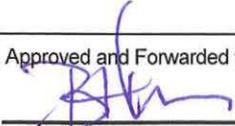




STAFF REPORT

Date: Tuesday, May 12, 2015
To: Bryan H. Montgomery, City Manager
From: Kevin Rohani, P.E. Public Works Director/ City Engineer
SUBJECT: Street Light LED Conversion with PG&E

Approved and Forwarded to City Council:


Bryan H. Montgomery, City Manager

Background and Analysis

The City of Oakley owns and maintains approximately 1,300 street lights and spends approximately \$135,000 annually on electricity for its City owned street lighting system alone. This does not include the additional electricity costs for the PG&E owned lights of approximately \$177,000. The street lighting system includes a variety of light fixtures; these street lights are primarily high pressure sodium (HPS), which have been the standard for many years. Converting the HPS street lights to Light Emitting Diode (LED) technology will reduce the City's electric bill by over half, over the future years. For example, the conversion of an HPS street light to an LED on a residential street will save the City an annual cost of \$1.67 per-fixture; and on an arterial street, an annual cost savings of \$39.22 per-fixture.

LED technology has been available for many years and the City is requiring all new private developments to install LED street lights as part of all subdivision projects. In the last few years, LED street light technology has evolved and has been refined and highly tested. The City, as part of varied street improvement projects, has replaced some of the existing HPS street lights with LED's. The most recent of this LED street light installation was on the Laurel Road widening project from O'Hara Avenue to Rose Avenue.

The appearance of LED street lighting is somewhat different from traditional HPS lighting in that it provides better and softer light for the viewer. This also assists the Police in night time patrol and response. The other distinct difference is the ability of the LED's to direct light downward, versus the traditional HPS fixtures where light spills out around the light head. LED technology also reduces energy consumption thereby reducing energy costs.

PG&E has met with City staff and conducted an inventory of the street light system. By working collaboratively, the inventory was refined and finalized. After completion of this inventory, the City will have a total of 126 HPS lights that would be converted to LED's as part of this project. These HPS lights are on tall galvanized poles, commonly referred to as "Cobra Heads". The smaller decorative street lights that

have been installed in residential neighborhoods are not part of this project and will be converted to LED's as a separate project in future years.

Within Contra Costa County, PG&E owns a number of HPS street lights in various municipalities. As part of their energy efficiency program, they are undertaking a regional project to retrofit all PG&E owned street lights with LED's.

The City has this opportunity to collaborate with PG&E to accomplish the conversion of the City owned street lights from HPS to LED concurrently with their project. The work will be done by PG&E and accomplished by obtaining a zero-interest loan through the PG&E ON-Bill Financing (OBF) program. The actual work will be done by a licensed professional electrical contractor under the order of PG&E. The City would reimburse PG&E for its work from the loan proceeds, and the annual cost savings would then be used to repay the loan. Savings for the City would then be realized in future years after the loan is repaid. For this proposed LED street light conversion, the payback period is 5 years.

The benefit of the OBF is that it allows municipalities to make street light improvements without large outlays of funds. PG&E will finance the project, and the City will pay the loan, interest free, through monthly utility bills.

Participation in this program would involve the City executing an agreement with PG&E to convert 126 City owned street lights and to complete the paperwork for billing and rebates. PG&E will then carry and manage the entire project.

Fiscal Impact

Participation in the PG&E street light conversation program will require a loan in the amount of \$60,000 from the PG&E OBF program, which allows the City to make the improvement without cash outlays. It is anticipated that the loan repayment will take 5 years. One of the additional benefits of this project is the reduced maintenance cost for street lights, as LED lights have a longer life span and durability.

Staff Recommendation

It is recommended that the City Council approve the PG&E Street Light Agreement, submittal of the On-Bill Financing Supplement and Application and authorize the City Manager to execute any associated agreements and applications.

