



THE CITY OF SAN DIEGO  
**REPORT TO THE CITY COUNCIL**

DATE ISSUED: May 4, 2010 REPORT NO: 10-66

ATTENTION: Natural Resources and Culture Committee

SUBJECT: Proposed Broad Spectrum Street Lighting; EECBG Municipal Energy Efficiency Project and Balboa Park Agreement

REFERENCE: The Committee On Rules, Open Government, and Intergovernmental Relations of the City Council of the City of San Diego - May 13, 2009

City Council of the City of San Diego - June 15, 2009

The Committee On Natural Resources and Culture Committee of the City Council of the City of San Diego - June 24, 2009

The Committee on Rules, Open Government and Intergovernmental Relations of the City Council of the City of San Diego - September 9, 2009

City Council of the City of San Diego - October 5, 2009

The Committee on Natural Resources and Culture Committee of the City Council of the City of San Diego - December 9, 2009

City Council of the City of San Diego - February 24, 2010

REQUESTED ACTIONS:

- Authorize the Mayor or his representative to execute and comply with the \$3 million 3% interest rate California Energy Commission (CEC) Loan #003-09-ECA for the purpose of upgrading City-owned street lights with energy efficient systems.
- Authorize the Chief Financial Officer to establish a Street Light Capital Improvement Program to accept funds from various sources including but not limited to CEC loans, Energy Efficiency Community Block Grant (EECBG), and Quality Energy Conservation Bond (QECB) funds as they become available.
- Authorize the Chief Financial Officer to accept and expend CEC funds not to exceed \$3 million for street lighting, contingent upon a fully executed CEC loan agreement.

- Authorize the Chief Financial Officer to appropriate and expend Capital Outlay funding not to exceed \$300,000 as reimbursable fund source for the CEC portion of the Street Light CIP.
- Authorize the Chief Financial Officer to establish a special interest bearing account not to exceed \$2.5 million utilizing EECBG grants as needed to develop, advertise, negotiate, and award contracts for the implementation of Municipal Facilities Energy Efficiency Projects (MFEEP).
- Authorize the City Attorney's Office and ESD Department to negotiate an agreement with the Balboa Park Cultural Committee (BPCP) for the administration of the \$2 million portion of EECBG grant funds for the purpose of upgrading various City owned building in Balboa Park that are leased to the various Balboa Park institutions in accordance with EECBG program goals.
- Authorize local agencies in San Diego County to utilize the City's of San Diego advertising process to award their own street lighting agreements and contract(s).
- Authorize Environmental Services Department (ESD) and Public Utilities Department (PUD) in conjunction with Purchasing and Contracting to develop, advertise, and award design build contracts for City energy efficiency improvement projects.

#### BACKGROUND:

On February 24, 2010 City Council adopted resolution-305594 authorizing the Mayor to apply for a low interest rate CEC loan and leverage EECBG funding for a street light conversion project. On April 21, 2010 the CEC approved the loan to the City of San Diego. This requested action authorizes the City of San Diego to execute a \$3 million loan at an interest rate of 3%. The loan will be paid back through the energy efficiency cost savings realized through the upgrade. The \$3 million loan will combined with \$2 million in EECBG funding approved by Resolution R-305276 on October 14, 2009 to implement the first phase of a multi-year program to upgrade City street light systems.

On April 15, 2010 the City of San Diego received the \$12.5 million in EECBG funds. This requested action authorizes further development and execution of the October 14, 2009 Resolution R-305276 that established EECBG funding to be used for various energy improvement programs. This action authorizes the Chief Operating Officer to execute agreements for the EECBG funds to coordinate, design, advertise, execute, and award agreements and/or contracts for Municipal Facility Energy Efficiency Program (MFEEP) in the amount of \$2.5 million. This action also requests authorization for ESD and the Attorney's Office to develop an agreement with the Balboa Park Cultural Partnership to administer \$2 million in energy improvements at Balboa Park institutions. All agreements, contracts, and allocations will be executed in accordance with City public contracting codes, City Charter and Municipal Code, and in conformance with the EECBG recent goal to encumber the EECBG

allocation by the June 25, 2010. This includes but is not limited to authorizing the Chief Financial Officer to encumber funds and establish CIP's as needed to comply with the EECBG grants. Quarterly status report will be presented to City Council regarding the expenditure of the EECBG funds. Federal funding for this project has been subject to NEPA review and found to qualify for a NEPA exclusion.

SUMMARY:

These requested authorizations are intended to accelerate the execution of the EECBG funds in accordance with the federal regulations that comprised the \$12.5 million grant. These actions will provide the Chief Operating Officer with authorization to execute various types of agreements and contracts needed to begin upgrading street lights, HVAC, lighting, and electrical systems at City municipal facilities to more energy efficient systems. The requested authorizations will provide the required authorization to execute an agreement with the Balboa Park Cultural Partnership to administer the \$2 million EECBG funding allocation for energy improvements in Balboa Park. These processes would be coordinated through typical City administrative processes without returning to Council for individual approvals for each individual action. Quarterly status reports will be provided to City Council regarding the EECBG program responsiveness and its effective federal funding deployment for effective local economic stimulus.

FISCAL CONSIDERATIONS:

The funding for the street light project executed under this first phase will be limited to an amount not to exceed \$5 million dollars (\$2 million EECBG plus \$3 million CEC loan). The EECBG allocation for the MFEEP improvements is \$2.5 million with \$2 million for Balboa Park Cultural Partnership projects in Balboa Park. The remaining \$6 million for the other EECBG programs will be brought to City Council for review independently of this action.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

Resolution No 305594 adopted February 24, 2010, Authorized the Mayor or his representative to apply for a CEC loan, and utilize EECBG funds for a \$5 million street light conversion project. The December 9, 2009 NR&C Committee Meeting and Action Item Agenda: ITEM-11: Report from the Environmental Services Department regarding BROAD SPECTRUM LIGHTING (Report to City Council No. 09-171). Resolution No 305276 adopted October 14, 2009, authorized the Mayor or his representative to secure, implement, administer, monitor and manage EECBG funding up to \$12,540,700. Resolution No R-304982 adopted June 26, 2009 City Council approved the EECBG (Energy Efficiency Community Block Grant), federal stimulus funding under the American Recovery Act (ARA). The September 9, 2009 NR&C Committee meeting regarding Final Report and acceptance by the EECBG Grant Ad Hoc Committee for the six energy efficiency projects, as set forth in Report to City Council No. 09-131, dated September 22, 2009.

EQUAL OPPORTUNITY CONTRACTING:

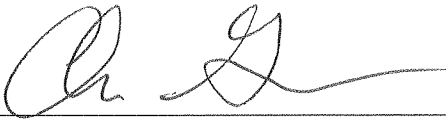
Agreements associated with this project will be subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. O-18173, Sections 22.2701 through 22.2708 and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The EECBG Ad Hoc Committee met six times between June 25, 2009 and August 10, 2009. Prior to that, the Mayor sponsored three public meetings in April and May. The “Stimulus Tracker” is highlighted on the first page of the City’s website. The public was invited to and participated in the evaluation of a pilot street light conducted April 28, 2009 along 6<sup>th</sup> Avenue. Continued PEER street light working group development of street light specifications.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

The City of San Diego and its citizens and tax payers in the City of San Diego.



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Chris Gonaver  
Director Environmental Services Department



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David Jarrell  
Deputy Chief/Public Works

## ENERGY CONSERVATION ASSISTANCE ACCOUNT LOAN AGREEMENT

LOAN NUMBER: 003-09-ECA

PRINCIPAL AMOUNT: \$3,000,000.00

PROJECT TERM: 4/21/10-12/30/11

This Loan Agreement (the "Agreement") is entered into as of the date it is executed by both parties hereto, between the California Energy Resources Conservation and Development Commission (the "Commission") and City of San Diego, a city ("Borrower") located in San Diego County, California.

### 1. STATUTORY AUTHORITY AND LOAN

- A. Pursuant to the purposes authorized by section 25410, *et seq.*, of the California Public Resources Code (the "Energy Conservation Assistance Act"), the Commission has approved Borrower's loan application dated December 16, 2009 which is not attached but is expressly incorporated by reference herein.
- B. Subject to the terms, covenants, and conditions contained herein, and the Budget Detail attached as Exhibit A hereto (the "Budget Detail") to the extent it modifies Borrower's loan application, the Commission shall make a loan to Borrower (the "Loan") in the amount of three million dollars (\$3,000,000.00), evidenced by a Promissory Note (the "Promissory Note") for loan number 003-09-ECA attached hereto as Exhibit B.

### 2. PURPOSE

The Borrower agrees to expend all funds disbursed pursuant to this Agreement only for the purposes and in the amounts set forth in the attached Budget Detail (the "Project"). Any other use of funds disbursed hereunder shall require prior written approval by the Commission.

### 3. LOAN DISBURSEMENT SCHEDULE

- A. The Commission agrees to disburse funds to the Borrower upon the Borrower's execution of the attached Promissory Note and any appropriate security instruments and required supplemental documents, including invoices as required in Section 3.C below.
- B. *This paragraph applies only to Borrowers who have received technical assistance or a feasibility study by a consultant under contract to the Commission and are financing the technical assistance or feasibility study reimbursement through this Loan.* The Commission will reimburse itself from the Borrower's Loan proceeds for the cost of the technical assistance or

feasibility study which was provided in accordance with the services agreement, dated \_\_\_N/A\_\_\_\_\_. Such reimbursement will occur on the date the Commission executes this Agreement and will be equal to \$\_\_\_N/A\_\_\_.

- C. Except for the technical assistance or feasibility study cost indicated in Section 3.B above, Loan funds shall be disbursed on a reimbursement basis based on invoices submitted by Borrower in a form approved by the Commission. Billings and proof of payment must be provided to substantiate the request. Commission staff will approve invoices only after verifying requested amounts against backup billings and determining that expenses are appropriate and used for the authorized purposes of this Loan. For executed Agreements, invoices for expenses incurred during the Project Term are eligible for reimbursement.
- D. All invoices must be submitted within sixty (60) days after Project completion.
- E. Ten percent (10%) of the Loan amount will be withheld as retention until the final report is received from the Borrower and the Commission's Project Manager determines the Project has been satisfactorily completed.

#### **4. LOAN REPAYMENT AND INTEREST**

All funds disbursed hereunder, together with all interest payable thereon, shall be repaid to the Commission in accordance with the terms of the Promissory Note. The Loan shall bear simple interest at the annual rate set forth in the attached Promissory Note on the principal balance of Loan funds disbursed to the Borrower. Payment of said interest shall be due at the time of semiannual scheduled Loan repayment installments to the Commission, and interest shall accrue from the time of disbursement of funds to the Borrower until receipt of full Loan repayment to the Commission. Interest on Commission reimbursement for technical assistance or the feasibility study, if applicable, described in Section 3.B shall accrue from the date the Commission executes this Agreement until receipt of full loan repayment to the Commission.

#### **5. TERM**

- A. The effective date of this Agreement shall be the date on which it has been executed by both parties hereto.
- B. The Borrower agrees to complete performance of its obligations under this Agreement within the applicable periods stated in this Agreement.

#### **6. PREPAYMENT**

Borrower shall have the right to prepay all or any part of the amount of this Loan at any time without penalty.

