



Huntington Beach Utility Owned Streetlight Investment Grade Audit Report- Phase 2

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Proposed to:

City of Huntington Beach, CA

Proposed by:

Siemens Industry, Inc.

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1 Executive Summary

The City of Huntington Beach (City) is an environmentally and fiscally responsible city that sees the opportunity to save energy, reduce greenhouse gas emissions and lessen annual expenditures by acquiring 11,181 Southern California Edison (SCE) owned street light assets and retrofitting them to energy efficient LED technology.

The City contracted with Siemens Industry, Inc. (Siemens) to provide consulting services to assist in the acquisition, retrofit and maintenance of street light assets. This became a two phase process where an initial Investment Grade Audit (IGA) was developed that produced a Phase 1 contract, consisting of a parking garage energy efficient lighting retrofit, an upgrade to three street light series circuits, and a mechanism for the City to purchase and install LED street lights on city-owned assets. This Phase 2 IGA assesses the acquisition of the street light system, retrofit of

the entire 11,181 fixture street light system to LED technology, and the development of a maintenance program. Based on Siemens Investment Grade Audit assessment the following project costs and energy savings are to be expected.

Table 1 Project Cost and Savings Summary

Street Light Asset Acquisition (SoCal Edison)	\$4,358,350
Street Light Transfer of Assets	\$420,462
Street Light LED Retrofit	\$3,695,338
Street Light Maintenance, Years 1-10*	\$1,590,467
Street Light Maintenance, Years 11-20*	\$4,079,781
Knockdown Replacements, Years 1-20*	\$8,778,884
Total Net Project Cost	\$22,923,282
SCE Energy Efficiency Rebate Potential	\$913,779
First Year SCE Tariff Rate Savings	\$1,168,887
20 Year Cumulative Net Project Cost Savings	\$10,810,557
Annual Greenhouse Gas Emission Reductions	2,460,174 lbs CO₂

*Estimated costs based on material failure rates, inflation adjustments and other assumptions.

Siemens offers the following as our IGA report; as the detailed assessment of this opportunity. This report summarizes the work efforts that have been completed by Siemens staff and the necessary steps to execute the street light program.

2 Siemens Overview



Founded over 165 years ago, Siemens is a global powerhouse in energy technologies and electrical engineering. Siemens stands for technological excellence, innovation, quality and reliability. The company is the world's largest provider of environmental technologies with worldwide revenue of over \$120 billion. Siemens has the long-term stability and access to extensive resources required to complete these types of complex projects with multi-year maintenance commitments. In the last decade Siemens

has implemented over 3,000 energy projects valued over \$1.4 billion including \$135 million in lighting-only energy contracts.

Siemens Intelligent Traffic Systems Customer Service Division is a licensed electrical contracting and transportation engineering firm founded in 1991. The company specializes in the maintenance, testing, repair, upgrading and replacement of traffic signals, streetlights, and exterior commercial lighting. Siemens has a broad range of expertise and experienced personnel including: registered professional transportation engineers, International Brotherhood Electrical Workers (IBEW), Journeymen Electricians/Technicians and International Municipal Signal Association (IMSA), Certified Technicians.

We are proud to say that Siemens has been one of the most successful streetlight and traffic signal maintenance/construction contractors in the United States. Siemens' employees and equipment are dedicated for streetlight and traffic signal maintenance. (unlike some of our competitors that may use the same personnel and vehicles for a number of different electrical jobs) We issue insulated "bucket" trucks to all of our linemen and electricians. Each truck is equipped with all the necessary tools, equipment and inventory to perform 100% of routine maintenance and repairs of traffic signals and street lighting. All vehicles are appropriately marked with the company logo, Department of Transportation (D.O.T.) markings, and have a company phone, and laptop computer.

Street Light Conversions Qualifications

Siemens depth of experience in streetlight conversions is demonstrated in the more than 200 streetlight and traffic signal energy efficiency projects completed across the nation valued in excess of \$60 Million. Siemens works individually with each community to examine multiple options and products to identify the best possible solution for each. Many of those projects were completed with the assistance of EECBG and ARRA funds.

Our extensive experience working with local agencies includes help selecting appropriate fixtures, implementing test installations and light level studies, and interacting with the public to promote widespread acceptance of new lighting technology. We specialize in maintenance, and therefore favor fixtures that provide the best efficiency, are easy to install and are well-designed.

Our firm has:

- Completed the energy efficient streetlight conversion redesign of over 100,000 streetlights in communities across the country utilizing the best available technologies
- Over 300 maintenance contracts with public agencies and over 100 private lighting contracts consisting of more than 400,000 streetlights and 10,000 traffic signals nationwide
- Completed over 500,000 traffic signal LED retrofits

Our core philosophy is to utilize our in-house engineering staff, skilled project management, quality technicians, and appropriate technology to deliver high quality projects on time and on budget.

Performance Contracting Experience

Siemens has a record of project performance that is unsurpassed in the industry. Siemens has executed more than \$2.6 billion in performance contracts and helps our customers execute hundreds of millions of dollars of Performance Contracts every year. We have substantial experience in arranging financing for our customers' projects through a

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number of sources, ranging from under half a million to the tens of millions of dollars. This experience, as well as our knowledge of the markets, has enabled our customers to entertain a broader scope of financing options.

Debt service payments on all forms of financing can be structured to meet the City's preferred schedule—monthly, quarterly, semi-annually or annually.

A critical factor for this type of project is identifying, developing and obtaining the optimum financing for the project. Siemens has the experience and ability to work with outside funding sources. In addition we have the option of obtaining financing internally through Siemens

Financial Services. Flexibility is the key and Siemens is more than willing to work with the City to provide custom funding. In general, Siemens financing partners have the creative freedom and financial strength to offer very flexible terms and structures so that the financing can be tailored to fit the unique needs of each customer.

Municipality Experience

Following is a list of some of the street light conversion projects we have completed in the last few years.

Agency	Number of Lights	Project Cost	Street Light Maintenance
American Canyon, CA	251	\$1,543,000	y
City/Town of Newton, MA	8,440	\$1,254,259	
Compton, CA	1400+	\$1,040,249	
Ontario, CA	1,800	\$723,000	y
Washington, DC	1000	\$657,414	
Lexington, MA	2381	\$656,000	
City/Town of New Haven, CT	11,000+	\$646,397	
Turlock, CA	1990	\$566,300	
Vallejo, CA	1100	\$541,081	
Manteca, CA	2900	\$496,300	y
Town of Arlington, MA	3,054	\$407,088	y
Mesa, AZ	1200	\$377,000	y
San Ramon, CA	360/2000	\$353,000	y
City/Town of Quincy, FL	1,206	\$350,000	
El Cajon, CA	1000	\$346,700	y
City/Town of Pittsfield, MA	2,836	\$326,885	y
Novato, CA	701	\$288,730	y
El Cerrito, CA	200	\$259,695	y
City/Town of Chelsea, MA	1,693	\$254,547	y
Town of Needham, MA	1,651	\$244,513	y
Berlin, PA	211	\$187,000	
Galt, CA	156	\$183,690	
Caltrans, CA	172	\$177,720	
Fremont, CA	266	\$172,874	y
Mission Viejo, CA	100+	\$165,840	
Elk Grove, CA	163	\$158,925	y
Elk Grove, Poppy Ridge, CA	435	\$150,716	y
Lafayette, CA	101	\$141,080	y
Los Gatos, CA	248	\$128,780	y
Paso Robles, CA	313	\$126,650	

In sum, Siemens has prodigious experience, well-positioned infrastructure, strategic business-to-business relationships, and unparalleled expertise. These qualifications strongly support our ability to safely, efficiently, and cost-effectively provide transportation engineering services, Traffic Signal/Street Light maintenance and retrofit services.

3 Investment Grade Audit Energy Analysis & Cost Savings

3.1 Investment Grade Audit Summary

The City of Huntington Beach selected Siemens Industry, Inc. to perform an Investment Grade Audit (IGA) for the acquisition of utility owned street light assets, the conversion of these newly acquired HPS street lighting fixtures to LED technology, the development of a street light maintenance program. This combination of Energy Conservation Measures (ECM) and Facility Improvement Measures (FIM) constitute the Street Light Acquisition and Retrofit Program (SLARP) assessed. Utilizing data provided by the City, Southern California Edison, and Siemens field audits, Siemens staff assessed each facet of the SLARP as requested by the City.

The SLARP assessed will create a first year SCE tariff rate savings to the city of \$1,168,887 in the first year after installation. In addition, the SLARP will reduce the annual energy consumption by nearly 3.5 Million kWh and greenhouse gas emissions by over 2.4 Million lbs CO₂. The estimated gross cost to implement the program is \$8,474,150. The estimated 20 year street light maintenance program is \$5,674,028. The potential utility rebate from SCE is \$913,779. Figure 1 highlights the details of the program.

ID	Description	Project Costs	Total Utility Incentives	Net Project Cost	First Year SCE Tariff Rate Savings	First Year Energy Savings (kWh)	First Year Greenhouse Gas Savings (lbs/CO ₂)
ECM-1	Street Light Tariff Rate change- LS-1 to LS-2	-	-	-	\$ 878,340	-	-
ECM-2	LED Street Light Conversion	\$ 3,594,876	\$ 913,779	\$ 2,681,098	\$ 290,546	3,514,534	2,460,174
FIM-1	Street Light Acquisition	\$ 4,358,350	\$ -	\$ 4,358,350	-	-	-
FIM-2	Asset Transfer	\$ 420,462	\$ -	\$ -	-	-	-
FIM-3	Street Light Maintenance Program	\$ 5,670,248	\$ -	\$ 5,670,248	-	-	-
	Totals	\$ 14,043,936	\$ 913,779	\$ 12,709,695	\$ 1,168,887	3,514,534	2,460,174

Figure 1. Street Light Acquisition & Retrofit Program Summary

The following sections discuss the details of the street light system and each ECM and FIM considered in the SLARP.

3.2 Huntington Beach Street Light System

The City of Huntington Beach currently enlists the lighting service of 13,668 street lights throughout the City, as listed on the January 2014 utility bill. Of those, 1,103 are billed as LS-2 and are City-owned and City maintained. The remaining 12,565 are billed as LS-1 and are utility owned and maintained (more detail on SCE Tariff rates are found in section 3.3). The utility, Southern California Edison (SCE), has been providing the maintenance service and energy service to these LS-1 assets since they were installed. The following section shows the results of the Siemens field assessment of the entire street light system in the City of Huntington Beach and the subsequent section further describes the LS-1 assets that are under consideration to purchase from SCE.

Street Light System Characterization

The street light system consists of a few main components: the street light pole, light fixture, weatherhead, electrical wire and miscellaneous hardware. During the field assessment the pole, fixture, and weatherhead inventory and condition were assessed.

The street light poles consist mainly of concrete poles, also known as Marbelite. These poles are primarily fed by underground cabling which constitutes 97% of the feed type. The second greatest pole type in the street light system is steel poles. The steel poles consist of both galvanized steel and ungalvanized poles. The steel poles are mainly fed by overhead wiring which constitutes 93% of the feed type. The third largest pole type is wood poles. Similar to the steel poles, wood poles are primarily fed overhead which constitutes 98% of the feed type. Lastly, there are 65 fiberglass poles identified which are mainly fed underground. Figure 2 shows the relative pole types identified during the audit.

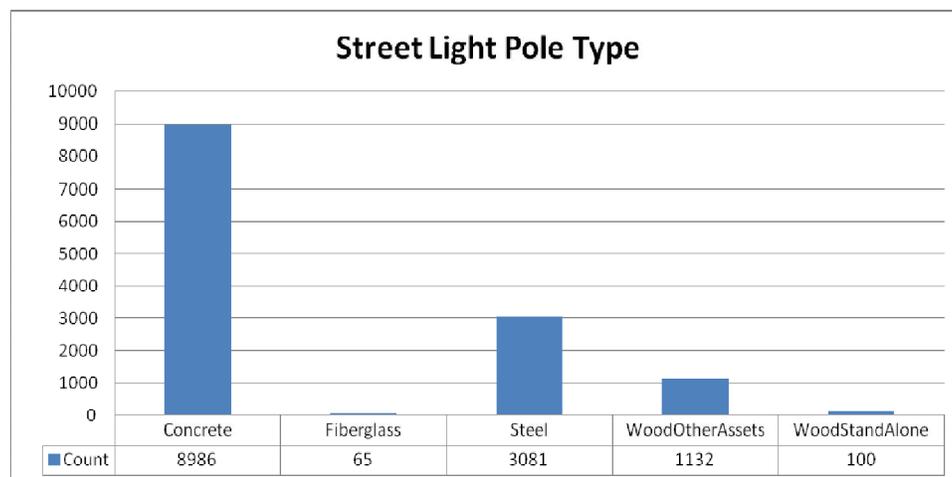


Figure 2. Street Light System Pole Type

The condition of the poles was evaluated during the audit. Figure 3 shows the breakdown of pole condition identified. The majority of the street light asset poles were identified as good or excellent condition. A small number were identified as fair and an even smaller number were identified as poor or very poor. Figure 4 shows the further detail of the poor and very poor pole condition. The 94 poles considered in poor condition have a relatively even

distribution between the pole types. Of the 15 poles considered very poor 8 are steel and 5 are concrete and 2 are wood. The reason for poor or very poor classification is captured in the detail audit information for consideration in the pole replacement program.

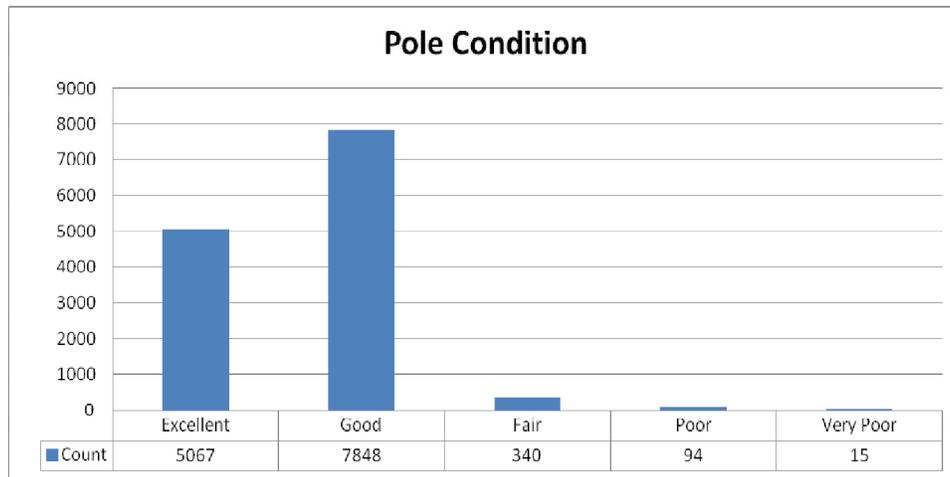


Figure 3. Street Light System Pole Condition

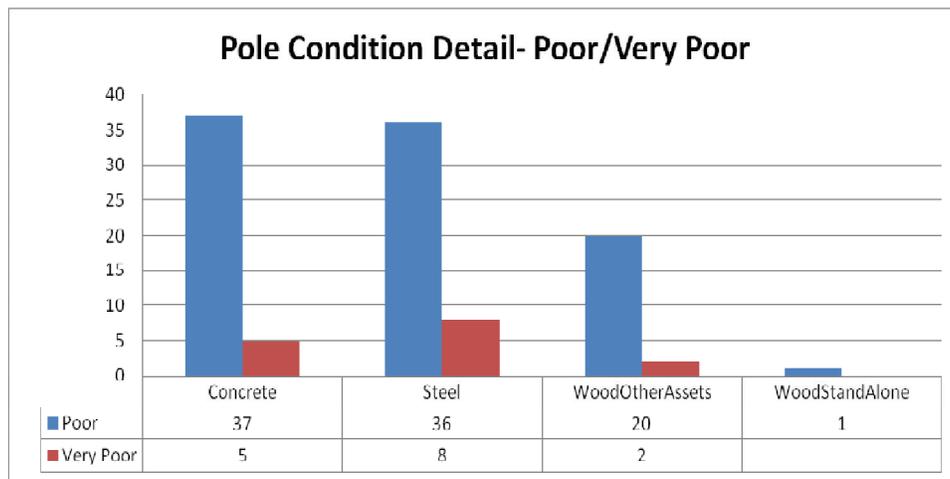


Figure 4. Street Light System Pole Type by Condition

In addition to the pole condition, fixture and weatherhead condition was assessed. Figure 5 shows the relative condition of the fixture. The majority of the fixture stock was considered good or excellent, with roughly 1552 considered fair, 34 considered poor and 12 considered very poor Figure 6 shows the relative condition of weatherheads identified in overhead fed street light assets. The majority of the stock was considered good or excellent, with 1810 considered fair, 13 considered poor and 36 considered very poor.

