

STREET LIGHT SERVICES AGREEMENT

This Street Light Services Agreement (“Agreement”) is entered into on _____, _____ (“Effective Date”) by and between PPL Electric Utilities Corporation (“Company”), a Pennsylvania corporation with its principal place of business at Two North Ninth Street, Allentown, PA 18101, and Boro of Manheim (“Municipality”), a municipality of the Commonwealth of Pennsylvania situated in the County of Lancaster. Company and Municipality are each referred to herein as a “Party” and collectively as the “Parties,” and

WHEREAS, Company is a “public utility” and “electric distribution company” as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §§ 102, 2803, that offers street light electric service to customers pursuant to its tariff approved by the Pennsylvania Public Utility Commission (“Commission”); and

WHEREAS, Municipality has requested Company to install new street lights, convert some or all of its existing street lights, or both, and

WHEREAS, at a properly noticed meeting of _____ of the Municipality duly convened and held on the _____ day of _____, _____, the Municipality authorized the execution of this agreement with Company, as evidenced by the Resolution attached as **Exhibit A**.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties, intending to be legally bound, hereby agree as follows:

1. Services

1.1 Street Light Installation/Conversion

(a) Standard Installation

- (i) Company shall install new street lights, convert some or all of its existing street lights, or both, as described in the scope of work attached hereto as **Exhibit B**.
- (ii) Except for Municipality-owned facilities described in **Exhibit B**, all necessary street lighting facilities shall be supplied, installed, owned, and maintained by the Company pursuant to the rate schedule of the Company’s tariff identified in **Exhibit B** as presently in effect and as may be amended from time to time in accordance with the law (“Selected Rate Schedule”). If, in the course of installing and/or converting the street lights, Company discovers that there are additional and/or fewer street lights to be installed and/or converted in the locations requested by Municipality, Company shall notify Municipality, and the Parties shall cooperate to amend **Exhibit B** to reflect the actual number of street lights to be installed and/or converted.

(b) **Special Installations**

- (i) In the event the Municipality requests an installation that is not in conformity with the Standard Installation in Section 1.1(a) and Exhibit A, the Company may, at its option, require advance payment from the Municipality for excess installation and/or equipment costs pursuant to the Selected Rate Schedule.
- (ii) The Municipality shall be responsible for the excess costs to maintain any special equipment that is not in conformity with the Standard Installation in Section 1.1(a) and Exhibit A pursuant to the Selected Rate Schedule.

1.2 **Removal of Street Light Facilities**

- (a) The Municipality may request removal of any existing Company-owned street light facilities pursuant to the Selected Rate Schedule.
- (b) The Company shall charge and the Municipality shall pay for the requested removal of any Company-owned street light facilities that are fewer than 10 years old measured from the date of installation or conversion pursuant to the Selected Rate Schedule.

1.3 **Rates for Electric Service**

- (a) Municipality agrees to receive electric service for the street lights described in Section 1.1(a) under the Selected Rate Schedule.
- (b) Municipality's receipt of electric service under the Selected Rate Schedule shall commence with the first billing cycle following the completion of the installation/conversion of the street lights described Section 1.1(a), and shall continue through the term of this Agreement as defined in Section 2.

1.4 **Additional Services**

- (a) Municipality shall promptly notify the Company of all Company-owned street lights installed pursuant to this Agreement that are not operating properly.
- (b) In addition to the Company's regularly scheduled vegetation management practices and policies, Company may, at the written request of Municipality and within a reasonable period of time after such request, trim vegetation that, in Company's judgment, may interfere with the proper lighting of the roads or highways illuminated by the Company-owned street lights that were installed pursuant to this Agreement. Municipality shall obtain all consents and permits necessary for Company to perform such work.

2. Term of Agreement and Termination

2.1 Term – This Agreement shall commence on the Effective Date, shall continue for the period of years specified in the rate schedule of the Company’s tariff identified in **Exhibit B** as in effect on the Effective Date, and shall renew for one-year periods thereafter until terminated in accordance with Section 2.2.

2.2 Termination of Agreement

(a) Either Party may terminate this Agreement for its convenience by giving six-months’ prior written notice to the other Party; provided, however, that termination by the Company is subject to all applicable requirements of the Pennsylvania Public Utility Code, the Commission’s regulations and the Company’s tariff.

(b) If Municipality terminates this Agreement, Municipality shall be deemed to have requested the removal of all the Company-owned street lights and associated facilities that were installed pursuant to this Agreement. Section 1.2(b) shall govern the charges imposed and the payments made for such removal.

3. Attachments

3.1 No attachments can be made to Company’s facilities without Company’s consent. Municipality must submit an application to Company for review using the current application process. The process for submitting an application is defined on the Company’s Pole Attachment Services website. The attachment may be made after the attachment application is approved by Company and an attachment agreement is executed by the Company and the Municipality.

4. Assignment

4.1 This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and permitted assigns.

4.2 Neither Party shall have the right to assign, convey, or transfer this Agreement or any rights hereunder, or delegate its duties hereunder without the written consent of the other Party, whose consent shall not be unreasonably withheld.

5. Choice of Law

5.1 This Agreement and the respective rights and obligations of the Parties hereto shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without regard to its conflicts of law provisions.

6. Miscellaneous

6.1 Notices – Each notice, request, demand, statement, or other communication allowed or required by this Agreement shall be in writing and shall be considered as delivered when received by the other Party by certified U.S. mail, reputable overnight courier, or facsimile addressed to the other Party at its address indicated below or at such other address as a Party may provide in a written notice to the other Party, provided that in the case of facsimile communication, the recipient shall confirm by return facsimile upon receipt:

If to Company:

PPL Electric Utilities Corporation
Two North Ninth Street
Allentown, PA 18101
Attention: Business Accounts
Telephone: (888) 220-9991, option 4
Facsimile: (484) 634-3260.

