

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



October 30, 2019

**Advice Letter 5652-E**

Erik Jacobson  
Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

**SUBJECT: Revision to Electric Schedule LS-1 - PG&E-Owned Street and Highway Lighting**

Dear Mr. Jacobson:

Advice Letter 5652-E is effective as of November 2, 2019.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph  
Deputy Executive Director for Energy and Climate Policy/  
Director, Energy Division



**Erik Jacobson**  
Director  
Regulatory Relations

Pacific Gas and Electric Company  
77 Beale St., Mail Code B13U  
P.O. Box 770000  
San Francisco, CA 94177

Fax: 415-973-3582

October 3, 2019

**Advice 5652-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Revision to Electric Schedule LS-1 - PG&E-Owned Street and Highway Lighting.**

Pacific Gas and Electric Company (PG&E) hereby submits revisions to its electric tariffs. The affected tariff sheets are listed on the enclosed Attachment 1.

**Purpose**

PG&E requests California Public Utilities Commission (“CPUC” or “Commission”) approval to modify Electric Schedule LS-1 - *PG&E-Owned Street and Highway Lighting* to remove obsolete language, add clarifying language, correct typographical errors, adjust formatting issues and/or to update the language in the tariff consistent with current practices and lighting technologies that continues to support transitions to LED fixtures.

**Background**

Electric Schedule LS-1 is applicable to lighting installation on public or private property that illuminate streets, highways, and other outdoor ways and places where the lighting fixture is owned and maintained by PG&E. Schedule LS-1 include both a facility charge and an energy charge that is based on the type and size of the lamp.

Advice 3831-E (April 18, 2011) represents the last major revision that was made to Electric Schedule LS-1, which added energy-efficient Light-Emitting Diode (“LED”) street light technologies to the schedule. Since 2011, LED streetlighting as become the industry standard and adoption is widespread resulting in older less-efficient technologies becoming obsolete. Revisions requested in this advice letter, in part, further support the adoption of LED street light technology both as PG&E standards and industry standards for both new and restoration projects, and the phasing out of older technologies including the elimination of a High Pressure Sodium Vapor (“HPSV”) luminaire option for new installations for all classes except D.

**Tariff Revisions**

PG&E is proposing the following changes to Electric Schedule LS-1:

Sheet 1, RATES:

- Clarify in 2<sup>nd</sup> paragraph that LS-1 Class facility charges correlate to the unique cost of owning, operating and maintaining each individual LS-1 Class.

Sheet 2, RATES

- Replaced column heading name in the fourth column of the table in the rate section from “Average Initial Lumens” to “All Night Rate”. In Advice 5528-E-A, PG&E inadvertently duplicated the column name of the third column of the rate table onto the fourth column, resulting in column 3 and 4 having the same column name. The fourth column represent the rate for lamps that are on all evening and should be labeled “All Night Rate”.
- Adding additional footnote reference “\*\*\*\*” added after “HIGH PRESSURE SODIUM LAMPS”
- Corrected row alignment under HIGH PRESSURE SODIUM LAMPS for 120 Volts. Columns 2, 3, 4 and 5 were lowered by 1 row to align accurately with the LAMP WATTS in column 1.
- Footnotes:
  - Footnote \*, adding reference to Advice Letter number, also eliminated reference for potential addition of incandescent or mercury vapor lamps under Class A & C for compatibility with existing lights. We are working with our Customers to replace all existing Mercury Vapor Lamps. There are fewer than 100 Mercury Vapor Lamps currently installed under LS-1.
  - Footnote \*\*, Clarifies that closure of Class C for new installations is specific to mixed ownership.
  - Added Footnote \*\*\*, Indicates closure of HPSV for all but Class D

Sheet 3, RATES:

- Removing Low Pressure Sodium Vapor (“LPSV”) option from table since currently there are no customers on Schedule LS-1 who are using this type of lamp and LPSV is not an allowable technology for new installations under PG&E Standards.
- Correction – Adding missing footnote (\*) references
- Simplified footnote \* indicating that Mercury Vapor and Metal Halide are closed to new installations. No path is provided for using these technologies for maintaining compatibility with existing light sources.
- Added footnote \*\* to indicate that HPSV is closed for all Classes except for decorative street light fixtures (Class D), as requested in this advice letter.

## Sheet 10 -

- **MORE THAN ONE LIGHT ON A POLE:** Added wording indicates that the paragraph refers to a single Customer of Record with multiple lights on a single pole.
- Special Condition (SC) 1, **TYPE OF SERVICE:** Deleted reference to accessing PG&E standards at PG&E local offices or online and indicate that standards are available through PG&E's Service Planning Process. This update is included several times in this revision.

## Sheet 11

- Special Condition 4, **DESCRIPTION OF SERVICE PROVIDED:** SC 4 has been revised to add clarity with no change of intent.
  - Paragraph 1 is rewritten to clarify that the purpose of SC 4 is to identify which lighting facilities PG&E provides for installation for each of the LS-1 Classes.
  - Paragraph 2 provides new text to explain why there are different LS-1 Classes.
  - Paragraph 3 restates requirement to use PG&E standard equipment and how to access current standards.
  - Paragraph 4 thru 9 describe, by LS-1 Class, what PG&E provides and Customer responsibilities.
  - Class A – No Changes -
  - Class B – No Changes – restates that B is closed for new installations

## Sheet 12

- Special Condition 4, **DESCRIPTION OF SERVICE PROVIDED (Cont'd):**
  - Class C – Provides clarification that Class C is specific to multiple lights on a single pole with a single Customer of Record. There is a 2nd paragraph for Class C clarifying responsibilities for Class C ownership & maintenance for Class C installations prior to March 1st, 2006.
  - Class D – Changes intended to consolidate all decorative fixtures under Class D. Standard support brackets are no longer included (as they are not applicable to decorative fixtures). The 20' height constraint is eliminated.
  - Class E & Class F – No changes, both are for luminaires on streetlight only poles. Class E is specific to poles installed on a concrete foundation. Class F is for embedded poles. PG&E also provides a standard arm if applicable for Class F fixtures.

## Sheet 13

- Special Condition 6: **SERVICE REQUESTS:**
  - Clarifies that submission of Service Requests is through Service Planning and added Rearrangements to the list of applicable service requests.

## Sheet 16

- Special Condition 9 **PAYMENT FOR INSTALLATION OF LIGHTING FACILITIES:**
  - Like SC 4, SC 6 is largely re-written towards improving clarity and viewing from a perspective of the various LS-1 Classes.
  - Paragraph 1 refers to SC 4 for a description of the materials provided by PG&E for each LS-1 Class.
  - For Classes A, C, E & F the respective paragraph indicates the aspects which are the Customers financial responsibility.
  - Class D does the same, but it also reviews IFC options for both new and upgrading fixtures to LEDs.
  - The paragraph referencing attachments was moved (without edits) from SC 9 to SC 11.