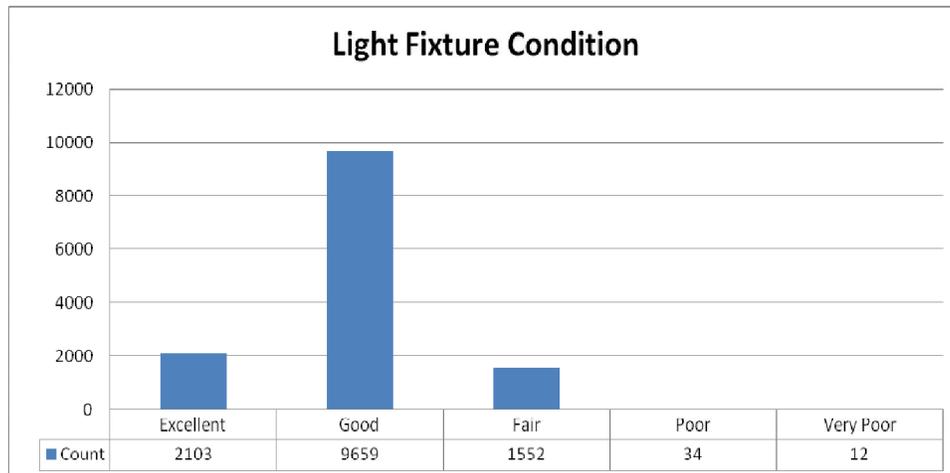


Figure 5. Street Light Fixture Condition

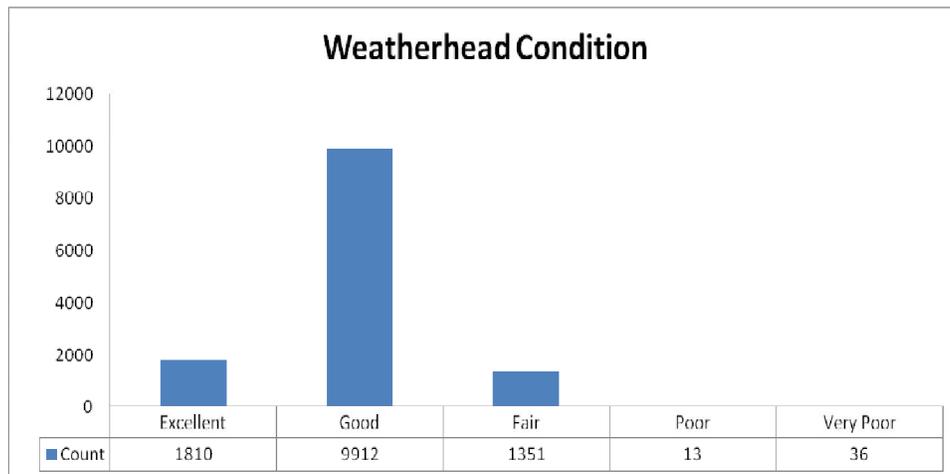


Figure 6. Street Light System Weatherhead Condition

Overall the City of Huntington Beach's street light system is in good condition. The comprehensive audit that was performed provides the City and the Siemens maintenance team an excellent overview of the maintenance needs and material considerations necessary to facilitate safe operation of the street light system throughout the city.

Eligible LS-1 Street Light Assets

SCE's definition of an eligible street light asset is currently defined as: a dedicated street light pole, with no other utilities attached, such as distribution lines or telecommunications lines. The constituent parts of the street light asset consist of:

- Street light pole and foundation
- Street light fixture (fixture)
- Mast arm
- Associated guy lines, straps, and hardware

- Wire from initial point of demarcation to fixture and any subsequent assets

The point of demarcation in the system, where the asset becomes the property of the City, falls into two categories based on electrical feed type:

Underground fed asset: When the street light asset is electrically fed from an underground source, the point of demarcation is where the electrical feed connects in the pole behind the access plate at the bottom the pole. SCE will install an inline fuse, denoting where the electrical wire becomes the property of the City.

Overhead fed asset: When the street light asset is electrically fed from an overhead source, the point of demarcation is where the electrical feed connects to the street light. SCE will install an inline fuse, denoting where the electrical wire becomes the property of the City. Any overhead electrical wire in a dedicated street light circuit will also become the property of the City.

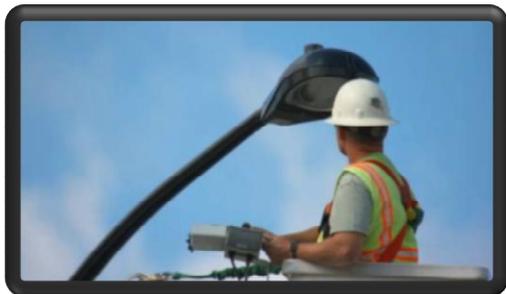
The overhead electrical wire that is on dedicated street light circuits will be included in the asset purchase. It is estimated that the maximum length of overhead electrical wire that will become property of the City is approximately 390,000ft or 74 miles. It is assumed that the actual amount will be considerably less, due to circuit configurations and the definition of the point of demarcation, but as there is no accurate data on this it is unclear at this time. The condition of the wire was not included in the initial system evaluation. During the asset transition, Siemens staff will document field conditions of the wiring throughout the new system.

Of the 12,565 LS-1 street lights, SCE has determined that approximately 11,181 fixtures are eligible for purchase. SCE was unable to produce data that clearly represents the exact eligible assets at the time of publication. As the LS-1 inventory consists of 92% of the entire street light system in the City, and due to the fact that SCE did not provide the exact asset information, the characterization of the specific LS-1 assets must be assumed to closely reflect the total stock. In addition to the characteristics captured in the field assessment the other system component that was not evaluated but is integral in the system, and will become property of the City, is the overhead electrical wire.

Wattage	Total LS-1 Quantity	LS-1 Eligible Asset Quantity
50	5,209	4,918
70	2,992	2,763
100	594	514
150	2,052	1,589
200	1,007	715
250	705	679
400	6	3
Total	12,565	11,181

Figure 7. Utility Owned LS-1 Street Light Fixtures

Siemens utilized the inventory data from the field assessment to best represent the fixtures eligible for purchase. This consisted of identifying the assets characterized as distribution poles and removing them from the assumed eligibility table and approximating the remaining fixtures that needed to be removed from the data set. SCE and the City will reconcile this data, once the asset transition takes place and field technicians are transferring ownership to the City. Figure 7 shows both the total LS-1 assets and the estimated eligible LS-1 assets, by wattage type.



3.3 Street Light Acquisition and Retrofit Program Detail

ECM-1 Street Light Tariff Rate Change

The majority of the street lights in Huntington Beach are unmetered and billed at a fixed monthly rate established by the utility, Southern California Edison (SCE). These tariff rates are formulated by utility calculations for monthly energy consumption and material costs for operation. The two street light tariffs considered in this analysis are:

- LS-1: Utility owned and utility maintained
- LS-2: Customer owned and customer maintained

These rates consist of an energy charge, based on estimated monthly kWh consumption, and a facilities charge, based on the material cost of operation of the street lights. As LS-1 tariffs include material and system maintenance they are significantly higher than the LS-2 facilities charges. LS-1 facilities charges are based on the technology type and wattage of each individual street light fixture. The energy charge is the same between the LS-1 and LS-2 tariffs at \$0.08222/kWh but the facilities charge varies by roughly \$6.57/lamp/month.

The tariff rate is designed by the utility and reflects the current costs for service. The assumptions made by the utility are considered and authorized by the California Public Utilities Commission (CPUC), in an attempt to establish a fair and reasonable rate for lighting service. The tariff rate fluctuates as the costs fluctuate periodically, so for this analysis the August 2014 LS-1 and LS-2 tariff rates were used.

HPS Wattage	Current Annual LS-1 Rate	Proposed LED LS-2 Rate	First Year Rate Savings
50	\$ 523,472	\$ 145,770	\$ 377,702
70	\$ 292,104	\$ 81,895	\$ 210,209
100	\$ 54,340	\$ 15,235	\$ 39,105
150	\$ 177,523	\$ 47,098	\$ 130,425
200	\$ 83,655	\$ 21,193	\$ 62,462
250	\$ 78,302	\$ 20,126	\$ 58,177
400	\$ 348	\$ 89	\$ 260
Total	\$ 1,209,745	\$ 331,405	\$ 878,340

Figure 8. SCE Facilities Charge Estimated Savings

The utility owned and maintained street light assets that are eligible for acquisition by the City are currently billed at the LS-1 tariff rate. When the city executes the purchase of these 11,181 street light assets the tariff rate will be changed from LS-1 to LS-2. The cost reduction for this rate change for the 11,181 street lights is estimated at \$878,340 in the first year after installation. Figure 8 provides the estimated annual savings from the change from LS-1 to LS-2. The cost reduction created by this rate change will help fund the SLARP.

ECM-2 LED Street Light Conversion

The opportunity to reduce energy consumption, increase reliability and offer better light quality with the installation of LED fixtures has been recognized by the City in the Phase 1 project. With the acquisition of the High Pressure Sodium (HPS) utility owned street lights, Siemens recommends that the City retrofit these assets with energy efficient LED fixtures.

Siemens staff utilized products on the Design Lights Consortium (DLC) Qualified Products List (QPL) to estimate the energy savings associated with the LED retrofit. Siemens recommends that the City install LED fixtures that meet or exceed the fixture standards outlined on the DLC QPL. Figure 9 highlights the energy savings by fixture type.

HPS Wattage	LED Wattage	HPS Annual Energy Consumption (kWh)	LED Annual Energy Consumption (kWh)	Annual Energy Savings (kWh)	Annual Energy Cost Savings
50	18	1,180,910	354,096	826,814	\$ 68,353
70	24	949,422	258,617	690,805	\$ 57,109
100	39	248,971	79,567	169,404	\$ 14,005
150	72	1,269,643	476,700	792,943	\$ 65,553
200	92	728,185	273,702	454,483	\$ 37,572
250	107	879,862	302,291	577,571	\$ 47,748
400	187	6,024	3,510	2,514	\$ 208
Totals		5,263,016	1,748,483	3,514,534	\$ 290,546

Figure 9. ECM-2 Energy Savings Calculation

*Energy rate \$0.0822/kWh. HPS energy consumption calculated with input wattages described in SCE LS-2 tariff.

The street light fixtures eligible for retrofit are currently unmetered and billed on a flat monthly rate. The energy and cost savings that would result from this retrofit would be a fixed rate once the billing adjustment was accepted by SCE. This savings may fluctuate as the tariff rate is adjusted, similar to what was discussed in ECM-2, but it is Siemens

understanding that the costs associated with street light service is projected to increase, so the cost savings potential is projected to increase through time.

LED fixtures have an expected service life that far exceeds the expected lifetime of the incumbent HPS technology. Existing HPS fixtures require a significant investment in routine and periodic maintenance. HPS bulbs require replacement every two to three years; the ballasts need to be replaced every seven years and the entire fixture has a useful life of ten years. LED technology does not necessitate routine material replacement. Manufacturers report that the LED silicon chips, the light emitting portion, will last up to 100,000hrs before needing to be replaced. The LED ballast, known as a driver, is also projected to last 10+ years. As LED technology is in its infancy, it is unclear exactly how long fixtures will last in the field but manufacturers are now typically warranting material for 10 years, with the expectation that fixtures will last 15 years or more.

By installing LED fixtures the city will reduce the maintenance costs borne by the program. In review of the street light inventory Siemens staff has determined that the energy savings created by the retrofit of the 11,181 HPS street light fixtures to LED technology is estimated at nearly 3,514,534 kWh/year in the first year after installation. This energy savings translates into a cost savings of approximately \$290,546/year with a reduction in greenhouse gas emission by over 2,460,174lbs CO₂.

In addition, the LED retrofit would be eligible for a utility rebate of \$913,779. This rebate is based on the SCE customized rebate solution of \$0.08/kWh saved in the first year with an additional \$0.18/kWh available to the program, as the City is a SCE Energy Leader Partnership Platinum member. This rebate amount is subject to SCE approval and may vary depending on the rebate available during project execution. Furthermore, the rebate allocation to the City occurs after installation of the light fixtures and the timing of distribution is dependent on the rebate processing by SCE.

FIM-1 Street Light Acquisition

The most significant portion of the SLARP is the completion of the acquisition of utility owned street light assets. By acquiring the street light assets the City reduces the annual expenditure for street light operation and becomes able to retrofit the 11,181 street light assets throughout the City which can provide additional cost reduction.

Siemens has been a key partner to the city in the street light acquisition asset evaluation process. Siemens staff has participated in many meetings, field asset evaluations, and personal communications with SCE in order to ensure a fair market sale price for the street light assets. Initial evaluation by SCE yielded an estimated price of \$5,000,000 for the 11,181 eligible street light assets. In secondary discussions, SCE communicated to the City that the valuation methodology had changed and indicated a new estimated value of \$4,358,350 for the street light system. Further detail of the acquisition history and process can be found in section 4.1.

The valuation of the street light assets consisted of a field survey to create some assumptions of the entire LS-1 system. This included an evaluation of over 100 street light assets to develop valuation assumptions of pole type, fixture type, mast arm, and wire to be included in the system. These assumptions were then used in the Replacement Cost Less Net Depreciation valuation model to come up with the not to exceed price. The final price will be determined once the system has been turned over to the City and all asset conditions

have been confirmed in the field. The details of the SCE valuation model can be found in Appendix A: SCE Sample Contract.

Once the City has accepted the offer to purchase the street light assets Siemens will perform the asset cut over tasks needed for the City to assume ownership (see section 4.1). The estimated cost for Siemens services is \$420,462.

FIM-2 Street Light Maintenance Program

When the utility owned street light assets are acquired by the City the maintenance of the assets will no longer be performed by the utility. When this occurs, the maintenance program will be initiated and Siemens will assist in the cutover of assets and provide maintenance coverage. Siemens staff has crafted a comprehensive street light maintenance package that covers both the maintenance of the HPS fixtures prior to retrofit and after the LED fixtures have been installed. The estimated cost for this program will vary depending on the time at which the LED fixtures are installed. The estimated net cost for a 20 year maintenance program is \$8,706,676. The maintenance program details can be found in section 4.4.

4 Project Implementation

The Street Light Acquisition and Retrofit Program (SLARP) is a project that will be executed in multiple phases. The following section describes the detailed process to execute each phase in the SLARP.

4.1 Street Light Acquisition from Southern California Edison

The asset valuation process for the City of Huntington Beach has been completed by SCE, Siemens and the City. This valuation process occurred from 2013 to 2014 and involved the field assessment of street light assets, an extensive review of SCE inventory data, the creation of a Replacement Cost Less Net Depreciation (RCLND) model and an established not to exceed price for the purchase of 11,181 street light assets. The valuation process has concluded and the City is able to proceed with the execution of the Street Light Acquisition and Retrofit Program, as described below.

Develop Contract with Southern California Edison

As the valuation of street lights assets is finalized, the City will need to develop a contract with SCE to purchase the street light assets. Siemens will provide assistance in the process to execute this contract between the City and SCE, as necessary. A template contract document is attached in Appendix A: SCE Sample Contract. Once the contract terms are agreed upon, the purchase is subject to the California Public Utilities Commission (CPUC) 851 filing for authorization of a sale of a utility asset¹.

California Public Utilities Commission Acceptance of Final Purchase

¹http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=1.&title=&part=1.&chapter=4.&article=6.

Once the contract for purchase is finalized between the City and SCE this transaction must be approved by the CPUC. This filing with the CPUC is to confirm the acceptance of this transaction, as legally required by State legislation. The street light asset value falls below the \$5,000,000 transaction value threshold and therefore is evaluated in the advice letter process, with review by the appropriate Industry Division and not a complete filing which necessitates a full commission review and an issuance of an order from the CPUC. The timeline on the processing of an advice letter for the 851 filing is described in the CPUC General Order 173:

“Unless a timely protest has been filed or an advice letter contains incomplete information, as determined by the appropriate Industry Division, the Commission or in appropriate cases, the Executive Director or Director of the appropriate Industry Division, shall act upon the advice letter by no later than 120 days after its filing, by either approving, modifying, or denying the advice letter.”

Siemens will assist with facilitating the filing of the advice letter, though SCE is the responsible party in executing this. Siemens can participate in communications with SCE and the CPUC during the advice letter evaluation period as needed, to ensure a timely review and acceptance of the transaction. Once the filing is complete then the purchase of the assets can be completed and the subsequent program phases can be executed.

Street Light Asset Transfer of Ownership

After the street light acquisition has been approved by the CPUC and the contract to purchase these assets has been executed, Siemens will coordinate with the City and SCE on the transfer of ownership or “cutover” schedule of the assets to City ownership. The exact schedule of this cutover will depend on the final terms decided between SCE and the City. It is Siemens understanding that the cutover cost to SCE is included in the asset valuation cost, therefore no further cost from SCE shall be borne by the program.

The estimated cutover rate is 1,000-1,500 street light assets/month, which translates to duration of roughly 1 year for the cutover of the total 11,181 assets. The cutover process will consist of SCE staff, Siemens staff and City staff participation in confirming the exact assets that are cutover and determining the point of demarcation of ownership of the system.

Once this process is completed in the field, Siemens staff will enter the new asset ID numbers in the maintenance database and provide the necessary information to SCE to complete the reassignment of the tariff rate from LS-1 to LS-2. Typically this process is done by filling out SCE form C505 but it is possible that SCE may derive a unique process to change the billing rate independent of the C505 form, due to the magnitude of the data involved.

The City will assume the maintenance responsibility over the newly acquired street light assets once they are cutover, with contracted service to Siemens. This will be calculated on a unit cost basis dependent on the street light technology type and prorated from date of cutover. During the cutover process an asset database will be created that will incorporate the new asset ID numbers and the available asset attributes identified by Siemens during the IGA field audit. This database will allow Siemens and City staff to access asset location, attributes, maintenance related activities, as well as, allow members of the community to report outages. Further details of this asset management system and maintenance program can be found in Section 4.6.

4.2 LED Street Light Retrofit

Once the street light assets have been acquired the assets will be eligible to be retrofitted from the current less efficient high pressure sodium (HPS) fixtures to Light Emitting Diode (LED) technology. The LED street light retrofit has the potential to yield a significant annual energy savings as outlined in Section 3.3. The details of executing the LED retrofit are as follows:

Street Light System Audit

Siemens conducted a field audit of the entire street light system throughout the City. Siemens subcontractors evaluated the street light assets and created an inventory which allowed Siemens to determine the installed fixture types and develop the energy analysis and LED replacement schedule. In addition, this audit identified assets that are in need of repair and will be included in the maintenance program. Siemens will incorporate this database into the maintenance database during the retrofit process.

Street Light System Design

Siemens installs LED fixtures that optimize energy savings while delivering adequate light output, high light quality and meet standard industry requirements, such as fixtures found on the Design Lights Consortium (DLC) Qualified Products List (QPL).

During Phase 1 project development Siemens worked with the City to identify many different LED fixture replacement options. Siemens intends to specify products that were previously identified in Phase 1, or like fixtures, for the Phase 2 project. Siemens will utilize City feedback from Phase 1 in final selection of the LED fixture replacement for Phase 2.

Once the LED fixture replacement schedule is confirmed Siemens will prepare and submit the rebate application, on behalf of the City, to SCE. This application form must be completed and approved by SCE prior to the start of retrofit work. Once SCE has processed this application then the construction phase can begin. After completion of each installation



phase Siemens will submit necessary information to SCE to complete each rebate phase. SCE will then issue the rebate to the City. Rebate processing and payment terms will be established with SCE once the project is initiated.