If to Municipality:

Telephone: _____
Facsimile: _____

6.2 Incorporation of Tariff – This Agreement expressly incorporates the provisions of Company’s tariff as amended from time to time in accordance with the law. If any aspect of this Agreement conflicts Company’s tariff, the tariff shall govern.

6.3 Third Party Beneficiaries – This Agreement is only intended to create rights and obligations for Municipality and Company, and is not intended for the benefit of any third parties.

6.4 Headings – The headings of this Agreement are inserted only for convenience and shall not affect the meaning or interpretation of this Agreement or any provision hereof.

6.5 Severability – If any provision of this Agreement is held to be invalid or unenforceable, then to the extent that such invalidity or unenforceability does not deprive either Party of any material benefit intended to be provided by this Agreement, the remaining provisions of this Agreement shall remain in full force and effect and shall be binding upon the Parties.

6.6 Amendments and Waiver – No change, amendment, or modification of this Agreement, including any Exhibit attached to the Agreement, shall be valid or binding upon the Parties unless in writing and duly executed by both Parties. No

delay or omission in the exercise of any right under this Agreement shall impair any such right or be taken, construed, or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. If any provision hereof is breached and the non-breaching Party permits cure of such breach, such forbearance shall be limited to the particular breach and shall not be deemed to waive any other breach hereof. The rights and remedies provided by this Agreement shall be in addition to those rights and remedies available in both law and equity.

6.7 Entire Agreement – This Agreement and the attached Exhibits embody the entire agreement and understanding of the Parties with respect to the subject matter hereof (i.e., services and equipment set forth in the Exhibits hereto) and supersede all prior and contemporaneous agreements and understandings, oral or written, relating to said subject matter.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers on the Effective Date.

MUNICIPALITY

Signature

Print Name

Title

Board of Commissioners

PPL ELECTRIC UTILITIES CORPORATION

Signature:

Print Name

Title

PPL LED lights conversion estimate

Exhibit B
Scope of Work

Req Name: Boro of Manheim
Req No: 15632
Account No: 8740145008
Date Printed: 2/28/2018