## Sheet 17

- Special Condition 11 **MAINTENANCE, ACCESS, CLEARANCES and ATTACHMENTS:**
  - Paragraph a) Maintenance: Added wording allowing PG&E the flexibility to use current technology for maintenance and restoration activities at no incremental cost to Customer.
  - Paragraph b) Access: Minor editing to reinforce Customer is responsible for maintaining access.
  - Paragraph c) Clearances: Clarify and strengthen wording around Customer responsibilities for maintain clearance for access and maintenance of poles and lights and that these responsibilities apply to all vegetation, not just trees.
  - Paragraph d) Attachments: This paragraph was moved from SC 9 without edits. "ATTACHMENTS" added to Title Line for SC 17

## Sheet 19

- Special Condition 14 **TEMPORARY DISCONTINUANCE OF SERVICE:**
  - No Change in intent, clarification of Customer Costs for temporarily discontinuing service. Now describing Customer cost in terms of Facility Charges and applicable taxes rather than relating it to SC 3, **OPERATING SCHEDULES OTHER THAN ALL-NIGHT.**

**Protests**

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than October 23, 2019, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division  
ED Tariff Unit  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, California 94102

Facsimile: (415) 703-2200  
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson  
Director, Regulatory Relations  
c/o Megan Lawson  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B13U  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-3582  
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

**Effective Date**

PG&E requests that this Tier 2 advice submittal become effective on regular notice, November 2, 2019, which is 30 calendar days after the date of submittal.

**Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process\_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

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/S/

Erik Jacobson  
Director, Regulatory Relations

**Attachments:**

Attachment 1- Tariffs  
Attachment 2- Redline Tariffs



# ADVICE LETTER SUMMARY

## ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)

Utility type:

- ELC       GAS       WATER  
 PLC       HEAT

Contact Person: Kimberly Loo

Phone #: (415)973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas      WATER = Water  
 PLC = Pipeline      HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5652-E

Tier Designation: 2

Subject of AL: Revision to Electric Schedule LS-1 - PG&E-Owned Street and Highway Lighting.

Keywords (choose from CPUC listing): Streets Lights

AL Type:  Monthly  Quarterly  Annual  One-Time  Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: N/A

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested?  Yes  No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required?  Yes  No

Requested effective date: 11/2/19

No. of tariff sheets: 15

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: Electric Schedules LS-1 - PG&E-Owned Street and Highway Lighting

Service affected and changes proposed<sup>1</sup>: N/A

Pending advice letters that revise the same tariff sheets: N/A

<sup>1</sup>Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Name: Erik Jacobson, c/o Megan Lawson  
Title: Director, Regulatory Relations  
Utility Name: Pacific Gas and Electric Company  
Address: 77 Beale Street, Mail Code B13U  
City: San Francisco, CA 94177  
State: California Zip: 94177  
Telephone (xxx) xxx-xxxx: (415)973-2093  
Facsimile (xxx) xxx-xxxx: (415)973-3582  
Email: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: District of Columbia Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
45482-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 1	26965-E
45483-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 2	45376-E
45484-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 3	26967-E*
45485-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 10	30278-E
45486-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 11	43850-E
45487-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 12	35445-E
45488-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 13	30281-E
45489-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 16	43851-E
45490-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 17	
45491-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 18	43852-E
45492-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 19	35448-E
45493-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 20	40905-E
45494-E	ELECTRIC SCHEDULE LS-1 PG&E-OWNED STREET AND HIGHWAY LIGHTING Sheet 21	44657-E
45495-E	ELECTRIC TABLE OF CONTENTS Sheet 1	45399-E

<b>Cal P.U.C. Sheet No.</b>	<b>Title of Sheet</b>	<b>Cancelling Cal P.U.C. Sheet No.</b>
45496-E	ELECTRIC TABLE OF CONTENTS Sheet 5	45403-E



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 1

**APPLICABILITY:** This schedule is applicable to PG&E-owned and maintained lighting installations which illuminate streets, highways, and other outdoor ways and places and which generally utilize PG&E's distribution facilities under the provisions contained below. Rates of Class A through Class F service will be applicable as determined in Special Condition 4.

**TERRITORY:** The entire territory served.

**RATES:** The total monthly charge per lamp is equal to the sum of the facility charge and the energy charge. The monthly charge per lamp used for billing is calculated using unrounded facility and energy charges.

Monthly facility charges include the costs of owning, operating and maintaining the various facilities for each Schedule LS-1 Class. Monthly energy charges are based on the kWh usage of each lamp. (T)

Monthly energy charges per lamp are calculated using the following formula: (Lamp wattage + ballast wattage) x 4,100 hours/12 months/1000 x streetlight energy rate per kilowatt hour (kWh). Ballast wattage = ballast factor x lamp wattage.

Total bundled monthly facility and energy charges are shown below.

The various ballast wattages used in the monthly energy charge calculations can be found in the Ballast Factor table following the monthly energy charges. Ballast factors are averaged within each grouping (range of wattages). The same ballast factor is applied to all of the lamps that fall within its watt range. Applicant or Customer must provide third party documentation where manufacturer's information is not available for rated wattage consumption before PG&E will accept lamps for this schedule.

Direct Access (DA) and Community Choice Aggregation (CCA) charges shall be calculated in accordance with Condition 17, Billing, below.

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 2

RATES: (Cont'd.)

Facilities Charge Per Lamp Per Month

CLASS	A	B	C**	D	E	F
	\$6.849	\$7.126	\$6.680	\$9.331	\$9.664	\$7.828
LED Program Incremental Facility Charge	\$0.000		\$0.000	\$12.768	\$0.000	\$0.000

Energy Charge Per Lamp Per Month  
All Night Rates

LAMP WATTS	kWh per MONTH	AVERAGE INITIAL LUMENS	All Night Rate (T)	Half-Hour Adjustment
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INCANDESCENTLAMPS\*:

58	20	600	\$3.564 (I)	\$0.162 (I)
92	31	1,000	\$5.524 (I)	\$0.251 (I)
189	65	2,500	\$11.582 (I)	\$0.526 (I)
295	101	4,000	\$17.997 (I)	\$0.818 (I)
405	139	6,000	\$24.768 (I)	\$1.126 (I)

MERCURYVAPORLAMPS\*:

100	40	3,500	\$7.128 (I)	\$0.324 (I)
175	68	7,500	\$12.117 (I)	\$0.551 (I)
250	97	11,000	\$17.284 (I)	\$0.786 (I)
400	152	21,000	\$27.085 (I)	\$1.231 (I)
700	266	37,000	\$47.399 (I)	\$2.155 (I)

HIGHPRESSURESODIUMVAPORLAMPS\*\*\*:

(T)

120 Volts

	29	5,800	\$5.168 (I)	\$0.235 (I)
70	41	9,500	\$7.306 (I)	\$0.332 (I)
100	60	16,000	\$10.691 (I)	\$0.486 (I)
150	80	22,000	\$14.255 (I)	\$0.648 (I)
200	100	26,000	\$17.819 (I)	\$0.810 (I)
250	154	46,000	\$27.441 (I)	\$1.247 (I)
400				

240 Volts

	34	5,800	\$6.058 (I)	\$0.275 (I)
70	47	9,500	\$8.375 (I)	\$0.381 (I)
150	69	16,000	\$12.295 (I)	\$0.559 (I)
200	81	22,000	\$14.433 (I)	\$0.656 (I)
250	100	25,500	\$17.819 (I)	\$0.810 (I)
400	154	46,000	\$27.441 (I)	\$1.247 (I)

\* Closed to new installations per Advice 669-E, effective June 8, 1978.

