	9,171	\$46,300	9.3
	HVAC Upgrade					
	Web-Based Monitoring					
Oroville Visitors Center	Lighting Upgrade	\$110,662	51,508	1,400	\$9,465	11.7
	HVAC Upgrade					
	Web-Based Monitoring					
Romero Overlook	Lighting Upgrade	\$110,254	31,287		\$5,172	21.3
	HVAC Upgrade					
	Web-Based Monitoring					
Vista Del Lago	Lighting Upgrade	\$200,082	173,061		\$23,686	8.4
	HVAC Upgrade					
	Web-Based Monitoring					
TOTAL DWR - Loan 118		\$849,529	503,021	11,971	\$84,623	10.0
DEPARTMENT OF GENERAL SERVICES - LOAN 101						
Secretary of State	Replace chiller	\$527,606	176,888		\$17,689	29.8
	Lighting controls					
	Replace air filters					
	Clean coils					
Bateson	Lighting controls	\$221,400	79,840		\$7,984	27.7
	Replace air filters					
	Clean coils					

¹ Reductions in lighting energy have secondary effects on cooling and heating energy consumption that can result in an increase in natural gas consumption, reflected here as negative savings.

NOTE: Monetary amounts are rounded to the nearest dollar

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Project/Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings			Simple Payback (years)
			kWh	Therms ¹	Dollars	
Jesse Unruh	Lighting controls and variable fan drives	\$309,604	165,101		\$16,510	18.8
Jesse Unruh (cont'd)	Replace air filters					
	Clean coils					
BOE	Lighting upgrade	\$1,901,795	2,444,207	28,523	\$284,353	6.7
	VFD retrofit					
	VAV optimization					
	DW pumps installation					
	Water valve replacement					
	Boiler retrofit					
Bonderson	Lighting retrofit	\$582,480	517,300		\$51,730	11.3
Mission Valley	Exterior lighting retrofit	\$127,053	123,302		\$12,330	10.3
CalTrans District 11	Exterior lighting retrofit					
Fresno State Office Building	Optimum start routine for chiller and boiler	\$412,229	243,426	2,863	\$43,823	9.4
	Reset condenser water temperature					
	Optimum stop routine					
	Chilled Water Reset					
	Variable air volume (VAV) air handlers					
	Chiller retrofit					
CA Energy Commission	De-lamp perimeter lights	\$170,580	76,004		\$7,600	22.4
	Reschedule air handler					
	Reschedule hot water pump					
	Reschedule fans					
	Occupancy sensor on hearing room air handler					
	Night cooling					
	Occupancy sensor for lighting					
CalTrans District 11	Chiller replacement	\$902,579	405,830	29,507	\$80,268	11.2
TOTAL DGS - LOAN 101		\$5,155,325	4,231,898	60,893	\$522,287	9.9
CLOSED LOANS						
DEPARTMENT OF MOTOR VEHICLES – LOAN 116						
Arleta Field Office	Lighting Upgrade	\$69,415	43,701	-15	\$5,156	13.5
	Web-Based Monitoring					