No of Street Lights: 463
IIC Cost: \$0
LCC Cost: \$543

Pole Location	Existing	Proposed/Equivalent	Light Emitted				
			High Pressure Sodium (HPS) Rate SHS.	Diode (LED) Rate SLE.			
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37428S30337	1	COBRA HEAD	5800	II	29.8	3300	18.8
37429S30264	1	COBRA HEAD	5800	II	29.8	3300	18.8
37432S30315	1	COBRA HEAD	5800	II	29.8	3300	18.8
37439S30351	1	COBRA HEAD	5800	II	29.8	3300	18.8
37440S30296	1	COBRA HEAD	5800	II	29.8	3300	18.8
37448S30253	1	COBRA HEAD	9500	II	42.7	4900	26
37450S30278	1	COBRA HEAD	5800	II	29.8	3300	18.8
37460S30263	1	COBRA HEAD	9500	II	42.7	4900	26
37472S30359	7	COBRA HEAD	5800	II	29.8	2600	18.8
37473S30320	1	COBRA HEAD	5800	II	29.8	3300	18.8
37478S30271	1	COBRA HEAD	9500	II	42.7	4900	26
37493S30357	7	COBRA HEAD	5800	II	29.8	2600	18.8
37494S30281	1	COBRA HEAD	9500	II	42.7	4900	26
37504S30332	1	COBRA HEAD	5800	II	29.8	3300	18.8
37508S30281	1	COBRA HEAD	5800	II	29.8	3300	18.8
37511S30264	7	COBRA HEAD	5800	II	29.8	2600	18.8
37511S30291	1	COBRA HEAD	9500	II	42.7	4900	26
37517S30235	1	COBRA HEAD	5800	II	29.8	3300	18.8
37522S30298	1	COBRA HEAD	9500	II	42.7	4900	26
37528S30369	7	COBRA HEAD	5800	II	29.8	2600	18.8
37533S30222	7	COBRA HEAD	5800	II	29.8	2600	18.8
37533S30344	1	COBRA HEAD	5800	II	29.8	3300	18.8
37534S30305	1	COBRA HEAD	9500	II	42.7	4900	26
37538S30328	1	COBRA HEAD	5800	II	29.8	3300	18.8
37539S30273	7	COBRA HEAD	5800	II	29.8	2600	18.8
37547S30312	1	COBRA HEAD	9500	II	42.7	4900	26
37553S30223	7	COBRA HEAD	5800	II	29.8	2600	18.8
37557S30253	7	COBRA HEAD	5800	II	29.8	2600	18.8
37559S30317	1	COBRA HEAD	9500	II	42.7	4900	26
37570S30324	1	COBRA HEAD	9500	II	42.7	4900	26
37581S30331	1	COBRA HEAD	9500	II	42.7	4900	26
37582S30605	1	COBRA HEAD	5800	II	29.8	3300	18.8
37585S30710	1	COBRA HEAD	5800	II	29.8	3300	18.8
37591S30691	1	COBRA HEAD	5800	II	29.8	3300	18.8
37593S30337	1	COBRA HEAD	9500	II	42.7	4900	26
37596S30733	1	COBRA HEAD	5800	II	29.8	3300	18.8
37598S30630	1	COBRA HEAD	5800	II	29.8	3300	18.8
37598S30657	1	COBRA HEAD	5800	II	29.8	3300	18.8
37605S30345	1	COBRA HEAD	9500	II	42.7	4900	26
37606S30677	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		Monthly kWh
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37610S30588	1	COBRA HEAD	5800	II	29.8	3300	18.8
37610S30739	1	COBRA HEAD	5800	II	29.8	3300	18.8
37617S30619	1	COBRA HEAD	5800	II	29.8	3300	18.8
37618S30352	1	COBRA HEAD	9500	II	42.7	4900	26
37619S30558	1	COBRA HEAD	5800	II	29.8	3300	18.8
37622S30584	1	COBRA HEAD	5800	II	29.8	3300	18.8
37623S30766	1	COBRA HEAD	5800	II	29.8	3300	18.8
37627S30465	1	COBRA HEAD	5800	II	29.8	3300	18.8
37627S30677	1	COBRA HEAD	5800	II	29.8	3300	18.8
37628S30545	1	COBRA HEAD	5800	II	29.8	3300	18.8
37628S30710	1	COBRA HEAD	5800	II	29.8	3300	18.8
37629S30625	1	COBRA HEAD	5800	II	29.8	3300	18.8
37634S30362	1	COBRA HEAD	9500	II	42.7	4900	26
37638S30567	1	COBRA HEAD	5800	II	29.8	3300	18.8
37638S30649	1	COBRA HEAD	5800	II	29.8	3300	18.8
37641S30325	1	COBRA HEAD	5800	II	29.8	3300	18.8
37641S30530	1	COBRA HEAD	5800	II	29.8	3300	18.8
37643S30479	1	COBRA HEAD	5800	II	29.8	3300	18.8
37644S30368	1	COBRA HEAD	9500	II	42.7	4900	26
37644S30700	1	COBRA HEAD	5800	II	29.8	3300	18.8
37646S30440	1	COBRA HEAD	5800	II	29.8	3300	18.8
37646S30605	1	COBRA HEAD	5800	II	29.8	3300	18.8
37649S30647	1	COBRA HEAD	5800	II	29.8	3300	18.8
37650S30707	1	COBRA HEAD	5800	II	29.8	3300	18.8
37650S30786	1	COBRA HEAD	5800	II	29.8	3300	18.8
37652S30550	1	COBRA HEAD	5800	II	29.8	3300	18.8
37657S30510	1	COBRA HEAD	5800	II	29.8	3300	18.8
37658S30377	1	COBRA HEAD	9500	II	42.7	4900	26
37658S30682	1	COBRA HEAD	5800	II	29.8	3300	18.8
37659S30308	1	COBRA HEAD	5800	II	29.8	3300	18.8
37661S30588	1	COBRA HEAD	5800	II	29.8	3300	18.8
37666S30497	1	COBRA HEAD	5800	II	29.8	3300	18.8
37668S30349	1	COBRA HEAD	5800	II	29.8	3300	18.8
37668S30624	1	COBRA HEAD	5800	II	29.8	3300	18.8
37670S30412	1	COBRA HEAD	5800	II	29.8	3300	18.8
37671S30386	1	COBRA HEAD	9500	II	42.7	4900	26
37671S30666	1	COBRA HEAD	5800	II	29.8	3300	18.8
37673S30528	1	COBRA HEAD	5800	II	29.8	3300	18.8
37675S30283	1	COBRA HEAD	5800	II	29.8	3300	18.8
37678S30728	1	COBRA HEAD	5800	II	29.8	3300	18.8
37679S30566	1	COBRA HEAD	5800	II	29.8	3300	18.8
37680S30610	1	COBRA HEAD	5800	II	29.8	3300	18.8
37681S30480	1	COBRA HEAD	5800	II	29.8	3300	18.8
37684S30513	1	COBRA HEAD	5800	II	29.8	3300	18.8
37685S30395	1	COBRA HEAD	9500	II	42.7	4900	26
37690S30644	1	COBRA HEAD	9500	II/4	42.7	4900	26
37691S30322	1	COBRA HEAD	5800	II	29.8	3300	18.8
37692S30596	1	COBRA HEAD	5800	II	29.8	3300	18.8
37693S30437	1	COBRA HEAD	5800	II	29.8	3300	18.8
37693S30551	1	COBRA HEAD	5800	II	29.8	3300	18.8
37694S30382	1	COBRA HEAD	5800	II	29.8	3300	18.8
37694S30401	1	COBRA HEAD	9500	II	42.7	4900	26
37696S30463	1	COBRA HEAD	5800	II	29.8	3300	18.8
37699S30496	1	COBRA HEAD	9500	II	42.7	4900	26
37701S30373	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37701S30407	1	COBRA HEAD	9500	II	42.7	4900	26
37706S30516	1	COBRA HEAD	5800	II	29.8	3300	18.8
37706S30625	1	COBRA HEAD	5800	II	29.8	3300	18.8
37708S30448	1	COBRA HEAD	5800	II	29.8	3300	18.8
37709S30532	1	COBRA HEAD	5800	II	29.8	3300	18.8