Construction

Siemens will staff work crews as necessary to adhere to schedule requirements to ensure that any delays are minimized. All LED installation work shall be performed by IBEW Licensed Electricians with IMSA Roadway Lighting Level I certification (or other certifications as required), and all installation work shall be paid at prevailing wage rates. All LED installation work shall be performed in accordance with the NEC, NESC, and OSHA provisions, and exclusively by individuals certified by OSHA as a "Qualified Electrical Worker." Siemens will also use this as an

opportunity to use local union members.

It is recommended that the retrofit schedule align with the cutover schedule agreed by the City and SCE. During the cutover, technicians will be assessing each asset and entering the asset data into the streetlight database and can utilize this time to retrofit the street light,

eliminating the costs of visiting an asset multiple times. The retrofit process could align with the estimated rate of cutover of roughly 1,000-1,500 fixtures/month, although additional retrofit rates and schedules will be considered per City.

Project Commissioning and Customer Acceptance

Project commissioning will follow each construction phase completed by Siemens staff.

Project commissioning for street lighting typically involves the following:

- a nighttime drive-by of streets with City representative(s) to evaluate the performance of the LED fixtures,
- submittals to SCE to initiate billing adjustments and rebate submittals, and
- confirmation upon receipt of the utility bill(s) that billing adjustments are accurate.

We have found that one of the most important phases of any project is to visually confirm the post-project environment with the customer. We will conduct a nighttime “drive-by” with City staff to ensure that lighting levels are satisfactory. Common adjustments include: fixture shielding or rotating/tilting, lumen output adjustment, recommended tree trimming by City staff or their contractor

Once each project commissioning phase is complete, the SCE rebate application form described is signed, indicating the work is complete and the final inventory file is submitted along with copies of all invoices. The final inventory file becomes the basis of the billing adjustments. Adjusting the billing frequently takes approximately 2-3 billing cycles for the utility to complete. During project close-out, we will request bill copies from the City to track and ensure the adjustments are correctly made.

As this project may be completed in phases customer acceptance and substantial completion may be defined and implemented at each phase of the cutover and retrofit. During the cutover of the assets the maintenance services are initiated once SCE has removed the asset tag and Siemens has entered the asset into the street light asset management database. The Service Account Manager will be the point of contact for the maintenance contract to dispatch repair crews, respond to customer requests, and respond to any customer needs.

Measurement and Verification

As the SLARP is dependent on the cost savings yielded by the acquisition and LED retrofit it is important to measure and verify the cost savings annually. The City and/or SCE will need to provide a utility bill for the street light assets for the 3 months prior to the start of the acquisition and LED retrofit in order to establish a baseline utility cost. Siemens will then execute the project, on a schedule agreed upon with the City. Upon acceptance of the project, Siemens will request a utility bill from the City and/or SCE to verify the billing adjustments have been made. This verification will then initiate the energy cost savings to be measured annually throughout the duration of the measurement and verification period. Cost savings experienced during the construction period will not be tracked nor will be guaranteed. Measurement and verification will commence after acceptance.

On an annual basis, Siemens staff will produce a measurement and verification report that will confirm the cost savings in comparison to the baseline established prior to installation. Siemens will request the utility bills associated with the street light assets and calculate the associated savings. The energy savings guarantee is linked to the street light service rates established at the time of completion and will be reported as such. Any fluctuations to the



tariff rate throughout the program will be calculated to show the city the actual cost savings experienced over the baseline and included in the report.

4.3 Warranty

The warranty phase shall begin for each fixture upon installation completion. Manufacturers typically offer a ten (10) year warranty on all LED light fixtures. Siemens offers a 12 month warranty on all materials and workmanship performed by Siemens. Furthermore, Siemens will pass through to the City all Manufacturers' Warranties. Labor to replace any inoperable, defective or otherwise non-performing fixtures will

be covered in our comprehensive maintenance plan, which is detailed in the section below.

Once the material warranty has ended, Siemens will provide labor only for the maintenance plan. Due to the ever changing LED technology and the rapid advances evidenced in the industry, it would be in the best interest of the City to include labor only following the material warranty period. Further considering the fact that LED light values degrade over time, Siemens will not cover the replacement material costs of any lights that are still functioning, but not providing adequate light levels in years after the manufacturer's warranty.

Should the City not elect to purchase a maintenance plan from Siemens, the labor to replace defective, inoperable or otherwise non-performing fixtures will not be covered and would be billed separately to the City by Siemens.

4.4 Street Light Maintenance Program

We will use a combination of highly qualified personnel, fleets of specially outfitted vehicles, the latest tools and equipment, and our unmatched knowledge, understanding and experience in the streetlight industry to meet the needs of the City of Huntington Beach.

A Siemens street light maintenance program is designed to eliminate and reduce malfunctions, complaints, and potential hazards throughout the community. Through the comprehensive maintenance program, Siemens will be responsible for maintaining approximately 11,181 LED streetlights as they become phased in to the city through the cut over process with Southern California Edison. Once owned by the city, the city will have minimal involvement with the maintenance of these newly acquired street lights. Our proposed streetlight maintenance program will include quarterly inspection of each of the city's streetlights, repair of streetlight outages, cleaning of the lenses while completing

service requests, recordkeeping, and replacement of faulty equipment, as reported. We will utilize traffic control and safety equipment as required to protect our technician and the public.

Approach

The Siemens street light maintenance program is designed to reduce malfunctions, complaints, and potential hazards throughout the community. Many issues that occur may be due to lack of preservation and preventative maintenance to the streetlights and their operations. Through the comprehensive maintenance program, Siemens will become responsible for maintaining approximately 11,181 street lights in the Huntington Beach community. The services formerly maintained by SCE will include; quarterly inspections of street lights, repair of the street light outages, cleaning of the lenses while completing the service request, recordkeeping, warranty claims administration for the LED fixtures replaced by Siemens, replacement of internal equipment, and knockdown repairs as outlined below.

Scope of Work

General Maintenance will consist of all operations and repairs on the street light system, starting from the point of demarcation of the electrical feed point from SCE. Siemens will receive maintenance calls via a 24/7 call center, provide the necessary equipment, qualified personnel, and the necessary material components of light fixtures in order to keep the system operating. Materials include: light fixtures, surge protectors, ballasts, starters, igniters, fuses, lenses, reflectors, connective wiring, fuse holders, photo cells, and shorting caps that have failed due to normal age or deterioration. Also included is general cleaning of general components of the fixture during any repair of the luminaries that may interfere with the illumination of the street. General maintenance will also include automatic repairs of any day burning light fixtures.

Routine Maintenance Years 1-10

Operations

- Quarterly night-run maintenance program
 - Dedicated outage checker will be assigned to the City of Huntington Beach
 - Devoted night survey truck specifically reserved for the City
 - Technician will gather vital information regarding the performance and condition of the streetlights. Based on severity of the issue, City of Huntington Beach will be notified of the following:
 - Outages
 - Pole knockdowns
 - Suggested Repairs
- A comprehensive report will be provided to the city on a quarterly basis. The information provided to the city will capture all outages and suggested repairs observed during night-run assessment
- In addition to the report, City staff will also have internet access to Siemens live database. This will provide the city an up to date summary of current and completed tasks
- All inoperable lights that are reported will be resolved and repaired within five (5) working days

- General cleaning of all components that may be interfered with during the repair of the luminaries
- Removal of all waste materials in accordance with the appropriate laws
- Include emergency response

Covered Materials and Repairs

- Fixture Housing
- Drivers
- Light Source
- Lenses
- Shorting Cap
- Photocells
- External Fixture Components
- Fuse located at the base of the pole
- Conductors between the fuse and the fixture
- Service pedestals and disconnects
- Graffiti removal
- Painting of non-galvanized poles up to (10) per year
- Pullbox lids
- Pole handhole covers
- House side shield requests including installation
- Downed or damaged overhead power line response and repairs
- Calls to disconnect power for outside contractors and utilities

Services Provided by Siemens

- Siemens call and dispatch center (1-800-LIGHTS-ON) [NEED TO CHANGE] will be available to the City of Huntington Beach and the members of the community 24 hours a day, 7 days a week. For the convenience of your staff, access to report an outage will also be available via the internet
- Siemens provides all traffic control and safety equipment that is needed to protect technicians and the public
- Siemens will obtain all necessary CalTrans permits on State owned highways
- Coordination with city staff, residents, and businesses as needed for difficult access to lights
- Highly qualified and trained personal
- Fleet of specially outfitted vehicles, which are supplied with the latest tools and equipment
- Siemens will provide GIS map updates when new poles are added through developer or city projects.



Extraordinary Maintenance

Extraordinary maintenance includes all the labor and materials necessary to ensure the safe and efficient operation of the City's street lights that go beyond the normal routine maintenance programs established by this contract. Generally extraordinary maintenance involves the replacement of equipment damaged by Acts of God, civil disorder, vehicle collisions or vandalism, construction activities, metal fatigue or defects, or equipment failure due to age or deterioration. With the exception of pole knockdowns and other emergency situations, extraordinary maintenance requires written approval from the City of Huntington

Beach before any work is scheduled. Siemens will prepare estimates showing the cost breakdown of materials and labor for the services and submit this information to the City of Huntington Beach for approval. Extraordinary Maintenance is not included as a part of the pricing of this document and will be billed separately to the City following their approval of the work.

Response Time

Siemens shall respond onsite within one (1) hour of receiving the call for Emergency calls, 24 hours a day, 7 days a week, 365 days a year. Emergencies are defined as pole down, wiring down, or other street light material emergency that necessitates immediate response. Siemens shall respond within 5 days for non-emergency calls.

Knockdowns

Siemens will perform in-house or engage third party services for knockdown replacements.

Siemens will be responsible for the following knockdown repair tasks:

1. Replace knockdown with like pole
2. Identify ownership of pole and route service request appropriately
3. When necessary; cut bolts, chip down foundation and restore area to existing surrounding
4. Stock inventory of replacement streetlight poles with standard pole type
5. Communication and coordination with utility company
6. Supply city with a costed statement of service for knockdown when needed

Annual Knockdown Estimate

Based on historical data in Huntington Beach and the history of surrounding Cities, it is estimated Huntington Beach experiences approximately 50-70 knockdowns per fiscal year. Therefore, the City has established a threshold of fifty-five (55) streetlight knockdowns per City fiscal year to be included in the knockdown maintenance program.

If the City experiences more than fifty-five (55) knockdowns per fiscal year, the City will need to appropriate additional funds for repairs. If the City experiences less than fifty-five (55) knockdowns in a given fiscal year, The City will replace street light poles in poor condition. Suggested pole replacements will be provided in the quarterly maintenance report.

Knockdown Insurance Recovery

As the majority of the damage to street light poles is from automobile collisions, an insurance recovery program will need to be developed. This would involve a City resource that documents and tracks the insurance monies associated from an insured motorist. Siemens will provide the necessary documentation to the City for the insurance recovery process but will not be responsible for managing the insurance recovery process.

It is estimated that approximately 66% of automobile knockdowns claims are successfully recovered, as provided by other communities in the greater LA area. As such, the model of the knockdown program assumes that 36 of the 55 poles and related costs will be offset by insurance recovery.

Additions and Reductions of Poles

The City will have the ability to add or deduct poles to the maintenance program at any time during the contract. Requested additions or reductions can be made via email to the designated Project Manager. The City will receive an amendment to the contract stating the adjustment within thirty (30) days of the initial request. All alterations will reflect the current contract pricing.



Bill Auditing, Training

Siemens will provide two one-half day (4 hours) training sessions. Training will be to train city staff on best practices on how to add/delete pole and fixture type to inventory to minimize SCE billing errors. Training will include SCE representative and Siemens field personnel.

Siemens will dedicate a full day (8 hours) to training city staff in the procedures and best practices of bill auditing. Training will include print outs and basic manuals to help guide the staff after the training concludes. Training will be instructed by an experienced representative who will be available on an annual basis to review work and update staff on any new strategies of bill auditing.



4.5 Street Light Asset Cut Over, Web Portal and Asset Management

We recognize the speed, efficiency, and comprehensive service are the keys to customer satisfaction in our industry. During the City's transfer of ownership of the street light assets Siemens will provide the City of Huntington Beach our computerized maintenance tracking and asset maintenance tool for this project. The ability to manage your assets and our technicians and provide not only the city with this information, but to provide a portal to your local citizens to report any outages or issues with the streetlights/poles is critical to the city.

Street Light Asset Cut-Over

During the transfer of ownership of the street light assets Siemens will create the asset management database to be utilized by the City and maintenance staff. Siemens will work in partnership with the City to develop the best nomenclature for the new assets.

Customer Portal/Records

Information available to view or download through the Customer Service Portal includes:

- List of assets including defined equipment structure
- Asset map including Google Street View application
- Real-time status of scheduled maintenance
- Real-time status of service request calls
- History per functional location
- Overall historical maintenance and repair data
- Equipment inventories, maps, event reporting
- Digital photographs (status of equipment) via separate report if necessary

The information handled by the Siemens Service Database includes:

- Initial contract data
 - Start-End Date/included work/excluded work/limits
- Dispatch
 - Dedicated dispatcher/visual planning board/time stamping
- Preventive Maintenance
 - Scheduled Maintenance/Open ticket reports
- Customer Relationship
 - Agency Information/Contact information/notes
- Logistic Inventory/Procurement
 - Inventory data/real-time tracking
- Billing
- Asset Management
 - Equipment structure defined
- Utilization/Payroll
 - Hours billed

Portal Samples:

Service Notification Streetlight

Users of newer versions of Internet Explorer (9+) may experience problems with this web page. Please click the compatibility mode button or use another browser.

If this is an emergency, or if you would like to speak to someone directly, please call us 24 hours a day at 1-800-LIGHTS-ON (800.544.4876).

Street Light Information

Streetlight Pole Number <input type="text"/>	Address Nearest Pole <input type="text"/>	Where to Find the Pole Number 
Street * <input type="text"/>	Cross Street <input type="text"/>	
City * <input type="text"/>	State * Please select state <input type="text"/>	
Fixture Type Select The Fixture Type <input type="text"/>	Fixture Label Number <input type="text"/>	Where to find the fixture Label 
Fixture Label Color Please select <input type="text"/>		

Additional Pole Information

The Pole Type is ...	Is the Streetlight ...
<input checked="" type="radio"/> Wood	<input type="checkbox"/> Part of a traffic signal
<input type="radio"/> Metal	<input type="checkbox"/> In a parking lot
<input type="radio"/> Concrete	<input type="checkbox"/> In a park
<input type="radio"/> Decorative	<input type="checkbox"/> On the freeway
<input type="radio"/> Other	<input type="checkbox"/> Not on a pole

Figure 10. Customer Portal (1)

Tell us about the Problem

Type of Problem	Additional Location and Problem Information
<input type="checkbox"/> Light is completely out <input type="checkbox"/> Cycling - turns on and of <input type="checkbox"/> Day Burning - always on <input type="checkbox"/> Pole or Arm Bent <input type="checkbox"/> Pole or Arm Rusted <input type="checkbox"/> Arm Dangling <input type="checkbox"/> Fixture broken/damaged <input type="checkbox"/> Fixture missing <input type="checkbox"/> Wires exposed <input type="checkbox"/> Pole knocked down <input type="checkbox"/> Multiple Outages <input type="checkbox"/> Request for shielding <input type="checkbox"/> Request for new streetlight	<div style="border: 1px solid #ccc; height: 60px; width: 100%;"></div>

Your Contact Information (in case we have questions)

Your Name *	Email Address *
<input type="text"/>	<input type="text"/>
Daytime Phone Number	
<input type="text"/>	

Please type the characters you see in the image: *

0413

Figure 11. Customer Portal (2)

SIEMENS Service as a Global Concept

Siemens Global Website Siemens IC MOL RCM CS Customer #. 0030401585 City of Huntington Beach

Back

History for functional location 9461-0030401585-0000000004

Description: TS ANTELOPE RD / MARIPOSA AVE
 Customer: 0030401585
 Name: CITY OF CITRUS HEIGHTS
 Count of orders: 4
 Count of open orders: 0
 Count of maintenance orders: 4
 Count of response orders: 0
 Count of project orders: 0

Order ID	Order Type	Problem/Description	Technician	Region	Created On	Actual Finish	Actual finish	Technician final response
005100853131	Routine	ANTELOPE RD / MARIPOSA AVE	Gerald R Shefke	SII MOL RCM Sacramento	03/08/2014	03/31/2014	11:35 AM	121.1, 24.5. Dusted cabs. All good
005100853131	Routine	ANTELOPE RD / MARIPOSA AVE	Nicholas Maciejewski	SII MOL RCM Sacramento	03/08/2014	03/31/2014	11:35 AM	no problems found
005100883125	Routine	ANTELOPE RD / MARIPOSA AVE	Josef Rys	SII MOL RCM Sacramento	04/30/2014	05/29/2014	01:45 PM	Pm check completed ok.
005100907447	Routine	ANTELOPE RD / MARIPOSA AVE	Michael Dean	SII MOL RCM Sacramento	07/02/2014	07/30/2014	02:30 PM	ok at this time
005100939410	Routine	ANTELOPE RD / MARIPOSA AVE	Ruben Quiroz	SII MOL RCM Sacramento	08/29/2014	09/24/2014	12:30 PM	pm

Figure 12. Overview Status Page

IC MOL RCM CS Customer #. 0030401585 City of Huntington Beach

0401585-0000000004

7714 Mariposa Ave, Citrus Heights, California
 Address is approximate

Mariposa Ave
 Mariposa Ave

Fullscreen

description	Technician	Region	Created On	Actual Finish	Actual finish	Technician final response
ERD / MARIPOSA	Gerald R Shefke	SII MOL RCM Sacramento	03/08/2014	03/31/2014	11:35 AM	121.1, 24.5. Dusted cabs. All good.
ERD / MARIPOSA	Nicholas Maciejewski	SII MOL RCM Sacramento	03/08/2014	03/31/2014	11:35 AM	no problems found
ERD / MARIPOSA	Josef Rys	SII MOL RCM Sacramento	04/30/2014	05/29/2014	01:45 PM	Pm check completed ok.
ERD / MARIPOSA	Michael Dean	SII MOL RCM Sacramento	07/02/2014	07/30/2014	02:30 PM	ok at this time
ERD / MARIPOSA	Ruben Quiroz	SII MOL RCM Sacramento	08/29/2014	09/24/2014	12:30 PM	pm

Figure 13. Zoom Feature

5 Project Finance and Cash Flow

The Street Light Acquisition and Retrofit Program will produce a significant energy cost savings to the City. The annual energy savings in the first year is estimated at \$1,168,887 after installation. The initial investment to implement the SLARP is dependent on the financing mechanism and length of the finance period. The exact project cost to the city depends on the financing mechanism(s) and length of the finance period. This section discusses the multiple funding options available to the City and the potential impact to project costs and savings each mechanism yields.