**7. PROMISSORY NOTE**

In order to evidence its debt to the Commission hereunder, the Borrower agrees to, contemporaneously with the execution of this Agreement, execute and deliver to the Commission the Promissory Note (attached as Exhibit B hereto).

**8. ACCOUNTS**

- A. The Borrower agrees to establish on its books a separate account for this Loan. This account shall be maintained as long as the Loan obligation remains unsatisfied.
- B. The Borrower further agrees to maintain records that accurately and fully show the date, amount, purpose, and payee of all expenditures drawn on said account for three (3) years after this Loan is repaid in full.
- C. The Borrower further agrees to utilize a voucher system by which all expenditures from said account will be authorized and authenticated.
- D. The Borrower further agrees to allow the Commission or any other agency of the State of California (the "State") or the federal government, or their designated representatives, on written request, to have reasonable access to, and the right of inspection of, all records that pertain to said account or the Project. The Borrower also agrees to submit to an independent audit, if requested by the Commission, at the expense of the Borrower. Borrower agrees to maintain all such records for a minimum of three years after this Loan is repaid in full, unless the Commission notifies the Borrower, prior to the expiration of such three-year period, that a longer period of record retention is necessary.

**9. SOURCE OF REPAYMENT; OPERATION OF PROJECT**

- A. Semiannual payments due to the Commission under this Agreement shall be made from savings in energy costs or other legally available funds as the Borrower chooses. If Borrower is a county, city, town, township, board of education, or school district, Borrower agrees that the amount of the semiannual Loan repayment shall not be raised by the levy of additional taxes and shall not be an obligation against tax revenues, but shall be obtained either from savings in energy costs resulting from the subject energy conservation projects or other legally available funds as the Borrower chooses.
- B. Energy cost savings as determined by the Commission are based on energy usage and serving utility rate schedules at the time of the issuance of this Loan, except as specified in Special Conditions, if any, as detailed in this Agreement, and the information and data contained in the Borrower's loan application and

technical study. The following will not affect the Commission's initial finding of energy cost savings, and are not a basis for claiming a lack of energy savings: a) changes in energy use and/or rate schedules which occur after issuance of the Loan, except as specified in Special Conditions, if any, as detailed in this Agreement, b) deviations in the project work scope from what was approved by the Energy Commission, c) changes in the Borrower's facility and/or equipment which occur after the issuance of the loan, including, but not limited to maintenance, operations, schedules, employees and facility alterations and expansions, d) deviations, omissions or errors found in the loan application and technical study after the loan award. The Borrower is responsible for ensuring the accuracy of the information contained in its loan application and technical study. In the event annual energy cost savings resulting from the Project, as determined by the Commission, fail to equal or exceed the amount due under this Agreement, this Agreement may be renegotiated to assure that the repayment amount does not exceed the actual energy savings or avoided costs resulting from the Project, and the Promissory Note will be revised accordingly. In no event, however, will the number of semiannual installments payable hereunder and under the Promissory Note exceed thirty.

- C. The Borrower shall obtain and maintain in its records any and all permits and licenses required to install or operate the Project and shall comply with all local, state, and federal laws, rules and codes concerning the Project. The Borrower shall maintain the Project in good working order for the duration of the Loan and shall insure that staff members are provided appropriate training on the operation and maintenance of the Project. The Borrower shall maintain insurance on the Project and, in the event of any casualty loss covered by such insurance policy, apply the proceeds to the repair of the Project or, with the approval of the Commission, may use the insurance proceeds to install alternate projects to generate alternative energy cost savings to repay the Loan.
- D. The Borrower agrees to provide the Commission with information necessary for administration of the Program for three years following completion of the Project. The needed information includes the following, at a minimum, (1) the annual computation, required by Section 25414 of the Energy Conservation Assistance Act, of energy cost savings for the most recent fiscal year, calculated in the manner prescribed by the Commission and (2) any information or change in assumptions or operations which might affect the Commission's initial determination of energy savings.
- E. The Borrower authorizes any official or agent of the Commission or the State to conduct physical inspections of the Project before the commencement; during construction, installation and implementation of the Project; and at any time prior to the complete repayment of the Loan. In each contract entered



into with suppliers of goods and services to install, conduct, or operate the Project, including management services, the Borrower shall include terms which allow any officer or agent of the Commission or the State access to the Project site and to any books, documents, or records directly relevant to the Project.

- F. If, prior to final repayment of the Loan, the Borrower sells the equipment or material installed with the proceeds of the Loan or sells the building, facility or system in which the Project has been implemented, then the Borrower shall apply the sale proceeds to repay any remaining balance due under this Agreement in full at the time of such sale. The Borrower shall notify the Commission within five business days of the date on which the Borrower enters into an agreement to effect such transaction. The Borrower shall repay the Commission within 30 calendar days of receiving an invoice from the Commission for the balance due.
- G. Borrower shall not place any liens or encumbrances on the Project until the Loan is fully repaid.
- H. In accordance with Section 25415 of the Energy Conservation Assistance Act, Borrower covenants to take such action as may be necessary to include all payments due hereunder in its annual budget and to make the necessary annual appropriations for all such payments. The obligation of the Borrower to make such payments shall be limited to the savings realized by the Borrower as a result of implementing the Project funded by the Loan.

**10. DEFAULT**

- A. The Borrower's failure to comply with any of the terms of this Agreement shall constitute a breach of this Agreement and an Event of Default. In such case, the Commission may declare this Agreement to have been breached and be released from any further performance hereunder.
- B. In the event of any default or breach of this Agreement by the Borrower, the Commission, without limiting any of its other legal rights or remedies, may to the extent permitted by law, declare the Promissory Note evidencing this Loan to be immediately due and payable.

**11. REPORTING**

- A. Progress reports are due quarterly until Project completion. Reports are due as follows:

Quarter	Report Due
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January-March	April 5
April-June	July 5
July-September	October 5
October-December	January 5

A progress report submitted with an invoice, in accordance with Section 11.C. will meet the quarterly reporting requirement if submitted within 30 days before or after the progress report due date.

- B. A final report is due no later than 60 days after Project completion.
- C. A progress report must be submitted with each request (invoice) for Loan funds.
- D. If requested by the Commission, Borrower shall submit, within ten (10) days after the Commission's written request, a status report on its activities to date, pursuant to this Agreement.
- E. Reports shall be in a format as determined by the Commission.
- F. The Borrower shall submit reports regarding energy savings as described in Section 9.D above.

**12. GENERAL TERMS**

- A. Indemnification by Borrower. The Borrower agrees to indemnify, defend, and save harmless the Commission and the State and their officers, agents, and employees from any and all claims, losses, or costs (including reasonable attorney fees) arising out of, resulting from, or in any way connected with the Loan or this Agreement, or the financing or the operation of the facilities financed with the Loan.
- B. Ownership of Equipment and Material. All equipment and material acquired under this Agreement shall become the property of the Borrower at time of purchase. The Borrower shall obtain and maintain in its records a written waiver of all claims, other than those previously made in writing and still unsettled, from each contractor who supplies goods and services, including management services, in connection with the Project.

- C. Independent Capacity. The Borrower, and the agents and employees of Borrower, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of the Commission or the State of California.
- D. Assignment. Without the written consent of the Commission, this Agreement is not assignable or transferable by Borrower either in whole or in part. The Commission may assign its rights under this Agreement for security purposes, and in such event the assignee of this Loan Agreement, including the bond trustee of any bonds which are secured by repayment of this Loan, shall be entitled to enforce the provisions hereof and shall be a third party beneficiary of this Agreement.
- E. Time of the Essence. Time is of the essence in this Agreement. Borrower is required to take timely actions which, taken collectively, move to completion of the purpose for which this Loan was awarded. The Commission Project Manager will periodically evaluate the progress toward completion. If the Commission Project Manager determines that the Borrower is not progressing toward completion within one (1) year after the effective date of this Agreement, the Commission Project Manager may, without penalty or prejudice to any of the Commission's other remedies, terminate this Agreement.
- F. Amendment. No amendment or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.
- G. Severability. In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.
- H. Governing Law and Venue. This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California. Venue shall be in Sacramento County.
- I. Non-discrimination. During the performance of this Agreement, Borrower and its contractors and subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and family care leave. Borrower and its contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination

and harassment. Borrower and its contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this agreement by reference and made a part hereof as if set forth in full. Borrower and its contractors and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Borrower and its contractors shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Agreement.

- J. Incorporation of Energy Conservation Assistance Act. The Energy Conservation Assistance Act, together with any applicable rules, regulations or procedures authorized by such statute, is incorporated by reference in this Agreement.
- K. Borrower Authorization. The Borrower certifies that it has full power and authority to enter into this Agreement, and this Agreement has been duly authorized, executed and delivered by the Borrower. The Borrower acknowledges that the resolution of its governing body or other official action authorizing it to enter into this Agreement also authorizes such further acts as are necessary, including execution of the Promissory Note, to implement and further the intent of this Agreement.
- L. Prevailing Wage. Borrower shall comply with Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code relating to the payment of prevailing wage for work performed on the Project financed in whole or in part with the proceeds of the Loan.

### 13. NOTICE

Any notice required to be given to the Commission hereunder shall be sent to the Commission at 1516 Ninth Street, MS-1, Sacramento, California 95814, attention Grants and Loans Office Manager, or at such other address as the Commission may designate in writing to the Borrower. Any notice required to be given to the Borrower hereunder shall be sent to the address shown below the Borrower's execution of this Agreement, or at such other address as the Borrower shall designate in writing to the Commission. Notice to either party may be given using the following delivery methods: certified mail, Federal Express, United Parcel Service, or personal delivery, providing evidence of receipt, to the respective parties identified in this Agreement. Delivery by fax or e-mail is not considered notice for the purposes of this Agreement. Notice shall be effective when received, unless a legal holiday for the State

commences on the date of the attempted delivery in which case the effective date shall be postponed 24 hours, or whenever the next business day occurs.

IN WITNESS WHEREOF, this Loan Agreement has been executed by the parties hereto.

STATE OF CALIFORNIA – CALIFORNIA  
ENERGY COMMISSION

BORROWER (If other than an individual, state  
whether a corporation, partnership, etc.)

City of San Diego  
NAME OF BORROWER

Sherry Mediati

PRINTED NAME OF AUTHORIZED SIGNATURE

PRINTED NAME OF AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

MANAGER, GRANTS AND LOANS OFFICE  
TITLE

TITLE

DATE

DATE

MAIL ADDRESS:  
City of San Diego  
9601 Ridghaven Court  
San Diego, CA 92123

AMOUNT ENCUMBERED	FISCAL YEAR	FUND	LOAN NO.
\$3,000,000.00	2009/2010	ECAA	003-09-ECA
APPROPRIATION ORG. Public Resources Code Sec. 25416 APPROPRIATION AUG		0033001-3360-94-517 CH553, Statutes of 1994	LINE ITEM ALLOTMENT 4400-626-44916 LINE ITEM ALLOTMENT

I HEREBY CERTIFY UPON MY OWN PERSONAL KNOWLEDGE THAT BUDGETED FUNDS ARE  
AVAILABLE FOR THE PERIOD AND PURPOSE OF THE EXPENDITURE STATED ABOVE.