37710S30574	1	COBRA HEAD	5800	II	29.8	3300	18.8
37710S30716	1	COBRA HEAD	5800	II	29.8	3300	18.8
37711S30299	1	COBRA HEAD	5800	II	29.8	3300	18.8
37711S30401	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37712S30663	1	COBRA HEAD	5800	II	29.8	3300	18.8
37713S30359	1	COBRA HEAD	5800	II	29.8	3300	18.8
37716S30419	1	COBRA HEAD	9500	II	42.7	4900	26
37716S30476	1	COBRA HEAD	9500	II	42.7	4900	26
37719S30723	1	COBRA HEAD	5800	II	29.8	3300	18.8
37721S30607	1	COBRA HEAD	5800	II	29.8	3300	18.8
37722S30516	1	COBRA HEAD	5800	II	29.8	3300	18.8
37725S30648	1	COBRA HEAD	5800	II	29.8	3300	18.8
37725S30675	1	COBRA HEAD	5800	II	29.8	3300	18.8
37726S30311	1	COBRA HEAD	5800	II	29.8	3300	18.8
37726S30428	1	COBRA HEAD	9500	II	42.7	4900	26
37727S30380	1	COBRA HEAD	5800	II	29.8	3300	18.8
37728S30342	1	COBRA HEAD	5800	II	29.8	3300	18.8
37728S30493	1	COBRA HEAD	5800	II	29.8	3300	18.8
37729S30393	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37729S30550	1	COBRA HEAD	5800	II	29.8	3300	18.8
37733S30419	1	COBRA HEAD	5800	II	29.8	3300	18.8
37733S30434	1	COBRA HEAD	9500	II	42.7	4900	26
37733S30689	1	COBRA HEAD	9500	II	42.7	4900	26
37733S30708	1	COBRA HEAD	9500	II	42.7	4900	26
37736S30500	1	COBRA HEAD	5800	II	29.8	3300	18.8
37737S30589	1	COBRA HEAD	5800	II	29.8	3300	18.8
37739S30412	1	COBRA HEAD	5800	II	29.8	3300	18.8
37739S30747	1	COBRA HEAD	9500	II	42.7	4900	26
37740S30440	1	COBRA HEAD	9500	II	42.7	4900	26
37740S30714	1	COBRA HEAD	9500	II	42.7	4900	26
37740S30728	1	COBRA HEAD	9500	II	42.7	4900	26
37741S30675	1	COBRA HEAD	9500	II	42.7	4900	26
37742S30325	1	COBRA HEAD	5800	II	29.8	3300	18.8
37744S30473	1	COBRA HEAD	5800	II	29.8	3300	18.8
37744S30626	1	COBRA HEAD	5800	II	29.8	3300	18.8
37746S30359	7	COBRA HEAD	5800	II	29.8	2600	18.8
37747S30668	1	COBRA HEAD	9500	II	42.7	4900	26
37750S30527	1	COBRA HEAD	5800	II	29.8	3300	18.8
37752S30363	1	COBRA HEAD	5800	II	29.8	3300	18.8
37752S30449	1	COBRA HEAD	9500	II	42.7	4900	26
37752S30569	1	COBRA HEAD	5800	II	29.8	3300	18.8
37754S30442	1	COBRA HEAD	5800	II	29.8	3300	18.8
37754S30480	1	COBRA HEAD	5800	II	29.8	3300	18.8
37754S30660	1	COBRA HEAD	9500	II	42.7	4900	26
37755S30310	1	COBRA HEAD	5800	II	29.8	3300	18.8
37755S30396	1	COBRA HEAD	5800	II	29.8	3300	18.8
37757S30703	1	COBRA HEAD	5800	II	29.8	3300	18.8
37758S30517	1	COBRA HEAD	5800	II	29.8	3300	18.8
37761S30456	1	COBRA HEAD	9500	II	42.7	4900	26
37762S30342	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		Monthly kWh
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37762S30609	1	COBRA HEAD	5800	II	29.8	3300	18.8
37762S30651	1	COBRA HEAD	9500	II	42.7	4900	26
37764S30578	1	COBRA HEAD	5800	II	29.8	3300	18.8
37765S30555	1	COBRA HEAD	5800	II	29.8	3300	18.8
37767S30377	1	COBRA HEAD	5800	II	29.8	3300	18.8
37767S30410	1	COBRA HEAD	5800	II	29.8	3300	18.8
37768S30643	1	COBRA HEAD	9500	II	42.7	4900	26
37769S30297	1	COBRA HEAD	5800	II	29.8	3300	18.8
37770S30601	1	COBRA HEAD	5800	II	29.8	3300	18.8
37772S30466	1	COBRA HEAD	9500	II	42.7	4900	26
37773S30254	1	COBRA HEAD	5800	II	29.8	3300	18.8
37773S30979	1	COBRA HEAD	5800	II	29.8	3300	18.8
37775S30497	1	COBRA HEAD	5800	II	29.8	3300	18.8
37775S30588	1	COBRA HEAD	5800	II	29.8	3300	18.8
37776S30541	1	COBRA HEAD	5800	II	29.8	3300	18.8
37776S30633	1	COBRA HEAD	9500	II	42.7	4900	26
37777S30321	1	COBRA HEAD	5800	II	29.8	3300	18.8
37778S30424	1	COBRA HEAD	5800	II	29.8	3300	18.8
37779S30458	1	COBRA HEAD	5800	II	29.8	3300	18.8
37780S30676	1	COBRA HEAD	5800	II	29.8	3300	18.8
37781S30473	1	COBRA HEAD	9500	II	42.7	4900	26
37782S30360	1	COBRA HEAD	5800	II	29.8	3300	18.8
37782S30626	1	COBRA HEAD	9500	II	42.7	4900	26
37785S30311	1	COBRA HEAD	5800	II	29.8	3300	18.8
37785S30451	1	COBRA HEAD	5800	II	29.8	3300	18.8
37788S30266	1	COBRA HEAD	5800	II	29.8	3300	18.8
37788S30528	1	COBRA HEAD	5800	II	29.8	3300	18.8
37788S30619	1	COBRA HEAD	9500	II	42.7	4900	26
37789S30382	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37789S30479	1	COBRA HEAD	9500	II	42.7	4900	26
37791S30409	1	COBRA HEAD	5800	II	29.8	3300	18.8
37791S30602	1	COBRA HEAD	5800	II	29.8	3300	18.8
37792S30663	1	COBRA HEAD	5800	II	29.8	3300	18.8
37793S30574	1	COBRA HEAD	5800	II	29.8	3300	18.8
37796S30439	1	COBRA HEAD	5800	II	29.8	3300	18.8
37798S30373	1	COBRA HEAD	5800	II	29.8	3300	18.8
37798S30607	1	COBRA HEAD	9500	II	42.7	4900	26
37801S30997	1	COBRA HEAD	5800	II	29.8	3300	18.8
37802S30465	1	COBRA HEAD	5800	II	29.8	3300	18.8
37802S30490	1	COBRA HEAD	9500	II	42.7	4900	26
37804S30508	1	COBRA HEAD	9500	II	42.7	4900	26
37804S30599	1	COBRA HEAD	9500	II	42.7	4900	26
37804S30952	1	COBRA HEAD	5800	II	29.8	3300	18.8
37805S30697	1	COBRA HEAD	5800	II	29.8	3300	18.8
37806S30614	1	COBRA HEAD	5800	II	29.8	3300	18.8
37807S30330	1	COBRA HEAD	5800	II	29.8	3300	18.8
37807S30644	1	COBRA HEAD	5800	II	29.8	3300	18.8
37808S30512	1	COBRA HEAD	9500	II	42.7	4900	26
37808S30861	1	COBRA HEAD	5800	II	29.8	3300	18.8
37810S30547	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37810S30592	1	COBRA HEAD	9500	II	42.7	4900	26
37810S30683	1	COBRA HEAD	5800	II	29.8	3300	18.8
37812S30452	1	COBRA HEAD	5800	II	29.8	3300	18.8
37812S30498	1	COBRA HEAD	9500	II	42.7	4900	26
37813S30517	1	COBRA HEAD	9500	II	42.7	4900	26