(T)

\*\* Closed to new mixed ownership installations. See Special Condition 4.

(T)

\*\*\* Closed to new installations for all Classes except D per Advice 5652-E

(T)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 3

RATES: (Cont'd.)

Ballast Factors by Lamp Type and Watt Range

<u>Watt Range</u>	<u>Ballast Factor</u>		<u>Watt Range</u>	<u>Ballast Factor</u>	
<u>MERCURY VAPOR*</u>		(T)	<u>HIGH PRESSURE SODIUM VAPOR**</u>		(T)
1 to 75	31.00%		<u>120 Volts</u>		
76 to 125	17.07%		1 to 40	25.44%	
126 to 325	13.69%		41 to 60	22.93%	
326 to 800	11.22%		61 to 85	21.25%	
801 +	10.34%		86 to 125	20.00%	
		(D)	126 +	17.07%	
			<u>240 Volts</u>		
			1 to 60	40.49%	
			61 to 85	42.16%	
		(D)	86 to 125	37.56%	
			126 to 175	34.63%	
			176 to 225	18.54%	
			226 to 280	17.07%	
			281 to 380	12.35%	
			381 +	12.68%	
<u>METAL HALIDE</u>					
1 to 85	25.44%				
86 to 200	20.39%				
201 to 375	22.93%				
376 to 700	18.54%				
701 +	13.27%				

\* Closed to new installations per Advice 669-E effective June 8, 1978

\*\* Closed to new installations, except for Class D per Advice 5652-E.

(T)

(T)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 10

**MORE THAN ONE LIGHT ON A POLE:**

Where more than one light with a single Customer of Record is installed on a pole, all lights other than the first will be billed on the Class C rate. Not applicable to installations made prior to September 11, 1978.

(T)

**SPECIAL CONDITIONS:**

1. **TYPE OF SERVICE:** (a) PG&E provides basic lighting services with limited standard facilities, pole types and configurations. Only equipment in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process; (b) Applicant or Customer is responsible for lighting pattern layout and coverage for safety considerations; and (c) PG&E reserves the right to supply either "multiple" or "series" service. Series service to new lights will only be made where it is practical from PG&E's engineering standpoint to supply them from existing series systems.
2. **ANNUAL OPERATING SCHEDULE:** The above rates for All-Night (AN) service assume an average of approximately 11 hours operation per night and apply to lamps which will be turned on and off once each night in accordance with a regular operating schedule agreeable to the Customer but not exceeding 4,100 hours per year. This is also predicated on an electronic type photo control meeting ANSI standard C.136.10, with a turn on value of 1.0 footcandles and turn off value of 1.5 foot candles. Electro mechanical or thermal type photo controls are not acceptable for this rate schedule.
3. **OPERATING SCHEDULES OTHER THAN ALL-NIGHT:** Rates for regular operating schedules other than full AN will be the AN rate plus or minus, respectively, the half-hour adjustment for each half-hour more or less than an average of approximately 11 hours per night. This adjustment will apply only to lamps on regular operating schedules of not less than 1,095 hours per year, or three hours per night, and may be applied for 24-hour operation.

(T)

|

(T)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 11

SPECIAL  
CONDITIONS:

(Cont'd)

**4. DESCRIPTION OF SERVICE PROVIDED:**

The following describes lighting facilities only. Service connection and lighting installation responsibilities and payments, are described in special conditions 7, 8 and 9.

(T)  
(T)

PG&E provides several Classes (A, B, C, D, E and F) of LS-1 facilities. The Classes enable fair distribution of facility charges in correlation with PG&E's cost to maintain each Class. Once installed, PG&E maintains full ownership and maintenance responsibility for all Classes of LS-1.

(N)

Only equipment included in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process.

(N)

Class A: Applicable to standard non-decorative luminaires installed on a PG&E distribution pole for illumination of public and private ways. PG&E provides its standard luminaire, control facility, and standard 30" support arm on its existing distribution pole. There is no installation charge for this Class for standard (non-decorative) LED luminaires.

(T)

Class B: Closed to new installations per Advice 688-E, effective September 11, 1978. This Class is for streetlight installations for which the Customer has paid the estimated installed cost of the luminaire, support arm and control facilities.

(T)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 12

SPECIAL  
CONDITIONS:  
(Cont'd)

4. **DESCRIPTION OF SERVICE PROVIDED:** (Cont'd.)

Class C: Closed to new mixed ownership installations as of March 1, 2006 per Advice 2791-E in compliance with Decision 05-11-005. New Class C installations are applicable to an individual Customer's second or additional luminaire(s) on a PG&E owned pole. The Class considers that facility charges for the pole are paid through the primary luminaire which is under Class A, D, E or F. PG&E provides its standard luminaire, control facility and a standard 30" bracket if applicable. Customer is responsible for all further costs, see Special Condition 9.

(T)

For LS-1C fixtures placed in operation prior to March 1, 2006, the customer owns and is responsible to maintain the pole, it's foundation and any support brackets. PG&E owns and maintains all other components

Class D: Applicable to decorative street light fixtures. PG&E provides its standard post top or pendant style fixture and control facility. Customer is responsible for all further costs, see Special Condition 9.

Class E: Applicable to street light only poles on a concrete foundation, installed solely for the luminaire. PG&E provides a standard luminaire, control facility and service connection. Customer is responsible for all further costs, see Special Condition 9.

Class F: Applicable to embedded street light only poles, installed solely for the luminaire. PG&E provides a standard luminaire, control facility, a standard 30" bracket if applicable. and service connection. Customer is responsible for all further costs, see Special Condition 9.

(T)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 13

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 5. **REARRANGEMENT OF FACILITIES:** For any relocation, or rearrangement of PG&E's existing streetlight or service facilities at the request of the Customer and agreed to by PG&E, Customer shall pay PG&E, in advance, PG&E's estimated total cost of the relocation or rearrangement.
- 6. **SERVICE REQUESTS:** Service requests shall be made through PG&E's Service Planning organization and shall include form 79-1007 or 79-1008 for installations, removals, rearrangements, energizing and de-energizing of streetlight facilities.
- 7. **SERVICE and LIGHTING INSTALLATION RESPONSIBILITIES:** The Applicant at its expense shall perform all necessary trenching, backfill and paving, and shall furnish and install all necessary conduit, and substructures, including substructures for transformer installations if necessary, for street light service and circuits, in accordance with PG&E's specifications. Upon acceptance by PG&E, ownership of the conduit and substructures will automatically transfer to PG&E. Riser material is installed by PG&E at the Customer's expense. Tree trimming is the responsibility of the Applicant.