Attachments

- 1) Resolution
- 2) PG&E Street Light Proposal
- 3) On-Bill Financing Supplement
- 4) PG&E LED Street Light Turnkey Replacement Service

RESOLUTION NO. ___-15

APPROVING TO FORGO STANDARD PROCUREMENT PROCESSES TO CONTRACT WITH PG&E FOR LED STREET LIGHT RETROFIT PROGRAM; APPROVING PG&E STREET LIGHT AGREEMENT, APPROVING SUBMITTAL OF THE ON-BILL FINANCIAL SUPPLEMENT AND CUSTOMIZED RETROFIT INCENTIVE APPLICATION FOR STREET LIGHT RETROFIT PROGRAM AND AUTHORIZING THE CITY MANAGER TO EXECUTE ANY ASSOCIATED AGREEMENTS AND APPLICATIONS

WHEREAS, The City owns and maintains approximately 1,300 street lights which are primarily high pressure sodium fixtures; and Light Emitting Diode (LED) fixtures are now readily available and tested, and take considerably less energy; and

WHEREAS, The City has an opportunity to collaborate with PG&E, to accomplish a partial change out of overhead street lights to lower energy-use fixtures, and realize an annual cost savings through lower pre-fixture rates by obtaining a zero-interest loan through the PG&E On-Bill Financing (OBF) Program, and the annual cost savings would then be used to repay the loan; and

WHEREAS, California Government Code Sections 4217.12 and 4217.13 allow the City to forgo standard procurement processes for energy service contracts and for energy financing contracts if it finds it best serves the City's interest; and

WHEREAS, Based on the cost and payback period on the investment, and the long term benefit to the City in reduced energy use and costs, it is in the City's best interest to participate in the Turnkey Program with PG&E; and

WHEREAS, Public notice of this City Council meeting item was given at least two weeks before the meeting.

NOW, THEREFORE, BE IT RESOLVED, that the City Council:

1. Approves to forgo standard procurement processes to contract with PG&E for the LED Street Light Retrofit Program, based on the authority of Government Code section 4217.12. The Council finds that the anticipated cost under the contract will be less than the anticipated cost to the City that would have been consumed in the absence of this purchase;
2. Approves PG&E Street Light Proposal (*PG&E Products and Services Agreement*);

3. Approves submittal of the On-Bill Financial (OBF) Supplement and Customized Retrofit Incentive Application for Street Light Retrofit Program; and
4. Authorizes the City Manager to execute any associated agreements and applications. In authorizing the City Manager to execute the anticipated energy financing agreement, the City Council finds under Government Code section 4217.13 that: the proposed financing arrangement is in the best interest of the City and that funds for the repayment of the financing are projected to be available from revenues resulting from funding that otherwise would have been used for the purchase of electrical energy required by the City.

PASSED AND ADOPTED by the City Council of the City of Oakley at a meeting held on the 12th of May, 2015 by the following vote:

AYES:
NOES:
ABSENT:
ABSTENTIONS:

APPROVED:

Doug Hardcastle, Mayor

ATTEST:

Libby Vreonis, City Clerk

Date



**EXHIBIT A
PROPOSAL NUMBER 2**

This Proposal is made and entered into as of May 12, 2015 by and between City of Oakley ("Customer") and Pacific Gas and Electric Company ("PG&E"). This Proposal is subject to the terms and conditions of the PG&E Products and Services Agreement between Customer and PG&E dated as of March 18, 2011 (the "Agreement").

DESCRIPTION OF SERVICES

- Scope of Work: Replace 126 HPSV lights with LED lights according to the map and LED spreadsheet (identifies each location) in the City of Oakley.
- Number any light poles that are not numbered using badge number stickers provided by PG&E.
- Change the rates to LED and provide documentation on the changes and cost for the street lights which with Customers approval may also include LS2C to LS2A rates changes. Customer Initials KR . Date 5-12-15 .
- Process the rebates and provide documentation on the changes and cost for the street lights.
- Provide a revised GIS-based inventory.

Estimated minimum number of days to complete scope of work: 14 days

Date work is estimated to begin: June 1, 2105

Customer sites where work is to be performed (may attach spreadsheet of street lights):
See attached map for location.

Type and number of street light fixtures to be replaced (may attach spreadsheet):
See attached spreadsheet for fixtures.