Pole Location		Existing			Proposed/Equivalent		
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37813S30620	1	COBRA HEAD	5800	II	29.8	3300	18.8
37814S30416	1	COBRA HEAD	5800	II	29.8	3300	18.8
37816S30585	1	COBRA HEAD	9500	II	42.7	4900	26
37817S30492	1	COBRA HEAD	9500	II	42.7	4900	26
37820S30391	1	COBRA HEAD	5800	II	29.8	3300	18.8
37820S30497	1	COBRA HEAD	9500	II	42.7	4900	26
37821S30524	1	COBRA HEAD	9500	II	42.7	4900	26
37821S30579	1	COBRA HEAD	9500	II	42.7	4900	26
37821S30626	1	COBRA HEAD	5800	II	29.8	3300	18.8
37825S30839	1	COBRA HEAD	5800	II	29.8	3300	18.8
37826S30502	1	COBRA HEAD	9500	II	42.7	4900	26
37827S30571	1	COBRA HEAD	16000	II	62.8	7500	33.1
37827S30663	1	COBRA HEAD	5800	II	29.8	3300	18.8
37828S30530	1	COBRA HEAD	9500	II	42.7	4900	26
37828S30633	1	COBRA HEAD	5800	II	29.8	3300	18.8
37829S30477	1	COBRA HEAD	5800	II	29.8	3300	18.8
37830S30304	1	COBRA HEAD	5800	II	29.8	3300	18.8
37830S30430	1	COBRA HEAD	5800	II	29.8	3300	18.8
37830S30698	1	COBRA HEAD	5800	II	29.8	3300	18.8
37831S30401	1	COBRA HEAD	5800	II	29.8	3300	18.8
37831S30928	1	COBRA HEAD	5800	II	29.8	3300	18.8
37832S30566	1	COBRA HEAD	16000	II	62.8	7500	33.1
37833S30507	1	COBRA HEAD	9500	II	42.7	4900	26
37833S30881	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37834S30994	1	COBRA HEAD	5800	II	29.8	3300	18.8
37835S30535	1	COBRA HEAD	9500	II	42.7	4900	26
37835S30610	1	COBRA HEAD	5800	II	29.8	3300	18.8
37835S30638	1	COBRA HEAD	5800	II	29.8	3300	18.8
37835S30747	1	COBRA HEAD	5800	II	29.8	3300	18.8
37837S30559	1	COBRA HEAD	16000	II	62.8	7500	33.1
37838S30347	1	COBRA HEAD	5800	II	29.8	3300	18.8
37841S30514	1	COBRA HEAD	9500	II	42.7	4900	26
37841S30541	1	COBRA HEAD	9500	II	42.7	4900	26
37842S30290	1	COBRA HEAD	5800	II	29.8	3300	18.8
37842S30462	1	COBRA HEAD	5800	II	29.8	3300	18.8
37843S30487	1	COBRA HEAD	5800	II	29.8	3300	18.8
37843S30552	1	COBRA HEAD	16000	II	62.8	7500	33.1
37843S30643	1	COBRA HEAD	9500	II	42.7	4900	26
37844S30413	1	COBRA HEAD	9500	II	42.7	4900	26
37846S30381	1	COBRA HEAD	5800	II	29.8	3300	18.8
37846S30814	1	COBRA HEAD	5800	II	29.8	3300	18.8
37847S30520	1	COBRA HEAD	9500	II	42.7	4900	26
37848S30546	1	COBRA HEAD	9500	II	42.7	4900	26
37849S30862	1	COBRA HEAD	5800	II	29.8	3300	18.8
37850S30635	1	COBRA HEAD	9500	II	42.7	4900	26
37853S30328	1	COBRA HEAD	5800	II	29.8	3300	18.8
37853S30388	1	COBRA HEAD	5800	II	29.8	3300	18.8
37853S30525	1	COBRA HEAD	9500	II	42.7	4900	26
37854S30656	1	COBRA HEAD	5800	II	29.8	3300	18.8
37854S30908	1	COBRA HEAD	5800	II	29.8	3300	18.8
37855S30446	1	COBRA HEAD	9500	II	42.7	4900	26
37855S30497	1	COBRA HEAD	5800	II	29.8	3300	18.8
37855S30587	1	COBRA HEAD	5800	II	29.8	3300	18.8
37858S30722	1	COBRA HEAD	5800	II	29.8	3300	18.8
37859S30272	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37859S30363	1	COBRA HEAD	5800	II	29.8	3300	18.8
37859S30624	1	COBRA HEAD	9500	II	42.7	4900	26
37860S30419	1	COBRA HEAD	9500	II	42.7	4900	26
37861S30393	1	COBRA HEAD	5800	II	29.8	3300	18.8
37861S30531	1	COBRA HEAD	9500	II	42.7	4900	26
37861S30966	1	COBRA HEAD	5800	II	29.8	3300	18.8
37863S30257	1	COBRA HEAD	5800	II	29.8	3300	18.8
37864S30542	1	COBRA HEAD	16000	II	62.8	7500	33.1
37864S30664	1	COBRA HEAD	5800	II	29.8	3300	18.8
37865S30504	1	COBRA HEAD	5800	II	29.8	3300	18.8
37865S30790	1	COBRA HEAD	5800	II	29.8	3300	18.8
37866S30311	1	COBRA HEAD	5800	II	29.8	3300	18.8
37866S30525	1	COBRA HEAD	16000	II	62.8	7500	33.1
37866S30913	1	COBRA HEAD	5800	II	29.8	3300	18.8
37867S30573	1	COBRA HEAD	5800	II	29.8	3300	18.8
37870S30548	1	COBRA HEAD	9500	II	42.7	4900	26
37871S30427	1	COBRA HEAD	9500	V	42.7	4900	26
37871S30519	1	COBRA HEAD	16000	II	62.8	7500	33.1
37873S30349	1	COBRA HEAD	5800	II	29.8	3300	18.8
37873S30617	1	COBRA HEAD	5800	II	29.8	3300	18.8
37873S30831	1	COBRA HEAD	5800	II	29.8	3300	18.8
37874S30475	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37875S30376	1	COBRA HEAD	5800	II	29.8	3300	18.8
37875S30674	1	COBRA HEAD	5800	II	29.8	3300	18.8
37876S30513	1	COBRA HEAD	16000	II	62.8	7500	33.1
37877S30738	1	COBRA HEAD	5800	II	29.8	3300	18.8