SIGNATURE OF ACCOUNTING OFFICER



DATE

4/7/10

**EXHIBIT A**  
**BUDGET DETAILS**

This loan is made to the City of San Diego ("Borrower") for an Energy Savings Project. The project consists of the installation of induction street lighting to replace existing High and Low Pressure Sodium street lamps throughout the City of San Diego.

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

TABLE 1: Estimated Energy Efficiency Project Savings:

Energy Efficiency Projects	Estimated Total Project Cost	Energy Commission Loan	Estimated Annual Energy Cost Savings	Payback* (Years)
Install 5,700 Induction Street Lights in the City of San Diego	\$3,100,000	\$3,000,000	\$350,000	8.8
<b>GRAND TOTAL ALL MEASURES</b>	<b>\$3,100,000</b>	<b>\$3,000,000</b>	<b>\$350,000</b>	<b>8.9*</b>

\* This payback based on the total project cost. The payback based on the loan amount is 8.6 years based on Loan Amount of \$3,000,000.

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.

**EXHIBIT B**

PROMISSORY NOTE

<b>LOAN NUMBER:</b>	<u>003-09-ECA</u>
<b>PRINCIPAL AMOUNT:</b>	<u>\$3,000,000.00</u>
<b>INTEREST RATE:</b>	<u>3%</u>

1. For value received, the undersigned, (hereinafter referred to as the "Borrower"), promises to pay to the order of the State of California, Energy Resources Conservation and Development Commission (hereinafter referred to as the "Commission"), at its principal place of business at 1516 Ninth Street, Sacramento, California 95814, or at such other place as the Commission may designate, (1) the principal sum of three million dollars (\$3,000,000.00) or such lesser amount as shall equal the aggregate amount disbursed to the Borrower by the Commission pursuant to the above-referenced Energy Conservation Assistance Account Loan Agreement (the "Loan Agreement") between the Borrower and the Commission, together with interest thereon at the rate of three percent per annum on the unpaid principal, computed from the date of each disbursement to the Borrower, and (2) the amount of Commission reimbursement for technical assistance or feasibility study cost, if applicable, from the date the Commission executes the Loan Agreement, until the loan is repaid by the Borrower, at the rate of three percent per annum on the unpaid principal. Principal, together with interest thereon, is due and payable in semiannual installments as specified in the Estimated Amortization Schedule, attached hereto as Exhibit C, and as amended in the Final Amortization Schedule, beginning on or before December 22 of the fiscal year following the year in which the Project is completed and continuing thereafter on each June 22 and December 22 until said principal and interest shall be paid in full. The Final Amortization Schedule, and any amended Final Amortization Schedule(s) are not attached but are expressly incorporated by reference herein.
2. Payment of any scheduled installment received within thirty (30) days after its due date shall be considered to have been received on its due date and shall be first applied to accrued interest from the date of disbursal to the Borrower and the balance, if any, to principal. Payment of any scheduled installment received more than thirty (30) days after its due date but before the next billing shall be considered late, and interest on the unpaid principal shall accrue from date of disbursal to the Borrower through the actual payment date. However, payment of any scheduled installment received after a subsequent billing shall be considered overdue, and interest shall accrue on the unpaid principal from date of disbursal to the Borrower through the subsequent billing due date or actual payment date, whichever is later.
3. The Borrower may prepay this Promissory Note in full or in part, without penalty.
4. In accordance with Section 25415 of the Energy Conservation Assistance Act, Borrower covenants to take such action as may be necessary to include all payments due hereunder in its annual budget and to make the necessary annual appropriations for all such



payments. The obligation of the Borrower to make such payments shall be limited to the savings realized by the Borrower as a result of implementing the Project funded by the Loan.

5. If any installment is not paid within thirty (30) days after its due date, the Commission, at its option, may require the Borrower to pay a late charge equal to five percent (5%) of the amount of the installment or Five Dollars (\$5.00), whichever is greater.
6. On the occurrence of any event of default, the Commission, at its sole election and without limiting any of its other legal rights or remedies, may, to the extent permitted by law, declare all or any portion of the principal and accrued interest on this Promissory Note to be immediately due and payable and may proceed at once without further notice to enforce this Promissory Note according to law.
7. Each of the following occurrences shall constitute an event of default:
  - A. Failure of the Borrower to repay any principal or interest when due under the terms of this Promissory Note;
  - B. Termination of the Loan Agreement pursuant to the terms thereof or breach by the Borrower of any terms of said Loan Agreement;
  - C. Failure of the Borrower to undertake in a timely way the express and implied activities for which said Loan Agreement has been executed;
  - D. Failure of the Borrower to obtain prior written Commission approval before undertaking a change in the scope of the activities for which said Loan Agreement has been executed; or
  - E. Occurrence of (1) the Borrower becoming insolvent or bankrupt or being unable or admitting in writing its inability to pay its debts as they mature or making a general assignment for the benefit of or entering into any composition or arrangement with creditors; (2) proceedings for the appointment of a receiver, trustee, or liquidator of the assets of the Borrower or a substantial part thereof, being authorized or instituted by or against the Borrower; or (3) proceedings under any bankruptcy, reorganization, readjustment of debt, insolvency, dissolution, liquidation or other similar law, or any jurisdiction being authorized or instituted against the Borrower.
8. No delay or failure of the Commission in the exercise of any right or remedy hereunder or under any other agreement which secures or is related hereto shall affect any such right or remedy, and no single or partial exercise of any such right or remedy shall preclude any further exercise thereof, and no action taken or omitted by the Commission shall be deemed a waiver of any such right or remedy.

9. Any notice to the Borrower provided for in this Promissory Note shall be given by mailing such notice by certified mail, return receipt requested, addressed to the Borrower at the address stated in the Loan Agreement, or to such other address as the Borrower may designate by notice to the Commission. Any notice to the Commission shall be given by mailing such notice by certified mail, return receipt requested, to the Commission at the address stated in the Loan Agreement, or at such other address as may have been designated by notice to the Borrower.
10. If suit is brought to collect any part of this Promissory Note, the Commission shall be entitled to collect all reasonable costs and expenses of said suit and any appeal therefrom, including reasonable attorney's fees.
11. This Promissory Note shall be binding upon the Borrower and its permitted successors and assigns and upon the Commission and its permitted successors and assigns. Without the written consent of the Commission, this Promissory Note is not assignable or transferable by Borrower either in whole or in part. The Commission may assign its rights under this Promissory Note for security purposes, and in such event the assignee of this Promissory Note, including the bond trustee of any bonds which are secured by repayments of this Promissory Note, shall be entitled to enforce the provisions hereof and shall be a third party beneficiary of this Promissory Note.
12. This Promissory Note shall be construed and enforced in accordance with the laws of the State of California.

City of San Diego  
BORROWER

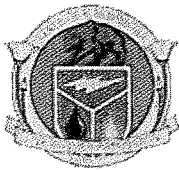
\_\_\_\_\_  
PRINTED NAME OF AUTHORIZED  
REPRESENTATIVE

\_\_\_\_\_  
AUTHORIZED SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

**EXHIBIT C**  
**ESTIMATED AMORTIZATION SCHEDULE**



## State of California

Energy Resources Conservation  
and Development Commission

1516 Ninth Street  
Sacramento, California 95814-5512

### Estimated Loan Amortization Table

Loan Number: <b>003-09-ECA</b>	Number of Payments: <b>21</b>
Recipient: <b>City of San Diego</b>	Estimated Disbursement Date: <b>12/30/2010</b>
Loan Amount: <b>\$3,000,000.00</b>	Estimated Project Completion Date: <b>12/30/2011</b>
Interest Rate: <b>3.00 %</b>	Annual Energy Savings: <b>\$350,000.00</b>

Trans #	Payment Date	Accrued Interest	Payment Amount	Interest Payment	Principal Payment	Principal Balance
Disbursement 1	12/30/2010	\$0.00	(\$3,000,000.00)	\$0.00	(\$3,000,000.00)	\$3,000,000.00
Payment 1	12/22/2012	\$178,273.97	\$174,938.35	\$178,273.97	\$0.00	\$3,000,000.00
Payment 2	6/22/2013	\$44,876.71	\$174,938.35	\$44,876.71	\$126,726.02	\$2,873,273.98
Payment 3	12/22/2013	\$43,217.19	\$174,938.35	\$43,217.19	\$131,721.16	\$2,741,552.82
Payment 4	6/22/2014	\$41,010.63	\$174,938.35	\$41,010.63	\$133,927.72	\$2,607,625.10
Payment 5	12/22/2014	\$39,221.54	\$174,938.35	\$39,221.54	\$135,716.81	\$2,471,908.29
Payment 6	6/22/2015	\$36,977.04	\$174,938.35	\$36,977.04	\$137,961.31	\$2,333,946.98
Payment 7	12/22/2015	\$35,105.12	\$174,938.35	\$35,105.12	\$139,833.23	\$2,194,113.75
Payment 8	6/22/2016	\$33,001.88	\$174,938.35	\$33,001.88	\$141,936.47	\$2,052,177.27
Payment 9	12/22/2016	\$30,867.00	\$174,938.35	\$30,867.00	\$144,071.35	\$1,908,105.92
Payment 10	6/22/2017	\$28,543.17	\$174,938.35	\$28,543.17	\$146,395.18	\$1,761,710.74
Payment 11	12/22/2017	\$26,498.06	\$174,938.35	\$26,498.06	\$148,440.29	\$1,613,270.45
Payment 12	6/22/2018	\$24,132.76	\$174,938.35	\$24,132.76	\$150,805.59	\$1,462,464.86
Payment 13	12/22/2018	\$21,997.07	\$174,938.35	\$21,997.07	\$152,941.28	\$1,309,523.59
Payment 14	6/22/2019	\$19,589.04	\$174,938.35	\$19,589.04	\$155,349.31	\$1,154,174.27
Payment 15	12/22/2019	\$17,360.05	\$174,938.35	\$17,360.05	\$157,578.30	\$996,595.97
Payment 16	6/22/2020	\$14,989.90	\$174,938.35	\$14,989.90	\$159,948.45	\$836,647.51
Payment 17	12/22/2020	\$12,584.10	\$174,938.35	\$12,584.10	\$162,354.25	\$674,293.26
Payment 18	6/22/2021	\$10,086.69	\$174,938.35	\$10,086.69	\$164,851.66	\$509,441.60
Payment 19	12/22/2021	\$7,662.56	\$174,938.35	\$7,662.56	\$167,275.79	\$342,165.81
Payment 20	6/22/2022	\$5,118.43	\$174,938.35	\$5,118.43	\$169,819.92	\$172,345.88
Payment 21	12/22/2022	\$2,592.27	\$174,938.15	\$2,592.27	\$172,345.88	\$0.00

MEET

150  
6/15

RESOLUTION NUMBER R-304982

DATE OF FINAL PASSAGE JUN 26 2009

A RESOLUTION AUTHORIZING APPLICATION TO THE U.S. DEPARTMENT OF ENERGY FOR ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT FUNDS TO DEVELOP A CONSERVATION STRATEGY; TAKING ALL NECESSARY ACTIONS TO SECURE GRANT FUNDING; ESTABLISHING AN AD HOC COMMITTEE TO DEVELOP AN ENERGY AND CONSERVATION STRATEGY; AND DOCKETING A REGULAR AGENDA ITEM FOR COUNCIL REVIEW OF CITY ACTION UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT.