5.1 Program Financing Options

California Energy Commission 1% Financing

The California Energy Commission (CEC) offers a 1% loan to municipal entities for qualified energy conservation projects. The LED street light retrofit portion of the SLARP would be considered an eligible project. The loan maximum is \$3 Million and is available on a first come first serve basis. An interested party must provide documentation of the energy savings potential of the project in the initial application and verification of installation and energy savings after acceptance. The project must meet a minimum of a 17 year simple payback and the loan term cannot exceed 20 years. Once the street light retrofit portion of the project is initiated, Siemens can provide assistance in securing this funding mechanism if the City would like to pursue this option.

South Coast Air Quality Management District Grant Funds- Rule 1304.1

The South Coast Air Quality Management District (SCAQMD) issued Rule 1304.1 which creates a potential grant funding mechanism for local environmental justice, air quality improvement and energy conservation projects. This mechanism would allow the City of Huntington Beach the opportunity to apply for grant funding for some or all of the energy conservation portions of the retrofit project. This would most likely be limited to the LED retrofit portion of the project.

Details of the application and project evaluation criteria have not been defined, as the mechanism structure is in development. Siemens has attended SCAQMD workshops to monitor the progress of this grant mechanism and was informed that the estimated award of funds will not be available until 2018. Siemens has also been in contact with the Project Manager of the grant and is aware that the next workshop may be scheduled in the Fall of 2015 or early 2016. Siemens will continue to monitor the progress of this and inform the City of any developments.

Other private financing options can be mutually explored.

5.2 City of Huntington Beach City Owned Lights Cash Flow Model

The following section provides the City of Huntington Beach a financial model of the SLARP with assumptions agreed upon with City staff. The assumptions included reflect the best available information of estimated costs and savings from the acquisition of the street lighting system over a 20 year period. The project cash flow model in Figure 14 shows the detailed results of the SLARP over the analysis period. The following section describes each line item in greater detail.

The annual estimated cost for the current HPS fixtures, owned by SCE and billed at the LS-1 rate, is shown in line A. The estimated increase in expected cost is projected over the 20 year period. This increase is based on the LS-1 cost trends over the previous 10 years.

The estimated cost of operating the system once the fixtures have been purchased by the City and retrofitted to LED, at the LS-2b rate, is shown in line B and reflects increases in cost based on historical data.

The anticipated SCE rebate is shown in line C, as a credit to the program and is estimated to be recovered over a two year period. The receipt of the rebate funds will occur at the completion of each installation phase. The rebate is calculated on the first year energy savings and includes a rebate enhancement due to the City's participation in the SCE energy efficiency partnership program.

The street light maintenance and knockdown maintenance programs, on line D and E respectfully, reflect the estimated annual costs for maintaining the street light system. In years 11-20 the additional cost of materials are included, as the manufacturer warranty is limited to the first 10 years after installation. It is estimated that fixture failure may increase in later years and the estimated increase results in a replacement of 47% of the entire stock in years 11-20.

The knockdown insurance recovery reflects the assumed recovery rate of 66% and is shown as a credit to the program to offset the knockdown maintenance cost on line F.

The project lease payments reflect the annualized cost for financing the project with a 2.75% for private financing, as shown on line G. Line H is reserved for potential CEC financing. CEC financing is dependent on availability and as such this rate was not included in this analysis.

Line I represents a secondary LED replacement account that will be established to ensure funding is available for future street lighting replacements, once the initial fixtures have reach the end of their useful life.

The summation of lines B through I represent the cost of operating the newly acquired streetlight system. The difference in the pre-acquisition cost and the post-acquisition cost represents the annual cash flow from this project, as shown in line L.

The 20 year Street Light Acquisition and Retrofit Program is estimated to yield a total savings to the City of \$10,810,557. This is adjusted to a net present value of \$4,485,619 over the term with a 5% discount rate. This yields a return on investment of 1.3, considering the initial investment of \$1,000,000 of capital funds and a debt finance of \$7,474,150.

City of Huntington Beach Loan Program of 10 Years														
Street Light Acquisition and Retrofit Project Cashflow														
Year	1	2	3	4	5	6	7	8	9	10	11	12-20*	Totals	
A	Pre-Acquisition SCE Cost	\$ 1,644,839	\$ 1,689,833	\$ 1,736,090	\$ 1,783,646	\$ 1,832,538	\$ 1,882,805	\$ 1,934,485	\$ 1,987,620	\$ 2,042,250	\$ 2,098,420	\$ 2,156,173	\$ 22,289,237	\$ 43,077,936
B	Post-Acquisition SCE Cost	\$ 475,952	\$ 488,785	\$ 501,974	\$ 515,530	\$ 529,461	\$ 543,781	\$ 558,498	\$ 573,625	\$ 589,174	\$ 605,155	\$ 621,582	\$ 6,413,568	\$ 12,417,086
C	SCE Rebate	\$ (456,889)	\$ (456,889)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (913,779)
D	Street Light Maintenance Cost	\$ 104,318	\$ 152,353	\$ 155,400	\$ 158,508	\$ 161,678	\$ 164,912	\$ 168,210	\$ 171,574	\$ 175,006	\$ 178,506	\$ 268,218	\$ 3,811,563	\$ 5,670,248
E	Knockdown Maintenance Cost (55 poles/year)	\$ 361,310	\$ 368,536	\$ 375,907	\$ 383,425	\$ 391,094	\$ 398,915	\$ 406,894	\$ 415,032	\$ 423,332	\$ 431,799	\$ 440,435	\$ 4,382,205	\$ 8,778,884
F	Knockdown Insurance Recovery (36 poles/year)	\$ (236,663)	\$ (241,053)	\$ (245,874)	\$ (250,792)	\$ (255,808)	\$ (260,924)	\$ (266,142)	\$ (271,465)	\$ (276,894)	\$ (282,432)	\$ (288,081)	\$ (2,866,326)	\$ (5,742,456)
G	Project Lease Payment (Private Loan @ 2.75%)	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ 855,740	\$ -	\$ -	\$ 8,557,396
H	Project Lease Payment (CEC Loan @ 1%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
I	Secondary LED Replacement Account	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 87,500	\$ 262,500	\$ 2,362,500	\$ 3,500,000
J	Post Acquisition Total Annual Cost	\$ 1,191,267	\$ 1,254,971	\$ 1,730,647	\$ 1,749,911	\$ 1,769,665	\$ 1,789,924	\$ 1,810,699	\$ 1,832,006	\$ 1,853,857	\$ 1,876,267	\$ 1,304,654	\$ 14,103,510	\$ 32,267,379
K														
L	Total Cash Flow (Pre-Acquisition less Post-Acquisition)	\$453,571	\$434,862	\$5,443	\$33,735	\$62,873	\$92,881	\$123,786	\$155,614	\$188,393	\$222,153	\$851,519	\$8,185,727	\$10,810,557
M	Cumulative Cash Flow	\$453,571	\$888,433	\$893,876	\$927,612	\$990,485	\$1,083,365	\$1,207,151	\$1,362,765	\$1,551,158	\$1,773,311	\$ 2,624,830	\$ 10,810,557	\$10,810,557

* Maintenance cost projections in years 11-20 include fixture costs, as material warranty concludes in year 10.

Street Light Acquisition & Fixture Replacement Loan Detail	
Total Loan Amount	\$ 8,474,150
Capital Contribution	\$ (1,000,000)
Net Loan Amount	\$ 7,474,150
	Private Loan CEC Loan
Loan Amount	\$ 7,474,150 \$ -
Interest Rate (assumed)	2.75% 1.00%
Loan Term (years)	10.0 10.0
Payments per year	12.0 12.0
Annual Loan Payment	\$ 855,740 \$ -
Finance Subtotal	\$ 8,557,396 \$ -
Total Debt Amount	\$ 8,557,396
Savings Detail and Assumptions	
Total Program Savings	\$ 10,810,557
20 Year NPV (5% Discount Rate)	\$ 4,485,619
Energy Charge Cost Escalation	2%
Distribution Charge Cost Escalation	3%

Possible SCE Rebate	
Annual Energy Savings (kWh)	3,514,534
Rebate Rate per kwh	\$ 0.26
Total Rebate*	\$ 913,779

Project Costs	
FIM 1a- SCE LS-1 Buy Back	\$ 4,358,350
FIM 1b- City Cut-Over	\$ 420,462
ECM LED Street Light Retrofit	\$ 3,695,338
Total Financed Cost	\$ 8,474,150

Figure 14. 20 year Project Cash Flow

5.3 Financial Scenarios

It is assumed that the project will be financed and is dependent on the finance rate(s) and any capital contribution the City may include. Many financial scenarios are possible and Figure 15 depicts three potential scenarios held at a fixed finance rate of 2.75% and including a varying capital contribution of \$1 Million, as included in the cash flow model above, and two other scenarios with a capital contribution of \$0 and \$2 Million respectively. In addition, the “business as usual” scenario is also depicted to highlight the savings potential each scenario offers.

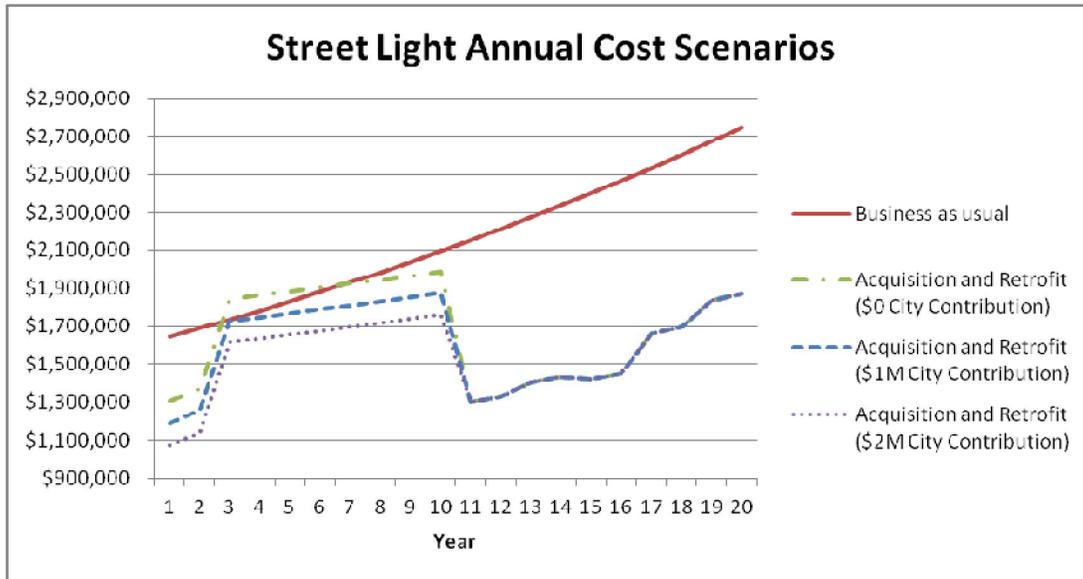


Figure 15. Annual Cost Scenarios

If the City does not purchase the street light assets from SCE and continues to pay the LS-1 tariff rate, the City will spend an estimated \$43,020,391 for 20 years of street lighting service from SCE. If the City purchases the street light assets and retrofits them to LED the estimated savings varies depending on the finance rate and capital contribution from the City. The three scenarios presented in Figure 15 are estimated to yield the following savings:

	10 Year Program Savings	20 Year Program Savings	20 Year Program Savings NPV*
Acquisition and Retrofit (\$0 City Contribution, 2.75% IR)	\$628,379	\$9,665,625	\$4,596,013
Acquisition and Retrofit (\$1M City Contribution, 2.75% IR)	\$1,773,311	\$10,810,557	\$4,485,619
Acquisition and Retrofit (\$2M City Contribution, 2.75% IR)	\$2,918,243	\$11,955,489	\$4,375,226

Figure 16. Scenario Savings Estimates

The result of these scenarios in Figure 16, show that with higher capital contribution the City will yield a higher program savings, as it reduces associated finance costs. An increase in capital contribution also impacts the overall Net Present Value of each scenario as the upfront investment is included as a negative outlay in year 0 of the cash flow.

6 Conclusion

The street light retrofit program described in this IGA report has the potential for energy and cost savings of 70 Million kWh and over \$10 Million during the 20 year period after acquisition and retrofit to LED technology. Siemens recommends that the City pursue the acquisition of the assets from SCE and Siemens will provide the associated retrofit and maintenance services of the newly acquired street light system. Siemens would like to thank the City for the partnership during this process and looks forward to further assisting the City in this effort.

7 Validity

This quote is valid for 90 days from the date indicated on the front cover. After this date the City will need to request updated pricing.

8 Assumptions

Siemens assumes the following:

- Siemens has offered the Maintenance Contract portion of the proposal at a standard yearly rate. As various material and labor costs may change due to several factors including material costs and prevailing wage, each year beginning in year two Siemens will evaluate these costs and the Consumer Price Index and submit changes to the City to be reflected in the price for that year.
- Industry standard warranty terms are 10 years. Although it is believed that LED fixtures last much longer than this time period, LED technology has not been in practical use for the 22 years assumed for life of product. Additionally, LED lights lose light value over time. Siemens cannot be responsible for light degradation and light levels beyond 10 years. Additionally, all technology is rapidly growing including LED technology. Siemens does not offer any guarantee that the installed fixtures will not reach obsolescence during the maintenance contract. Any obsolete fixtures that require replacement will be billed separately.
- Siemens remains vendor neutral concerning this proposal. After Siemens has been awarded a Letter of Intent from the City and within 30 days of implementation and final award, Siemens will open the procurement of approved fixtures and subcontracting activities to a formal bidding process in order to allow the market to determine the best possible price to benefit the City.

9 Terms and Conditions

Siemens offers the following Contract Terms and Conditions. While this document does not reflect a firm offer, we ask that the City's Legal Counsel review this proposed document and return to Siemens with any changes. We feel this will drastically reduce the negotiation phase and allow all parties to enter into the final proposal with fewer changes needed.

AGREEMENT FOR THE PURCHASE AND INSTALLATION OF ENERGY CONSERVING STREET LIGHTS

This Performance Service Agreement (the "Agreement") is made and entered into on this, the day of by and between Siemens Industry, Inc., a Delaware Corporation, (herein "Contractor"), and City of Huntington Beach a charter City and municipal corporation duly organized and existing under the Constitution and laws of the State of California, 2000 Main Street, Huntington Beach, CA 92648 (herein "City"), collectively, ("Parties").

RECITALS

- A. The City council declares its intention of reducing energy consumption within the City.
- B. The City and Contractor entered into discussions with regard to reducing energy consumption in the City by way of street light repair, maintenance and replacement. Said discussions were memorialized in a letter of intent which was executed by Parties on February 4, 2013. By execution of this agreement, the letter of intent is terminated, except as provided in Section 2. A. 1. below.
- C. The City desires to retain a Contractor having special skill and knowledge in the field of furnishing, and installing energy conservation measures to minimize energy consumption within the City including the replacement and installation of street lights and area and drive aisle lighting in designated parking areas in the City and related equipment and materials.
- D. Contractor represents that Contractor is able and willing to provide such services to the City.
- E. Contractor represents that it has conducted energy efficiency tests of City street lights, utilizing best practice techniques available for Verifying the results of energy efficiency, to determine the energy savings that the City will recognize as a result of implementing recommended energy efficiency measures.
- F. Contractor has been selected to perform these services pursuant to the Huntington Beach Charter, Municipal Code and California Government Code Section 4217.12.

G. Contractor represents that it has complied with all City and State laws and regulations including, but not limited to, all applicable City contract bid requirements and prevailing wage requirements.

H. In undertaking the performance of this Agreement, Contractor represents that it is knowledgeable in its field and that any Services performed by Contractor under this Agreement will be performed in compliance with such standards as may reasonably be expected from a professional consulting firm in the field and undertakes this Agreement based on law, code, standards, in effect at the date of this Agreement.

NOW, THEREFORE, in consideration of the mutual and respective promises, and subject to the terms and conditions hereinafter set forth, the parties agree as follows:

SECTION 1. DEFINITIONS.

The following definitions shall apply to this Agreement unless otherwise defined herein:

“Acceptance” means the City has signed the Certificate of Substantial Completion.

“Acceptance Date” means the date on which the City signs the Certificate of Substantial Completion.

“Annual Debt Service” means the total amount of annual payments made by the City pursuant to the Lease Purchase Agreement authorized to finance the energy conservation measures.

“Annual Performance Guaranteed Periods” means the periods of time beginning with the first day of the month following the Acceptance Date and continuing for one (1) year periods for Ten years or the date the City pays the debt incurred pursuant to this agreement whichever is earlier.

“Annual Project Costs” means all costs incurred by City in one year relating to this Agreement.

“Actual Annual Project Savings” means the measured amount of cash and energy savings City recognizes in one year as a result of Facility Improvement Measures and energy conservation measures. The calculations to arrive at the Actual Annual Project Savings are set forth in Exhibit C attached hereto and incorporated herein by reference and shall

be updated annually during the Annual Performance Guaranteed Periods to reflect actual savings amounts.

“Annual Guarantee” means Actual Annual Project Savings shall be an amount equal to or greater than the Annual Debt Service the City incurs annually. If the Actual Annual Project Savings is less than the Annual Debt Service, there is a Shortfall. In the case of a Shortfall, Contractor shall reimburse to City the amount of the Shortfall. Said Guarantee is set forth in Exhibit C attached hereto and incorporated herein by reference.

“Commencement Date” means the effective date of this Agreement.

“Construction Period” means the period from the Commencement Date of this Agreement to the Acceptance Date.

“Construction Period Savings” means the actual amount of cash and energy savings the City recognizes as a result of Facility Improvements Measures during the Construction Period.

“Energy Escalation Factor” means an annual escalation percentage to be applied to the previous year’s Energy Savings as set forth in Exhibit C. Each year during the Annual Performance Guarantee Periods, the escalation factor shall be adjusted on the Exhibit C Project Cash flow calculation to equal the actual escalation factor(s) for each annual period as per SCE’s applicable rate tables.