Locations may change if street lights are added to or deleted from the project during installation. A final spreadsheet will be given to Customer upon completion of the work.

If in the process of performing the Service, active bird nests, and/or bee hives, wasps are discovered, PG&E will notify Customer of such condition and discontinue work on affected equipment.

MATERIALS DISPOSAL

Customer will make space available, if requested, at Customer-owned property for material storage and disposal during construction. PG&E will hold Customer harmless for damage to stored materials while on Customer's property.



PG&E will store the materials at the following PG&E site:

Antioch Service Center
2111 Hillcrest Ave.
Antioch, CA 94509

PG&E's Contractor will keep the lights that have been replaced in a locked container until taking them to PG&E's yard. Contractor will separate the lamp from the fixture and put them in the appropriate bins. PG&E will label the bins and ship them to a registered disposal facility.

TRAFFIC CONTROL PLAN

PG&E Contractor shall be required to comply with all applicable federal, state, and local laws, rules, regulations, permits, and codes including without limitation such laws, rules, regulations, permits, and codes with respect to safety and traffic control.

COST AND PAYMENT SCHEDULE

PG&E estimates the services under this Proposal will cost Forty Eight Thousand, Eight Hundred, Twenty One dollars and no cents (\$48,881). However, Customer will be invoiced for actual installations (location and size of fixture). The estimate will not be exceeded without Customer's prior approval.

This price does does not subtract the value of the LED streetlight rebates from the cost to provide the Services.

Payment Schedule:

Initial Payment: Upon ordering of materials, Customer will be invoiced 50% of the total amount of the contract.

Final Payment: Customer will be invoiced for final 50% payment upon completion of this Proposal or when punch list items (if any) have been completed.

If Customer chooses to terminate this Proposal prior to completion of the Services, then Customer shall pay PG&E for all costs accrued up to the date of termination, including all materials purchased.

PG&E will submit invoices to Customer based on the Payment Schedule. Each invoice will reference the Agreement and this Proposal and be submitted to Customer's billing address as set forth below. Customer will remit payment to PG&E within 14 days after receipt of the invoice.

BUSINESS CONTACTS:

PG&E's primary business contact for this Proposal:

Name: David J. Carter



Title: Business Development Manager
Address: 245 Market Street, Mail Code N10D
San Francisco, CA 94105
Telephone: 415-973-4385
Email: d6c4@pge.com

Customer's primary business contact for this Proposal:

Name: Kevin Rohani
Title: Public Works Director/City Engineer
Address: City of Oakley
3231 Main Street
Oakley, CA 94561
Telephone: 925-625-7003
Email: rohani@ci.oakley.ca.us

CUSTOMER BILLING CONTACT:

Customer's billing contact for this Proposal:

Name: Kevin Rohani
Title: Public Works Director/City Engineer
Address: City of Oakley
3231 Main Street
Oakley, CA 94561
Telephone: 925-625-7003
Email: rohani@ci.oakley.ca.us

IN WITNESS THEREOF, the parties agree to be bound by this Proposal as of the date first set forth above.

CUSTOMER CITY OF OAKLEY

PACIFIC GAS AND ELECTRIC COMPANY

Print Name: _____

Print Name: Roxanne Fong, Manager

Signature: _____

Signature: _____

Date: _____

Date: _____



EXHIBIT B

THIRD PARTY WARRANTIES

1. Street light manufacturer's contact information:
 - (a) Cree LED Lighting Fixtures
1200 92nd Street
Sturtevant, WI 53177-1854
Phone: (800)236-6800
 - (b) The warranty period for the Cree LED Lighting Fixtures is 10 years. A copy of that warranty is set forth in Schedule 1 to this Exhibit C.

2. Photo control warrantor's contact information:
 - (a) Ripley Lighting Controls

2023 Platt Springs Road
P.O. Box 3229
West Columbia, SC 29169
Phone: 803-939-4700
Fax: 803-939-4777
 - (b) The warranty period for the Ripley lighting controls is 12 years from date of manufacture. A copy of that warranty is set forth in Schedule 2 to this Exhibit C.