(T)  
|  
(T)

PG&E will furnish and install the underground or overhead service conductor, transformers and necessary facilities to complete the service from the distribution line source subject to the payment provision of special condition 8.

PG&E will establish service delivery points in close proximity to its distribution system as follows:

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 16

SPECIAL  
CONDITIONS:  
(Cont'd.)

**9. PAYMENT FOR INSTALLATION OF LIGHTING FACILITIES:**

(D)

(D)

See Special Condition 4 for a description of what material PG&E provides for each LS-1 Class (A, B, C, D, E and F). The Customer is responsible for the cost of all additional materials required to complete the installation. Only equipment included in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process.

(N)

Class A: Unless rearrangement of facilities is required to enable installation, there is no installation charge for this class for standard luminaires.

Class B: This Class is closed for new installations.

Class C: Effective March 1, 2006, this Class is restricted to new fixtures installed on PG&E owned distribution or streetlight only poles on which the Customer has an existing streetlight installed under another LS-1 Class (A, D, E or F). Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

(N)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 17

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. **PAYMENT FOR INSTALLATION OF LIGHTING FACILITIES** (Cont'd.):

Class D: Restricted to Decorative Fixtures - Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

(N)

For new Class D installations where the Customer requests an LED luminaire, the Customer may choose to pay to PG&E in advance, a non-refundable amount equal to PG&E's estimated cost difference between the selected LED fixture and PG&E's most similar HPSV fixture as determined by PG&E. Customers not wishing to pay the estimated cost difference between LED and HPSV for new lighting installations under LS-1D may elect to include new lights under PG&E's optional LED streetlight replacement program by choosing to pay the Incremental Facility Charge for LS-1D as shown on Sheet 2 of this schedule.

LS-1D Customers with existing HPSV fixtures who prefer to not pay the up-front cost for replacement LED fixtures may also elect to participate in PG&E's optional LED streetlight replacement program by choosing to pay the LS-1D Incremental Facility Charge as shown on Sheet 2.

Customers electing to participate in PG&E's optional LED streetlight replacement program will be eligible for any applicable rebate or incentive available through ratepayer-funded programs intended to increase energy efficiency.

Classes E and F: Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

(N)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 18

SPECIAL  
CONDITIONS:  
(Cont'd.)

**10. OWNERSHIP:**

All facilities installed under the provisions of this rate schedule shall be owned, operated and maintained by PG&E.

(L)

**11. MAINTENANCE, ACCESS, CLEARANCES and ATTACHMENTS**

a) Maintenance: PG&E shall exercise reasonable care and diligence in maintaining PG&E-owned facilities. For PG&E's operational efficiency, maintenance and restoration activities may be completed with like for like lighting technology or, at PG&E's discretion may include updating to PG&E's current lighting technology at no incremental cost to the Customer .

(L)  
(L)(N)  
(N)  
(N)

b) Access: The Customer is responsible for maintaining adequate access for PG&E's standard equipment used in maintaining facilities and for installation of its facilities. PG&E reserves the right to collect additional maintenance costs due to obstructed access or other conditions preventing PG&E from maintaining its equipment with standard operating procedures. Applicant or Customer shall be responsible for rearrangement charges as provided for in Special Condition 5.

(L)(T)  
(L)  
(L)

c) Clearances: The Customer will, at their own expense, correct all access or clearance infractions, or pay PG&E's total estimated cost for PG&E to relocate facilities to a new location which is acceptable to PG&E. Failure to comply with corrective measures within a reasonable time may result in discontinuance of service in accordance with electric Rule 11. Applicant or Customer shall be responsible for managing vegetation to maintain lighting patterns, required clearances and access for maintenance of existing poles and luminaires.

(T)  
(T)  
(T)

d) Attachments: Any attachments to street light poles requested by governmental agencies requires prior approval by PG&E and execution of a license agreement. Unauthorized attachments are subject to removal.

(N)  
(N)

(Continued)







**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 21

SPECIAL  
CONDITIONS:  
(Cont'd.)

17. **BILLING** (Cont'd.):

(L)

**Direct Access (DA) and Community Choice Aggregation (CCA) Customers** purchase energy from their non-utility provider and continue receiving delivery services from PG&E. Bills are equal to the sum of charges for transmission, transmission rate adjustments, reliability services, distribution, public purpose programs, nuclear decommissioning, New System Generation Charges, the franchise fee surcharge, and the applicable CRS. The CRS is equal to the sum of the individual charges set forth below. Exemptions to the CRS are set forth in Schedules DA CRS and CCA CRS.

	<u>DA / CCA CRS</u>
Energy Cost Recovery Amount Charge (per kWh)	(\$0.00057)
DWR Bond Charge (per kWh)	\$0.00503
CTC Charge (per kWh)	\$0.00087
Power Charge Indifference Adjustment (per kWh)	
2009 Vintage	\$0.01882
2010 Vintage	\$0.02150
2011 Vintage	\$0.02230
2012 Vintage	\$0.02312
2013 Vintage	\$0.02326
2014 Vintage	\$0.02327
2015 Vintage	\$0.02329
2016 Vintage	\$0.02318
2017 Vintage	\$0.02322
2018 Vintage	\$0.02328
2019 Vintage	\$0.02375

18. **DWR BOND CHARGE:** The Department of Water Resources (DWR) Bond Charge was imposed by California Public Utilities Commission Decision 02-10-063, as modified by Decision 02-12-082, and is property of DWR for all purposes under California law. The Bond Charge applies to all retail sales, excluding CARE and Medical Baseline sales. The DWR Bond Charge (where applicable) is included in customers' total billed amounts.

(L)



**ELECTRIC TABLE OF CONTENTS**

Sheet 1

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(Continued)

Advice 5652-E  
Decision

Issued by  
**Robert S. Kenney**  
Vice President, Regulatory Affairs

Submitted  
Effective  
Resolution

October 3, 2019



**ELECTRIC TABLE OF CONTENTS**

Sheet 5

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(Continued)

Advice 5652-E  
October 3, 2019

## **Attachment 2**

### **Redline Tariffs**



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 1

**APPLICABILITY:** This schedule is applicable to PG&E-owned and maintained lighting installations which illuminate streets, highways, and other outdoor ways and places and which generally utilize PG&E's distribution facilities under the provisions contained below. Rates of Class A through Class F service will be applicable as determined in Special Condition 4.