WHEREAS, the U.S. Congress has adopted the American Recovery and Reinvestment Act of 2009, which in part provides additional federal stimulus funding to the Energy Efficiency and Conservation Block Grant [EECBG] Program administered by the U.S. Department of Energy pursuant to Subtitle E of Title V of the Energy Independence and Security Act of 2007; and

WHEREAS, as a result of the federal appropriation for these purposes, the Department of Energy has invited the City of San Diego [City] to apply for EECBG funding for projects or activities which meet statutory and program requirements; and

WHEREAS, it is in the interest of the City to apply to the Department of Energy for funding to develop an implementation strategy for EECBG funding for eligible City projects and/or activities; and

WHEREAS, on May 13, 2009, the Rules Committee approved the application for such funding and also approved the inclusion of a standing agenda item to provide updates on City actions under the American Recovery and Reinvestment Act; and

WHEREAS, it would be advantageous for the City to establish an ad hoc committee to further develop the City's energy efficiency and conservation strategy before applications are

made to the Department of Energy for specific projects; NOW THEREFORE,

BE IT RESOLVED, by the Council of the City of San Diego as follows:

1. That the Mayor or his designee, is authorized and empowered, for and on behalf of the City, to apply to the United States Department of Energy for the EECBG in the amount of \$250,000 for development of an "Energy Efficiency and Conservation Strategy."

2. That the Mayor or his designee is authorized and empowered to take all necessary actions to secure EECBG funds in the initial amount of \$250,000 to develop the City's Energy Efficiency and Conservation Strategy.

3. That the Mayor or his designee is authorized to negotiate and execute agreements with the Department of Energy for funding of up to \$250,000 in EECBG funding for an Energy Efficiency and Conservation Strategy.

4. That the City Comptroller is authorized to accept, appropriate, and expend funds if the EECBG funds are secured and approved by the Department of Energy.

5. That the City Comptroller is further authorized to transfer excess funds, if any, to the appropriate reserves on advice from the administering department.

BE IT FURTHER RESOLVED, by the Council of the City of San Diego, as follows:

6. That the Council hereby establishes the Ad Hoc Committee for Review of Energy Efficiency and Conservation Strategy, consisting of one appointed representative from each Council Office and three appointed representatives from the Mayor's Office.

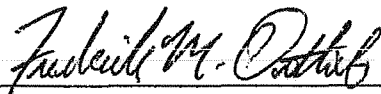
7. That the Ad Hoc Committee Members will serve without pay and shall not be applicants, agents, employees, or under contract with applicants or recipients of EECBG grant funds, and will not represent applicants and/or recipients of EECBG grant funds received by the City.

8. That the Ad Hoc Committee will be co-chaired by Councilmember Frye and the Mayor or one of his designees.

BE IT FURTHER RESOLVED, that the Mayor or his designee shall provide the Council on or before June 19, 2009, a copy of the master agreement between the City and Sun Edison Company regarding energy efficiency projects.

BE IT FURTHER RESOLVED, that the City Clerk shall docket at each Monday Council meeting an agenda item for the Mayor or his designee to provide an update of the City's actions under the American Recovery and Reinvestment Act and all stimulus funds received by the City.

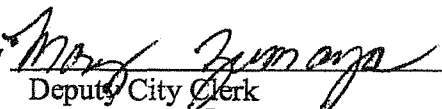
APPROVED: JAN I. GOLDSMITH, City Attorney

By   
Frederick M. Ortlieb  
Deputy City Attorney

FMO:sc:mb  
06/03/09  
06/19/09 Rev.  
06/24/09 Rev.2  
Or.Dept:Mayor  
R-2009-1244

I hereby certify that the foregoing Resolution was passed by the Council of the City of Diego, at its meeting of June 15, 2009.

ELIZABETH S. MALAND, City Clerk

By   
Deputy City Clerk

Approved: 6.26.09  
(date)

  
JERRY SANDERS, Mayor

Vetoed: \_\_\_\_\_  
(date)

\_\_\_\_\_  
JERRY SANDERS, Mayor

Passed by the Council of The City of San Diego on JUN 15 2009, by the following vote:

Council Members	Yeas	Nays	Not Present	Recused
Sherri Lightner	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kevin Faulconer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Todd Gloria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anthony Young	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carl DeMaio	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Donna Frye	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marti Emerald	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ben Hueso	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date of final passage JUN 26 2009

AUTHENTICATED BY:

(Seal)

JERRY SANDERS  
Mayor of The City of San Diego, California.

ELIZABETH S. MALAND  
City Clerk of The City of San Diego, California.

By *Mary Zamora*, Deputy

Office of the City Clerk, San Diego, California  
Resolution Number R- 304982

P-304982



<b>REQUEST FOR COUNCIL ACTION</b>				CERTIFICATE NUMBER (FOR COMPTROLLER'S USE ONLY)	
CITY OF SAN DIEGO				n/a	
TO: CITY COUNCIL		FROM (ORIGINATING DEPARTMENT): Environmental Services		DATE: 02/26/2009	
SUBJECT: Broad Spectrum Street Lighting					
PRIMARY CONTACT (NAME, PHONE): Tom Cartier, 858 492 2009, MS 1103A			SECONDARY CONTACT (NAME, PHONE): John Helminski, 858 492 6002, MS 1103B		
<b>COMPLETE FOR ACCOUNTING PURPOSES</b>					
FUND					
DEPT / FUNCTIONAL AREA					
ORG / COST CENTER					
OBJECT / GENERAL LEDGER ACCT					
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00
FUND					
DEPT / FUNCTIONAL AREA					
ORG / COST CENTER					
OBJECT / GENERAL LEDGER ACCT					
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00
<b>COST SUMMARY (IF APPLICABLE):</b>					
<b>ROUTING AND APPROVALS</b>					
CONTRIBUTORS/REVIEWERS:		APPROVING AUTHORITY		APPROVAL SIGNATURE	DATE SIGNED
Comptroller		ORIG DEPT.		Gonaver, Chris	12/21/2009
Liaison Office		CFO			
Equal Opportunity Contracting		DEPUTY CHIEF		Jarrell, David	1/19/2010
Environmental Analysis		COO			
Financial Management		CITY ATTORNEY		Ortlieb, Fritz	1/12/2010
		COUNCIL PRESIDENTS OFFICE		JuradoSainz, Diana	1/20/2010
PREPARATION OF:		<input checked="" type="checkbox"/> RESOLUTIONS	<input type="checkbox"/> ORDINANCE(S)	<input type="checkbox"/> AGREEMENT(S)	<input type="checkbox"/> DEED(S)
1. Authorize Energy Sustainability and Environmental Protection Division (ESEP) of the Environmental Services Department (ESD) to pursue a California Energy Commission (CEC) low interest rate loan in the amount of 3 million dollars.					

2. Authorize ESEP Division of the Environmental Services Department to combine and leverage the CEC loan financing with 2 million dollars of Energy Efficiency and Conservation Block Grant from the US Department of Energy (EECBG) for a street light conversion program contingent upon receipt of a fully executed grant agreement.
3. Authorize the Mayor's duly authorized representative to advertise a street light conversion project(s) with funding from federal economic stimulus revolving (EECBG) and CEC loan funds, not to exceed \$5 million for the first phase of the conversion.
4. Authorize ESEP Division of the Environmental Services Department to pursue and apply for additional funding sources from Federal or State sources for street lighting conversions beyond the initial 5 million dollars requested. This authorization would be subject to Council ratification prior to acceptance of funds that require unbudgeted City funding.
5. Authorize the use of broad spectrum street lighting, including LED and induction as deemed appropriate by the City Engineer, outside the 30 mile radii of the local observatories with a maximum 3000 Kelvin color corrected temperature and full cut off distribution.
6. Authorize the Energy Sustainability and Environmental Protection Division of the Environmental Services Department to coordinate with all the City Council Districts for specific street lighting conversion locations as recommended by City staff, (E&CP, Transportation Division; and General Services, Street Division) based on expected life of the existing systems, energy savings, and the public need.
7. Authorize the integration of adaptive technology with SDG&E smart grid technology to capture additional energy savings by utilizing dimming in selected areas.

**STAFF RECOMMENDATIONS:**  
 Approve Requested Actions

**SPECIAL CONDITIONS (REFER TO A.R. 3.20 FOR INFORMATION ON COMPLETING THIS SECTION)**

<b>COUNCIL DISTRICT(S):</b>	All
<b>COMMUNITY AREA(S):</b>	All
<b>ENVIRONMENTAL IMPACT:</b>	This activity is exempt from CEQA State Guidelines, Categorical Exemption Class 1 CCR, and Section 15301(b)(c), "Operation, repair, maintenance, or minor alteration of existing structures of facilities not expanding existing uses."
<b>CITY CLERK INSTRUCTIONS:</b>	Upon Council Approval, please forward two (2) copies of the 1472 and Resolution to Evelyn Lee, ESD, M.S. 1101B and one (1) copy to Tom Cartier, ESD M.S. 1101B

**COUNCIL ACTION  
EXECUTIVE SUMMARY SHEET  
CITY OF SAN DIEGO**

DATE: 02/26/2009

ORIGINATING DEPARTMENT: Environmental Services

SUBJECT: Broad Spectrum Street Lighting

COUNCIL DISTRICT(S): All

CONTACT/PHONE NUMBER: Tom Cartier/ 858 492 2009, MS 1103A

**REQUESTED ACTION:**

Authorize use of broad spectrum Induction street lighting technology outside the 30 mile local observatory radii. Advertise, award, and construct an induction street light conversion project using 3000 Kelvin Correlated Color Temperature (CCT) lamps and full cut off light distribution. Authorize a combination of federal economic stimulus funding and California Energy Commission (CEC) low-interest loan funds, not to exceed \$5 million for the first phased retrofit. Authorize the Mayor's duly authorized representative to coordinate with City Council offices, General Services, and E&CP the specific locations in each Council District for streetlight deployment. Authorize integration of adaptive technology smart grid technology to capture additional energy savings by utilizing dimming in selected areas.

**STAFF RECOMMENDATION:**

Approve Requested Actions

Background: Ongoing research and past experience converting interior building lighting systems at various City facilities revealed the virtues of broad spectrum lighting. Recent developments in outdoor broad-spectrum lighting technology, such as LED and induction lights, provide long lamp life that reduces maintenance costs. The energy savings combined with reduced maintenance costs, also termed "lifecycle cost", will lower costs for long term economic "green" savings. SDG&E and the Environmental Services Department have sponsored an assessment pilot project to display and test the most prominent street lighting technologies along 6th Ave between Spruce Street and Ivy Street. A nationally renowned lighting consultant was hired to help select the best technology. Induction technology has emerged over LED as the best technology for economic and environmental compatibility with the local astronomy community. City Council offices, General Service Street Maintenance, Engineering and Capital Projects and ESD will specify locations in each Council District for deployment of the streetlight conversions. A street light conversion contract will be advertised and awarded to the most responsible vendor(s) based on costs, including extended warranties, to convert existing street lights. The project is expected to pay back the initial conversion costs in less than seven years. Authorize use of after-hours dimming to reduce energy consumption and reduce light pollution. Because this is adaptive technology not a widely used practice, the concept will be promoted on a case-by-case basis. Federal funding for this project has been subject to NEPA review and found to qualify for a NEPA exclusion.