“Facilities” means those street lights and parking garage lights as set forth in Exhibit A Scope of Services, attached hereto and incorporated herein by reference.

“Facility Improvement Measures (FIM) or (FIM's)” means various items of equipment and lights repair or replacement by the Contractor at the Facilities, or as repaired by the City hereunder, for the purpose of improving the efficiency of utility consumption or otherwise to reduce utility costs of the Facilities as set forth in Exhibit A.

“Projected Annual Project Savings” means the amount of cash and energy savings City is projected to recognize in one year as a result of Facility Improvement Measures. The calculations to arrive at the Projected Annual Savings have been conducted utilizing best practice techniques available for verifying the results of energy efficiency.

“Scope of Work” means the implementation of the FIM's to be performed as fully set forth in Exhibit A attached hereto and incorporated herein by reference.

SECTION 2. SCOPE OF SERVICES.

A. Contractor's Responsibilities:

1. Contractor agrees to install, warrant and guarantee certain energy FIM's as fully set forth herein, including Exhibit A, Scope of Work, Special Provisions, as well as any unfinished provisions contained in the letter of intent dated February 4, 2013, attached hereto and incorporated herein by reference.

2. Contractor guarantees that the Annual Project Savings shall be an amount equal to or greater than the Annual Debt Service the City incurs annually. If the Actual Annual Project Savings is less than the Annual Debt Service, there is a Shortfall. In the case of a Shortfall, Contractor shall reimburse to City the amount of the Shortfall. Details of said guarantee are fully set forth in Exhibit C.

3. Contractor shall designate a person to be known as the Contractor Representative to act as a single point of contact on behalf of Contractor with respect to all matters under this Agreement. Contractor Representative will become familiar with the progress and quality of the completed work as set forth in this Agreement.

4. Contractor shall comply with all City, State and Federal laws related to waste disposal including disposal of fluorescent lights, ballast with PCB and regular ballast. Contractor shall provide disposal manifest if requested.

B. City Responsibilities:

1. City shall designate a City Representative as the point of contact to interact with Contractor regarding to the Scope of Work.

2. City shall furnish Contractor with blueprints, surveys, legal descriptions of the site, and other information regarding the Facilities as Contractor may reasonably request in order to complete Scope of Work and maintain the Annual Guarantee provided said documents are readily available to City. These shall not become the property of Contractor and shall be returned to City, unless otherwise requested by Contractor, in which case Contractor shall bear the cost of all blueprints and copies necessary to perform the Scope of Work in this Agreement.

3. City shall within ten (10) business days, respond to samples or documents submitted by Contractor to the City for review and approval under this Agreement.

4. City shall provide reasonable access to City facilities in order to accomplish the Scope of Work.

5. City shall operate equipment according to the manufacturer's

recommendations.

6. City shall notify Contractor in writing of any City policies that may affect the Scope of Work.

7. City shall notify Contractor of any unusual operating conditions.

8. City shall control and/or operate all equipment necessary to perform the services herein described as arranged with Contractor representative.

SECTION 3. TERM.

This Agreement shall commence on the date first written above and terminate 24 months from commencement date, unless terminated earlier in accordance with the provisions as set forth below except that the warranty and guarantees provided by Contractor herein which shall continue for ten (10) years or the date the City pays the debt incurred pursuant to this agreement whichever is earlier.

SECTION 4. PAYMENT.

A. TOTAL COST. Total installation job costs for complete scope of work, including any feasibility study is in an amount not to exceed \$_____. The City will make progress payments as provided herein.

B. ACCEPTANCE.

1. When Contractor believes that all of a definable phase, of the Scope of Work has been completed in accordance with the terms of this Agreement, Contractor will submit to the City a progress payment estimate. If the Scope of Work substantially conforms to the description of said Scope of Work the City will sign the progress payment estimate and submit to the City for payment to the Contractor. Progress payment estimates are submitted to the City monthly and paid within 30 days. If the Scope of Work does not substantially conform, then the City Representative shall so notify Contractor within ten (10) business days of receipt of the aforementioned progress payment estimate. Upon notification of the discrepancies the Contractor shall correct the discrepancies to conform with the Scope of Work and resubmit the progress payment estimate to the City, the process will continue until the City determines the Scope of Work meets the City requirements. City will retain 10% of total project cost until City signs the first progress payment estimate. This process will continue until all independent or definable phases are complete as follows: when Contractor has, in the judgment of City, faithfully executed percent (50%) or more of the value of the work as determined from Scope of Work, and if the City finds that satisfactory progress has been and is being made, City will sign second progress payment estimate at which time Contractor may be paid such sum as will bring the payments of each

month up to one hundred percent (100%) of the value of the work completed since the commencement of the Scope of Work, as determined in its sole discretion by City, less all previous payments and less all previous retained amounts. City's final payment to Contractor, if unencumbered, or any part thereof unencumbered, shall be made no later than thirty-five (35) calendar days after the acceptance of all work performed pursuant to the Scope of Work and the final Certificate of Substantial Completion is signed. Payments shall be made on demands drawn in the manner required by law, each payment to be accompanied by a progress payment estimate signed by City, affirming that the work for which payment is demanded has been performed in accordance with the terms of this Agreement and that the amount stated in the progress payment estimate is due under the terms of this Agreement. Partial payments on the contract price shall not be considered an acceptance of any part of the work.

2. Energy savings measurement and verification are to be completed within ninety (90) days of substantial completion of installation and testing phase. See Exhibit C

3. In the event City and Contractor do not agree on scope and/or quality, or acceptability, of the work completed, City may suspend payment and notify Contractor of failure to complete Scope of Work pursuant to this Agreement. Said non-payment will not constitute default. If the City becomes more than thirty (30) business days overdue on any progress payment, Contractor may elect to suspend working. If work is suspended due to non-payment all guarantees and warranties are extended in an equal time period from the original or last extended invoice date. If City fails to provide Contractor written notice within one hundred and twenty days (120) days to proceed with the Work, Contractor, may at its sole discretion, terminate the Agreement without liability.

4. When Contractor believes that all or an independent, definable phase, of the Scope of Work has been completed in accordance with the terms of this Agreement,

Contractor will submit a Certificate of Substantial Completion to the City. If the Scope of Work substantially conforms to the description of said Scope of Work the City will sign the Certificate of Substantial Completion and return it to Contractor. If the Scope of Work does not substantially conform, then the City Representative shall so notify Contractor within ten (10) business days of receipt of the aforementioned certificate. Upon notification of the discrepancies the Contractor shall correct the discrepancies to conform with the Scope of Work and resubmit the Certificate of Substantial Completion to the City.

5. Contingency funds identified in Exhibit B Schedule of Values may be accessed and managed by Parties. Contingency funds may not be withdrawn or used without mutual written approval which shall not be unreasonably withheld. Unused contingency funds at project completion shall be deducted from the not to exceed price and/or returned to the City within thirty (30) days of project completion.

C. ENERGY EFFICIENCY CREDIT. Contractor shall cooperate with the City and Southern California Edison (SCE) to assist the City in obtaining the maximum energy efficiency incentives/credits and/or otherwise as named, offered by SCE. Any incentives shall be transferred by SCE to the City and Contractor shall not retain any such incentives/credits etc.

D. Currently, Internal Revenue Code Section 179D (section "179D") does not provide tax incentives for this light replacement project as described herein. However, if Section 179D is amended to allow incentives such as accelerated depreciation benefits, the City may designate at its sole discretion, any eligible entity as the "Designer" of the energy efficient improvements for the purposes of allocating accelerated depreciation benefits pursuant to Section 179D. If the City designates the Contractor as the Designer or if Contractor shall otherwise benefit financially from the monetization of the accelerated depreciation benefit, Contractor shall discount this Contract price or provide a cash rebate to the City in an amount equal to 50% of the incremental financial benefit realized by Contractor as a result of the tax benefit or the monetization thereof. The City may retain a third party consultant ("EP Act Coordinator") to calculate, manage and administer the process of obtaining and monetizing any IRS deductions resulting from this Agreement. Contractor will provide reasonable cooperation with regard to any effort to obtain and/or monetize IRS rebates, depreciation benefits etc.

SECTION 5. FINANCING.

At the City's sole discretion, as a condition precedent to this Agreement, an Escrow Fund shall be created and funded pursuant to a Lease/Purchase and Escrow Agreement. If the Escrow Fund is not funded or the City has not obtained credit approval within forty-five (45) days from the execution of this Agreement, this Agreement shall be voidable at the sole discretion of the City. This forty-five (45) day period may be extended as mutually agreed upon in writing by both parties. In the event that this Agreement becomes void as described in the preceding paragraph the City will reimburse for any work the City authorized in writing to be completed.

¹ The determination of rebate versus discount will be determined by City at its sole discretion.

SECTION 6. AUTHORITY AND AUTHORIZATION.

City and Contractor each represent, warrant and covenant that each has done all things commercially reasonable necessary to preserve and keep in full force and effect the existence of this Agreement, all requirements have been met and procedures have been followed to ensure the enforceability of this Agreement and there is not any pending, or to the best of City's knowledge, threatened, suits or actions, litigation or proceedings against or affecting City that affects the validity or enforceability of this Agreement.

SECTION 7. WARRANTY.

A. Contractor expressly warrants that all electronic drivers are free from defect and will operate for ten years without failure provided said equipment is operated according to Contractor and manufacturer specifications. Contractor expressly warrants that all light fixtures are free from defect and will operate for ten years without failure provided said equipment is operated according to Contractor and manufacturer specifications. Contractor expressly warrants that all underground utilities are free from defect and will operate for ten years without failure

provided said equipment is operated according to Contractor and manufacturer specifications. One (1) year labor warranty.

B. Contractor warrants for one year from Acceptance Date, that all equipment manufactured by Contractor or nameplate shall be free from defects in material and workmanship which arise from normal use or service, provided the equipment is properly operated in accordance with Contractor's instructions. If any equipment should prove defective in this warranty, Contractor will at Contractor's option, repair, replace, or issue credit for any such item. For materials furnished but not manufactured by Contractor nor bearing Contractor's nameplate, Contractor will extend the same warranty Contractor received from the manufacturer.

C. This express warranty is in lieu of and excludes all other warranties, guarantees, or representations, expressed, or implied including warranties of merchantability or of fitness for a particular purpose.

SECTION 8. LIMITATION OF WARRANTIES.

Contractor has provided City with certain written warranties with respect to the FIM's. Except for such warranties in this Agreement, Contractor makes no warranty of any kind or nature, express or implied, relating to the FIM's or its performance or the installation and service thereof. No assignee(s) of the Contractor to this Agreement may make warranties of any kind or nature, express or implied, relating to the FIM's or the performance or the installation and service thereof. THE FOREGOING IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY CONTRACTOR. CONTRACTOR EXPRESSLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RELATION TO THIS AGREEMENT.

SECTION 9. INDEMNIFICATION AND HOLD HARMLESS.

Contractor hereby agrees to protect, defend, indemnify and hold harmless City, its officers, elected or appointed officials, employees, agents and volunteers from and against any third party tangible property claims, damages, losses expenses, judgments, demands and defense costs including without limitation costs and fees of litigation of every nature or liability of any kind or nature arising out of or in connection with Contractor's or Contractor's: sub-Contractors, if any, negligent or alleged negligent performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement including any failure by its officers, agents or employees except such loss or damage which is caused by the negligence or willful misconduct of CITY. Contractor shall be informed immediately of any third party claim and Customer is expressly prohibited from acknowledging or settling any third party claim directed at Contractor under this project Agreement. Contractor will conduct all defense at its sole cost and expense. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as limitation upon the amount of indemnification to be provided by Contractor. Contractor indemnity obligations shall terminate coincidental with completion of the warranty period term. Contractors' and contractor's subcontractors total liability arising under this Agreement shall not reach or exceed fifty percent (50%) of the value of the contract Agreement.

SECTION 10. FORCE MAJEURE.

Except for any obligation to pay money under this Agreement, if either party shall be delayed in or prevented from the performance of any of the terms, covenants and conditions of this Agreement, by reason of restrictive governmental laws or regulations, riots, insurrections, war, sabotage, act of nature, or any other reason of a similar or dissimilar nature not the fault of the party delayed in or prevented from performance, then performance shall be excused for the period of the delay or prevention of performance and the time for performance shall be extended for an equivalent period not to exceed six (6) months otherwise this Agreement will be null and void and Contractor shall be reimbursed for all costs.

SECTION 11. TITLE.

Title to the FIM's implemented at City's facilities is deemed to be free and clear of any liens created by Contractor. Should it become necessary, at the request of the City, Contractor or its Assignee agrees to execute any appropriate documents submitted by the City to the Contractor or its Assignee evidencing such right, title and interest in the FIM's.

SECTION 12. USE, REPAIRS.

City, except as warranted herein, at its sole cost and expense, shall maintain the FIM's according to the manufacturers recommended guidelines or the equivalent and meet any and all re—certification requirements and shall furnish proof of such maintenance, if requested by Contractor. City shall furnish all needed servicing and parts, which parts shall become part of the FIM's. This section refers to standard manufacturers recommended electrical equipment maintenance as is normally performed by City personnel on existing mechanical equipment during regular business operations.

SECTION 13. INSURANCE.

Prior to undertaking performance of work under this Agreement, Contractor shall maintain and shall require its subcontractors, if any, to obtain and maintain insurance as described below:

A. Commercial General Liability Insurance: Contractor shall maintain commercial general liability insurance adding the City its officer, agents, volunteers, and employees as additional insured(s) and shall include, but not be limited to protection against claims arising from bodily and personal injury, including death resulting there from and damage to property, resulting from any act or occurrence arising out of Contractor's operations in the performance of this Agreement, including, without limitation, acts involving vehicles. The amounts of insurance shall be not less than the following; single limit coverage applying to bodily and personal injury, including

death resulting there from, and property damage, in the total amount of \$1,000,000 per occurrence. Contractor shall supply City with a Certificate of Insurance adding language substantially in the form attached hereto as Exhibit C and incorporated herein by reference upon execution of this Agreement shall to be approved in form by the City Attorney.

B. Business automobile liability insurance, or equivalent from, with a combined single limit of not less than \$1,000,000 per occurrence. Such insurance shall include coverage for owned, hired, and non-owned automobiles.

C. Worker's Compensation Insurance. In accordance with the provisions of Section 3300 of the Labor Code, Contractor, if Contractor has any employees, is required to be insured against liability for worker's compensation or to undertake self-insurance. Prior to commencing the performance of the work under this Agreement, Contractor agrees to obtain and maintain any employer's liability insurance with limits not less than \$1,000,000 per accident,

D. If Contractor is or employs a licensed professional, such as an architect or engineer: Professional liability (errors and omissions) insurance, with a combined single limit of not less than \$1,000,000 per claim,

E. The following requirements apply to the insurance to be provided by Contractor pursuant to this section:

1. Contractor shall maintain all insurance required above in full force and effect for the entire period covered by this Agreement.

2. Certificates of insurance shall be furnished to the City upon execution of this Agreement and shall be approved in form by the City Attorney.

3. Certificates and policies shall state that the policies shall not be canceled or reduced in coverage or changed in any other material aspect without thirty (30) days prior to written notice to the City.

F. If Contractor fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the City with required proof that insurance has been procured and is in full force and paid for, the City shall have the right, at the City's election, to forthwith terminate this Agreement. Such termination shall not affect Contractor's right to be paid for its time and materials expended prior to notification of termination. Contractor waives the right to receive compensation and agrees to indemnify the City for any work performed prior to approval on insurance by the City.

SECTION 14. TERMINATION.

A. This entire Agreement may be terminated by the City at its sole discretion, including breach of contract upon thirty (30) days written notice of termination. In such event, Contractor shall be entitled to receive and the City shall pay Contractor for all services performed by Contractor prior to receipt of such notice of termination, subject to the following conditions:

1. As a condition of such payment, the City Manager may require Contractor to deliver to the City all work product completed as of such date, and in such case such work product shall be the property of the City unless prohibited by law, and Contractor consents to the City's use thereof for such purposes as the City deems appropriate.
2. Payment need not be made for work which fails to meet the standard of performance specified in the Recitals of this Agreement.
3. In the event of breach of contract by City and ensuing termination by Contractor, Contractor shall be fully paid as if termination had occurred for the convenience of the the City as set forth in paragraph B, below.

B. This Agreement may be terminated for convenience at the sole discretion of either party (City or Contractor) by mutual agreement. Termination for convenience shall entitle Contractor to be paid for all services performed prior to such termination and shall include reasonable payment for demobilization expenses including, but not limited to, restocking fees for project materials and equipment return charges. As a condition of such payment, the Executive Director may require Contractor to deliver to the City all work product completed as of such date, and in such case such work product shall be the property of the City unless prohibited by law, and Contractor consents to the City's use thereof for such purposes as the City deems appropriate. Payment need not be made for work which fails to meet the standard of performance specified in the Recitals of this Agreement.

C. If a dispute arises in connection with this contract, the responsible representatives of the parties shall attempt, in fair dealing and good faith, to settle such dispute. Upon request of a party a senior management representative of each party shall participate in the negotiations. Each party shall be entitled to terminate these negotiations by written notification to the other party at any time.

The parties shall attempt to agree on a procedure for Alternative Dispute Resolution (ADR) and the applicable procedural rules (including time limits) within fourteen (14) days after a termination notice has been received by the other side. If the parties fail to agree on an ADR procedure within this time limit, each party shall be entitled to refer the dispute to arbitration.

All disputes, controversy or claim arising out of or in connection with this contract, which are not resolved by negotiation or an ADR procedure, including but not limited to any question regarding the termination or any subsequent amendment of the contract, shall be finally settled in accordance with the rules then in force of the American Arbitration Association, and judgment upon the award rendered through arbitration may be entered in any court having jurisdiction.