**TERRITORY:** The entire territory served.

**RATES:** The total monthly charge per lamp is equal to the sum of the facility charge and the energy charge. The monthly charge per lamp used for billing is calculated using unrounded facility and energy charges.

Monthly facility charges include the costs of owning, operating and maintaining the various ~~lamp types and size~~ facilities for each LS-1 Class. Monthly energy charges are based on the kWh usage of each lamp.

Monthly energy charges per lamp are calculated using the following formula: (Lamp wattage + ballast wattage) x 4,100 hours/12 months/1000 x streetlight energy rate per kilowatt hour (kWh). Ballast wattage = ballast factor x lamp wattage.

Total bundled monthly facility and energy charges are shown below.

The various ballast wattages used in the monthly energy charge calculations can be found in the Ballast Factor table following the monthly energy charges. Ballast factors are averaged within each grouping (range of wattages). The same ballast factor is applied to all of the lamps that fall within its watt range. Applicant or Customer must provide third party documentation where manufacturer's information is not available for rated wattage consumption before PG&E will accept lamps for this schedule.

Direct Access (DA) and Community Choice Aggregation (CCA) charges shall be calculated in accordance with Condition 17, Billing, below.

(Continued)

<i>Advice</i>	3115-E-A	<i>Issued by</i>	<i>Date Filed</i>	December 27, 2007
<i>Decision</i>	07-09-004	<b>Robert S. Kenney</b>	<i>Effective</i>	January 1, 2008
		<i>Vice President, Regulatory Affairs</i>	<i>Resolution</i>	E-4121



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 2

RATES: (Cont'd.)

Facilities Charge Per Lamp Per Month

CLASS	A	B	C**	D	E	F
	\$6.849	\$7.126	\$6.680	\$9.331	\$9.664	\$7.828
LED Program Incremental Facility Charge	\$0.000		\$0.000	\$12.768	\$0.000	\$0.000

Energy Charge Per Lamp Per Month  
All Night Rates

LAMP WATTS	kWh per MONTH	AVERAGE INITIAL LUMENS	AVERAGE INITIAL LUMENS All Night Rate	Half-Hour Adjustment
<b>INCANDESCENT LAMPS*:</b>				
58	20	600	\$3.504 (I)	\$0.159 (I)
92	31	1,000	\$5.432 (I)	\$0.247 (I)
189	65	2,500	\$11.389 (I)	\$0.518 (I)
295	101	4,000	\$17.697 (I)	\$0.804 (I)
405	139	6,000	\$24.356 (I)	\$1.107 (I)
<b>MERCURY VAPOR LAMPS*:</b>				
100	40	3,500	\$7.009 (I)	\$0.319 (I)
175	68	7,500	\$11.915 (I)	\$0.542 (I)
250	97	11,000	\$16.996 (I)	\$0.773 (I)
400	152	21,000	\$26.633 (I)	\$1.211 (I)
700	266	37,000	\$46.609 (I)	\$2.119 (I)
<b>HIGH PRESSURE SODIUM VAPOR LAMPS***:</b>				
120 Volts				
70	29	5,800	\$5.081 (I)	\$0.231 (I)
100	41	9,500	\$7.184 (I)	\$0.327 (I)
150	60	16,000	\$10.513 (I)	\$0.478 (I)
200	80	22,000	\$14.018 (I)	\$0.637 (I)
250	100	26,000	\$17.522 (I)	\$0.796 (I)
400	154	46,000	\$26.984 (I)	\$1.227 (I)
240 Volts				
70	34	5,800	\$5.957 (I)	\$0.271 (I)
100	47	9,500	\$8.235 (I)	\$0.374 (I)
150	69	16,000	\$12.090 (I)	\$0.550 (I)
200	81	22,000	\$14.193 (I)	\$0.645 (I)
250	100	25,500	\$17.522 (I)	\$0.796 (I)
400	154	46,000	\$26.984 (I)	\$1.227 (I)

\* Closed to new installations per Advice 669-E, effective as of June 8, 1978, except where PG&E and customer shall agree, mercury vapor lamps may be installed under Class A and C to provide compatibility with existing light sources.

\*\* Closed to new mixed ownership installations. See Special Condition 4.

\*\*\* Closed to new installations for all Classes except D per Advice XXXX-E

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 3

RATES: (Cont'd.)

Ballast Factors by Lamp Type and Watt Range (N)

<u>Watt Range</u>	<u>Ballast Factor</u>	<u>Watt Range</u>	<u>Ballast Factor</u>
<u>MERCURY VAPOR*</u>		<u>HIGH PRESSURE SODIUM VAPOR**</u>	
1 to 75	31.00%	<u>120 Volts</u>	
76 to 125	17.07%	1 to 40	25.44%
126 to 325	13.69%	41 to 60	22.93%
326 to 800	11.22%	61 to 85	21.25%
801 +	10.34%	86 to 125	20.00%
<u>LOW PRESSURE SODIUM VAPOR</u>		126 +	17.07%
<del>4 to 40</del>	<del>75.61%</del>	<u>240 Volts</u>	
<del>44 to 75</del>	<del>54.32%</del>	1 to 60	40.49%
<del>76 to 110</del>	<del>46.34%</del>	61 to 85	42.16%
<del>114 to 160</del>	<del>34.42%</del>	86 to 125	37.56%
<del>164 +</del>	<del>26.83%</del>	126 to 175	34.63%
<u>METAL HALIDE*</u>		176 to 225	18.54%
1 to 85	25.44%	226 to 280	17.07%
86 to 200	20.39%	281 to 380	12.35%
201 to 375	22.93%	381 +	12.68%
376 to 700	18.54%		
701 +	13.27%		

\* Closed to new installations ~~as per Advice 669-E, effective June 8, 1978, except where PG&E and Customer shall agree, mercury vapor lamps may be installed under Class A and C to provide compatibility with existing light sources.~~

\*\* Closed to new installations ~~except for Class D per Advice XXXX-E.~~

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

**MORE THAN ONE LIGHT ON A POLE:**

Where more than one light with a single Customer of Record is installed on a pole, all lights other than the first will be billed on the Class C rate. Not applicable to installations made prior to September 11, 1978.

**SPECIAL CONDITIONS:**

1. **TYPE OF SERVICE:** (a) PG&E provides basic lighting services with limited standard facilities, pole types and configurations. Applicants may view standard offerings at PG&E local offices or online at PGE.com; Only equipment in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process; (b) Applicant or Customer is responsible for lighting pattern layout and coverage for safety considerations; and (c) PG&E reserves the right to supply either "multiple" or "series" service. Series service to new lights will only be made where it is practical from PG&E's engineering standpoint to supply them from existing series systems.
2. **ANNUAL OPERATING SCHEDULE:** The above rates for All-Night (AN) service assume an average of approximately 11 hours operation per night and apply to lamps which will be turned on and off once each night in accordance with a regular operating schedule agreeable to the Customer but not exceeding 4,100 hours per year. This is also predicated on an electronic type photo control meeting ANSI standard C.136.10, with a turn on value of 1.0 footcandles and turn off value of 1.5 foot candles. Electro mechanical or thermal type photo controls are not acceptable for this rate schedule.
3. **OPERATING SCHEDULES OTHER THAN ALL-NIGHT:** Rates for regular operating schedules other than full AN will be the AN rate plus or minus, respectively, the half-hour adjustment for each half-hour more or less than an average of approximately 11 hours per night. This adjustment will apply only to lamps on regular operating schedules of not less than 1,095 hours per year, or three hours per night, and may be applied for 24-hour operation.

