



**Portland General Electric Company**  
121 SW Salmon Street • Portland, Oregon 97204  
PortlandGeneral.com

September 8, 2015

Public Utility Commission of Oregon  
Attn: Filing Center  
201 High Street, S.E.  
P.O. Box 1088  
Salem, OR 97308-1088

**RE: Advice No. 15-19, Addition to LED options for Street and Area Lighting**

Portland General Electric (PGE) submits this filing pursuant to Oregon Revised Statutes 757.205 and 757.210, and Oregon Administrative Rule (OAR) 860-022-0025, for filing proposed tariff sheets associated with Tariff P.U.C. No. 18, with a requested effective date of **October 21, 2015**:

Seventh Revision of Sheet No. 15-4  
Eighth Revision of Sheet No. 95-5  
First Revision of Sheet No. 95-7  
Second Revision of Sheet No. 95-8  
First Revision of Sheet No. 95-9  
First Revision of Sheet No. 95-10  
First Revision of Sheet No. 95-11  
Original Sheet No. 95-12  
Fourth Revision of Sheet No. 495-5  
Third Revision of Sheet No. 495-8  
First Revision of Sheet No. 495-9  
Sixth Revision of Sheet No. 515-3  
Sixth Revision of Sheet No. 595-3  
Fourth Revision of Sheet No. 595-6

The purpose of this filing is to add additional higher wattage standard and decorative Light-Emitting Diode (LED) fixture options to Schedule 15 and Schedule 95. Schedule 495, Schedule 515, and Schedule 595 are the Direct Access equivalents. Schedule 95 has additional sheets being filed due to movement which required repagination.

To satisfy requirements under OAR 860-022-0025(2), PGE provides the following information:

This filing creates additional light options for street and area lighting. Street and area light customers who choose the LED fixtures may see a slight reduction in their bill depending on the lights selected. Because it is unknown how many customers will choose the new LEDs, any resulting revenue change is also unknown.

PGE Advice No. 15-19  
Page 2

OAR 860-022-0030(1) does not apply because this filing is not proposing increased rates. The proposed rates are for new LED options that are not currently available in the tariff.

Should you have any questions or comments regarding this filing, please contact Colin Wright at (503) 464-8011.

Please direct all formal correspondence and requests to the following email address [pge.opuc.filings@pqn.com](mailto:pge.opuc.filings@pqn.com)

Sincerely,

A handwritten signature in black ink, appearing to read "Karla Wenzel". The signature is fluid and cursive, with the first name "Karla" being more prominent than the last name "Wenzel".

Karla Wenzel  
Manager, Pricing and Tariffs

Enclosures

**SCHEDULE 15 (Continued)**

MONTHLY RATE (Continued)  
Rates for LED Area Lighting

Type of Light	Watts	Lumens	Monthly kWh	Monthly Rate Per Luminaire <sup>(1)</sup>	
Acorn LED	60	5,488	21	\$ 14.56	
	70	4,332	24	16.68	
Cobrahead Equivalent LED	37	2,530	13	5.04	
	50	3,162	17	5.45	
	52	3,757	18	5.92	
	67	5,050	23	6.71	
	106	7,444	36	8.85	
	134	14,200	46	12.63	(N)
	156	16,300	53	14.47	
	176	18,300	60	15.70	
	201	21,400	69	17.15	
Westbrooke LED (Non-Flare)	36	3,369	12	17.30	(N)
	53	5,079	18	18.82	
	69	6,661	24	20.19	
	85	8,153	29	20.95	
	136	12,687	46	26.21	
	206	18,159	70	28.68	
Westbrooke LED (Flare)	36	3,369	12	19.43	(N)
	53	5,079	18	20.86	
	69	6,661	24	21.82	
	85	8,153	29	22.95	
	136	12,687	46	27.45	
	206	18,159	70	29.92	
CREE XSP LED	25	2,529	9	3.68	
	42	3,819	14	4.29	
	48	4,373	16	4.96	
	56	5,863	19	5.76	
	91	8,747	31	7.00	
Post-Top, American Revolution LED	45	3,395	15	8.11	(N)
	72	4,409	25	9.14	(N)

(1) See Schedule 100 for applicable adjustments.