**SCHEDULE 1 TO EXHIBIT B
LIMITED WARRANTY FOR CREE® LED LIGHTING FIXTURES
(INCLUDING BETALED® TECHNOLOGY; TRUEWHITE® TECHNOLOGY; AND
ESSENTIA® FIXTURES)**

This limited warranty is provided by the Cree company described below ("Seller") to you as the original purchaser of the LED lighting product that is identified on Seller's invoice reflecting its original purchase (the "Product"). The Seller is the Cree Company identified as such on the invoice. This limited warranty may be transferred to subsequent purchasers of the Product, provided that such Product is resold in new condition and in its original packaging. Seller warrants that the Product, when delivered in new condition and in its original packaging, will be free of defects in material and workmanship for a period of **TEN (10) YEARS** from the date of original purchase. The determination of whether the Product is defective shall be made by Seller in its sole discretion with consideration given to the overall performance of the Product. A Product shall not be considered defective solely as a result of the failure of individual LED components to emit light if the number of inoperable components is less than 10% of the total number of LED components in the Product.

If Seller determines the Product is defective, Seller will elect, in its sole discretion, to refund you the purchase price of the Product, repair the Product or replace the Product. This limited warranty will not apply to loss or damage to the Product caused by: negligence; abuse; misuse; mishandling; improper installation, storage or maintenance; damage due to fire or acts of God; vandalism; civil disturbances; power surges; improper power supply; electrical current fluctuations; corrosive environment installations; induced vibration; harmonic oscillation or resonance associated with movement of air currents around the Product; alteration; accident; failure to follow installation, operating, maintenance or environmental instructions prescribed by Seller or applicable electrical codes; or improper service of the Product performed by someone other than Seller or its authorized service provider. This limited warranty excludes field labor and service charges related to the repair or replacement of the Product. **THIS LIMITED WARRANTY IS VOID IF THE PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT IS DESIGNED.**

Seller reserves the right to utilize new, reconditioned, refurbished, repaired or remanufactured products or parts in the warranty repair or replacement process. Such products and parts will be comparable in function and performance to an original product or part, as determined by Seller in its sole discretion, and warranted for the remainder of the original warranty period.

In order to make a warranty claim, you must notify Seller in writing within sixty (60) days after your discovery of the defect, provide proof of purchase such as the invoice and comply with Seller's other warranty requirements. Upon receiving that notice, Seller may require you to promptly return the Product to Seller, or its authorized service provider, freight prepaid. Your warranty claim should be addressed to Cree c/o Ruud Lighting, Inc., 9201 Washington Avenue, Racine, WI 53406.

This limited warranty only applies to specified LED fixtures. Any warranties applicable to finish, poles, lamps, CR Series downlights, LR24™ troffers, certain BetaLED® Technology outdoor fixtures (specifically Class II as defined per IEC/EN60598), backup batteries, controls, occupancy



sensors, photocells and other fixture accessories can be found at www.cree.com/lighting/products/warranty.

THE FOREGOING WARRANTY PROVISIONS ARE EXCLUSIVE AND ARE GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY AGAINST INFRINGEMENT AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SELLER BE LIABLE FOR INCIDENTAL, COMPENSATORY, CONSEQUENTIAL, INDIRECT, SPECIAL OR OTHER DAMAGES. SELLER'S AGGREGATE LIABILITY WITH RESPECT TO A DEFECTIVE PRODUCT SHALL IN ANY EVENT BE LIMITED TO THE MONIES PAID TO SELLER FOR THAT DEFECTIVE PRODUCT.

This warranty is effective for purchases of Product on or after the effective date set forth below. Seller reserves the right to modify this warranty from time to time. Any modification of this warranty shall be effective for all orders placed with Seller on or after the effective date of such revised warranty.



**SCHEDULE 2 TO EXHIBIT C
WARRANTY FOR RIPLEY LIGHTING CONTROLS**

RIPLEY LIGHTING CONTROLS

DIVISION OF SOUTHCONN TECHNOLOGIES INC

Twist-Lock Electronic Photocontrol
LongLife II

Exclusive Features

ZCS TECHNOLOGY
Zero Cross Switching

Zero Cross Switching Technology: protects the device from inrush currents, commonly found in LED Luminaires.