SECTION 15. ASSIGNMENT

- Without City prior written consent, or except in the context of a lease financing,
1. Contractor shall not assign, transfer, pledge, hypothecate or grant any security interest in, or otherwise dispose of this Agreement or any interest in this Agreement or the FIM's, sublet or lend the FIM's or permit the FIM's to be used by anyone other than City or City's employees. Contractor assignment or transfer of any rights, duties or obligations under this Agreement, shall be subject to the prior written approval of the City, which shall not be unreasonably withheld, conditioned or delayed. As a reasonable condition of approval of assignment, prior to any assignment, or transfer of any rights, duties or obligations by Contractor under this Agreement, to any party or parties to whom all or any portion of the interest herein, is conveyed, the Contractor shall present such information to the City as shall reasonably be necessary to demonstrate to the City's reasonable satisfaction that the proposed assignee has the financial ability and experience to fulfill those specific rights, duties and obligations under this Agreement that the transferee will assume. City may at its sole and absolute discretion withhold approval of assignment if at City's sole discretion finds the proposed assignee does not have the financial ability and experience to fulfill those specific rights, duties and obligations under this Agreement, however, that Siemens may assign, delegate, or transfer any and all of its rights and obligations without the prior written consent of the CITY to a Siemens Affiliate. In case of such a transfer the respective party shall take care that the transferee, assignee or successor will comply with this Agreement.

SECTION 16. AMENDMENTS.

All amendments or modification of the terms of this Agreement must be accomplished by written consent of City and Contractor, and its Assignee, if any.

SECTION 17, NOTICES.

Any notices, certificates, or other communications hereunder shall be given either by personal delivery to CONTRACTOR or to CITY as the situation shall warrant, or by enclosing the same in a sealed envelope, postage prepaid, and depositing the same in the United States Postal Service, to the addresses specified below. CITY and CONTRACTOR may designate different addresses to which subsequent notices, certificates or other communications will be sent by notifying the other party via personal delivery, a reputable overnight carrier or U. S. certified mail-return receipt requested:

TO CITY:

City of Huntington Beach
 ATTN: Travis Hopkins
 2000 Main Street

TO CONTRACTOR:

Siemens Industry. Inc.
 Attn. Michael Diaz & Steven Teal
 1266 North La Loma Circle

Huntington Beach, CA 92648

Anaheim, CA 92806

SECTION 18. GOVERNING LAW.

This Agreement shall be governed by the provisions hereof and by the laws of the State of California.

SECTION 19. CONFLICTS

In the event there is a conflict between the terms contained in the Letter of Intent or any Exhibits or attachments and the terms and conditions contained herein, the terms and conditions of this Agreement supersede and take precedent over any other terms and conditions.

SECTION 20. INDEPENDENT CONTRACTOR

Nothing contained in this Agreement will be deemed or construed for any purpose to establish between the parties a partnership or joint venture, a principal-agent relationship, employee-employer relationship, or any relationship other than City and supplier.

SECTION 21. ENTIRE AGREEMENT.

This Agreement together with the attachments and exhibits attached hereto and made a part hereof and other attachments hereto, and other documents or instruments executed by City and Contractor in connection herewith, constitute the entire Agreement between the parties with respect to the purchase of the FIM's. All previous proposals, oral or written communication, engineering information or written communication are superseded by this Agreement.

SECTION 22. SEVERABILITY.

Any provision of this Agreement found to be prohibited, shall be ineffective to the extent of such prohibition without invalidating the remainder of this Agreement and all other provisions shall remain in full force and effect.

SECTION 23. WAIVER.

The waiver by a Party of any breach by the other Party of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach hereof.

SECTION 24. BONDS.

A. Before Contractor performs any work pursuant to this Agreement Contractor shall cause to be filed with City four (4) duplicates of each Performance Bond and Payment Bond, in the form attached hereto as Exhibits D and E, respectively, and incorporated herein by this reference, required under this section. These bonds shall be in the amounts and for the purposes specified below. The surety bonds shall be issued by a California Admitted Surety; and, either a current A.M. Best A:VIII rated Surety or an admitted surety insurer which complies with the provisions of the California Code of Civil Procedure §995.660.

B. Should any surety or sureties upon said bonds or any of them become insufficient, Contractor shall obtain replacement bonds with good and sufficient sureties within ten (10) days after receiving notice from City that the surety or sureties are insufficient.

C. Performance Bond. Contractor shall deliver to City an executed Performance Bond in favor of City on a form reasonably acceptable to City and equal in amount to 100% of the contract sum of such Contractor's Construction Contract, as security for the faithful performance by such Contractor including the warranty period of one-year.

D. Payment Bond. Contractor shall deliver to City an executed Payment Bond in favor of City in an amount equal to 100% of the contract sum of such Contractor's Construction Contract as security for the payment of all persons performing labor and furnishing materials under such Contractor's Construction Contract.

SECTION 25. SPECIFIC EXCLUSION OF REMEDIES.

Contractor waives any claim or right to damages either in law or equity against the City regarding the enforceability of the process to award this Agreement to Contractor.

SECTION 26. WAIVER OF CONSEQUENTIAL DAMAGES.

In no event shall Contractor be liable for business interruption losses or consequential, indirect or speculative damages, but this sentence shall not relieve Contractor of liability for damage to property or injury to persons resulting from accidents caused directly by its negligence in performance or failure to perform its obligations under this Agreement.

SECTION 27, ATTORNEY'S FEES

In the event suit is brought by either party to construe, interpret and/or enforce the terms and/or provisions of this Agreement or to secure the performance hereof, each party shall bear its own attorney's fees, such that the prevailing party shall not be entitled to recover its attorney's fees from the non-prevailing party.

SECTION 28. SURVIVAL

Terms and conditions of this Agreement, which by their sense and context survive the expiration or termination of this Agreement, shall so survive.

SECTION 29. REMEDIES.

Upon the occurrence of an Event of Default, either party may, at its option, exercise any right, remedy, or privilege which may be available to it under applicable law, including the right to (i) proceed by appropriate Contractor's action to enforce the terms of this Agreement, or (ii) recover damages for the breach of this Agreement. In addition, the parties shall remain liable for all covenants and indemnities under this Agreement.

SECTION 30. SAFETY AND HAZARDOUS MATERIALS.

It is Contractor's intent to perform all work in a clean, safe professional manner, causing no hazards to Contractor's staff, facility, the environment or Contractor's service personnel, Contractor shall not be required to make safety tests, install new devices or make modifications to any equipment beyond the scope of the original Agreement in order to comply with recommendations or directives of insurance companies, governmental bodies, or for other reasons. However, this provision shall not relieve Contractor from its responsibility to install all equipment in compliance with any and all applicable, City, County, State and Federal laws, regulations, and guidelines, including but not limited to building code requirements, in effect at the time of the installation of said equipment. This Agreement pre-supposes hazardous materials are not present at the jobsite, including but not limited to asbestos. If in providing service, Contractor discovers or suspects the presence of hazardous material Contractor will notify City. City shall be responsible for the cost and performance of testing, abating, encapsulating, cleaning up, removing, or rendering such materials non-hazardous, Contractor has the right to stop work until the jobsite is free from hazardous materials. City agree to notify Contractor in writing of any hazardous materials on the jobsite and any jobsite safety policies including but not limited to lock-out and tag procedures, laboratory procedures, biological hazards and other items covered by right to know regulations or which may pose a hazard to Contractor's employee's and equipment.

SECTION 31. MISCELLANEOUS PROVISIONS

- A. Each undersigned represents and warrants that its signature herein below has the power, authority and right to bind their respective parties to each of the terms of this Agreement.
- B. All Exhibits and RECITALS referenced herein and attached hereto shall be incorporated as if fully set forth in the body of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first above written.

SIEMENS INDUSTRY, INC.

CITY OF HUNTINGTON BEACH, a
municipal corporation of the State of
California

Appendix A: Sample SCE Contract

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") is made and entered into as of _____, 2015 ("Effective Date"), by and between SOUTHERN CALIFORNIA EDISON, a California corporation ("SCE"), and the CITY OF LANCASTER, a Municipal Corporation and Charter City ("Buyer"). SCE and Buyer are referred to herein individually as a "Party," and together as "Parties".

RECITALS

- A. SCE currently owns nineteen thousand five hundred twenty six (19,526) LS-1 electric streetlight facilities located in the City of Lancaster, of which, seventeen thousand eight hundred and fifty six (17,856) are to be purchased by Buyer.
- B. Buyer has expressed a desire to purchase the Facilities (defined below) from SCE, and SCE is willing to sell the Facilities to Buyer, on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the respective covenants and agreements contained in this Agreement, SCE and Buyer each agree as follows:

1. **DEFINITIONS.** The following terms shall have the meanings ascribed to them below for purposes of this Agreement.

"**Agreement**" has the meaning given in the first paragraph.

"**Applicable Requirements**" means all laws, statutes, ordinances, rules, regulations, requirements or orders of any Governmental Authority now in force or that may later be in force, and the terms and conditions of any permit, certificate, license or other requirement.

"**Bill of Sale**" means a document setting forth the Purchase Price and Severance Costs as well as any Taxes for which Buyer is responsible with respect to the Facilities specified to be transferred to Buyer in each Phase (including Reconfigured Facilities in the final Phase), which document shall be substantially in the form of **Exhibit B** attached hereto.

"**Business Day**" means a day other than Saturday, Sunday or a day on which (i) banks are legally closed for business in the State of California; or (ii) SCE is closed for business.

"**Buyer**" has the meaning given in the preamble paragraph.

"**CEQA**" has the meaning given in Section 5.2.

“Claims” has the meaning given in Section 7.1.

“Commencement” has the meaning given in Section 6.2.

“Commencement Date” has the meaning in Section 6.1.

“CPUC” means the California Public Utilities Commission, or its regulatory successor, as applicable.

“CPUC Approval” means a final, unconditional and unappealable decision of the CPUC under Section 851 of the Public Utilities Code (including exhaustion of all administrative and judicial remedies or the running of time periods and statutes of limitation for rehearing and judicial review without rehearing or judicial review being sought) approving this Agreement and the transactions contemplated hereby on terms and conditions acceptable to SCE and Buyer, in their good faith discretion, including approval of SCE’s proposed accounting and rate making treatment of the sale in accordance with CPUC’s decisions.

“CPUC Approval Date” means the date on which the CPUC Approval occurs.

“Effective Date” has the meaning given in the preamble paragraph.

“Environmental Requirements” means any applicable federal, state and local statutes, regulations or ordinances now in force or that may later be in force relating to the protection of human health or safety, or regulating or relating to industrial hygiene or environmental conditions, or the protection of the environment, or pollution or contamination of the air, soil, surface water or ground water, including federal, state and local laws, requirements and regulations pertaining to reporting, licensing, permitting, investigating and remediating emissions, discharges, releases or threatened releases of such substances into air, surface water or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of such substances. Environmental Requirements include without limitation: the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq.); the Hazardous Materials Transportation Act (49 U.S.C. 5101 et seq.); and the Resource Conservation and Recovery Act (42 U.S.C. 6901et seq.)

“Excluded Taxes” means (a) taxes (other than any sales, use, gross receipts, or any taxes in the nature of sales, use or gross receipts taxes) imposed on SCE that are capital gains taxes, minimum or alternative minimum taxes, accumulated earnings taxes, franchise taxes or taxes on or measured by gross or net income, capital or net worth of SCE; and (b) personal property taxes to the extent the payment is addressed in Section 3.3(b), and is not required to be reimbursed to SCE by Buyer.

“Facilities” has the meaning given in Section 2.2 and further described in Exhibit A.

“Governmental Authority” means any federal, state, local or other governmental, regulatory or administrative agency, commission, department, board, subdivision, court, tribunal, or other governmental arbitrator, arbitral body or other authority, but excluding Buyer.

“Hazardous Substances” means any hazardous or toxic material or waste, which is or becomes regulated by Environmental Requirement. Without limiting the generality of the foregoing, Hazardous Substances includes any material or substance: (a) now or hereafter defined as a “hazardous substance,” “hazardous waste,” “hazardous material,” “extremely hazardous waste,” “restricted hazardous waste” or “toxic substance” or words of similar import under any applicable Environmental Requirements; or (b) which is toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous, and is now or hereafter regulated as Hazardous Substance by the United States, the State of California, any local governmental authority or any political subdivision thereof, or which cause or are listed by the State of California as being known to the State of California to cause, cancer or reproductive toxicity; or (c) the presence of which poses or threatens to pose a hazard to the health or safety of persons or the environment; or (d) which contains gasoline, diesel fuel or other petroleum hydrocarbons; or (e) which contains lead-based paint or other lead contamination, polychlorinated biphenyls (“PCBs”), or asbestos or asbestos-containing materials or urea formaldehyde foam insulation; or (f) which contains radon gas; or (g) fuel or chemical storage tanks, energized electrical conductors or equipment, or natural gas transmission or distribution pipelines; and (h) other potentially hazardous substances, materials, products or conditions.

“Inventory, Planning and Inspection Activities” means the activities referenced in Section 6.2(a) and set forth in Exhibit D to be performed by Buyer and SCE during the Inventory, Planning and Inspection Period.

“Inventory, Planning and Inspection Period” has the meaning set forth in Section 6.2(a). ”

“Land” means the real property on which the Facilities are located, together with any other real property that is encumbered by Land Rights.

“Land Rights” means the easements, leases, permits, franchise agreements or other agreements that grant SCE the right to locate the Facilities on the Land and/or permit access to the Facilities by SCE.

“Local Service Planning Office” means SCE’s local service planning office located at Antelope Valley Service Center, Attn: District Manager, 42060 10th Street West, Lancaster, CA 93534, (661) 726-5617.

“Phase” means the nine (9) periods of five (5) months each, not to exceed a total of twenty-four (24) months, during which the Parties will undertake certain activities as set forth in this Agreement with regard to the Facilities identified in each such Phase

in **Exhibit C**. The Parties may mutually agree at any time to change the Phase Commencement Date and/or the Phase Closing Date for any or all Phases.

“Phase Commencement Date” means the first day of each Phase as set forth in **Exhibit C**.

“Phase Completion” means the completion of all activities for each Phase as set forth in Sections 6.2 and 6.4 of this Agreement.

“Phase Closing Date” means the last day of each Phase as set forth in **Exhibit C** on which the closing of the purchase and sale of the Facilities in such Phase shall occur.

“Potential Environmental Hazards” means electric fields, magnetic fields, electromagnetic fields, electromagnetic radiation, power frequency fields, and extremely low frequency fields, however designated, and whether emitted by electric transmission lines, other distribution equipment or otherwise.

“Purchase Price” has the meaning given in Section 3.1.

“Reconfigured Facilities” means any additional facilities the Parties identify during the Inventory, Planning and Inspection Period of any Phase which serve purposes in addition to street lighting, which the Parties agree that SCE will reconfigure to remove such other (non-street light) uses, and which will be purchased by Buyer from SCE in the final Phase. Buyer shall coordinate all activities relating to Reconfigured Facilities with SCE’s Local Service Planning Office.

“SCE Parties” means SCE, its affiliates, and each of their respective past, present and future officers, directors, partners, employees, agents, representatives, shareholders, attorneys, affiliates, parent and subsidiary corporations, divisions, insurance carriers, heirs, legal representatives, beneficiaries, executors, administrators, predecessors, transferees, successors and assigns.

“Severance Activities” means the activities referenced in Section 6.2(a) and set forth in **Exhibit D** to be performed by SCE and Buyer during each Phase (after the applicable Inventory, Planning and Inspection Period expires) with respect to the Facilities to be transferred from SCE to Buyer in such Phase.

“Severance Costs” has the meaning in Section 3.1.

“Tax Claim” has the meaning given in Section 3.3(e).

“Taxes” mean all federal, state, local or foreign income, ad valorem, gross receipts, license, payroll, employment, excise, stamp, occupation, premium, windfall profits, environmental, customs duties, capital stock, franchise, profits, withholding, social security (or similar), unemployment, disability, real property including assessments, special assessments, special district assessments, escape assessments, benefit assessments and maintenance assessments, fees or other charges or surcharges of any nature based on the use or ownership of real property), personal property, sales,

use, documentary transfer, registration, value added, alternative and add-on minimum, estimated taxes, and all other taxes of any kind whatsoever, including all interest, penalties, fines and additions thereto, whether disputed or not, including all items for which liability arises as a transferee or successor-in-interest.

2. PURCHASE AND SALES OF FACILITIES.

2.1 Purchase and Sale. Subject to the terms and conditions of this Agreement, SCE agrees to sell, convey, assign, transfer and deliver to Buyer, and Buyer agrees to purchase and acquire from SCE, all of SCE's right, title and interest in the Facilities.

2.2 Description of Facilities. The "Facilities" consist of Seventeen Thousand Eight Hundred And Fifty Six (17,856) electric streetlight facilities owned by SCE and located within the Buyer's service territory. A detailed description and listing of the Facilities to be purchased and sold is provided **Exhibit A**. The Parties believe that **Exhibit A** contains a reasonably accurate inventory and map of the LS-1 streetlight facilities owned by SCE within the Buyer's service territory that are considered for sale.

3. PURCHASE PRICE AND OTHER COSTS.

3.1 Purchase Price. Subject to adjustment as provided in this Section 3.1, the total purchase price for all Facilities described in **Exhibit A** ("**Purchase Price**") is Eleven Million Seven Hundred Ninety Thousand Dollars (\$11,790,000).

(a) The Parties shall mutually agree on the Purchase Price, Severance Costs and any additional costs for any Reconfigured Facilities transferred to Buyer in the final Phase in accordance with Section 6.2(b).

(b) If, within thirty (30) days after the Phase Closing Date for the final Phase, the Parties determine that the actual number of Facilities (excluding Reconfigured Facilities) that have been transferred to Buyer pursuant to this Agreement exceeds 17,856 by five percent (5%) or more then, within sixty (60) days after the Phase Closing Date for the final Phase, the Parties will amend the applicable Bill(s) of Sale, and the Buyer will make a true-up payment to SCE using a price of \$660.00 per pole.

(c) If, within thirty (30) days after the Phase Closing Date for the final Phase, the Parties determine that the actual number of Facilities (excluding Reconfigured Facilities) that have been transferred to Buyer pursuant to this Agreement is less than 17,856 by five percent (5%) or more then, within sixty (60) days after the Phase Closing Date for the final Phase, the Parties will amend the applicable Bill(s) of Sale, and SCE will make a true-up payment to Buyer using a price of \$660.00 per pole.