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 11

SPECIAL  
CONDITIONS:  
(Cont'd)

**4. DESCRIPTION OF SERVICE PROVIDED:**

The following describes lighting facilities only. Service connection and lighting installation responsibilities. ~~Lighting facilities payments, and service connections~~ and payments, are described in special conditions 7, 8 and 9.

PG&E provides several Classes (A, B, C, D, E and F) of LS-1 facilities. The Classes enable fair distribution of facility charges in correlation with PG&E's cost to maintain each Class. Once installed, PG&E maintains full ownership and maintenance responsibility for all Classes of LS-1.

Only equipment included in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process.

Class A: Applicable to standard non-decorative luminaires installed on a PG&E distribution pole for illumination of public and private ways. PG&E provides its standard luminaire, control facility, and standard 30" support arm on its existing distribution pole. There is no installation charge for this Class for standard (non-decorative) LED luminaires. -PG&E owns and maintains luminaire, control facilities, support arm, and service wiring on its existing distribution pole. There is no installation charge for this class for standard (non-decorative) Light Emitting Diode (LED) luminaires.

Class B: Closed to new installations per Advice 688-E, effective September 11, 1978. This Class is for streetlight installations for which the Customer has paid the estimated installed cost of the luminaire, support arm and control facilities. PG&E owns and maintains luminaire, control facilities, support arm, pole or post, foundation and service connection and where Customer has paid the estimated installed cost of the luminaire, support arm and control facilities (applicable only to installations in service as of September 11, 1978).

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 12

SPECIAL  
CONDITIONS:  
(Cont'd)

**4. DESCRIPTION OF SERVICE PROVIDED: (Cont'd.)**

~~Class C: Closed to new mixed ownership installations as of March 1, 2006. Only used for multiple lights on PG&E-owned poles to avoid duplicate billing of poles. per Advice 2791-E in compliance with Decision 05-11-005. New Class C installations are applicable to an individual Customer's second or additional luminaire(s) on a PG&E owned pole. The Class considers that facility charges for the pole are paid through the primary luminaire which is under Class A, D, E or F. PG&E provides its standard luminaire, control facility and a standard 30" bracket if applicable. Customer is responsible for all further costs, see Special Condition 9.~~

For LS-1C fixtures placed in operation prior to March 1st, 2006, the customer owns and is responsible to maintain the pole, it's foundation and any support brackets. PG&E owns and maintains all other components.

~~Class D: Applicable to decorative street light fixtures. PG&E provides its standard post top or pendant style High Pressure Sodium Vapor (HPSV) luminaire, fixture and control facility. Customer is responsible for all further costs, see Special Condition 9. PG&E owns and maintains its standard post top luminaire (including pendant style), control facility, internal post wiring, standard post (20-foot mounting height or less), support arm (when required) and foundation, underground or overhead circuit.~~

~~Class E: PG&E owns and maintains its standard luminaire, control facility, internal pole wiring, standard pole and foundation, underground or overhead circuit. Applicable to street light only poles on a concrete foundation, installed solely for the luminaire. PG&E provides a standard luminaire, control facility and service connection. Customer is responsible for all further costs, see Special Condition 9.~~

~~Class F: PG&E owns and maintains a standard luminaire, control facility, support arm, and service~~

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 12

~~connection on its standard pole or post, installed solely for the luminaire. Applicable to embedded street light only poles, installed solely for the luminaire. PG&E provides a standard luminaire, control facility, a standard 30" bracket if applicable, and service connection. Customer is responsible for all further costs, see Special Condition 9.~~

(Continued)

Advice 4661-E  
Decision

Issued by  
**Steven Malnight**  
Senior Vice President  
Regulatory Affairs

Date Filed July 1, 2015  
Effective January 1, 2016  
Resolution



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 13

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 5. **REARRANGEMENT OF FACILITIES:** For any relocation, or rearrangement of PG&E's existing streetlight or service facilities at the request of the Customer and agreed to by PG&E, Customer shall pay PG&E, in advance, PG&E's estimated total cost of the relocation or rearrangement.
- 6. **SERVICE REQUESTS:** Service requests shall be made through PG&E's Service Planning organization and shall include form 79-1007 or 79-1008 for installations, removals, rearrangements, energizing and de-energizing of streetlight facilities.
- 7. **SERVICE and LIGHTING INSTALLATION RESPONSIBILITIES:** The Applicant at its expense shall perform all necessary trenching, backfill and paving, and shall furnish and install all necessary conduit, and substructures, including substructures for transformer installations if necessary, for street light service and circuits, in accordance with PG&E's specifications. Upon acceptance by PG&E, ownership of the conduit and substructures will automatically transfer to PG&E. Riser material is installed by PG&E at the Customer's expense. Tree trimming is the responsibility of the Applicant.

PG&E will furnish and install the underground or overhead service conductor, transformers and necessary facilities to complete the service from the distribution line source subject to the payment provision of special condition 8.

PG&E will establish service delivery points in close proximity to its distribution system as follows:

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 14

SPECIAL  
CONDITIONS:  
(Cont'd.)

**7. SERVICE and LIGHTING INSTALLATION  
RESPONSIBILITIES (Cont'd.)**

OVERHEAD: a) In an overhead area - a single drop will be installed; b) for an overhead to underground system, service will be established in a PG&E box at the base of the pole, or directly to a single light or to the first light of a multiple circuit based on PG&E's standard design, in the shortest most practical configuration from the connection on the distribution line source.

UNDERGROUND: For an underground area, service will be established at the nearest existing secondary box. Where no secondary facilities exist, a new service, transformer and secondary splice box, as required, will be installed in the shortest most practical configuration from the connection on the distribution line source.

The Customer shall provide rights of way, clear route and access acceptable to PG&E in accordance with the provisions of Electric Rule 16, and Special Condition 11 below.

Line or service extensions not conforming to the foregoing descriptions shall be installed under Special Condition 13.

(Continued)

Advice 3831-E  
Decision

Issued by  
**Jane K. Yura**  
Vice President  
Regulation and Rates

Date Filed April 18, 2011  
Effective June 1, 2011  
Resolution



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

SPECIAL  
CONDITIONS:  
(Cont'd.)

