THE CITY OF SAN DIEGO

REPORT TO THE CITY COUNCIL

DATE ISSUED: September 8, 2010 REPORT NO: 10-119

ATTENTION: Budget and Finance Committee

SUBJECT: Broad Spectrum Street Light Conversion Program -- Qualified Energy Conservation Bonds

REFERENCE: City Council of the City of San Diego, February 24, 2010; R-305594
City Council of the City of San Diego, August 3, 2010; O-19981

REQUESTED ACTIONS:

City Council approval is requested to expand the Broad Spectrum Street Light Conversion Program (the "Program") and to utilize the City's allocation of Qualified Energy Conservation Bonds ("QECBs").

STAFF RECOMMENDATION:

Forward to City Council for consideration and approval of the following specific actions as required for the expansion of the Program and the utilization of the City's QECB allocation:

Program Related Actions:

1. Authorizing the use of broad spectrum lighting, as deemed appropriate by the City Engineer, with a maximum correlated color temperature of 4000 Kelvin with cutoff distribution outside of a 35-mile radius from the local observatories.

2. After advertising for bids, authorizing the Mayor or his designee to award the Broad Spectrum Street Light Conversion Project(s) to the lowest, most responsible and reliable bidder(s) in an amount not to exceed $18.1 million provided that the City Comptroller furnishes one or more certificates demonstrating that the funds necessary for the expenditure, are or will be, on deposit with the City Treasurer.

3. Authorizing the Mayor or his designee to develop specifications, advertise, and evaluate for best value, a Broad Spectrum Street Light Conversion Project(s) for an estimated total amount not to exceed $18.1 million.

4. Authorizing the Chief Financial Officer to appropriate and expend an amount not to exceed $18.1 million from the annual allocation A-BT.00003, City-Wide Energy Improvement Projects, to perform broad spectrum improvements of street lighting systems.

5. Authorizing the Chief Financial Officer to combine and leverage the previously approved $5 million from CEC loan and EECBG funds authorized by O-19981 with the QECB fund allocation for a Broad Spectrum Street Light Conversion Program.

6. Authorizing the City Comptroller to transfer $13.1 million of QECB funds into FY 2011 Capital Improvement Program budget thereby adding $13.1 million to CIP A-BT.00003, City-Wide Energy Improvement Projects, to perform broad spectrum improvements of street lighting.

Financing Related Actions:

7. Authorizing the Chief Financial Officer to accept and utilize the City's QECB allocation to be expended in an amount not to exceed $13.1 million to fund a portion of the Broad Spectrum Street Light Conversion Program in the City and fund related costs of issuance.

8. Authorizing the execution and delivery of all QECB financing documents and approving related actions in connection therewith.

9. Authorizing the City Attorney to appoint Orrick, Herrington & Sutcliff LLP as Special Counsel for the City in connection with the QECBs, and pay an amount not to exceed $42,500, provided the fees payable to Special Counsel will be contingent upon the closing of the QECBs and paid out of the proceeds from QECB funds.

EXECUTIVE SUMMARY:

I. Background

QECBs are taxable tax credit bonds limited solely to fund qualified energy conservation projects. The QECB program was first introduced by Congress in October 2008 and further expanded in February 2009 through the American Recovery and Reinvestment Act of 2009 ("ARRA"). On March 18, 2010, the Hiring Incentive to Restore Employment Act ("HIRE Act") was signed into law, allowing QECBs to be issued with a direct payment option whereby an issuer would receive a federal subsidy in an amount equal to 70% of the applicable tax credit rate published by the U.S. Treasury. ARRA provided that the State of California would receive approximately $382 million in QECB allocation of which the City received approximately $13.1 million.

On February 24, 2010, the City Council approved Resolution R-305594 authorizing the City to apply for state or federal funding to expand the use of Broad Spectrum Street Lighting. Upon applying to utilize the City's QECB allocation, approval was granted specifically for use on Broad Spectrum Street Lighting by the California Debt Limit Allocation Committee ("CDLAC"), the state agency overseeing the allocation of QECB issuances. CDLAC, which is tasked with ensuring prompt progression towards QECB issuance, has the authority to reallocate existing allocations to other local agencies if not utilized in a timely manner. In accordance with CDLAC requirements, the City has provided periodic progress reports to the State in order to retain its allocation. As of September 7, 2010, CDLAC staff has confirmed that the City will maintain its $13.1 million allocation.

II. Project Description

The broad spectrum street light conversion program ("Program") is programmed to convert approximately 38,700 of 43,000 existing Low Pressure Sodium ("LPS") and High Pressure Sodium ("HPS") street lights outside the Mt. Palomar Observatory's 30-mile radius ("Mt Palomar Radius") to broad spectrum lighting using induction type technology. Broad spectrum light is comprised of more wavelengths than HPS and has a higher Color Rendering Index ("CRI"). This enhances visual performance by producing light that is more like sunlight. As documented in the SDG&E sponsored "Advanced Street Lighting Technologies Assessment Project" and subsequent report issued January 4, 2010, converting to broad spectrum lighting will produce both energy savings and energy cost savings due to the lower wattage that broad spectrum lights require.

Over the last year, the Environmental Services Department ("ESD") has pursued and received City Council approval to move forward with a $5 million project to convert existing street lights to induction type technology. ESD's requests for approval to initiate street light conversions culminated with City Council Ordnance O-19981 passed on August 3, 2010, providing authority to convert approximately 10,000 street lights with federal EECBG and State CEC funds. This request is for an additional $13.1 million to convert approximately 28,700 of 43,000 streetlights outside the Mt. Palomar Radius utilizing QECB funding and authorize expansion of the previously approved street light conversion Program.