37879S30434	1	COBRA HEAD	9500	II	42.7	4900	26
37880S30508	1	COBRA HEAD	16000	II	62.8	7500	33.1
37881S30555	1	COBRA HEAD	9500	II	42.7	4900	26
37884S30326	1	COBRA HEAD	9500	II	42.7	4900	26
37884S30594	1	COBRA HEAD	5800	II	29.8	3300	18.8
37884S30767	1	COBRA HEAD	5800	II	29.8	3300	18.8
37884S30935	1	COBRA HEAD	5800	II	29.8	3300	18.8
37885S30410	1	COBRA HEAD	9500	II	42.7	4900	26
37885S30924	1	COBRA HEAD	5800	II	29.8	3300	18.8
37886S30238	1	COBRA HEAD	5800	II	29.8	3300	18.8
37886S30363	1	COBRA HEAD	5800	II	29.8	3300	18.8
37886S30683	1	COBRA HEAD	5800	II	29.8	3300	18.8
37887S30499	1	COBRA HEAD	16000	II	62.8	7500	33.1
37888S30461	1	COBRA HEAD	5800	II	29.8	3300	18.8
37888S30562	1	COBRA HEAD	9500	II	42.7	4900	26
37889S30545	1	COBRA HEAD	5800	II	29.8	3300	18.8
37889S30720	1	COBRA HEAD	5800	II	29.8	3300	18.8
37892S30585	1	COBRA HEAD	5800	II	29.8	3300	18.8
37892S30602	1	COBRA HEAD	5800	II	29.8	3300	18.8
37893S30447	1	COBRA HEAD	9500	II	42.7	4900	26
37893S30810	1	COBRA HEAD	5800	II	29.8	3300	18.8
37894S30755	1	COBRA HEAD	9500	II	42.7	4900	26
37895S30491	1	COBRA HEAD	16000	II	62.8	7500	33.1
37895S30570	1	COBRA HEAD	9500	II	42.7	4900	26
37895S30672	1	COBRA HEAD	5800	II	29.8	3300	18.8
37897S30216	1	COBRA HEAD	5800	II	29.8	3300	18.8
37898S30394	1	COBRA HEAD	5800	II	29.8	3300	18.8
37901S30483	1	COBRA HEAD	16000	II	62.8	7500	33.1
37901S30932	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37902S30340	1	COBRA HEAD	5800	II	29.8	3300	18.8
37903S30762	1	COBRA HEAD	5800	II	29.8	3300	18.8
37904S30661	1	COBRA HEAD	5800	II	29.8	3300	18.8
37904S30794	1	COBRA HEAD	5800	II	29.8	3300	18.8
37905S30740	1	COBRA HEAD	5800	II	29.8	3300	18.8
37906S30524	1	COBRA HEAD	9500	II	42.7	4900	26
37906S30577	1	COBRA HEAD	9500	II	42.7	4900	26
37906S30701	1	COBRA HEAD	5800	II	29.8	3300	18.8
37907S30475	1	COBRA HEAD	16000	II	62.8	7500	33.1
37907S30567	1	COBRA HEAD	5800	II	29.8	3300	18.8
37908S30621	1	COBRA HEAD	5800	II	29.8	3300	18.8
37909S30460	1	COBRA HEAD	5800	II	29.8	3300	18.8
37911S30783	1	COBRA HEAD	5800	II	29.8	3300	18.8
37912S30378	1	COBRA HEAD	5800	II	29.8	3300	18.8
37914S30584	1	COBRA HEAD	9500	II	42.7	4900	26
37918S30335	1	COBRA HEAD	5800	II	29.8	3300	18.8
37915S30648	1	COBRA HEAD	5800	II	29.8	3300	18.8
37916S30465	1	COBRA HEAD	16000	II	62.8	7500	33.1
37917S30728	1	COBRA HEAD	5800	II	29.8	3300	18.8
37917S30775	1	COBRA HEAD	5800	II	29.8	3300	18.8
37918S30190	1	COBRA HEAD	5800	II	29.8	3300	18.8
37920S30462	1	COBRA HEAD	9500	II	42.7	4900	26
37921S30549	1	COBRA HEAD	5800	II	29.8	3300	18.8
37921S30684	1	COBRA HEAD	5800	II	29.8	3300	18.8
37922S30419	1	COBRA HEAD	5800	II	29.8	3300	18.8
37923S30510	1	COBRA HEAD	5800	II	29.8	3300	18.8
37924S30592	1	COBRA HEAD	9500	II	42.7	4900	26
37925S30715	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37926S30360	1	COBRA HEAD	9500	II	42.7	4900	26
37926S30453	1	COBRA HEAD	9500	II	42.7	4900	26
37926S30634	1	COBRA HEAD	5800	II	29.8	3300	18.8
37929S30785	1	COBRA HEAD	5800	II	29.8	3300	18.8
37930S30479	1	COBRA HEAD	5800	II	29.8	3300	18.8
37931S30317	1	COBRA HEAD	5800	II	29.8	3300	18.8
37932S30445	1	COBRA HEAD	9500	II	42.7	4900	26
37933S30536	1	COBRA HEAD	5800	II	29.8	3300	18.8
37935S30601	1	COBRA HEAD	9500	II	42.7	4900	26
37935S30623	1	COBRA HEAD	5800	II	29.8	3300	18.8
37936S30348	1	COBRA HEAD	5800	II	29.8	3300	18.8
37936S30368	1	COBRA HEAD	5800	II	29.8	3300	18.8
37937S30309	1	COBRA HEAD	5800	II	29.8	3300	18.8
37937S30396	1	COBRA HEAD	5800	II/4	29.8	3300	18.8
37938S30438	1	COBRA HEAD	9500	II	42.7	4900	26
37941S30488	1	COBRA HEAD	5800	II	29.8	3300	18.8
37941S30795	1	COBRA HEAD	5800	II	29.8	3300	18.8
37945S30430	1	COBRA HEAD	9500	II	42.7	4900	26
37945S30521	1	COBRA HEAD	5800	II	29.8	3300	18.8
37945S30569	1	COBRA HEAD	5800	II	29.8	3300	18.8
37947S30610	1	COBRA HEAD	9500	II	42.7	4900	26
37949S30332	1	COBRA HEAD	9500	II	42.7	4900	26
37949S30687	1	COBRA HEAD	5800	II	29.8	3300	18.8
37950S30221	1	COBRA HEAD	5800	II	29.8	3300	18.8
37950S30293	1	COBRA HEAD	5800	II	29.8	3300	18.8
37950S30380	1	COBRA HEAD	5800	II	29.8	3300	18.8
37950S30552	1	COBRA HEAD	5800	II	29.8	3300	18.8