3.2 Severance Costs. In addition to the Purchase Price, Buyer shall pay to SCE, SCE's good faith estimate of the cost of SCE's Severance Activities with respect to the Facilities, which the parties agree is equal to a total amount of \$410,000 ("**Severance Costs**"). Buyer shall pay the Severance Costs in nine (9) equal installments, as invoiced by SCE in each Phase.

3.3 Taxes.

(a) Except for any Excluded Taxes for which Buyer will have no liability, Buyer shall pay all Taxes arising in connection with the sale and transfer of the Facilities, this Agreement or the transactions contemplated herein, or the receipt of the Purchase Price or other amounts hereunder, which Taxes are levied or imposed on or with respect to SCE, Buyer or all or any part of the Facilities or any use thereof on or after the applicable Phase Closing Date.

(b) State and local personal property Taxes relating to the Facilities for the tax year (ending June 30) will be prorated between Buyer and SCE on the following basis: SCE is to be responsible for all such Taxes for the period up to the Phase Closing Date for such Facilities; and Buyer is responsible for all such Taxes for the period on and after the Phase Closing Date for such Facilities. All Taxes assessed on an annual basis will be prorated on the assumption that an equal amount of Taxes applies to each day of the year, regardless of how many payments are billed or made, except that Buyer will bear all supplemental or other state and local personal property Taxes with arise out of change in ownership of the Facilities. In addition, Buyer acknowledges that the Facilities are assessed by the California State Board of Equalization as of January 1 of each year, and, if the Phase Closing Date occurs between January 1 and June 30, SCE must pay personal property taxes arising out of the ownership of the Facilities for the subsequent fiscal year. If the Phase Closing Date occurs between January 1 and June 30, Buyer will deposit with SCE the full amount to pay personal property taxes for the tax year beginning on July 1, in addition to the prorated amount of personal property taxes for the current tax year (ending June 30), and SCE will pay the personal property taxes for these tax years before they become delinquent; provided however, SCE may pay such taxes in installments as permitted by law. If the personal property tax amounts owing for the tax year beginning on July 1 are not available as of the Phase Closing Date, then the amount due from Buyer to SCE for such tax year will be estimated on the basis of the prior year's personal property taxes and such amount will be subject to adjustment after the Phase Closing Date. If the Phase Closing Date occurs between July 1 and December 31, Buyer will deposit with SCE the prorated amount of personal property taxes for the tax year in which the Phase Closing Date occurs and SCE will pay the personal property taxes for such tax year before they become delinquent; provided however, SCE may pay such taxes in installments as permitted by law.

(c) SCE will be entitled to any refunds or credits of Taxes relating to the Facilities that are allocable to the period prior to the Phase Closing Date. Buyer

will promptly notify and forward to SCE the amounts of any such refunds or credits to SCE within five (5) Business Days after receipt thereof. Buyer will be entitled to any refund or credit of Taxes relating to the Facilities that are allocable to the period on and after the Phase Closing Date. SCE agrees to reasonably cooperate with Buyer's efforts to obtain such refund or credit.

(d) After each Phase Closing Date, Buyer will notify SCE in writing, within five (5) Business Days after Buyer's receipt of any correspondence, notice or other communication from a taxing authority or any representative thereof, of any pending or threatened tax audit, or any pending or threatened judicial or administrative proceeding that involves Taxes relating to the Facilities for the period prior to the Phase Closing Date, and furnish SCE with copies of all correspondence received from any taxing authority in connection with any audit or information request with respect to any such Taxes relating to the Facilities for the period prior to the Phase Closing Date.

(e) Notwithstanding any provision of this Agreement to the contrary, with respect to any claim for refund, audit, examination, notice of deficiency or assessment or any judicial or administrative proceeding that involves Taxes relating to the Facilities for the period either entirely prior to the Phase Closing Date or both prior to and after the Phase Closing Date (collectively, "**Tax Claim**"), the Parties will reasonably cooperate with each other in contesting any Tax Claim, including making available original books, records, documents and information for inspection, copying and, if necessary, introduction as evidence to any such Tax Claim contest and making employees available on a mutually convenient basis to provide additional information or explanation of any material provided hereunder with respect to such Tax Claim or to testify at proceedings relating to such Tax Claim. SCE will control all proceedings taken in connection with any Tax Claim that pertains entirely to the period prior to the Phase Closing Date, and SCE and Buyer will jointly control all proceedings taken in connection with any Tax Claim pertaining to the period both prior to and after the Phase Closing Date. Buyer has no right to settle or otherwise compromise any Tax Claim which pertains entirely to the period prior to the Phase Closing Date; and neither Party has the right to settle or otherwise compromise any Tax Claim which pertains to the periods both prior to and after the Phase Closing Date without the other Party's prior written consent.

(f) The obligations of the Parties pursuant to the Section 3.3 shall survive the termination of this Agreement.

4. CONDITIONS PRECEDENT

4.1 Conditions to Buyer's Obligations. Buyer's obligation under this Agreement to purchase the Facilities is subject to the fulfillment or waiver of each of the following conditions precedent:

(a) SCE shall have performed or complied in all material respects with all covenants, agreements and conditions contained in this Agreement to be performed or complied with by SCE at or prior to the Commencement Date and each Phase Closing Date.

(b) No suit, action or other proceeding shall be pending before any court or Governmental Authority which seeks to restrain or prohibit any of the transactions contemplated by this Agreement or to obtain material damages or other material relief in connection with this Agreement or the transactions contemplated hereby.

(c) Buyer shall have obtained financing necessary to pay the Purchase Price and the Severance Costs.

4.2 Conditions to SCE's Obligations SCE's obligation under this Agreement to sell the Facilities to Buyer is subject to the fulfillment or waiver of each of the following conditions precedent:

(a) Buyer shall have performed or complied in all material respects with all covenants, agreements and conditions contained in this Agreement to be performed by Buyer at or prior to the Commencement and each Phase Closing.

(b) No suit, action or other proceeding shall be pending before any court or Governmental Authority which seeks to restrain or prohibit any of the transactions contemplated by this Agreement or to obtain material damages or other material relief in connection with this Agreement or the transactions contemplated hereby.

4.3 CPUC Approval. The obligation of each Party to consummate the purchase and the sale of the Facilities is conditioned upon obtaining CPUC Approval. SCE agrees to make reasonable efforts to draft and file an application seeking CPUC approval within ninety (90) days following the Effective Date of this Agreement. Buyer agrees to cooperate with SCE's efforts to obtain CPUC Approval, including by promptly reviewing and commenting on the application for CPUC Approval. Buyer acknowledges and agrees that SCE makes no representation or warranty with respect to the likelihood of obtaining CPUC Approval, and Buyer hereby waives all Claims against SCE that may arise as a result of the need for CPUC Approval or SCE's failure to obtain CPUC Approval.

4.4 Satisfaction or Waiver of Conditions Precedent. Buyer may waive in writing any of the conditions precedent set forth in Section 4.1, and SCE may waive in writing any of the conditions precedent set forth in Section 4.2. Neither Party shall have the right to waive the condition precedent set forth in Section 4.3. Subject to the foregoing, in the event that any of the conditions precedent set forth in this Section 4.1 or Section 4.2 have not been satisfied or waived on or before the Commencement Date or any Phase Closing Date (as the same may be extended), then the Party whose obligations are subject to such condition precedent shall

have the right to rescind this Agreement ab initio upon written notice to the other Party, and SCE and Buyer shall thereupon return to the other Party all performances received from the other Party (except for the Severance Costs actually paid), and each Party shall be released from all other obligations under this Agreement, except those which expressly survive termination.

5. CONDITION OF FACILITIES AND LAND RIGHTS

5.1 Compliance with Applicable Requirements and Governmental Approvals.

Except for CPUC Approval, Buyer is solely responsible for complying, at Buyer's sole expense, with all Applicable Requirements and obtaining all authorizations, consents, licenses, permits and approvals of Governmental Authorities and third persons in connection with the consummation of the transactions contemplated by this Agreement and with Buyer's operation of the Facilities, whether as result of the PCB content or otherwise. Without limiting the foregoing, Buyer is responsible for any costs of complying with the California Environmental Quality Act ("CEQA"), if and to the extent applicable to the sale and transfer of the Facilities, and satisfying, at Buyer's sole expense, any and all mitigation measures under CEQA that may apply to Buyer's acquisition or operation of the Facilities. Buyer shall promptly notify SCE of any and all mitigation measures that may affect SCE. If SCE determines in good faith that any such mitigation measures may adversely affect SCE, SCE shall have the right without liability to Buyer to terminate this Agreement upon written notice to Buyer. In the event of such termination, SCE and Buyer shall each be released from all obligations under this Agreement, except those that expressly survive termination. Buyer's obligations under this Section 5.2 shall survive the termination of this Agreement.

5.2 Disclosure Regarding Hazardous Substances. SCE hereby discloses to Buyer that Potential Environmental Hazards and Hazardous Substances, including PCBs, may be present at, in, on, under, about, contained in, or incorporated in the Facilities. Buyer represents that it is purchasing the Facilities for Buyer's own use, and not for resale (provided that Buyer contemplates that Buyer may transfer title to the Facilities in connection with financing and/or refinancing of the Facilities). If Buyer sells the Facilities, or any part thereof, it shall disclose, in writing, to all potential Buyers, prior to the sale, that Potential Environmental Hazards and Hazardous Substances, including PCBs, may be present at, in, on, under, about, contained in, or incorporated in the Facilities, or portions thereof. Further, in the event the Facilities (or any portion thereof) are sold, conveyed or transferred in any manner to a person other than SCE, Buyer shall incorporate in the agreement effectuating such transfer, language substantially in the same form as this paragraph. Buyer's obligations under this Section 5.3 shall survive the termination of this Agreement. Notwithstanding anything to the contrary set forth in this Agreement, SCE approval shall not be required for any conveyance of the Facilities, whether or not such conveyance is made in connection with a financing or refinancing of the Facilities or any part thereof.

- 5.3 Disclaimers Regarding the Facilities and the Land.** BUYER ACKNOWLEDGES THAT IT IS RELYING UPON ITS OWN INDEPENDENT INVESTIGATION IN DECIDING TO PURCHASE THE FACILITIES. BUYER EXPRESSLY DISCLAIMS RELIANCE ON ANY REPRESENTATIONS, WARRANTIES OR GUARANTIES, EITHER EXPRESS OR IMPLIED, BY SCE, ITS OFFICERS, DIRECTORS, COUNSEL, REPRESENTATIVES OR AGENTS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SCE EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, AS TO THE CONDITION, VALUE OR QUALITY OF THE FACILITIES, THE PROSPECTS (FINANCIAL AND OTHERWISE) OF THE FACILITIES, THE QUALITY OF WORKMANSHIP OF THE FACILITIES, OR THE ABSENCE OF ANY DEFECTS THEREIN, WHETHER LATENT OR PATENT. SCE FURTHER SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY REGARDING POTENTIAL ENVIRONMENTAL HAZARDS, THE PRESENCE OF HAZARDOUS SUBSTANCES, COMPLIANCE OF THE FACILITIES OR THE LAND WHERE THE FACILITIES ARE LOCATED WITH ENVIRONMENTAL REQUIREMENTS, OR LIABILITY OR POTENTIAL LIABILITY ARISING UNDER ENVIRONMENTAL REQUIREMENTS. NO SCHEDULE OR EXHIBIT TO THIS AGREEMENT, NOR ANY OTHER MATERIAL OR INFORMATION PROVIDED BY OR COMMUNICATIONS MADE BY SCE, WILL CAUSE OR CREATE ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SCE EXPRESSLY DISCLAIMS: (A) ANY IMPLIED OR EXPRESS WARRANTY OF MERCHANTABILITY; (B) ANY IMPLIED OR EXPRESS WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; AND (C) ANY IMPLIED OR EXPRESS WARRANTY OF CONFORMITY TO MODELS OR MATERIALS.
- 5.4 “AS IS” SALE.** THE FACILITIES ARE BEING TRANSFERRED “AS IS, WHERE IS, AND WITH ALL FAULTS” IN THEIR EXISTING CONDITION, WITHOUT ANY REPRESENTATIONS OR WARRANTIES OF ANY KIND BY SCE, EXPRESS, IMPLIED OR STATUTORY, AND WITHOUT RECOURSE AGAINST SCE.
- 5.5 Specific Disclaimer Regarding Land Rights.** BUYER SPECIFICALLY ACKNOWLEDGES AND AGREES THAT SCE IS NOT ASSIGNING OR OTHERWISE TRANSFERRING ITS RIGHT, TITLE AND INTEREST IN AND TO ANY LAND RIGHTS (OR ANY CLAIM, RIGHT OR BENEFIT ARISING UNDER OR RESULTING FROM SUCH LAND RIGHTS) IN CONNECTION WITH ITS SALE OF THE FACILITIES TO BUYER, AND BUYER ASSUMES ANY AND ALL RISKS AND LIABILITIES IN CONNECTION WITH THE ABSENCE OF ADEQUATE OR APPROPRIATE LAND RIGHTS.
- 5.6 Maintenance of Facilities Pending Commencement.** From the Effective Date until the Phase Closing Date, SCE will, at its expense, operate and maintain the Facilities in accordance with SCE’s rate “Schedule LS-1 LIGHTING - STREET

AND HIGHWAY - UNMETERED SERVICE COMPANY-OWNED SYSTEM,” and consistent with SCE’s custom and past practices.

5.7 New Facilities. Until the Commencement Date, SCE may continue to install new streetlights in the City of Lancaster in accordance with SCE’s standard practices and tariffs and CPUC rules and regulations.

6. COMMENCEMENT AND POST-COMMENCEMENT ACTIVITIES.

6.1 Commencement Date. The “**Commencement Date**” shall be the date that is sixty (60) days after the CPUC Approval Date. The application seeking CPUC Approval will request such approval within six months of the date the application is filed. SCE makes no representations as to when or in what manner the CPUC will act on the application.

6.2 The Phases. The first Phase shall commence on the Commencement Date (“**Commencement**”), and each successive Phase shall follow consecutively thereafter or on such earlier date as mutually agreed by the Parties as to the Facilities identified for each Phase in **Exhibit C**. The Parties shall take the following actions during each Phase for the Facilities to be transferred to Buyer in such Phase:

- (a) For a period not to exceed four months following the commencement of each Phase (each, an “**Inventory, Planning and Inspection Period**”), the Parties will perform their respective Inventory, Planning and Inspection Activities set forth in **Exhibit D**, including identifying any Reconfigured Facilities. For each Phase, SCE’s Local Service Planning office shall provide written notice to Buyer before the expiration of the Inventory, Planning and Inspection Period identifying any potential Reconfigured Facilities and stating the work necessary to reconfigure such facilities for sale to Buyer and the estimated time and cost to complete the work (“Reconfigured Facilities Notice”).
- (b) For a period of ten (10) Business Days following Buyer’s receipt of the Reconfigured Facilities Notice, Buyer shall have the right to accept or reject the Reconfigured Facilities described in the Reconfigured Facilities Notice, which acceptance or rejection shall be evidenced by a written notice delivered to SCE’s Local Service Planning Office.
- (c) At any time prior to the applicable Phase Closing, each Party shall perform and complete its respective Severance Activities for all Facilities in the applicable Phase, excepting only the Reconfigured Facilities identified in the Reconfigured Facilities Notice for that Phase, which Reconfigured Facilities shall be added to the final Phase. Prior to or during the final Phase, each Party shall perform and complete its respective Severance Activities for any Reconfigured Facilities.

- (d) Not later than thirty (30) days prior to each Phase Closing Date, SCE shall deliver to Buyer an original Bill of Sale duly executed by SCE. The Parties agree that delivery of the Bill of Sale shall be effective upon the earlier of (i) delivery to Buyer by hand of an original Bill of Sale or (ii) Buyer's receipt of a facsimile or other electronic transmission of the Bill of Sale. If delivery is made by facsimile or other electronic transmission, SCE shall concurrently send the original Bill of Sale to Buyer by registered or certified mail or overnight courier.
- (e) SCE shall notify Buyer in writing prior to each applicable Phase Closing Date if SCE obtains actual knowledge, at any time during the Phase in which the Facility will be purchased by the City, of any material damage to a Facility or any third-party formal claim that the condition of a Facility caused property damage, injury or death.
- (f) At any time prior to any Phase Closing, Buyer may elect at its sole and absolute discretion to remove any of the Facilities (except for Reconfigured Facilities) from any Phase and deduct on a pro rata basis the value of such Facilities from the Purchase Price.
- (g) By each Phase Closing Date, Buyer shall pay to SCE in U.S. dollars the Purchase Price, Severance Costs, and the Taxes (but not Excluded Taxes) for the Facilities to be transferred to Buyer in such Phase.
- (h) After completion of the final Phase, SCE's Local Service Planning Office will invoice Buyer separately for any Reconfigured Facilities.

6.3 Assumption of Liabilities. On each Phase Closing Date, Buyer will assume all obligations and liabilities of any kind or nature whatsoever related to, arising from, or associated with ownership or possession of the Facilities transferred to Buyer in such Phase.

6.4 Post-Phase Activities.

- (a) Within ninety (90) days after each Phase Closing Date, but effective as of each such Phase Closing Date, SCE will change the charge for electricity furnished to the Facilities transferred to Buyer in such Phase from the Streetlight Rate Schedule LS-1 to the Streetlight Rate Schedule "LS-2 LIGHTING - STREET AND HIGHWAY CUSTOMER-OWNED INSTALLATION - UNMETERED SERVICE" Multiple Service – Rate B and provide written notice to Buyer of such change ("Notice of Rate Change").
- (b) Within ninety (90) days after each Phase Closing Date, SCE shall provide an updated map and inventory of the Facilities transferred pursuant to such Phase to Buyer.

Within sixty (60) days of Buyer's receipt of the Notice of Rate Change, Buyer shall confirm that the change has been effected ("Rate Change Confirmation") or advise SCE in writing

that it has not (“Rate Change Error Notice”). In the event Buyer issues a Rate Change Error Notice, the Parties shall engage in the Dispute Resolution process to resolve the deficiency(ies) identified in the Rate Change Error Notice pursuant to Section 9.11 until Buyer issues a Rate Change Confirmation.

6.5 Prohibition on Connecting Non-Conforming Load. Buyer acknowledges and agrees that Buyer’s purchase of the Facilities does not entitle Buyer to connect non-conforming load to the Facilities or supporting circuits beyond SCE’s initial point of connection. If Buyer wishes to connect such non-conforming load, Buyer agrees to comply with SCE’s applicable filed tariffs.