The existing streetlights within the Mt. Palomar Radius will remain LPS. LPS street lights are monochromatic with only one wavelength of light. The Mt. Palomar astronomers can easily filter the 589 nano-meters wavelength so that LPS light does not interfere with their astronomy activities. As broad spectrum lighting technology develops, ESD will continue to explore the use of advanced technology that remains compatible with the local astronomy community. ESD has requested that the Mt. Palomar Radius be extended to allow broader spectrum lighting outside a 35 mile radius. It is anticipated that advances in lighting technology will promote LED technology while realizing that excessive use of broad spectrum lighting can be detrimental to the observatories. ESD is establishing a self-imposed maximum Correlated Color Temperature (CCT) of 4000 Kelvin outside a 35-mile observatory radius. 4000 Kelvin CCT, which corresponds to the CCT of a full moon, will set a maximum CCT threshold to provide the City an opportunity to capitalize on future technological lighting advances. Outdoor lighting in San Diego will continue to present unique challenges to balance public needs with the Mt. Palomar desire for dark skies.

On an annual basis, the estimated savings for the QECB funded portion of the Program is to be 10,600,000 kWh equating to approximately $1.2 million in energy cost savings. Furthermore, considering the reduced maintenance costs realized by the extended lamp life of induction technology, an additional $550,000 in annual maintenance savings was calculated. Combined with conversions funded through other sources mentioned above, total energy and maintenance cost savings are estimated to be $2.6 million. There is also an estimated one time SDG&E utility incentive of approximately $700,000 for the full Program. Construction of the QECB funded portion of the Program is projected to commence April 2011 and be completed by July 2012.

FISCAL CONSIDERATIONS:

I. Financing Plan & Structure

Staff is seeking City Council authorization to utilize the City's QECB allocation towards the Program in an amount not to exceed $13.1 million, to approve the required QECB documents, and to take all other necessary actions related to the sale of QECBs. It is anticipated that the QECB documents will be docketed for City Council action in mid-October.

The firm Banc of America Leasing & Capital ("Purchaser") was identified as the direct purchaser for QECBs through a competitive process. The City issued a Request for Proposals ("RFP") on April 8, 2010. The RFP was sent to 79 firms including underwriting firms, banks, and municipal fund managers -- five proposals were received. A direct private placement is recommended versus a public sale due to the unique nature of these tax credit bonds, including their small size and the relative lack of familiarity within the investment community; and favorable financing terms and lower costs of issuance presenting the lowest possible borrowing costs to the City.

The QECBs will be structured under a Taxable Qualified Energy Conservation Equipment Lease/Purchase Agreement ("Agreement") where, upon closing, proceeds will be deposited into an acquisition fund and applied toward the Program. The repayment term for the QECBs will be 17 years; the projected useful life of the lighting installations is 20 years.

II. Interest Rate and Projected Lease Payments

Following City Council approval, a fixed rate of interest will be locked by May 2011, the expected time when the Program will begin utilizing QECB funds. The extended rate lock-in date will: (1) demonstrate to CDLAC progress on utilizing the City's QECB allocation while still allowing the City to access funds when needed, thus reducing the negative arbitrage created when monies are deposited into project funds in advance of being spent; and (2) provide flexibility to lock-in a rate prior to May 2011 should market conditions deem favorable. The interest rate will be based on the 10 Year US Treasury Interest Rate Swap plus 2.65%. As of September 7, 2010, this results in a 5.26% taxable interest rate ("Taxable QECB Rate").

Upon executing the financing, the City will receive a direct cash subsidy payment semi-annually from the Treasury equal to 70% of the tax credit rate published by the Treasury ("QECB Tax Credit Rate") as provided by the HIRE Act, and as mentioned above. As of September 7, 2010, this results in a direct cash subsidy payment of 3.44%.

Accounting for the direct cash subsidy, the resulting Net Effective Rate (the Taxable QECB Rate less the QECB Tax Credit Rate) on September 7, 2010 would be and estimated 1.82%. Based on the Net Effective Rate of 1.82% for illustration, annual lease payments over the 17-year term would be $1.1 million when factoring in the subsidy amount. Lease payments will not commence until the City recieves beneficial use the equipment.

QECB lease payments will be borne entirely through street light energy and maintenance cost savings estimated at $1.8 million for approximately 28,700 street lights to be converted through

QECB funding. Due to the cost savings exceeding lease payments by approximately $700,000 annually, the street light project, when fully implemented, is projected to generate yearly positive cash flow for the General Fund effective in Fiscal Year 2013.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

Ordinance O-19981 adopted July 27, 2010 authorized funding for $5 million Street Light Conversion project. May 12, 2010 NR&C Committee Meeting and Action Item Agenda: ITEM-7 with Report No. 10-66 describing the $5 million project. 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 Reinvestment and Recovery Act (ARRA). 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.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The public was invited to and participated in the evaluation of a pilot street light program conducted April 28, 2009 along 6th Avenue. Continued PEER street light working group development of street light specifications.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Suppliers and contractors for the Program are in the process of being identified.
Business entities associated with the QECB funding portion of the Program are: Banc of America Leasing & Capital, LLC (Purchaser); Orrick, Herrington & Sutcliff LLP (Special Counsel); Chapman and Cutler LLP (Purchaser's Counsel); Public Financial Management, (Financial Advisor), and Deutsche Bank National Trust Company (Trustee).

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