**Fiscal Considerations:**

The funding for projects executed under this first phase will be limited to a combined amount not to exceed \$5,000,000 from Economic Stimulus Revolving funding and California Energy

Commission low interest loans. Long term fiscal considerations include reduced annual street lighting costs due to increased energy and maintenance savings.

**Equal Opportunity Contracting:**

Agreements associated with this project will be subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. O-18173, Sections 22.2701 through 22.2708 and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

**Previous Council and/or Committee Action:**

On February 26, 2002, Council Resolution R-296141 approved use of broad-spectrum lighting outside a Mt. Palomar 30-mile radius. In accordance with the Resolution and Managers Report, 02-039 dated February 20, 2002, ESD has been researching broad-spectrum lighting benefits. Resolution No 305276 adopted October 14, 2009, Authorized the Mayor or his designee to secure, implement, administer, monitor and manage EECSBG funding up to \$12,540,700.

Dec 9, 2009 NR&C Committee Meeting Notes Excerpt from Action Item Agenda:

ITEM-11: Report from the Environmental Services Department regarding BROAD SPECTRUM LIGHTING(See Report to City Council No. 09-171)

ACTION: Motion by Councilmember Lightner, second by Councilmember

DeMaio, to approve.VOTE: 3-0; Frye-yea, DeMaio-yea, Lightner-yea, Emerald-not present

---

**Community Participation and Public Outreach Efforts:**

The public was invited to and participated in the evaluation of an pilot street light conducted April 28, 2009 along 6th Avenue. Additional pilot induction street light projects are being planned.

**Key Stakeholders and Projected Impacts:**

City of San Diego citizens and tax payers in the City of San Diego.

Gonaver, Chris

Originating Department

Jarrell, David

Deputy Chief/Chief Operating Officer

RESOLUTION NUMBER R-\_\_\_\_\_

DATE OF FINAL PASSAGE \_\_\_\_\_

A RESOLUTION OF THE SAN DIEGO CITY COUNCIL  
AUTHORIZING APPLICATION FOR A LOW INTEREST  
RATE LOAN FROM THE CALIFORNIA ENERGY  
COMMISSION AND TAKING RELATED ACTIONS  
RELATED TO BROAD SPECTRUM STREET LIGHTING.

WHEREAS, in February 2002, by Resolution No. R-296141, the Council endorsed the use of broad spectrum street lighting within the City outside the 30-mile observatory radius;  
and

WHEREAS, the City with the assistance of San Diego Gas & Electric Company has assessed the feasibility of a pilot program for broad spectrum street lighting along Sixth Avenue in the Balboa Park area; and

WHEREAS, the California Energy Commission has low interest rate loans available for the installation of broad spectrum lighting, for which the City is eligible; and

WHEREAS, the City will realize substantial energy savings through the deployment of broad spectrum street lighting; NOW, THEREFORE,

BE IT RESOLVED, by the Council of the City of San Diego, as follows:

1. That the Mayor or his designee, the Energy Sustainability and Environmental Protection Division (ESEPD) of the Environmental Services Department, is authorized to apply for a low interest rate loan from the California Energy Commission (CEC) in the amount of \$3,000,000.

2. That the Mayor or ESEPD is directed to consult with each Council District office and thereafter is authorized to determine the locations within the City where broad spectrum street lighting is to be deployed under the program authorized by this resolution.

3. That the Mayor or ESEPD is authorized to combine and leverage the CEC loan financing with Energy Efficiency & Conservation Block Grant (EECBG) funds from the U.S. Department of Energy in the amount of \$2,000,000 to be used for a broad spectrum street light conversion program.

4. That the Mayor or ESEPD is directed to present to the Council for its consideration and approval the terms and conditions of the California Energy Commission loan when such becomes available from the CEC.

5. That the Mayor or ESEPD is authorized to develop plans and specifications and to advertise for bids for a broad spectrum street light conversion installation contract for an estimated amount not to exceed \$5,000,000.

6. That, after advertising for bids in accordance with law, the Mayor or ESEPD is authorized to award the broad spectrum street light conversion installation contract to the lowest responsible and reliable bidder in an amount not to exceed \$5,000,000, provided that the City Comptroller furnishes one or more certificates demonstrating that the funds necessary for expenditure under the contract are, or will be, on deposit with the City Treasurer.

7. That the expenditure of an amount not to exceed \$5,000,000 from the CEC loan and EECBG funds received for the broad spectrum street light conversion program is authorized, solely and exclusively to provide funds for the program and related costs, provided that the City Comptroller furnishes one or more certificates demonstrating that the funds are, or will be, on deposit with the City Treasurer.

8. That, subject to Council approval of funding that requires unbudgeted City funds, the Mayor or ESEPD is authorized to pursue and apply for additional funding from federal or state sources to expand the broad spectrum street light conversion program beyond the initial request.

9. That the Council authorizes the use of broad spectrum street lighting, including LED and induction as deemed appropriate by the City Engineer, outside the 30-mile radii of local observatories, with a maximum 3000 Kelvin color corrected temperature and full cut-off distribution.

10. That the Council authorizes the integration of adaptive technology with SDG&E Smart Grid technology to capture additional energy savings by using dimming in selected areas.

APPROVED: JAN I. GOLDSMITH, City Attorney

By Frederick M. Ortlieb  
Frederick M. Ortlieb  
Deputy City Attorney

FMO:mb  
01/12/10  
Or.Dept:ESD  
R-2010-492

I hereby certify that the foregoing Resolution was passed by the Council of the City of San Diego, at its meeting of \_\_\_\_\_.

ELIZABETH S. MALAND, City Clerk

By \_\_\_\_\_  
Deputy City Clerk

Approved: \_\_\_\_\_  
(date)

\_\_\_\_\_  
JERRY SANDERS, Mayor

Vetoed: \_\_\_\_\_  
(date)

\_\_\_\_\_  
JERRY SANDERS, Mayor

DOCKET SUPPORTING INFORMATION  
CITY OF SAN DIEGO  
**EQUAL OPPORTUNITY CONTRACTING PROGRAM  
EVALUATION**

DATE:  
January 12, 2010

SUBJECT: Broad Spectrum Street Lighting

**GENERAL CONTRACTOR INFORMATION**

Recommended Agencies: California Energy Commission  
US Department of Energy

Amount of this Action: \$3,000,000.00 (City to apply for loan)  
\$2,000,000.00 (City to apply for grant)

Funding Source: State/Federal

**SUBCONTRACTOR PARTICIPATION**

There are no subcontractors identified at this time.

**EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE**

Equal Opportunity: Required

Agreements associated with this project will be subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2708) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

**ADDITIONAL COMMENTS**

This action authorizes the Energy Sustainability & Environmental Protection Division (ESEP) of the Environmental Services Department (ESD) to pursue a California Energy Commission (CEC) low interest rate in the amount of \$3 million dollars and apply for a grant from the US Department of Energy, Energy Efficiency and Conservation Block Grant (EECBG) in the amount of \$2 million dollars, with a total not to exceed \$5 million dollars.

CCA



NOTICE OF EXEMPTION

(Check one or both)

TO: X RECORDER/COUNTY CLERK
P.O. BOX 1750, MS A-33
1600 PACIFIC HWY, ROOM 260
SAN DIEGO, CA 92101-2422

FROM: CITY OF SAN DIEGO
DEVELOPMENT SERVICES DEPARTMENT
1222 FIRST AVENUE, MS 501
SAN DIEGO, CA 92101

OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET, ROOM 121
SACRAMENTO, CA 95814

PROJECT NO.: N/A PROJECT TITLE: CITYWIDE STREET LIGHT CONVERSION

PROJECT LOCATION-SPECIFIC: Citywide (All Council Districts) excluding areas within 30 miles of operating observatories. All work confined to the existing public right-of-way

PROJECT LOCATION-CITY/COUNTY: San Diego/San Diego

DESCRIPTION OF NATURE AND PURPOSE OF PROJECT: CITY COUNCIL APPROVAL to Advertise, award, and construct an induction street light conversion project using 3000 Kelvin Correlated Color Temperature (CCT) lamps and full cut off light distribution; Authorize a combination of federal economic stimulus funding and California Energy Commission (CEC) low-interest loan funds, not to exceed \$5 million for the first phased retrofit. The project scope is to retrofit approximately 1300 existing 250 watt HPS fixtures with 165 watt induction fixtures and 4400 existing 150 watt HPS fixtures with 85 watt induction fixtures. The area of conversion will be on existing streetlight standards outside the 30 mile radius of the observatories.

NAME OF PUBLIC AGENCY APPROVING PROJECT: City of San Diego

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: City of San Diego, Environmental Services Department, Tom Cartier
9601 Ridgheaven Ct, MS 1103A, San Diego, CA 92122, 858.492.6009

EXEMPT STATUS: (CHECK ONE)

- ( ) MINISTERIAL (SEC. 21080(b)(1); 15268);
( ) DECLARED EMERGENCY (SEC. 21080(b)(3); 15269(a));
( ) EMERGENCY PROJECT (SEC. 21080(b)( 4); 15269 (b)(c))
(X) CATEGORICAL EXEMPTION: 15301 (b/c)
( ) STATUTORY EXEMPTIONS:

REASONS WHY PROJECT IS EXEMPT: The project consists only of the replacement of existing lighting fixtures to meet current energy efficiency standards which would not result in any adverse effects on the environment. No grading or excavation is required for this activity and therefore it qualifies for an exemption under the category checked above.

LEAD AGENCY CONTACT PERSON: Myra Herrmann, Senior Planner TELEPHONE: (619) 446-5372

IF FILED BY APPLICANT:

- 1. ATTACH CERTIFIED DOCUMENT OF EXEMPTION FINDING.
2. HAS A NOTICE OF EXEMPTION BEEN FILED BY THE PUBLIC AGENCY APPROVING THE PROJECT?
( ) YES ( ) NO