**SCHEDULE 95 (Continued)**

**REPLACEMENT OF NON-REPAIRABLE LUMINAIRES INSTALLATION LABOR RATES**

Labor Rate	Straight Time	Overtime <sup>(1)</sup>
	\$133.00 per hour	\$189.00 per hour

<sup>(1)</sup> Per Article 20.2 of the Collective Bargaining Agreement Union No. 125 Contract, overtime is paid at the Overtime Rate for a minimum of one hour.

**RATES FOR STANDARD LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

LED lighting is new to the Company and pricing is changing rapidly. The Company may adjust rates under this schedule based on actual frequency of maintenance occurrences and changes in material prices.

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>
Cobrahead Equivalent	37	2,530	13	\$ 3.29
Cobrahead Equivalent	50	3,162	17	3.29
Cobrahead Equivalent	52	3,757	18	3.66
Cobrahead Equivalent	67	5,050	23	4.10
Cobrahead Equivalent	106	7,444	36	4.90
Cobrahead Equivalent	134	14,200	46	8.41
Cobrahead Equivalent	156	16,300	53	9.53
Cobrahead Equivalent	176	18,300	60	10.03
Cobrahead Equivalent	201	21,400	69	10.56

(N)

(N)

(M)

(M)

**SCHEDULE 95 (Continued)**

RATES FOR STANDARD LIGHTING (Continued)  
Light-Emitting Diode (LED) Only – Option C Energy Use (Continued)

<u>Type of Light</u>	<u>Watts*</u>	<u>Monthly kWh**</u>
LED	>200 - 210	70
LED	>210 - 220	73
LED	>220 - 230	77
LED	>230 - 240	80
LED	>240 - 250	84
LED	>250 - 260	87
LED	>260 - 270	91
LED	>270 - 280	94
LED	>280 - 290	97
LED	>290 - 300	101

\* Wattage based on total consumption of fixture (lamp, driver, photo control, etc). Customer may be required to provide verification of total energy consumption upon Company request.

\*\* Monthly kWh figure based on 4,100 burning hours per year and midpoint of listed watt range, rounded to the nearest kWh.

Monthly kWh = (midpoint of wattage range / 1,000) x (4,100 hours / 12 months)

(M)

(M)



**SCHEDULE 95 (Continued)**

**RATES FOR DECORATIVE LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>
Acorn LED	60	5,488	21	\$ 11.77
	70	4,332	24	13.57
Westbrooke (Non-Flared) LED	36	3,369	12	16.57
	53	5,079	18	16.34
	69	6,661	24	17.08
	85	8,153	29	17.34
	136	12,687	46	20.84
	206	18,159	70	20.84
Westbrooke (Flared) LED	36	3,369	12	18.70
	53	5,079	18	18.37
	69	6,661	24	18.71
	85	8,153	29	19.33
	136	12,687	46	22.08
	206	18,159	70	22.08
Post-Top, American Revolution LED	45	3,395	15	7.07
	72	4,409	25	7.07

**SPECIALTY SERVICES OFFERED**

Upon Customer request and subject to the Company's agreement, the Company will provide the following streetlighting services based on the Company's total costs including Company indirect charges:

- . Trimming of trees adjacent to streetlight equipment and circuits.
- . Arterial patrols to ensure correct operation of streetlights.
- . Painting or staining of wood and steel streetlight poles.

**ADJUSTMENTS**

Service under this schedule is subject to adjustments approved by the Commission. Adjustments include those summarized in Schedule 100.