Microprocessor Control

Intelligent Microprocessor: assures advanced Performance & Reliability

Self-Healing Relay

SELF-Healing Relay: allows unattended field restoration. Stuck relay contacts are a common failure point. Our Patent Pending technology actually works to un-stick the contacts, thus preventing wasted energy (day burners) and service calls. Tested at more than 325 years with a 1000 Watt Tungsten Lamp.

3
Tier Power Supply Technology

3 Tier Power Supply Circuitry: 640 Joule 33-mm MOV rated @ 40,000 Amps for primary protection Dual Zener Diode for secondary protection. 3rd Layer of protection using a precision voltage regulator.

TRU Filter

Tru-Filter®: spectral sensitivity matches that of the Human Eye; while competitor's Silicon Photodetector comes nowhere close.

Ripley's exclusive
LongLife II Photocontrol

"NEW Generation of Technologies that change the Game"

Ripley Lighting Controls is pioneering new technologies raising the bar in the Street and Area Lighting Industry.

	6390LL-BK	6394LL	6395LL
Nominal Voltage 60 Hz	120/208/240/277	480	347
Voltage Range	105-305	432-528	312-382
Fail Mode	On		
Load Rating	1000 Watt Tungsten / 1800 VA Ballast		
Operating Temperature	-40C to +70C (-40F to +158F)		
Photocell	Infrared Filtering Silicon Phototransistor		
Dielectric Strength	5000 Volts between current carrying parts and metal surfaces		
Surge Protection	Primary: 640 Joule MOV rated at 40,000 amp surge current—protects not only the photocontrol, but also the LED fixture Secondary: 2 Zener diodes Third: Voltage Regulator		
Power Consumption	0.5 watts @ 120 V		
Time Delay Off (Instant On)	3 to 5 seconds		
Operating Light Levels (Standard Settings)	Turn On 1.5 FC ± .25 / Turn Off by 2.25 FC (Off:On Ratio = 1.5:1)		
ANSI Color Coded Cover: double-wall thickness, UV Stabilized Permanent Color LongLife polymer with extra UV inhibitor	Black	Yellow	Green
Options			
Fail Off	-FO (Green)	N/A	N/A
Frequency	60Hz		

Other Exclusive Features:

- Electrolytic Capacitors rated 105 °C, with minimum 20,000 hour life at maximum voltage, current, & temperature
- Completed circuit boards are conformal coated with silicone for Long Life
- Double-wall thickness for strength and longevity in constant outdoor environment, optimized black Long Life polymer with maximum UV inhibitor
- 1:1 Ratio Capable saves energy by reducing burn time. Allows for the light to turn off at the same light level as the turn on value.
- RoHS Compliant & packaged in Biodegradable Bags
- WARRANTY: 12 years from date of manufacture

Meets or exceeds rigid quality requirements of SouthConn Technologies Inc. and applicable ANSI C136.10, and C136.24 Standards

Phone: 803-939-4700
 Fax: 803-939-4777
 E-mail: Sales@RipleyLC.com
www.RipleyLC.com

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Financing Supplement to the Energy Efficiency Retrofit Program Application

The Energy Efficiency Retrofit Loan Program (the "Program") is funded by California utility customers and administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission (CPUC). The Program provides qualified PG&E customers with a means to finance energy-efficient (EE) retrofit projects implemented under select PG&E EE Programs (the "Qualified Program"). The loans issued under the Program are interest-free, unsecured loans to fully or partially reimburse qualified PG&E customers for the costs they incur in connection with a qualified retrofit project (the "Retrofit Project"), which term shall mean the energy efficiency retrofit project described in Customer's relevant Energy Efficiency Program Application.