**8. NON REFUNDABLE PAYMENT FOR SERVICE POINT  
INSTALLATION**

- a) The Applicant shall pay in advance the estimated installed cost of facilities necessary to establish a service delivery point to serve the street light or street light circuit, minus a one-time revenue allowance based on the kWh of energy usage and the distribution component of the energy rate posted in the rate schedule for the lamps installed. The total allowance shall be determined by taking the annual equivalent kWh multiplied by the distribution component, then divided by the cost of service factor used in electric Rule 15.C.
- b) The allowance may only be provided where PG&E must install service facilities to connect street lights or street light circuits. No allowance will be provided where a simple connection is required, or in the case of a Class A installation. Only lights operating at a minimum on the full 11hour AN schedule shall be granted allowances. Where Applicant received allowances based upon 11 hour AN operation, no billing adjustments, as otherwise provided for in Special Condition 3, shall be made for the first three (3) years following commencement of service.

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 16

SPECIAL  
CONDITIONS:  
(Cont'd.)

**9. PAYMENT FOR INSTALLATION OF LIGHTING FACILITIES:**

See Special Condition 4 for a description of what material PG&E provides for each LS-1 Class (A, B, C, D, E and F). The Customer is responsible for the cost of all additional materials required to complete the installation. Only equipment included in PG&E's current standards are eligible for installation under LS-1, except as addressed in Special Condition 12. Current standards are available through PG&E's Service Planning application process.

**Class A:** Unless rearrangement of facilities is required to enable installation, there is no installation charge for this class for standard luminaires.

**Class B:** This Class is closed for new installations.

**Class C:** Effective March 1, 2006, this Class is restricted to new fixtures installed on PG&E owned distribution or streetlight only poles on which the Customer has an existing streetlight installed under another LS-1 Class (A, D, E or F). Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

**Class D:** Restricted to Decorative Fixtures - Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

For new Class D installations where the Customer requests an LED luminaire, the Customer may choose to pay to PG&E in advance, a non-refundable amount equal to PG&E's estimated cost difference between the selected LED fixture and PG&E's most similar HPSV fixture as determined by PG&E. Customers not wishing to pay the estimated cost difference between LED and HPSV for new lighting installations under LS-1D may elect to include new lights under PG&E's optional LED streetlight replacement program by choosing to pay the Incremental

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 16

Facility Charge for LS-1D as shown on Sheet 2 of this schedule.

LS-1D Customers with existing HPSV fixtures who prefer to not pay the up-front cost for replacement LED fixtures may also elect to participate in PG&E's optional LED streetlight replacement program by choosing to pay the LS-1D Incremental Facility Charge as shown on Sheet 2.

Customers electing to participate in PG&E's optional LED streetlight replacement program will be eligible for any applicable rebate or incentive available through ratepayer-funded programs intended to increase energy efficiency.

**Classes E and F:** Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.

- ~~a) For LED installations, PG&E will provide at its expense the luminaire kit and standard arm for LS-1A and LS-1C for second and multiple lights on a PG&E pole, for Class LS-1E a luminiare kit, and for Class LS-1F a luminaire kit and standard arm. Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Allowances are not applied to street light facilities on the load side of the service delivery point.~~
- ~~b) For decorative lights under LS-1D, PG&E will provide a standard HPS post top. For LS-1D LED installations, the Customer shall pay to PG&E, in advance a non-refundable amount equal to PG&E's estimated cost difference between the LED installation and installation of a standard HPS post top of equivalent light output as determined by PG&E. In addition, Customer or Applicant shall pay, in advance, the estimated installed cost of the remaining lighting facilities that PG&E is required to install. Only fixtures selected by PG&E are eligible for installation under LS-1 except as addressed in Special Condition 12. Allowances are not applied to street light facilities on the load side of the service delivery point.~~

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 16

~~— For customers with decorative lights under LS-1D who elect to participate in PG&E's optional LED streetlight replacement program no advance costs will be collected for the replacement of existing lights, but the customer will pay the Incremental Facility Charge for LS-1D as shown on Sheet 2 of this schedule.~~

(Continued)

Advice 5376-E-B  
Decision

Issued by  
**Robert S. Kenney**  
Vice President, Regulatory Affairs

Submitted  
Effective  
Resolution

February 26, 2019  
March 1, 2019



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 17

SPECIAL  
CONDITIONS:  
(Cont'd.)

**9. PAYMENT FOR INSTALLATION OF LIGHTING FACILITIES**  
(Cont'd.):

~~b) Customers electing to participate in PG&E's optional LED streetlight replacement program will be eligible for any applicable rebate or incentive available through ratepayer-funded programs intended to increase energy efficiency.~~

~~— Customers not wishing to pay the estimated cost difference between LED and HPS for new (or replacement where PG&E is performing other work related to existing lights) lighting installations under LS-1D may elect to include new lights under PG&E's optional LED streetlight replacement program by choosing to pay the Incremental Facility Charge for the program.~~

~~— Any attachments to street light poles requested by governmental agencies requires prior approval by PG&E and execution of a license agreement. Unauthorized attachments are subject to removal.~~

**10. OWNERSHIP:** All facilities installed under the provisions of this rate schedule shall be owned, operated and maintained by PG&E.

**11. MAINTENANCE, ACCESS, CLEARANCES and ATTACHMENTS**

a) Maintenance: PG&E shall exercise reasonable care and diligence in maintaining PG&E-owned facilities. For PG&E's operational efficiency, maintenance and restoration activities may be completed with like for like lighting technology or, at PG&E's discretion may include updating to PG&E's current lighting technology at no incremental cost to the Customer.

b) Access: The Customer is responsible forwill maintaining adequate access for PG&E's standard equipment used in maintaining facilities and for installation of its facilities. PG&E reserves the right to collect additional maintenance costs due to obstructed access or other conditions preventing PG&E from maintaining its equipment with standard operating procedures. Applicant or Customer shall be responsible for rearrangement charges as provided for in Special Condition 5.

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

SPECIAL  
CONDITIONS:  
(Cont'd.)

**11. MAINTENANCE, ACCESS, CLEARANCES and ATTACHMENTS CLEARANCES (Cont'd.)**

c) Clearances: The Customer will, at Customers-their own expense, correct all access or clearance infractions, or pay PG&E's total estimated cost for PG&E to relocate facilities to a new location which is acceptable to PG&E. Failure to comply with corrective measures within a reasonable time may result in discontinuance of service in accordance with electric Rule 11. Applicant or Customer shall be responsible for tree-managing vegetation trimming to ensure required clearances for maintaining lighting patterns, and required clearances, and as well as -accessibility for maintenance of existing and repairs to poles and lights luminaires.

d) Attachments: Any attachments to street light poles requested by governmental agencies requires prior approval by PG&E and execution of a license agreement. Unauthorized attachments are subject to removal.