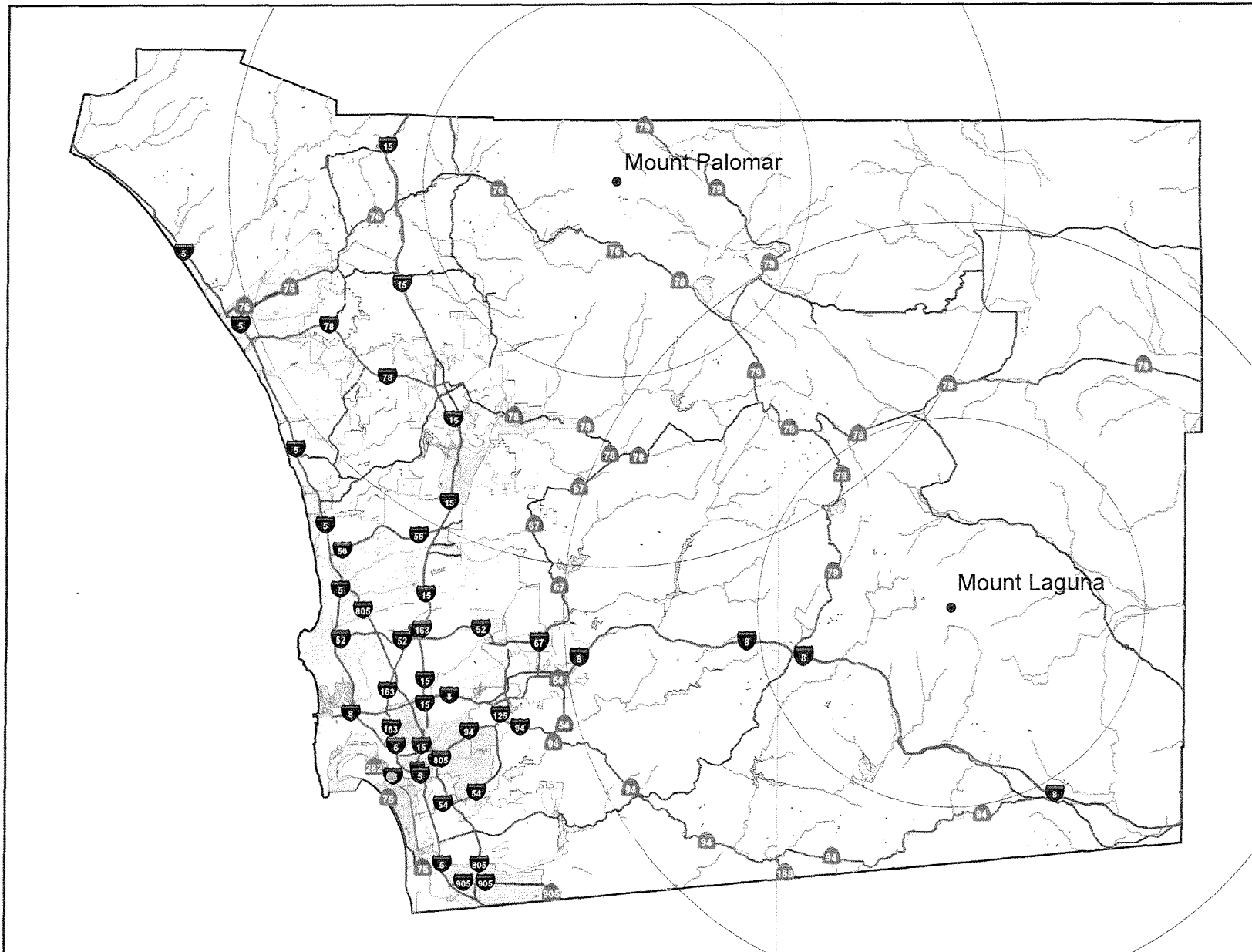
IT IS HEREBY CERTIFIED THAT THE CITY OF SAN DIEGO HAS DETERMINED THE ABOVE ACTIVITY TO BE EXEMPT FROM CEQA

Myra Herrmann, Senior Planner
SIGNATURE/TITLE

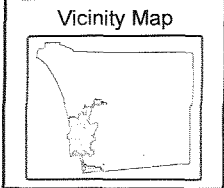
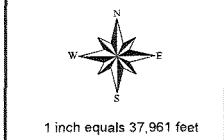
12/16/09
DATE

- CHECK ONE:
(X) SIGNED BY LEAD AGENCY
( ) SIGNED BY APPLICANT

DATE RECEIVED FOR FILING WITH COUNTY CLERK OR OPR:



- Legend**
- Observatories
  - ▭ County Boundary
  - 15-Mile and 30-Mile Radii of Observatories
  - Buffer Distance**
  - 15 Miles
  - 30 Miles



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Plot Date: 04/12/05

COMMITTEE ACTION SHEET

COUNCIL DOCKET OF \_\_\_\_\_

Supplemental     Adoption     Consent     Unanimous Consent

R -

O -

Broad Spectrum Lighting

Reviewed     Initiated    By NR&C    On 12/09/09    Item No. 11

RECOMMENDATION TO:

Approve.

VOTED YEA: Frye, Lightner, DeMaio

VOTED NAY:

NOT PRESENT: Emerald

CITY CLERK: Please reference the following reports on the City Council Docket:

REPORT TO THE CITY COUNCIL NO. 09-171


INDEPENDENT BUDGET ANALYST NO.

COUNCIL COMMITTEE CONSULTANT ANALYSIS NO.

OTHER:

[Empty box for other information]

COUNCIL COMMITTEE CONSULTANT





NR&C DEC 09 2009 #11

THE CITY OF SAN DIEGO  
**REPORT TO THE CITY COUNCIL**

DATE ISSUED: December 2, 2009 REPORT NO: 09-171  
ATTENTION: Natural Resources and Culture Committee  
SUBJECT: Proposed Broad Spectrum Street Lighting Project  
REFERENCE: Broad Spectrum Street Lighting Conversion

REQUESTED ACTION:

Authorize Energy Sustainability and Environmental Protection Division (ESEP) of the Environmental Services Department (ESD) to pursue and accept a California Energy Commission (CEC) low interest rate loan in the amount of 3 million dollars.

Authorize ESEP Division of the Environmental Services Department to combine and leverage the CEC loan financing with 2 million dollars of Energy Efficiency and Conservation Block Grant from the US Department of Energy (EECBG) for a street light conversion program.

Authorize the ESEP Division of the Environmental Services Department to advertise and award the installation of a Broad Spectrum Street Light Conversion project not to exceed 5 million dollars.

Authorize ESEP Division of the Environmental Services Department to pursue and apply for additional funding sources from Federal or State sources for street lighting conversions beyond the initial 5 million dollars requested. This authorization would be subject to Council ratification prior to acceptance of funds that require unbudgeted City funding.

Modify the Street Lighting section of the Street Design Manual to authorize use of induction or LED lighting as a broad spectrum street light technology where deemed appropriate by the City Engineer.

Authorize use of broad spectrum "white" street lighting. This street light conversion will convert existing street lights outside a 30 mile observatory radii with 3000 Kelvin Correlated Color Temperature (CCT) induction technology with full cut off distribution. Induction technology is currently proposed, however future projects will not be limited to induction technology as broad spectrum lighting technology continues to evolve.

Authorize the ESEP Division of the Environmental Services Department to coordinate with all the City Council Districts for specific street lighting conversion locations as recommended by

City staff from E&CP, Transportation Division; and General Services, Street Division based on expected life of the existing systems, energy savings, and public need.

Authorize the integration of adaptive technology with SDG&E smart grid technology to capture additional energy savings by utilizing dimming in selected areas.

BACKGROUND:

On February 26, 2002 City Council adopted Resolution R-29614 which approved use of broad-spectrum lighting outside a 30 mile Mount Palomar radius. The accompanying City Manager Report No. 02-039 suggested alternate streetlight technologies be further studied, in particular broad spectrum lighting. Recent advances in street lighting, in particular LED and induction technologies offer enhanced visual performance over incumbent Low Pressure Sodium and High Pressure Sodium (HPS and LPS) technologies while increasing energy savings and reducing maintenance costs.

ESD observed the advancement of the broad-spectrum lighting phenomena during interior lighting energy retrofits of City facilities. To promote outdoor broad-spectrum lighting, ESD procured the professional services of Clanton and Associates, a nationally recognized lighting consulting to study both LED and induction lighting technologies and develop street lighting guidelines. To demonstrate the benefits of broad-spectrum lighting technology outdoors, ESD collaborated with SDG&E on a pilot project to identify the best technology. A portion of 6th Avenue, north and south of Laurel Street was chosen for the pilot project venue. The LED technology was installed north of Laurel Street and the induction street lights installed south of Laurel Street which is the entrance to Balboa Park. The 6th Ave pilot project was completed in late March 2009. ESD is also currently collaborating with CCDC to install induction streetlights at other downtown locations.

During late April of this year ESD and SDG&E mutually sponsored a public review of the 6<sup>th</sup> Avenue pilot project to identify which technology both LED and induction might emerge as most promising. There were two types of public surveys. The subjective survey asked questions of the public in a written format to identify how they felt about safety and lighting. The objective portion was conducted using a test vehicle that evaluated human response times to small targets placed in the roadway. It was determined there was no significant visual performance difference amongst the 250 watt HPS and the lower wattage (150 to 190 watt LED and induction) technologies. The draft street light report authored by Clanton and Associates document the study parameters and results. The final version is being reviewed by SDG&E legal staff.

All visual performance test results being equal, a life cycle cost analysis was developed to identify the economic parameters for long term cost evaluation. In accordance with the attached life cycle cost spread sheet, induction emerged as having the lowest life cycle costs. We also solicited input from the astronomy community, as unmitigated broad spectrum light is not desirable in the vicinity of the observatories. We received comments from the astronomy community and incorporated their comments into the new lighting guidelines. In summary the project will convert lights outside the 30 mile radii of the observatories with 3000 Kelvin Color Correlated Temperature (CCT) full cut-off distribution induction street lights. The astronomy community does not object to the lighting conversion with these self imposed constraints.

City Council approved the EECBG (Energy Efficiency Community Block Grant), federal stimulus funding under the American Recovery Act (ARA) (R-305276 Dated October 14, 2009) that authorized EECBG funding for a streetlight conversion project. The California Energy Commission (CEC) is presently accepting applications from municipalities for low interest rate energy improvements loans. An opportunity now exists to leverage funding sources and move forward with the first phase of a broad spectrum street light conversion project. The request for City Council approval to apply and execute an agreement with the CEC for a low interest loan allows combined EECBG and CEC funds to accomplish \$5 million to initiate the first phase of street lighting retrofits.

DISCUSSION:

Phase I of street lighting conversions would save an estimated 4.3 million kilowatt-hours (kWh) annually for an immediate annual energy cost savings of \$586,000. An SDG&E onetime incentive will provide an estimated \$215,000 in additional savings. The combined "after installation savings" to the general fund would be \$780,000. The lamp life of induction technology lighting is estimated to be at least 20 years. Maintenance costs will be significantly reduced by not having to change street light lamps for a generation. City street lights in the Gas Lamp area have operated for 12 years without replacement. City Street Division maintenance staff has expressed their satisfaction and endorsement of induction lighting.

Presently an advanced pilot induction project is being planned and constructed. This small pilot project will use select induction fixtures to provide the necessary installation experience for developing specifications. It is anticipated that the induction fixture procurement and construction labor will be advertised independently for maximum effectiveness. In the long term, five to ten years, we anticipate that the cost and technological evolution of LED technology to be competitive with induction technology. Presently LED has a high CCT Kelvin temperature such that astronomy community objects to their use. The LED technology has higher initial costs, presently making induction the preferred technology.

Although the 2002 City Council resolution provided an endorsement of broad-spectrum lighting, it was determined that HPS, the incumbent technology, was broad-spectrum. HPS compared with LPS is much closer to a "white light," however it is not considered broad-spectrum in the recent definition. The mechanism of changing the current street light guidelines to induction lighting involves modifying the Street Design Manual. Therefore, it is requested that the attached revised Street Design Manual pertaining to street lighting be approved to codify the new guidelines and authorize implementation of induction lighting. It is desirable to include LED lighting; however technical lighting specifications have not yet been fully developed. As LED technology evolves, we will continue to evaluate street lighting best street light practices. This includes evaluating a new Recommended Practice (IES RP 8) street light design by IES, the ANSI lighting authority, anticipated to be published in the next three to six months. We will provide annual reports to NR&C and the Sustainable Energy Advisory Board (SEAB) to document street light retrofit progress and technological advances in the street lighting industry.