1. **Conditions for Eligibility:** Participation in the Program is limited to PG&E customers that meet the following conditions and satisfy these conditions throughout the duration of the Retrofit Project up to and including the date of Final Verification (defined below in Section 8): (a) the PG&E customer must be a business ("Commercial Customer") or a federal, state, county or local government agency ("Government Customer").* Commercial Customers and Government Customers are collectively referred to as "Customer;" (b) Customer currently receives service from PG&E at the location of the Retrofit Project (the "Location"); (c) Customer has continually maintained an active PG&E account for the previous 24 months and has a minimum of 12 months of historical metered energy usage at Customer's current Location; (d) at the time the Customer's Program Application is Approved and Customer's Loan Agreement is executed, and at the time the loan is to be funded following completion of the Retrofit Project and satisfaction of all other requirements of the Loan Agreement, Customer must be in good credit standing, as determined by PG&E through credit review which may include a commercial credit check and a bill history review, which may be based upon the following and other criteria:
 - a. No 24-hour disconnection notices in the last 12 months;
 - b. No returned payments within the last 12 months;
 - c. No more than 1 payment arrangement in the last 12 months;
 - d. No broken payment arrangements within the last 12 months;
 - e. No deposit assessed within the last 12 months; and
 - f. The Retrofit Project qualifies and Customer is eligible for an incentive under the Qualified Program.

2. **Loan Features:** The loans offered under the Program are interest-free [0%] and free of any fees, late payment penalties or other charges. The loan terms and conditions are set to provide simple payback from energy savings during the maximum allowed loan term, and are calculated by dividing the loan amount (eligible project cost less Qualified Program Incentives) by the estimated monthly energy savings resulting from the Retrofit Project. The ensuing number of monthly payments must not exceed the Maximum Loan Term set forth in chart below ("Loan Amount and Term Limitations").
3. **Eligibility:** Prior to purchasing and installing any energy-efficient measures or equipment under the Qualified Program, Customer must satisfy the eligibility requirements of both the Program and Qualified Program. Because energy efficiency projects in progress are ineligible under the Program, Customer must have an inspection of the Retrofit Project and Location conducted and completed by PG&E before commencing any work or purchasing any equipment for the Retrofit Project.
4. **Inspection:** PG&E will assist Customers in understanding the energy efficiency measures available under the Qualified Program and will answer their questions concerning this Program. After Customer has decided upon the measures that comprise the Retrofit Project, PG&E will request an engineering review, perform an inspection of the Location, calculate the Loan Terms and prepare the Loan Documents. Thereafter, PG&E will provide Customer with a copy of the inspection report, a Loan Agreement, the Application, the applicable On-Bill Financing (OBF) Gas and/or Electric Rate Schedule and Loan Calculation Summary Sheet (collectively, the "Loan Documents").
5. **Loan Documents:** If the terms of the loan are acceptable, Customer shall execute the Loan Documents and return them to PG&E prior to the commencement of the Retrofit Project. Incomplete or incorrect applications cannot be processed and may result in the delay of PG&E's approval and possible disqualification from the Program. Customer may withdraw this Application for any reason without penalty by sending written notice to PG&E.
6. **Customer's Responsibilities for Contractor and Vendor:** Upon PG&E's notification to Customer that the Retrofit Project is eligible for the Program, Customer may begin the Retrofit Project pursuant to the contract agreed upon by Customer, its contractor or vendor. PG&E does not endorse or recommend any particular contractor or vendor nor does PG&E review any contractor or vendor proposals. Rather, Customer shall be solely responsible for reviewing the feasibility of the contractor's and vendor's proposal(s) and verifying their respective qualifications, pricing, energy savings, warranties and the terms and conditions of the contractor's and/or vendor's contract with Customer.

Loan Amount and Term Limitations

Interest	0%, with no additional fees or charges
Minimum Loan Amount	\$5,000
Maximum Loan Amount	Commercial Customer: \$100,000 / premises Government Customer: \$250,000 / meter
Maximum Loan Term, not to exceed the Expected Useful Life (EUL) of the measures	Commercial Customer: 60 months Government Customer: 120 months

*Residential customers are ineligible.