**12. SPECIAL EQUIPMENT:** Luminaires, poles, posts and other equipment requested by an Applicant or Customer in addition to or in substitution for PG&E's standard poles, posts, photo controls and equipment, will be provided if such equipment meets PG&E's engineering and operating standards, and if PG&E agrees to do so, provided that the Applicant or Customer pays the cost difference between the equipment normally installed by PG&E and the equipment requested by the Applicant or Customer, plus an additional Cost of Ownership payment as provided for in Section I.3 of electric Rule 2. This provision is also applicable to ~~special optical filters, shields or~~ other special hardware required or requested by the Applicant or Customer or any governmental agency having jurisdiction.

**13. LINE EXTENSIONS**

A. Where PG&E extends its facilities to street light installations in advance of subdivision projects where subdivision maps have been approved by local

(Continued)



**ELECTRIC SCHEDULE LS-1**  
PG&E-OWNED STREET AND HIGHWAY LIGHTING

Sheet 18

authorities, extensions will be installed under the provisions of electric Rule 15, except as noted below.

- B. Where PG&E extends its facilities to street light installations in the absence of any approved subdivision maps, applicant shall pay PG&E's estimated cost, plus cost of ownership and applicable tax. Standard form contract 62-4527, Agreement to Perform Tariff Schedule Related Work, shall be used for these installations.

(Continued)

Advice 4661-E  
Decision

Issued by  
**Steven Malnight**  
Senior Vice President  
Regulatory Affairs

Date Filed	July 1, 2015
Effective	January 1, 2016
Resolution	



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 19

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 14. **TEMPORARY DISCONTINUANCE OF SERVICE:** (Fixture remains in place.)  
At the request of the Customer, PG&E will temporarily discontinue service to ~~the~~ individual luminaires provided the Customer continues to pay the applicable facility charges and any applicable taxes for the Class of Service as identified in the Rates section of this Schedule equal to the all night rate, adjusted to zero burning hours under the provisions of Special Condition 3, plus the estimated cost to disconnect and reconnect the light. Upon Customer request for re-energization, PG&E may update the fixtures to current standards.
- 15. **CONTRACT:** Except as otherwise provided in this rate schedule, or where lighting service is installed in conjunction with facilities installed under the provisions of Rules 15 or 16, standard form contract 62-4527, Agreement to Perform Tariff Schedule Related Work shall be used for installations, rearrangements or relocations.
- 16. **MINIMUM SERVICE PERIOD:** Temporary services will be installed under electric Rule 13.
- 17. **BILLING:** A Customer's bill is calculated based on the option applicable to the Customer. Payment will be made in accordance with PG&E's filed tariffs.

**Bundled Service Customers** receive supply and delivery service solely from PG&E. The customer's bill is based on the Total Rates and Conditions set forth in this schedule.

**Transitional Bundled Service Customers** take transitional bundled service as prescribed in Rules 22.1 and 23, or take bundled service prior to the end of the six (6) month advance notice period required to elect bundled portfolio service as prescribed in Rules 22.1 and 23. These customers shall pay charges for transmission, transmission rate adjustments, reliability services, distribution, nuclear decommissioning, public purpose programs, New System Generation Charges, the applicable Cost Responsibility Surcharge (CRS) pursuant to Schedule DA CRS or Schedule CCA CRS, and short-term commodity prices as set forth in Schedule TBCC.

(D)

(Continued)



**ELECTRIC SCHEDULE LS-1**  
**PG&E-OWNED STREET AND HIGHWAY LIGHTING**

Sheet 20

SPECIAL  
CONDITIONS:  
(Cont'd.)

17. **BILLING** (Cont'd.):

**Direct Access (DA) and Community Choice Aggregation (CCA) Customers** purchase energy from their non-utility provider and continue receiving delivery services from PG&E. Bills are equal to the sum of charges for transmission, transmission rate adjustments, reliability services, distribution, public purpose programs, nuclear decommissioning, New System Generation Charges, the franchise fee surcharge, and the applicable CRS. The CRS is equal to the sum of the individual charges set forth below. Exemptions to the CRS are set forth in Schedules DA CRS and CCA CRS.

	<u>DA / CCA CRS</u>
Energy Cost Recovery Amount Charge (per kWh)	(\$0.00057)
DWR Bond Charge (per kWh)	\$0.00503
CTC Charge (per kWh)	\$0.00087
Power Charge Indifference Adjustment (per kWh)	
2009 Vintage	\$0.01882
2010 Vintage	\$0.02150
2011 Vintage	\$0.02230
2012 Vintage	\$0.02312
2013 Vintage	\$0.02326
2014 Vintage	\$0.02327
2015 Vintage	\$0.02329
2016 Vintage	\$0.02318
2017 Vintage	\$0.02322
2018 Vintage	\$0.02328
2019 Vintage	\$0.02375

18. **DWR BOND CHARGE:** The Department of Water Resources (DWR) Bond Charge was imposed by California Public Utilities Commission Decision 02-10-063, as modified by Decision 02-12-082, and is property of DWR for all purposes under California law. The Bond Charge applies to all retail sales, excluding CARE and Medical Baseline sales. The DWR Bond Charge (where applicable) is included in customers' total billed amounts.

**PG&E Gas and Electric  
Advice Submittal List  
General Order 96-B, Section IV**

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	
BART	Green Charge Networks	SCE
	Green Power Institute	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Hanna & Morton	
P.C. CalCom Solar	ICF	SPURR
California Cotton Ginners & Growers Assn	International Power Technology	San Francisco Water Power and Sewer
California Energy Commission	Intestate Gas Services, Inc.	Seattle City Light
California Public Utilities Commission	Kelly Group	Sempra Utilities
California State Association of Counties	Ken Bohn Consulting	Southern California Edison Company
Calpine	Keyes & Fox LLP	Southern California Gas Company
	Leviton Manufacturing Co., Inc. Linde	Spark Energy
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
Casner, Steve	Los Angeles Dept of Water & Power	Sunshine Design
Cenergy Power	MRW & Associates	Tecogen, Inc.
Center for Biological Diversity	Manatt Phelps Phillips	TerraVerde Renewable Partners
City of Palo Alto	Marin Energy Authority	Tiger Natural Gas, Inc.
	McKenzie & Associates	
City of San Jose	Modesto Irrigation District	TransCanada
Clean Power Research	Morgan Stanley	Troutman Sanders LLP
Coast Economic Consulting	NLine Energy, Inc.	Utility Cost Management
Commercial Energy	NRG Solar	Utility Power Solutions
County of Tehama - Department of Public Works		Utility Specialists
Crossborder Energy	Office of Ratepayer Advocates	
Crown Road Energy, LLC	OnGrid Solar	Verizon
Davis Wright Tremaine LLP	Pacific Gas and Electric Company	Water and Energy Consulting Wellhead Electric Company
Day Carter Murphy	Peninsula Clean Energy	Western Manufactured Housing Communities Association (WMA)
		Yep Energy
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		