(M)  
(N)  
(N)  
(N)  
(N)  
(N)  
(N)  
(N)  
(N)  
(M)

**SCHEDULE 95 (Continued)**

**SPECIAL CONDITIONS**

1. Customer is responsible for the cost associated with trenching, boring, conduit and restoration required for underground service to streetlighting.
2. Unless otherwise specifically provided, the location of Company-owned streetlighting equipment and poles may be changed at the Customer's request and upon payment by the Customer of the costs of removal and reinstallation.
3. If Company-owned streetlighting equipment or poles are removed at the Customer's request, a charge will be made consisting of the estimated original cost, less depreciation, less salvage value, plus removal cost. This provision does not pertain to the sale of Company-owned equipment. This condition applies if a Customer's selection of service under this Schedule requires the removal of Company-owned streetlighting equipment or poles.
4. If circuits or poles not already covered under Special Conditions 2 or 3 are removed or relocated at the Customer's request, the Customer is responsible for all associated costs for labor and materials incurred when fulfilling this request.
5. For Option C lights: The Company does not provide the circuit on new installations.
6. For Option A lights: The Company shall not be liable when either (i) the luminaires become inoperable or (ii) repair or replacement of inoperable luminaires is delayed or prevented; provided that, such inoperability of the luminaires or delay or prevention of repair or replacement is due to any cause beyond the Company's control, or that otherwise could not reasonably be foreseen or guarded against including but not limited to such causes as: strikes, lockouts, labor troubles, riots, insurrection, war, acts of God, extreme weather conditions, access to equipment, or the like.
7. For Option C lights: The Customer must ensure that (i) all maintenance and other work associated with this schedule is in compliance with the applicable requirements of OSHA, OPUC Safety Rules, the NESC and/or NEC and (ii) that all such work is performed by a Qualified Worker. A "Qualified Worker" means one who is knowledgeable about the construction and operation of the electric power generation, transmission, and distribution equipment as it relates to his or her work, along with the associated hazards, as demonstrated by satisfying the qualifying requirements for a "qualified person" or "qualified employee" with regard to the work in question as described in 29 CFR 1910.269 effective January 31, 1994, as it may be amended from time to time. In this case, a Qualified Worker is a journeyman lineman, or someone who has the equivalent training, expertise and experience to perform journeyman lineman work.

(M)

(M)



**SCHEDULE 95 (Continued)**

SPECIAL CONDITIONS (Continued)

(M)

8. Indemnification:

- a. For Option A lights: To the extent permitted by the Oregon Constitution and subject to the limits of the Oregon Tort Claims Act, the Customer shall hold the Company harmless and indemnify it for any and all third-party claims, actions, liability, costs, and expense by reason of injury to or death of persons or damage to property arising or resulting from any negligent acts or omissions or willful misconduct of the Customer, its officers, employees, or agents that arise under this Schedule, including but not limited to the street lighting requested by Customer, its officers, employees, or agents under this Schedule or the associated lighting levels. The Company shall hold Customer harmless and indemnify it for any and all third-party claims, actions, liability, costs, and expense by reason of injury to or death of persons or damage to property arising or resulting from any negligent acts or omissions or willful misconduct of the Company, its officers, employees, or agents that arise under this Schedule.
- b. For Option C lights: To the extent permitted by the Oregon Constitution and subject to the limits of the Oregon Tort Claims Act, the Customer shall hold the Company harmless and indemnify it for any and all third-party claims, actions, liability, costs, and expense by reason of injury to or death of persons or damage to property arising or resulting from any negligent acts or omissions or willful misconduct of the Customer, its officers, employees, or agents that arise under this Schedule, including but not limited to the street lighting requested by Customer, its officers, employees, or agents under this Schedule or the associated lighting levels or Customer's failure to comply with any of its obligations under Special Condition 8.c. below. This paragraph applies only to Option C lights that are attached to poles owned by PGE and does not apply to Option C lights attached to poles owned by Customer.
- c. For Option C lights: Customer has the obligation to ensure that any contractor performing any street or outdoor area light maintenance work or any construction associated with street or outdoor area lighting carry commercial liability insurance in an aggregate amount of \$5 million and \$2 million per occurrence and list PGE as an additional insured on the policy or policies. Customer will, at least seven (7) business days prior to the performance by a contractor of any street or outdoor area light maintenance work or any construction associated with street or outdoor area lighting, cause the contractor to furnish the Company with a certificate naming the Company as an additional insured under the contractor's commercial liability policy or policies. This paragraph shall not apply to Option C lights that are attached to poles owned by Customer.