- 7. PG&E Disclaimers:** CUSTOMER'S DESIGN OF THE RETROFIT PROJECT AND SELECTION AND USE OF ENERGY EFFICIENCY EQUIPMENT, MEASURES AND SELECTION OF CONTRACTORS AND VENDORS IS AT CUSTOMER'S SOLE DISCRETION AND AT CUSTOMER'S SOLE RISK. TO THE EXTENT PERMITTED BY APPLICABLE LAW, PG&E EXPRESSLY AND SPECIFICALLY DISCLAIMS ANY LIABILITY IN RESPECT OF ANY ADVICE, INFORMATION OR OTHER INSTRUCTION PROVIDED BY OR ON BEHALF OF PG&E TO CUSTOMER IN CONNECTION WITH THE QUALIFIED PROGRAM, PROGRAM OR RETROFIT PROJECT. PG&E DOES NOT WARRANT OR BEAR ANY RESPONSIBILITY FOR ANY OF THE FOLLOWING:
- a. THE WORK PERFORMED BY CUSTOMER'S CONTRACTOR(S) OR VENDOR(S), THAT THE RETROFIT PROJECT IS APPROPRIATE FOR THE LOCATION;
 - b. THE RETROFIT WILL RESULT IN OR YIELD ANY ENERGY EFFICIENCY SAVINGS OR A SPECIFIC AMOUNT OF ENERGY EFFICIENCY SAVINGS OR OTHER REDUCTION IN CUSTOMER'S PG&E UTILITY BILL AFTER COMPLETION OF THE RETROFIT PROJECT;
 - c. THE CONTRACTOR'S OR VENDOR'S SERVICES WILL BE TIMELY, COMPLETE OR ERROR-FREE, OR THAT DEFECTS IN THE RETROFIT PROJECT WILL BE CORRECTED BY SUCH INDIVIDUALS;
 - d. ANY ERRORS, OMISSIONS, DEFECTS OR DELAYS IN THE DESIGN OR CONSTRUCTION OF THE RETROFIT PROJECT OR THE OPERATION OF ANY ENERGY EFFICIENCY MEASURES INSTALLED AT THE LOCATION.
- 8. Verification:** Upon completion of the Retrofit Project, Customer shall request PG&E's post-completion inspection and final verification that the Retrofit Project has been completed in conformity with the requirements of the Qualified Program and that customer remains eligible (the "Final Verification").
- a. If there has been any change to the Retrofit Project's scope, cost and/or incentives available under the Qualified Program or energy savings, Customer will be required to enter into a Loan Modification Agreement with PG&E, which may include new contract terms reflecting the changes in the Retrofit Project. (If a Loan Modification Agreement is required, it shall be deemed part of the "Loan Documents.")
- b. If the changes to the Retrofit Project are such that it no longer meets the Program's payback criteria or other conditions, the Retrofit Project will be considered ineligible, the Loan Agreement will be terminated and no loan proceeds will be disbursed.
 - c. **IF PG&E DETERMINES, IN ITS ABSOLUTE DISCRETION, THAT CUSTOMER'S CREDIT HAS DETERIORATED OR HAS OTHERWISE PLACED CUSTOMER'S REPAYMENT OF THE LOAN AT RISK, THE LOAN PROCEEDS SHALL NOT BE ISSUED, EVEN THOUGH THE RETROFIT PROJECT MAY HAVE BEEN SATISFACTORILY COMPLETED AT CUSTOMER'S EXPENSE.**
- 9. Disbursements:** Subject to and following PG&E's satisfactory Final Verification, an incentive check and the loan proceeds will be issued to Customer or, at Customer's written direction, to Customer's contractor or vendor.
- 10. General Provisions:**
- a. Applications for loans under the Program will be accepted from qualified Customers on a first-come, first-served basis until the funds allocated by PG&E for the Program are no longer available. The Program may be modified or terminated by the CPUC or PG&E at any time and without prior notice. However, termination of the Program following execution of a Loan Agreement by Customer will not affect that Loan Agreement, or, if Customer thereafter satisfies all Program conditions, the disbursement.
 - b. The loan proceeds may only be used to pay or reimburse Customer for implementing or installing energy-efficient measures or equipment through the Qualified Program.
 - c. If there is any conflict between the terms of any document relating to the Program, the Loan Documents shall control.
 - d. For all retrofit projects, including but not limited to streetlight, HVAC and lighting retrofits, Customer acknowledges and understands that Customer is able to use the installation vendor or contractor of their choice.