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Project/Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings			Simple Payback (years)
			kWh	Therms ¹	Dollars	
Chula Vista	Lighting Upgrade	\$77,818	35,148		\$6,323	12.3
	Web-Based Monitoring					
El Cajon	Lighting Upgrade	\$27,585	42,409	-164	\$8,220	3.4
	Web-Based Monitoring					
Hanford	Lighting Upgrade	\$36,480	17,657		\$2,156	16.9
	Web-Based Monitoring					
Hollister	Lighting Upgrade	\$20,796	13,147		\$2,348	8.9
	Web-Based Monitoring					
Merced	Lighting Upgrade	\$61,284	44,892		\$6,860	8.9
	Web-Based Monitoring					
Modesto	Lighting Upgrade	\$36,936	42,223		\$4,822	7.7
	Web-Based Monitoring					
Mountain View	Lighting Upgrade	\$35,651	31,660		\$5,009	7.1
	Web-Based Monitoring					
Oakland Claremont	Lighting Upgrade	\$74,442	70,933		\$11,151	6.7
	Web-Based Monitoring					
Oakland Coliseum	Lighting Upgrade	\$67,133	38,095		\$5,907	11.4
	Web-Based Monitoring					
Redwood City	Lighting Upgrade	\$73,369	40,877	-71	\$6,401	11.5
	Web-Based Monitoring					
Sacramento	Lighting Upgrade	\$256,679	51,185	1,189	\$13,212	19.4
	HVAC Upgrade					
	Web-Based Monitoring					
San Diego	Lighting Upgrade	\$58,172	44,429		\$8,242	7.1
	Web-Based Monitoring					
San Mateo	Lighting Upgrade	\$32,017	36,252		\$6,243	5.1
	Web-Based Monitoring					
Turlock	Lighting Upgrade	\$135,139	31,470	351	\$5,157	26.2
	HVAC Upgrade					
	Web-Based Monitoring					
Visalia	Lighting Upgrade	\$38,332	38,909		\$4,743	8.1
	Web-Based Monitoring					
Watsonville	Lighting Upgrade	\$22,972	13,305		\$2,346	9.8
	Web-Based Monitoring					
Yuba City	Lighting Upgrade	\$110,946	29,776	811	\$10,135	10.9
	HVAC Upgrade					
	Web-Based Monitoring					
Salinas	Lighting Upgrade	\$82,302	40,607		\$7,147	11.5
	Web-Based Monitoring					

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Project/Building	Energy Measure	ARRA-Funded Loan Amount	Annual Savings			Simple Payback (years)
			kWh	Therms ¹	Dollars	
FINAL RESULTS FOR DMV - LOAN 116		\$1,317,468	706,675	2,101	\$121,578	10.8
CA HIGHWAY PATROL - LOAN 114						
Altadena Area	Lighting Upgrade	\$145,280	74,505		\$8,650	16.8
	HVAC Upgrade					
	Web-Based Monitoring					
Central Los Angeles Area	Lighting Upgrade	\$110,275	117,162		\$13,298	8.3
	Web-Based Monitoring					
Coalinga Area	Lighting Upgrade	\$131,511	51,789		\$9,022	14.6
	HVAC Upgrade					
Coalinga Area (cont'd)	Rezone HVAC					
	Web-Based Monitoring					
El Cajon Area	Lighting Upgrade	\$58,370	50,108		\$9,455	6.2
	Web-Based Monitoring					
Fort Tejon Area	Lighting Upgrade	\$54,650	43,918		\$6,206	8.8
	Web-Based Monitoring					
Fresno Area	Lighting Upgrade	\$62,169	106,793	-893	\$14,439	4.3
	Web-Based Monitoring					
Hanford Area	Lighting Upgrade	\$103,140	53,996		\$8,569	12.0
	HVAC Upgrade					
	Web-Based Monitoring					
Hayward Area	Lighting Upgrade	\$48,035	68,385		\$11,913	4.0
	Web-Based Monitoring					
Hollister-Gilroy Area	Lighting Upgrade	\$149,535	50,038	963	\$10,192	14.7
	HVAC Upgrade					
	Web-Based Monitoring					
Madera Area	Lighting Upgrade	\$37,928	39,785		\$6,931	5.5
	Web-Based Monitoring					
Merced Area	Lighting Upgrade	\$261,335	192,425	683	\$34,273	7.6
	HVAC Upgrade					
	Web-Based Monitoring					
Modesto Area	Lighting Upgrade	\$156,597	132,904	1,321	\$17,681	8.9
	HVAC Upgrade					
	Web-Based Monitoring					
Oakland Area	Lighting Upgrade	\$64,220	89,502		\$15,591	4.1
	Web-Based Monitoring					
Redwood City Area	Lighting Upgrade	\$37,878	31,977		\$5,570	6.8
	Web-Based Monitoring					
San Jose Area	Lighting Upgrade	\$39,574	92,204		\$16,062	2.5
	Web-Based Monitoring					