We intend to advertise the project in early spring 2010 and award contracts in late spring or early summer, with completion in early 2011. The initial \$5 million requested for Phase 1 will provide

the funding to convert approximately 9,500 streetlights which are about 20% of the approximate 50,000 streetlights citywide. The kilowatt-hours savings equates to reductions of 1,700 tons of CO2 and 150 pounds of Methane annually. In summary, once this project is completed, we estimate a general fund savings of \$780,000 annually considering both the energy and maintenance savings.

FISCAL CONSIDERATIONS:

The funding for projects executed under this first phase will be limited to an amount not to exceed 5 million dollars from federal EECBG Stimulus Revolving funding in conjunction with CEC low interest loans. Long term fiscal considerations include reduced annual street lighting costs due to increased energy and maintenance savings. The estimated annual energy savings for this phase is estimated to be \$586,000, with an additional maintenance savings of \$194,000 for a combined general fund savings of \$780,000 annually.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

Resolution No 305276 adopted October 14, 2009, Authorize the Mayor or his representative to secure, implement, administer, monitor and manage EECBG funding up to \$12,540,700. Council Resolution R-296141 adopted February 26, 2002, approved use of broad-spectrum lighting outside a Mt. Palomar 30-mile radius, in accordance with the Resolution and Managers Report, 02- 039 dated February 20, 2002.

EQUAL OPPORTUNITY CONTRACTING:

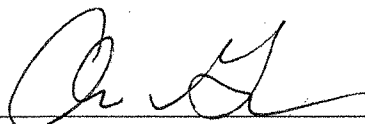
Agreements associated with this project will be subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. O-18173, Sections 22.2701 through 22.2708 and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The public was invited to and participated in the evaluation of a pilot street light conducted April 28, 2009 along 6<sup>th</sup> Avenue. An additional pilot induction street light project is being planned.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

The City of San Diego and its citizens and tax payers in the City of San Diego.



Chris Gonaver  
Director Environmental Services



David Jarrell  
Deputy Chief of Public Works

# Street Lighting

*-Street Lights shall be provided in accordance with the approved Council Policy 200-18, Street Lighting.*



### Street Lights

1. Street lighting shall be installed at all street intersections and shall conform to Table L-1. All street lighting shall be broad spectrum light sources no greater than 3000K CCT except for areas which are designated for low pressure sodium vapor (LPS). Contact the Development Services Department for current information.
2. Midblock street lighting shall be installed as follows:
  - a. On Residential and Collector streets
    - (1) Within 1,320 feet of a transit stop, or
    - (2) In a residential or commercial district within a high-crime census tract staggered at 150 foot intervals, or else staggered at 300 foot intervals.
  - b. On Four-lane Urban Major or higher classification streets
    - (1) Within 1,320 feet of a transit stop, or
    - (2) In a residential or commercial district within a high-crime census tract on both sides of the street at 150 foot intervals, or else on both sides of the street at 300 foot intervals.
  - c. Near the end of a cul-de-sac that exceeds 150 feet in length
    - (1) Within 1,320 feet of a transit stop, or
    - (2) In a residential or commercial district within a high-crime census tract, or else Near the end of a cul-de-sac that exceeds 200 feet in length.
  - d. One light on each side of the street at at-grade railroad crossings to illuminate the side of the train facing the motorist.
  - e. Immediately adjacent to areas of high pedestrian activity including schools, parks, transit centers, and commercial and recreational facilities that draw large numbers of pedestrians.
  - f. At other locations, such as abrupt changes in

horizontal or vertical alignment, as determined by engineering judgment.

3. Agriculture-zoned or natural open space land may be exempted from midblock street lighting provisions, at the direction of the City Engineer.
4. Midblock street lighting shall be fully shielded, Type III fixtures and shall conform to the following:
  - a. 50 to 55 Watt induction or 55 Watt LPS, as applicable, in alleys.
  - b. 70 to 85 watt induction, or 90 Watt LPS, as applicable, for local residential streets (any width) and streets classified as collector or higher with curb-to-curb width up to and including 40 feet.
  - c. 150 to 165 watt induction or 180 Watt LPS, as applicable, for streets classified as collector or higher with curb-to-curb width greater than 40 feet up to and including 52 feet.
  - d. 150 to 165 watt induction or 180 Watt LPS, as applicable, for streets classified as collector or higher with curb-to-curb width greater than 52 feet.
5. Supplemental street lighting, funded from other than the City General Fund may include: a) ornamental, b) continuous street lighting, or c) pedestrian-scale lighting purposes, may be installed in street lighting assessment districts. Street lighting assessment districts will be formed only upon the request of the properties which will be included in the district. (Note: All Supplemental Street Lighting must be approved by the City Engineer.)
  - a. Ornamental street lighting shall be designed to meet the desires of the street lighting assessment district. Custom poles, luminaries, and spacing may be used.
  - b. Continuous street lighting shall conform to the current version of RP-8 publication of the Illuminating Engineering Society of North America, "American National Standard Practice for Roadway Lighting."

Table L-1

## Street Lighting at Non-Signalized Intersections\*

Street A	Street B	B1	B2	B3
		Local residential streets (any width) and collector or higher streets up to and including 40 ft. wide, curb-to-curb.	Collector of higher streets greater than 40 ft. and up to and including 52 ft. wide, curb-to-curb.	Collector or higher streets, greater than 52 ft. wide, curb-to-curb.
A1 Local residential streets (any width) and collector or higher streets up to and including 40 ft. wide, curb-to-curb	A1-B1 Install one 70-85 watt induction or 90 watt LPS as applicable, on the corners of wider street.	Same as A2-B1.	Same as A3-B1.	
A2 Collector or higher streets greater than 40' and up to and including 52' wide	A2-B1 Install two 150-165 watt induction or 180 watt LPS luminaires as applicable, on alternate corners of the wider streets.	Same as A2-B1.	Same as A3-B2.	
A3 Collector or higher streets greater than 52' wide	A3-B1 Install (2) poles with 150-165 watt induction or 180 watt LPS luminaires as applicable, on corners of wider street. Install two 70-85 watt induction or 90 watt LPS luminaires as applicable, on corners of narrower street.	A3-B2 Install (4) poles with 150-165 watt induction or 180 watt LPS lamps as applicable, on each corner of the intersection.	Same as A3-B2.	

NOTES:

1. Street lighting fixtures shall be induction or LPS fully shielded, Type III.
2. Street lighting standards and mounting heights shall conform to City of San Diego Standard Drawing SDE-101.
3. Street lighting at signalized intersections shall conform to the Caltrans Traffic Manual.
4. LPS shall be installed within a 30 mile radius of astronomical observatories.
5. Locations of additional poles to be determined by special conditions such as marked cross walks or traffic volumes as determined by the City Engineer.

c. Pedestrian Scale Lighting

Where pedestrian-scale lighting is installed, sidewalk or walkway lighting shall provide adequate lighting for pedestrians of all abilities and shall conform to the following:

1. In commercial areas, the average maintained horizontal illuminance (FC) on the sidewalk or walkway shall not be less than 1 foot-candle and shall not exceed illuminance uniformity ratio (UR) of 4:1 (FC<sub>Avg</sub>:FC<sub>Min</sub>).
2. In mixed-use areas, the average maintained horizontal illuminance on the sidewalk or walkway shall not be less than 0.5 foot-candles and shall not exceed UR of 4:1 (FC<sub>Avg</sub>:FC<sub>Min</sub>).
3. In residential areas, the average maintained horizontal illuminance on the sidewalk or walkway shall not be less than 0.2 foot-candles and shall not exceed UR of 10:1 (FC<sub>Avg</sub>:FC<sub>Min</sub>).
4. In commercial areas, contributions from other nearby storefront lighting, private lighting, sign lighting and/or reflections from structures on private property should not be considered as a reason for reducing the sidewalk or walkway illuminance levels indicated above.
5. Sidewalk or walkway lights shall have shielded fixtures that keep light pollution, light trespass, and glare to drivers to a minimum, as approved by the City Engineer. Manufacturer models for sidewalk and walkway lighting shall be approved by the City Engineer.
6. Agriculture-zoned land or open space may be exempt, at the discretion of the City Engineer, from pedestrian scale lighting provisions.
7. Further design guidelines can be found in the current version of RP-8 publication of the Illuminating Engineering Society of North America, "American National Standard Practice for Roadway Lighting." Energy code regulations for exterior lighting are in California's Title 24 -2009.





THE CITY OF SAN DIEGO  
**REPORT TO THE CITY COUNCIL**

DATE ISSUED: September 22, 2009 REPORT NO: 09-131

ATTENTION: Council President and City Council

SUBJECT: Energy Efficiency and Conservation Block Grant (EECBG)

REFERENCE: The Committee On Rules, Open Government, and Intergovernmental Relations of the City Council of the City of San Diego - May 13, 2009

City Council of the City of San Diego - June 15, 2009

The Committee On Natural Resources and Culture Committee of the City Council of the City of San Diego - June 24, 2009

The Committee on Natural Resources and Culture Committee of the City Council of the City of San Diego – September 9, 2009

REQUESTED ACTIONS:

- Authorizing the Mayor or his representative to make an application to the United States Department of Energy (DOE), grantor agency and to take all necessary actions to secure funding in amount of \$12,541,700.00, (grant award # DE-EE0000877), for developing and implementing energy conservation measures and programs by the City of San Diego.
- Accept the recommendations for project concepts developed by the Energy Efficiency and Conservation Block Grant (EECBG) Ad Hoc Committee established by City Council.
- Authorize the remaining energy strategy funds be reallocated for the propose of hiring a consultant to assist City staff in the development of "Requests for Proposals" for DOE approved project activities; and to ensure project activities meet the recommendation of the AD HOC committee; and to ensure the funds are allocated before the expiration of the fund allocation milestone of January 2011.
- Accept the recommendations by the Energy Efficiency and Conservation Block Grant (EECBG) Ad Hoc Committee to approve the Draft-Energy Efficiency and Conservation Strategy.

- Authorize the Mayor, or his representative, for and on behalf of the City, to submit the Energy Efficiency and Conservation Strategy (EECS) and associated project summaries to DOE, and negotiate and execute agreements for the total award of \$12,541,700.00.
- Authorizing the Chief Financial Officer to establish a special interest-bearing fund for the grant, and deposit the funds in an account established by the City Comptroller.
- Authorizing the Chief Financial Officer to accept up to \$12,541,700.00, if the grant funding is secured, appropriate and expend funds for Energy Efficiency and Conservation Block Grant activities, as determined by the Mayor or his representative, in accordance with the Energy Efficiency and Conservation Block Grant guidelines.
- Authorize the Mayor, or his representative, to take all necessary action to administer, monitor and manage the agreement with DOE, and when required, develop, advertise, negotiate and award contracts to third parties to implement the EECS approved by DOE.
- Authorize the study, classification, and creation of three (3) limited positions assigned to the Environmental Services Department to administer, monitor and implement the projects identified in the Energy Efficiency Conservation Strategy.

#### STAFF RECOMMENDATIONS:

- Adopt the Requested Actions.

#### SUMMARY:

The completed Energy Efficiency and Conservation Strategy (EECS) is due to DOE no later than November 24, 2009 and will include the list of EECBG-eligible concepts provided by the *Ad Hoc* Committee. The DOE will review and decide on the award by March 2010. All funds must be specifically allocated no later than January 27, 2011 and all projects must be completed no later than July 26, 2012.