I have read, understand and agree to all of the Energy Efficiency Retrofit Loan Program requirements and terms and conditions set forth in this Program description. I understand that loan calculations will be based on pre-inspection results and on the applicable program documentation, and that my agency/company must meet all eligibility criteria and requirements in order to participate in the Program. Any unapproved changes to project scope, costs or run hours, or to my agency's/company's creditworthiness, between the time the Loan Documents are accepted and signed and the Retrofit Project is completed and the project's and my agency's/company's continued eligibility are verified, could result in loan ineligibility.

Legal Name of Business (i.e., the formal name on your tax return)	Authorized Representative's Printed Name	
Authorized Representative's Signature	Title	Date
Tax identification information (select one):		
<input type="checkbox"/> Federal Tax ID Number: _____		
<input type="checkbox"/> Social Security Number: _____		
FOR PG&E USE ONLY:		
PG&E OBF Administrator	Printed Name	
Retrofit Program Application Number	OBF Application Number	





PG&E LED Street Light Turnkey Replacement Service

Non-binding price estimate to be used for budgetary purposes only

City of: Oakley

Date of this estimate: 17-Apr-2015

Expiration date of this estimate: 17-May-2015

Number of Lights to be Replaced	Voltage	Type	Wattage (Nominal/Actual)	Rate	Suggested Replacement LED
2	120	HPS	70/85	LS-2	BXSPBHT2MEB40K-UHSV-NQ4 7PIN
7	120	HPS	100/120	LS-2	BXSPBHT2MEB40K-UHSV-NQ4 7PIN
1	120	HPS	100/120	LS-2	BXSPBHT3MEB40K-UHSV-NQ6 7PIN
42	120	HPS	150/176	LS-2	BXSPBHT2MEB40K-UHSV-NQ4 7PIN
6	120	HPS	150/176	LS-2	BXSPBHT3MEB40K-UHSV-NQ6 7PIN
11	240	HPS	150/201	LS-2	BXSPBHT2MEB40K-UHSV-NQ4 7PIN
54	240	HPS	200/237	LS-2	BXSPBHT3MEB40K-UHSV-NQ6 7PIN
3	240	HPS	250/293	LS-2	BXSPBHT3MEB40K-UHSV-NQ9 7PIN
126					

Total Project Price: \$55,821
Total PG&E Rebates: \$6,940
Net Estimated Price: \$48,881

The rebates are subject to funding availability and are administered on a first come, first-serve basis. If rebate funding is depleted, customer must pay Total Project Price.

Energy cost savings in first year*: \$9,866
Energy savings (kWh/year): 65,580
CO2 reduction (lbs/year): 34,364
Avoided maintenance expenses in first year:** \$882

Simple Payback (Energy Only): 4.95

*Project Price Notes:

Price includes purchase of requested street lights, installation and field verification of installed lights, rate change and rebate application processing.

No permitting costs included in total project price.

Project price assumes all lights to be replaced will be cobra head fixtures and will not include post top, shoe box, tear drop, or decorative fixtures

Project price assumes all street lights to be replaced are currently in operating condition.

Project price assumes no restrictions on installations will be made (e.g.--heavy traffic area, special hours for installation, etc.)

Project price assumes all street lights to be replaced are at an operating voltage between 120-240 volts AC.

Notes:

*Future year savings will grow with the expected increase in electricity and labor costs.

**Avoided maintenance expenses are compared to maintaining HPSV lights.

***The street light manufacturer is BETA LED.

Assumptions:

- » 4100 operating hours annually
- » \$0.15045/kWh electricity cost
- » 0.524 lbs/kWh emission factor
- » \$26 per year maintenance cost for HPSV
- » \$19 per year average maintenance cost for LED
- » City has full jurisdiction over street lights