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			kWh	Therms ¹	Dollars	
South Los Angeles Area	Lighting Upgrade	\$55,174	119,927		\$14,079	3.9
	Web-Based Monitoring					
West Los Angeles Area	Lighting Upgrade	\$54,087	66,869		\$7,824	6.9
	Rezone HVAC					
	Web-Based Monitoring					
Yuba-Sutter Area	Lighting Upgrade	\$156,254	73,870	97	\$12,982	12.0
	HVAC Upgrade					
	Rezone HVAC					
	Web-Based Monitoring					
San Luis Obispo	Lighting Upgrade	\$105,964	91,735		\$12,843	8.3
	Web-Based Monitoring					
FINAL RESULTS FOR CHP - LOAN 114		\$1,831,976	1,547,892	2,171	\$235,579	7.8

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			kWh	Therms	Dollars	
DEPARTMENT OF MENTAL HEALTH – LOAN 108 AND LOAN 110						
Atascadero	Lighting Upgrade	\$673,129	823,446		\$85,124	7.9
	Web-Based Monitoring					
Patton	Lighting Upgrade	\$399,682	456,119		54,917	7.3
	Web-Based Monitoring					
FINAL RESULTS FOR DMH		\$1,072,811	1,279,565		\$140,041	7.7
DGS OFFICE OF FLEET AND ASSET MANAGEMENT - LOAN 104						
Parking Lot 8	Lighting retrofits	\$22,666	482,643		\$88,493	0.3
Parking Lot 14		\$98,513				
Parking Lot 38		\$51,757				
Parking Lot 50		\$119,652				
Parking Lot 55		\$177,474				
FINAL RESULTS FOR OFAM - LOAN 104		\$470,063	482,643		\$88,493	5.3
CALIFORNIA HIGHWAY PATROL - LOAN 106						

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			kWh	Therms	Dollars	
CHP Headquarters	Lighting retrofit	\$163,356	185,440		\$18,544	8.8
FINAL RESULTS FOR CHP - LOAN 106		\$163,356	185,440		\$18,544	8.8
CDCR LOAN 102						
Tehachapi	Install boilers	\$786,371	616,144	345,222	\$333,580	2.4
Soledad Valley State Prison	Lighting upgrades	\$684,626	1,392,066	95,202	\$205,160	3.1
	Replace water heaters					
Salinas Correctional Training Facility	Lighting retrofit	\$727,619	656,312	223,021	\$246,183	
	Replace boilers					
	Upgrade air controls					
Corcoran State Prison	Expand energy mgmt system	\$1,886,366	4,558,114	66,458	\$467,290	4.0
	Programmable thermostats					
	Variable fan drives					
	Lighting upgrade					
FINAL RESULTS FOR CDCR - LOAN 102		\$4,084,982	7,222,636	729,903	\$1,252,213	3.3
CDCR LOAN 124						
Corcoran Treatment Center	HVAC Controls	\$632,793	5,443,383	38,204	\$532,107	1.2
	Outside Lighting Controls					
Norco Rehabilitation	Boiler Replacement	\$701,816	133,376	220,980	\$172,194	4.1
FINAL RESULTS FOR CDCR - LOAN 124		\$1,334,609	5,576,759	259,184	\$704,301	1.9
CA TECHNOLOGY AGENCY (OFFICE OF THE CHIEF INFORMATION OFFICER)						
OCIO - Loan 112						
Gold Camp Data Center	CRAC Units Upgrade	\$2,278,049	1,741,198		\$158,446	14.4
	Chiller Upgrade					
	Cooling Towers					
	Lighting Upgrade					
FINAL RESULTS FOR LOAN 112 - OCIO		\$2,278,049	1,741,198		\$158,446	14.4
ADMINISTRATION		\$335,963				

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			kWh	Therms	Dollars	
PROGRAM INCOME EARNED FROM THE SURPLUS MONEY INVESTMENT FUND (SMIF)						
LOAN FUND PROGRAM TOTALS		\$23,453,136	28,810,287	1,180,497	\$4,151,987	5.6

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