Pole Location		Existing			Proposed/Equivalent		Monthly kWh
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
37951S30423	1	COBRA HEAD	9500	II	42.7	4900	26
37952S30650	1	COBRA HEAD	5800	II	29.8	3300	18.8
37952S30804	1	COBRA HEAD	5800	II	29.8	3300	18.8
37953S30474	1	COBRA HEAD	5800	II	29.8	3300	18.8
37954S30714	1	COBRA HEAD	5800	II	29.8	3300	18.8
37955S30365	1	COBRA HEAD	5800	II	29.8	3300	18.8
37956S30599	1	COBRA HEAD	5800	II	29.8	3300	18.8
37957S30276	1	COBRA HEAD	5800	II	29.8	3300	18.8
37957S30415	1	COBRA HEAD	9500	II	42.7	4900	26
37957S30618	1	COBRA HEAD	9500	II	42.7	4900	26
37957S30695	1	COBRA HEAD	5800	II	29.8	3300	18.8
37959S30300	1	COBRA HEAD	5800	II	29.8	3300	18.8
37959S30504	1	COBRA HEAD	5800	II	29.8	3300	18.8
37959S30542	1	COBRA HEAD	5800	II	29.8	3300	18.8
37960S30320	1	COBRA HEAD	5800	II	29.8	3300	18.8
37964S30406	1	COBRA HEAD	9500	II	42.7	4900	26
37964S30814	1	COBRA HEAD	5800	II	29.8	3300	18.8
37965S30460	1	COBRA HEAD	5800	II	29.8	3300	18.8
37966S30334	1	COBRA HEAD	5800	II	29.8	3300	18.8
37966S30346	1	COBRA HEAD	5800	II	29.8	3300	18.8
37966S30393	1	COBRA HEAD	5800	II	29.8	3300	18.8
37966S30665	1	COBRA HEAD	5800	II	29.8	3300	18.8
37967S30586	1	COBRA HEAD	5800	II	29.8	3300	18.8
37969S30308	1	COBRA HEAD	5800	II	29.8	3300	18.8
37970S30262	1	COBRA HEAD	5800	II	29.8	3300	18.8
37970S30628	1	COBRA HEAD	9500	II	42.7	4900	26
37971S30694	1	COBRA HEAD	5800	II	29.8	3300	18.8
37973S30495	1	COBRA HEAD	5800	II	29.8	3300	18.8
37975S30399	1	COBRA HEAD	9500	II	42.7	4900	26
37975S30632	1	COBRA HEAD	9500	II	42.7	4900	26
37976S30354	1	COBRA HEAD	9500	II	42.7	4900	26
37977S30298	1	COBRA HEAD	5800	II	29.8	3300	18.8
37979S30444	1	COBRA HEAD	5800	II	29.8	3300	18.8
37979S30827	1	COBRA HEAD	5800	II	29.8	3300	18.8
37980S30479	1	COBRA HEAD	5800	II	29.8	3300	18.8
37981S30521	1	COBRA HEAD	5800	II	29.8	3300	18.8
37982S30248	1	COBRA HEAD	5800	II	29.8	3300	18.8
37982S30394	1	COBRA HEAD	9500	II	42.7	4900	26
37982S30638	1	COBRA HEAD	9500	II	42.7	4900	26
37983S30414	1	COBRA HEAD	5800	II	29.8	3300	18.8
37984S30678	1	COBRA HEAD	5800	II	29.8	3300	18.8
37985S30359	1	COBRA HEAD	5800	II	29.8	3300	18.8
37985S30564	1	COBRA HEAD	5800	II	29.8	3300	18.8
37987S30325	1	COBRA HEAD	5800	II	29.8	3300	18.8
37987S30340	1	COBRA HEAD	5800	II	29.8	3300	18.8
37989S30284	1	COBRA HEAD	5800	II	29.8	3300	18.8
37990S30604	1	COBRA HEAD	5800	II	29.8	3300	18.8
37991S30422	1	COBRA HEAD	5800	II	29.8	3300	18.8
37992S30383	1	COBRA HEAD	9500	II	42.7	4900	26
37994S30649	1	COBRA HEAD	9500	II	42.7	4900	26
37995S30331	1	COBRA HEAD	5800	II	29.8	3300	18.8
37995S30358	1	COBRA HEAD	5800	II	29.8	3300	18.8
37997S30459	1	COBRA HEAD	5800	II	29.8	3300	18.8
37999S30494	1	COBRA HEAD	5800	II	29.8	3300	18.8
38000S30373	1	COBRA HEAD	9500	II	42.7	4900	26