7. RELEASE.

7.1 Release. Buyer, for itself, and for any future owners of all or a part of the Facilities, and each of their respective predecessors, successors, assigns, licensees, officers, directors, employees, agents, partners, shareholders, transferees, parent and subsidiary corporations, legal representatives, heirs, beneficiaries, executors and administrators hereby fully and forever releases, discharges and covenants not to sue the SCE Parties of, from or for any and all losses (including diminution in the value of the Land) and all other costs, claims, demands, actions, suits, orders, causes of action, obligations, controversies, debts, expenses, accounts, damages (including consequential or direct damages), judgments and liabilities of whatever kind or nature (including fines and civil penalties), and by whomsoever asserted, in law, equity or otherwise, whether known or unknown, (each a “**Claim**” and, collectively, “**Claims**”) arising from or in any way connected with the Facilities, including without limitation any Claims relating to SCE’s maintenance of the Facilities prior to each Phase Closing Date, Claims relating to Potential Environmental Hazards, and Claims relating to the presence of PCBs or any other Hazardous Substances in the Facilities, and/or in, on or about the Land.

7.2 Waiver of Civil Code § 1542. With respect to the matters being released in Paragraph 7, and as to those matters only, Buyer does knowingly, after having first obtained the advice of its attorneys, waive all of the provisions of California Civil Code § 1542 (“Section 1542”). Section 1542 reads as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.”

Buyer acknowledges and agrees that: (a) the releases set forth in Paragraph 7 are intended to extend to and extinguish all claims, causes of action, etc. that are encompassed within the terms of the releases, including those that are not presently known to or suspected by Buyer and (b) it may hereafter discover facts in addition to or different from those which it now believes concerning the subject matter of this Agreement, and that notwithstanding any such new or different facts, the releases contained herein will remain effective. Buyer further acknowledges and agrees that the

foregoing waiver of Section 1542 is an essential and material term of this Agreement, without which said consideration would not have been given. Buyer has been advised by its legal counsel regarding this release and waiver and understands and acknowledges the significance and consequences of this release and waiver of Section 1542.

8. INDEMNITY. Buyer shall, at its sole cost and expense, indemnify, protect, defend and hold the SCE Parties harmless, to the fullest extent permitted by law, from and against any and all Claims (including the payments of damages, both actual and consequential, the payment of penalties and fines, the payment of the actual fees and expenses of experts, attorneys and others, and the payment of the cost of environmental investigations, monitoring, containment, abatement, removal, repair, cleanup, restoration, remedial work and other “response costs” under CERCLA or any other Environmental Requirements) arising from or in any way connected with: (a) any activities or failures to act in connection with this Agreement by Buyer, its employees, agents, or contractors; or (b) the ownership, possession, use or operation of the Facilities transferred to Buyer from and after the Phase Closing Date applicable to such Facilities; or (c) Potential Environmental Hazards relating to the Facilities or the presence, disposal, dumping, escape, seepage, leakage, spillage, discharge, emission, pumping, emptying, injecting, leaching, pouring, release or threatened release of PCBs or any other Hazardous Substances in connection with the Facilities, to the extent such Hazardous Substances were present or affecting the Facilities and/or in, on, or about the Land as of the applicable Phase Closing Date; or (d) the failure of the Facilities to comply with any Applicable Requirements; or (e) Buyer’s breach of any of its obligations under this Agreement. If any action or proceeding is brought against any one or more SCE Parties for any Claim against which Buyer is obligated to indemnify or provide a defense hereunder, Buyer, upon written notice from SCE, shall defend the SCE Parties. Buyer’s obligation to defend includes the obligation to defend claims and participate in administrative proceedings, even if they are false or fraudulent. The indemnity, defense and other obligations of Buyer in this Section 8 shall survive the termination of this Agreement.

9. MISCELLANEOUS.

9.1 Time of Essence. Time is of the essence of this Agreement and each and every provision hereof.

9.2 FORCE MAJEURE. Except for the payment of money when due, performance by either Party hereunder shall not be deemed to be in default, or considered to be a default, where delays or defaults are due to force majeure events beyond the control of such Party, including, without limitation, war, insurrection, strikes, lockouts, riots, floods, earthquakes, fires, casualties, acts of God, acts of the public enemy, epidemics, quarantine restrictions, government imposed moratorium legislation, actions of failures to act by any regulatory authority with jurisdiction over SCE (including the CPUC), freight embargoes, lack of transportation,

weather-caused delays, inability to secure necessary labor, materials or tools, delays of any contractor, subcontractor or supplier, that are not attributable to the fault of the Party claiming an extension of time. An extension of time for any such force majeure cause shall be for the period of the enforced delay and shall commence to run from the date of occurrence of the delay; provided, however, that the Party claiming the existence of the delay first provides the other party with written notice of the occurrence of the delay, within ten (10) days of the commencement of such occurrence of a force majeure event and, thereafter, takes prompt and reasonable action within its control to remedy such force majeure event.

- 9.3 Further Assurances.** Each Party hereto agrees to execute and deliver to the other Party such further documents or instruments as may be necessary or appropriate in order to carry out the intentions of the Parties as contained in this Agreement.
- 9.4 Binding Effect; Assignment.** This Agreement shall be binding upon, and shall inure to the benefit of, the heirs, successors and assigns of the Parties hereto. Notwithstanding the foregoing, Buyer shall have no right to assign this Agreement or any of its rights or obligations under this Agreement.
- 9.5 Severability.** If any provision of this Agreement shall be unenforceable or invalid, the same shall not affect the remaining provisions of this Agreement and the provisions of this Agreement are intended to be and shall be severable.
- 9.6 Survival.** The covenants, agreements, obligations, indemnities and releases contained in Sections 3.3, 5, 6.3, 6.4, 6.5, 7 and 8 of this Agreement shall survive the termination of this Agreement.
- 9.7 Governing Laws.** This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California without reference to its conflicts of laws provisions.
- 9.8 Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- 9.9 Notices.** Any notice or other communication required or permitted under this Agreement shall be in writing and shall be either personally delivered or transmitted by registered or certified mail, return receipt requested, postage prepaid, or by a nationally recognized overnight courier, such as FedEx or Airborne Express, addressed to the Parties as follows:

If to SCE:

Account Services Department
Attention: John King
Southern California Edison
4777 Irwindale Avenue, Mail Stop 6042 A

Irwindale, CA, 91706

and

Antelope Valley Service Center
Attn: District Manager
42060 10th Street West, Lancaster, CA 93534

If to Buyer:

Barbara Boswell
Finance Director
44933 N. Fern Avenue
Lancaster CA 93534

The date of any notice or communication shall be deemed to be the date of receipt if delivered personally, or the date of the receipt or refusal of delivery if transmitted by mail or overnight courier. Any Party may change its address for notice by giving notice to the other Party in accordance with this Section 9.7.

9.10 Attorneys' Fees. In the event that either Party shall bring an action to enforce its rights under this Agreement, the prevailing Party in any such proceeding shall be entitled to recover its reasonable attorneys' fees, investigation expenses and all other out of pocket expenses, including in connection with any appeal thereof. Any such attorneys' fees, costs and expenses incurred by either Party in enforcing a judgment in its favor under this Agreement shall be recoverable separately from and in addition to any other amount included in such judgment, and such attorneys' fees obligation is intended to be recoverable from the other provision of this Agreement and to survive and not be merged into any such judgment. For purposes hereof, the reasonable fees of each Party's in-house attorneys are recoverable, and shall be based on the fees regularly charged by private attorneys with the equivalent number of years of experience in the relevant subject matter area of the law, in law firms in the City of Los Angeles with approximately the same number of attorneys as are employed by the Party's law department. The covenants of SCE and Buyer contained in this Section 9.8 shall survive the termination of this Agreement

9.11 Limitation on Liability. Buyer expressly agrees that the obligations and liabilities of SCE under this Agreement and any document referenced herein shall not constitute personal obligations of the officers, directors, employees, agents, affiliates, members, representatives, stockholders or other principals or representatives of SCE. SCE expressly agrees that the obligations and liabilities of Buyer under this Agreement and any document referenced herein shall not constitute personal obligations of the officers, directors, employees, agents, affiliates, members, representatives, stockholders or other principals or representatives of Buyer. The limitations contained in this Section 9.9 shall survive the termination of this Agreement.

9.12 Exhibits. The following Exhibits are attached hereto and incorporated by reference into this Agreement.

Exhibit A	Description of the Facilities
Exhibit B	Form of Bill of Sale
Exhibit C	Phases
Exhibit D	Inventory, Planning and Inspection Activities
Exhibit E	Communications Equipment
Exhibit F	Pole Attachment License Agreement

9.13 Dispute Resolution. In the event any dispute arises concerning the enforcement and/or interpretation of this Agreement, the Parties agree to attempt initially to settle such claims or disputes in good faith between themselves. Said obligation to discuss settlement of such claims or disputes shall be initiated by written notice of such claim or dispute. Should the Parties not settle such claims or disputes within thirty (30) days of the date of mailing of such notice or within such additional time period to which the Parties agree in writing (the "Negotiation Period"), the Parties may mutually agree to submit any such claim or dispute to mediation. In such case, the Parties will select an independent mediator within thirty (30) days of the expiration of the Negotiation Period (the "Selection Period"), either by mutual agreement or, in the absence of agreement on a mediator, by requesting during the Selection Period that the American Arbitration Association in Los Angeles, California appoint a mediator. The mediation shall be commenced within thirty (30) days of the selection of a mediator by the Parties or the American Arbitration Association. Except as provided herein or by written agreement of the Parties, the mediation shall be conducted in Los Angeles pursuant to the rules of the American Arbitration Association. If the Parties are unable to settle the dispute through discussions or in mediation, each Party shall have the right to pursue all of its remedies at law or in equity. The covenants of Buyer and SCE contained in this **Section 9.13** shall survive the termination of this Agreement.

9.14 Communications Equipment. Buyer acknowledges that the Facilities have certain SCE-owned and operated radio equipment attached to them as identified in **Exhibit E** ("Communications Equipment"). Concurrently with each Phase Closing Date, Buyer shall grant to SCE a cost-free license to leave in place, operate, maintain, replace and remove any Communications Equipment attached to Facilities included in such Phase pursuant to the Pole Attachment License Agreement attached hereto as **Exhibit F**. Buyer also agrees to enter into future Pole Attachment License Agreements to grant SCE a cost-free license to operate, maintain, replace and remove new and additional Communications Equipment on the Facilities as reasonably requested by SCE.

9.15 Interpretation. The language in all parts of this Agreement shall be construed according to its normal and usual meaning and not strictly for or against either SCE or Buyer. The headings of the paragraphs of this Agreement are inserted solely for convenience of reference and are not a part of and are not intended to govern,

limit or aid in the construction of any terms or provisions hereof. The words “include,” “includes,” and “including” shall be deemed to be followed by the phrase “without limitation.”

9.16 Authority. Each Party represents and warrants that the execution, delivery and performance of this Agreement has been duly authorized by such Party and each person signing this Agreement on its behalf is duly and validly authorized to do so.

9.17 Prior Agreements. This Agreement and the exhibits hereto contain the entire agreement and understating of the Parties relating to the subject matter hereto and shall supersede any prior written or oral agreements or communications between the Parties pertaining to such subject matter.

IN WITNESS WHEREOF, the Parties hereto have caused this agreement to be duly executed as of the date and year first written above.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

Appendix B: Additional Scope

Street Light Series Circuit Conversion

In addition to the street light acquisition and retrofit the City is interested in improving deteriorating street light series circuits, located throughout the city, to modern loop fed circuits. These high voltage circuits date back to the 1930's and 1940's and present a significant safety risk while also incurring increasing maintenance cost to the City.

A Series Circuit Conversion project involves replacing the old, antiquated and inefficient high voltage system with efficient 120/240v streetlight system. This includes replacing all conduits (by a subcontractor), conductors, poles and luminaries, converting a series circuit to a loop circuit.

There are 18 different circuits, identified by City staff, which need to be upgraded. There are approximately 361 Mercury Vapor (MV) and HPS street lights along these circuits that will be converted to LED fixtures during the upgrade. LED fixtures specified for this FIM will comply with the Downtown Specific Plan streetscape guidelines.

Siemens staff has reviewed the series circuits identified by City staff and determined that the energy savings created by the retrofit of the 19 series circuits is estimated to be 122,285 kWh/year in the first year after installation. This energy savings translates into a cost savings of \$50,797/year with a reduction in greenhouse gas emission by 85,600 lbs CO₂. The rebate associated with the installation of LED technology is \$24,457. The estimated cost for the construction of the new circuits and installation of LED fixtures is approximately \$8,300,000.

Siemens is in the process of constructing new loop fed circuits at three locations in the City and utilizes these projects as a proxy for estimating the costs for upgrading the circuits identified in FIM-3.

The Series Circuit Conversion portion of this project consists of converting seventeen existing 5kV series circuits (see figure above; Error! Reference source not found.) to standard voltage loop circuits. This will entail installing new service pedestals or tying into existing 240V SCE service points and installing conduits and conductors to service the new streetlight system. As part of the series circuit conversion, Siemens will also replace the existing concrete standards with new, and will install new LED cobra-head style streetlights to match those that will be installed throughout the rest of the City.

The following sections describe the methodology Siemens will implement in the execution of the street light series circuit conversion.

Scheduling

Given the close proximity of the Series Circuit Conversion portion of this project to tourist and revenue producing areas, we will work with the City to determine a schedule that poses the least amount of inconvenience to local businesses, tourists, and the general public. In order to minimize negative impacts of construction, each area or circuit will be worked on

from start to finish prior to beginning a new area, unless deemed unnecessary by both Siemens and the City.

Operation of Existing Streetlight System

During construction, existing streetlights will remain operational until new streetlights and infrastructure is installed and ready for operation. This will minimize or eliminate dark streets during the construction phases. To do this, Siemens will install the new streetlight system adjacent to the existing system (including poles and underground infrastructure). The old poles will be decommissioned following the turn-on of the new system.

Coordination with SCE

All coordination with SCE will be handled by Siemens to ensure the scope is to SCE standards, service plans are in place, and the energizing of the new systems are completed in a timely manner. Siemens will also ensure new fixtures are properly recorded in SCE's database and that the City receives any applicable rebates and is billed correctly based on the consumption/classification of the new system.

Installation of New Infrastructure

All new service infrastructures will be engineered to appropriate specifications by an engineering firm specializing in such work, and will be approved and permitted by the City and in accordance with SCE and City standards. Siemens forces will either install new services for streetlights or tie into existing SCE service points, as deemed appropriate by the engineering firm, the City, and SCE.

All conduits, pullboxes, and foundations will be installed by a qualified and experienced civil subcontractor to Siemens. Siemens will manage and supervise the subcontractor's work to ensure it is done completely, correctly, in a timely manner, and to the satisfaction of both Siemens and the City. Siemens forces will stand poles, pull in all new conductors, and install new LED fixtures.



Commissioning and Decommissioning

Siemens forces will perform the commissioning of the new streetlight system and the decommissioning of the existing system. Existing poles and foundations will be physically removed by the subcontractor. Decommissioned materials will be scrapped, disposed of, or salvaged by Siemens at the discretion of the City.

Following the commissioning of each area or circuit, Siemens will have a walkthrough with City representatives to gain City acceptance of the work and to turn over operation maintenance to the appropriate party.

Siemens will complete a commission process including punch list check out and final test to ensure that the system is working as designed. We will conduct a nighttime drive-by with representatives of the city to ensure that the fixtures are working and lighting levels are satisfactory

Priority	Locations	SL Qty
1	10th Street - PCH to Palm	23
2	11th Street - PCH to Palm	23
3	Orange - 2nd to 11th	19
4	Palm - Main to 17th	24
5	Crest - Lake to 14th	29
6	Walnut - 11th to 17th	12
7	12th Street - PCH to Orange	23
8	8th Street - PCH to Palm	23
9	15th Street - PCH to Palm	24
10	16th Street - PCH to Palm	24
11	13th Street - PCH to Palm	23
12	14th Street - PCH to Palm	22
13	Main - Pecan to 14th	41
14	Gothard - Edinger to McFadden	13
15	Edinger - Gothard to Goldenwest	8
16	Goldenwest - Edinger to McFadden	9
17	Mcfadden - Goldenwest to Gothard	7

Main St/Walnut Parking Garage- Safety Retrofit to LED

The Main St/Walnut St Parking Garage was identified by City officials as being having safety issues. As such, a lighting retrofit was identified as a potential measure to increase visibility throughout the parking structure in order to decrease vagrancy and crime. The following describes an initial evaluation of an LED retrofit, further design is necessary for this to be executable.

Following an executed contract and a notice to proceed, begin the design phase of the project. Photometric studies will be done to determine necessary fixture additions and locations. Once the requirements are determined, and design and engineered plans will be produced for City review and approval. Once approved, material acquisition and construction will commence.

Siemens plans to furnish and install 236 deck mounted LED garage lights to replace existing fluorescent fixtures. Wall packs (113), pole mounted fixtures (23), and stairwell fixtures (63) will also be replaced with appropriate LED fixtures. The one for one replacement portion of this project will take approximately 30 working days (6 weeks).

In addition to the fixtures that are to be replaced, we will add fixtures to eliminate dark areas in the garage. The quantity of fixtures and the expected duration for completing the addition of fixtures will be determined during the design/engineering phase of the project, and is dependent on photometric studies.



Each fixture added will be tied into existing lighting circuits. Lighting circuits will be extended using rigid, EMT conduit and #12 THW wire. In cases where we are adding fixtures to bays with no existing power source, conduit will be run through existing holes in the concrete beams. To supply power to the fixture on the outside of the structure over the

balcony on second floor, we will core drill the wall behind the fixture to avoid unsightly exposed conduit on the building's façade. In this same area, a "dummy" camera will be added to discourage unwanted activities (liability concerns of inoperable camera to be considered by City).

To facilitate proper installation and commissioning, manufacturer's representatives will be onsite as a resource for Siemens crews and City personnel. They will also provide training on system maintenance and the proper operation of controls, including occupancy sensors and photo-electric sensors.

Following training and commissioning, a walkthrough will be done with Siemens and The City to obtain City acceptance and to begin the system warranty.