#### Background

The federal government allocated \$12,541,700.00 in Energy Efficiency and Conservation Block Grant (EECBG) funds to the City of San Diego (City), with the requirement that the City develop an Energy Efficiency and Conservation Strategy that demonstrates how these funds will be used. Mayor Sanders and City Council members appointed experts in energy efficiency and renewable energy, advocates for the community, and planning experts to serve on an *Ad Hoc* Committee to review potential uses for these funds in accordance with Resolution 2009-1244 which was adopted on June 15, 2009.

The *Ad Hoc* Committee reviewed existing City policy and procedures, developed a scoring matrix and evaluated 93 “concept proposals” with rankings for possible use in the submission to the (DOE). The list of participants on the *Ad Hoc* Committee is provided in Attachment “A”. During the *Ad Hoc* Committee proceedings, significant public comment was provided on project concepts to create the EECS that balances the needs of the community with the DOE eligibility requirements.

The *Ad Hoc* Committee met six times between June 25, 2009 and August 10, 2009. The outcome was a list of recommended concepts and allocations that will guide the development of specific projects.

Approximate Amount ALLOCATED	PROJECT CONCEPT
\$3,000,000	Residential Energy Efficiency and Water Conservation Program for economically disadvantaged and pre-1978 households that includes audits, education, and upgrades.
\$2,500,000	Revolving Loan Fund for Municipal Operations and Energy Efficiency Retrofits and Water Conservation including audits and education.
\$2,000,000	City of San Diego street light retrofits.
\$2,000,000	Energy Efficiency and Water Conservation Program for buildings owned by the City of San Diego and occupied by non-profit organizations that includes audits, education, and upgrades.
\$1,500,000	Residential Energy Efficiency and Water Conservation Program that includes audits, education and upgrades.
\$ 250,000	Development of a Climate Protection Action Plan for the City of San Diego.
\$1,000,000	Administrative oversight
\$ 250,000	Previously allocated for community planning effort with the <i>Ad Hoc</i> Committee

The Assistance Agreement from DOE (Attachment “B”) confirms that the period of performance for the grant funds is July 27, 2009 through July 26, 2012.

The completed EECS is due to DOE no later than November 24, 2009, and will include project activity sheets for the list of EECBG-eligible concepts recommended by the *Ad Hoc* Committee. DOE will review and decide on the award by March 2010. All funds provided in the award must be encumbered no later than January 27, 2011 and all projects must be completed no later than July 26, 2012.

Environmental Services Department (ESD) Energy, Sustainability, and Environmental Protection Division staff will be responsible for incorporating the concepts from the *Ad Hoc* Committee recommendations into the EECS. Upon approval by DOE, staff will take all necessary action to administer, monitor and manage the agreement with DOE, and when required, develop, advertise, negotiate and award contracts to third parties to implement the EECS approved by DOE. ESD will establish three (3) limited positions assigned to administer, monitor and implement the projects. These positions will be 100% cost-recoverable under the EECBG.

#### Discussion

The Energy Efficiency and Conservation Strategy (EECS) (Attachment “C”) will support existing goals and objectives that are based on previous Council actions. This includes, but is not limited to: the City of San Diego’s General Plan, approved in March 2008; the commitment to a 50 megawatt (MW) increase in renewable energy use by 2013; and the City Climate Protection Action Plan, approved by Council in 2004. ESD takes a leadership role in coordinating the City’s energy efficiency and renewable energy projects, as well as tracking the greenhouse gas

emissions inventory (1990, 2004 and 2007) and developing the associated Climate Protection Action Plan.

The project concepts selected by the *Ad Hoc* Committee include the following six items:

1. Residential Energy Efficiency and Water Conservation Program for economically disadvantaged and pre-1978 households that includes audits, education, and upgrades.
  - a. Estimated allocation: \$3,000,000
  - b. Eligibility category from DOE: Residential and commercial building energy audits.
  - c. Results Expected: In conjunction with San Diego Gas and Electric's (SDGE) existing weatherization program, approximately 10,000 eligible homes will receive appropriate energy audits, education of potential savings and updates with an expected energy reduction between 15 and 25 percent per household.
2. Revolving Loan Fund for Municipal Operations Energy Efficiency Retrofits and Water Conservation including audits and education.
  - a. Estimated allocation: \$2,500,000
  - b. Eligibility category from DOE: Financial incentive programs and mechanisms for energy efficiency improvements, such as energy savings performance contracting, on-bill financing, and revolving loan funds.
  - c. Results Expected: Ongoing funding through a reimbursement process of loans for energy efficiency upgrades with a 10-year expected energy savings of about 25 percent.
3. City of San Diego streetlight retrofits.
  - a. Estimated allocation: \$2,000,000
  - b. Eligibility category from DOE: Energy efficient traffic signals and street lighting.
  - c. Results Expected: Replace approximately 4000 fixtures resulting in a savings of 2 million kilowatt-hours annually and \$240,000 in energy savings per year and \$200,000 in maintenance savings.
4. Energy Efficiency and Water Conservation Program for buildings owned by the City of San Diego and occupied by non-profit organizations that includes audits, education, and upgrades.
  - a. Estimated allocation: \$2,000,000
  - b. Eligibility category from DOE: Energy efficiency and conservation programs for buildings and facilities.
  - c. Results Expected: Energy audits indicate a potential for over 5 million kilowatt hours (\$750,000) of energy saving annually.
5. Residential Energy Efficiency and Water Conservation Program that includes audits, education and upgrades.
  - a. Estimated allocation: \$1,500,000
  - b. Eligibility category from DOE: Residential and commercial building energy audits
  - c. Results Expected: Extensive community outreach covering all of San Diego with an estimated 5,000 homes receiving upgrades. Potentially, the program may be enhanced if coordination is possible with the City's AB 811 program.



6. Development of a Climate Protection Action Plan for the City of San Diego.
  - a. Allocation: \$250,000
  - b. Eligibility category from DOE: Planning
  - c. Results Expected: Technical review of the City's greenhouse gas emission inventory and update of the Climate Protection Action Plan, including public forums, and a long-term coordinated plan for the City's compliance with "The Global Warming Solutions Act of 2006 (AB 32).

Additionally, the EECGB Ad Hoc Committee developed a long term Draft-Energy Efficiency and Conservation Strategy that seeks to reduce the consumption of natural resources and fossil fuels; reduce the emission of greenhouse gases; generate local, long-term career track green jobs related to energy and water sustainability; and create new markets and industries in energy and water efficiency and renewable energy. On September 9, 2009, the Committee on Natural Resources and Culture Committee of the City Council of the City of San Diego, adopted the final EECGB Ad Hoc Committee Report and approved the Draft-Energy Efficiency and Conservation Strategy.

During the Natural Resources and Cultural Committee discussion on September 9, 2009, it was suggested that the remaining portion of the \$250,000 allocated the energy strategy development be used to conduct a performance audit to benchmark the productivity of the project activities. The Department of Energy (DOE) staff has responded that this "does not appear to be an appropriate use of funding under this activity". In her response (Attachment "D"- DOE Correspondence), Project Officer Johanna Sevier notes that the City "will be subject to monitoring and oversight" and Project Officers will be reviewing a number of required reports "to assess the City of San Diego's progress toward meeting goals and objectives."

However the DOE staff made several recommendations regarding the use of the remaining funds:

1. Create another project activity.
2. Allocate the remaining funds amongst the proposed project activities.
3. "Use the remaining energy strategy funds for program administration costs as long as the cost doesn't exceed the 10% EECBG administrative requirement."
4. "Hiring of a consultant to assist the City of San Diego in developing "Requests for Proposal." The consultant costs should be included in whatever activity the consultant will be working for."

It is staff's recommendation the remaining energy strategy funds be reallocated for the propose of hiring a consultant to assist City staff in the development of "Requests for Proposals" for DOE approved project activities; and to ensure project activities meet the recommendation of the AD HOC committee; and to ensure the funds are allocated before the expiration of the fund allocation milestone of January 2011.

FISCAL CONSIDERATIONS:

Project implementation is intended to reduce energy consumption at City facilities and in the community. As a result, General Fund expenditures for energy may decrease. All administrative and operational costs for the EECBG projects described in this report are provided through the EECBG Program.

PREVIOUS COUNCIL AND/OR COMMITTEE ACTION:

The Committee on Rules, Open Government, and Intergovernmental Relations of the City Council of the City of San Diego- May 13, 2009. ACTION: Motion by Councilmember Frye, second by Councilmember Young, to direct staff to apply for \$250,000 of EECBG funds to develop an energy efficiency plan; and to add a standing Monday Council agenda item regarding updates on the American Recovery and Reinvestment Act. VOTE: 5-0; Hueso-yea, Faulconer-yea, Frye-yea, Gloria-yea, Young-yea

City Council of the City of San Diego- June 15, 2009. Item 150; ACTION: Adopted as Amended (R-2009-1244) Authorizing the Application for Energy Efficiency and Conservation Block Grant Program. VOTE: Unanimous; all present

The Committee On Natural Resources and Culture Committee of the City Council of the City of San Diego- June 24, 2009. Item 7; ACTION: Information only. No action taken. Reports from the MAYOR'S OFFICE regarding: New EECBG Ad-Hoc Committee

The Committee on Natural Resources and Culture Committee of the City Council of the City of San Diego - September 9, 2009. ITEM-5: Report from the Environmental Services Department regarding FINAL REPORT OF THE ENERGY EFFICIENCY CONSERVATION BLOCK GRANT AD HOC COMMITTEE

ACTION: Motion by Councilmember Emerald, second by Chair Frye, to approve the requested action and to set up a working group to track AB 811 and the home retrofit program. Approve the energy strategy developed by the Ad Hoc Committee. All programs established with these monies should be consistent with State guidelines and to use some of the \$250,000 that was previously allocated by the City Council for establishing the Ad-Hoc Committee for a performance audit to assess how well the strategy was met and to provide updates on this program to the NR&C Committee.

VOTE: 3-1; Frye-yea, DeMaio-yea, Lightner-nay, Emerald-yea

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The EECBG Ad Hoc Committee met six times between June 25, 2009 and August 10, 2009. Prior to that, the Mayor sponsored three public meetings in April and May. Additionally, the City's "Stimulus Tracker" is a link on the City website which allows interested parties to track the progress of the EECBG Ad Hoc Committee and provides a complete listing of project concepts.

ENVIRONMENTAL REQUIREMENTS:

This activity is not a “project” and is there not subject to CEQA pursuant to State CEQA Guidelines Section 15060(c) (3). Projects will be proposed to be developed using these funds. At such time as these projects are developed, they will be reviewed for potential impacts.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Successful program implementation will benefit all sectors of San Diego because of gains in energy efficiency and conservation, jobs creation, and a reduction in greenhouse gas emissions.



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Chris Gonaver  
Environmental Services Director



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David Jarrell  
Deputy Chief Operating Officer  
Public Works

Attachments: Attachment “A” - Ad Hoc Committee  
Attachment “B” - Assistance Agreement from DOE  
Attachment “C” - Draft Energy Efficiency and Conservation Strategy (EECS)  
Attachment “D” - DOE Correspondence