Pole Location		Existing			Proposed/Equivalent		
Grid Number	Bill Code	Luminaire Description	Lumen Size	Light Pattern	Monthly kWh (before conversion)	Lumen Size	Monthly kWh (after conversion)
38003S30656	1	COBRA HEAD	9500	II	42.7	4900	26
38004S30542	1	COBRA HEAD	5800	II	29.8	3300	18.8
38004S30577	1	COBRA HEAD	5800	II	29.8	3300	18.8
38005S30282	1	COBRA HEAD	5800	II	29.8	3300	18.8
38006S30340	1	COBRA HEAD	5800	II	29.8	3300	18.8
38007S30303	1	COBRA HEAD	5800	II	29.8	3300	18.8
38008S30668	1	COBRA HEAD	9500	II	42.7	4900	26
38009S30362	1	COBRA HEAD	9500	II	42.7	4900	26
37990S30351	1	COBRA HEAD	9500	II	42.7	4900	26
38013S30347	1	COBRA HEAD	9500	II	42.7	4900	26
38013S30440	1	COBRA HEAD	5800	II	29.8	3300	18.8
38014S30508	1	COBRA HEAD	5800	II	29.8	3300	18.8
38021S30557	1	COBRA HEAD	5800	II	29.8	3300	18.8
38021S30679	1	COBRA HEAD	9500	II	42.7	4900	26
38026S30518	1	COBRA HEAD	5800	II	29.8	3300	18.8
38033S30448	1	COBRA HEAD	9500	II	42.7	4900	26
38041S30348	1	COBRA HEAD	5800	II	29.8	3300	18.8
38045S30577	1	COBRA HEAD	5800	II	29.8	3300	18.8
38048S30524	1	COBRA HEAD	5800	II	29.8	3300	18.8
38050S30522	1	COBRA HEAD	5800	II	29.8	3300	18.8
38052S30464	1	COBRA HEAD	9500	II	42.7	4900	26
38055S30352	1	COBRA HEAD	5800	II	29.8	3300	18.8
38063S30513	1	COBRA HEAD	5800	II	29.8	3300	18.8
38071S30502	1	COBRA HEAD	5800	II	29.8	3300	18.8
38073S30482	1	COBRA HEAD	9500	II	42.7	4900	26
38094S30475	1	COBRA HEAD	9500	II	42.7	4900	26
38109S30457	1	COBRA HEAD	9500	II	42.7	4900	26
38117S30447	1	COBRA HEAD	9500	II	42.7	4900	26
38127S30435	1	COBRA HEAD	9500	II	42.7	4900	26
38137S30456	1	COBRA HEAD	5800	II	29.8	3300	18.8
38158S30466	1	COBRA HEAD	5800	II	29.8	3300	18.8
38177S30475	1	COBRA HEAD	5800	II	29.8	3300	18.8
38210S30490	1	COBRA HEAD	5800	II	29.8	3300	18.8
37949S30310	1	COBRA HEAD	9500	II	42.7	4900	26
37980S30635	1	COBRA HEAD	9500	II	42.7	4900	26
37818S30555	1	COBRA-CUTOFF	9500	II	42.7	4900	26
37993S30835	1	COBRA HEAD	9500	II/4	42.7	4900	26
37925S30772	1	COBRA-CUTOFF	9500	II	42.7	4900	26