(M)



**SCHEDULE 95 (Continued)**

(T)

SPECIAL CONDITIONS (Continued)

(M)

- d. Customer will provide (i) commercial liability insurance in an aggregate amount of \$5 million and \$2 million per occurrence and list PGE as an additional insured on the policy or policies or (ii) proof of adequate self-insurance for the amounts identified. All Insurance certificates or proof of self-insurance required under this Schedule shall be sent to Portland General Electric Company, Utility Asset Management, 2213 SW 153rd, Beaverton, OR 97006. All insurance required by this Schedule, to the extent it is provided by an insurance carrier, must be provided by an insurance carrier rated "A-" VIII or better by the A.M. Best Key Rating Guide. All policies of insurance required to be carried under this Schedule shall not be cancelled, reduced in coverage or renewal refused without at least thirty (30) days' prior written notice to the Company. The insurance coverage required by this Schedule must (i) be primary over, and pay without contribution from, any other insurance or self-insurance used by the Company, and (ii) waive all rights of subrogation against the Company. Customer shall bear all costs of deductibles and shall remain solely and fully liable for the full amount of any liability to the Company that is not compensated by Customer's or contractor's insurance.
  - e. The indemnifying party under this Schedule shall be liable only for third-party claims, actions, liability, costs, and expense pursuant to the terms of this Schedule and shall not be liable to the indemnified party for any of the indemnified party's special, punitive, exemplary, consequential, incidental or indirect losses or damages. For avoidance of doubt, the indemnifying party shall pay all reasonable attorneys' fees, experts' fees, and other legal expenses incurred in responding to or defending the third-party claim or action.
9. The conversion of existing Schedule 91 luminaires to Schedule 95 Option A luminaires is subject to the Company's operating schedule.
  10. The Customer is responsible for the cost of temporary disconnection and reconnection of Electricity Service. The Customer must provide written notice to request a temporary disconnection. During the period of temporary disconnection, the Customer remains responsible for all fixed charges in this schedule except for the cost of providing energy. After one year, the disconnection may no longer considered temporary and the facilities removed with the Customer responsible for the cost listed in Special Condition No. 3 of this schedule.
  11. For Option C lights: Customer is responsible to notify the Company within 30 days of conversions to Option C lights in this Schedule. The Company will limit all billing adjustments to 30 days back. The Company will use the nearest billing cycle date for all adjustments.

(M)

**SCHEDULE 95 (Concluded)**

**TERM**

A Customer served under the Daily Pricing Option may not choose service under another rate schedule until the end of the calendar year in which the pricing choice was made.

(M)  
|  
(M)

**SCHEDULE 495 (Continued)**

**REPLACEMENT OF NON-REPAIRABLE LUMINAIRES INSTALLATION LABOR RATES**

Labor Rates <sup>(1)</sup>	Straight Time	Overtime
	\$133.00 per hour	\$189.00 per hour

(1) Per Article 20.2 of the Collective Bargaining Agreement Union No. 125 Contract, overtime is paid at the Overtime Rate for a minimum of one hour.

**RATES FOR STANDARD LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

LED lighting is new to the Company and pricing is changing rapidly. The Company may adjust rates under this schedule based on actual frequency of maintenance occurrences and changes in material prices.

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>
LED	37	2,530	13	\$ 3.90
LED	50	3,162	17	4.09
LED	52	3,757	18	4.50
LED	67	5,050	23	5.18
LED	106	7,444	36	6.59
LED	134	14,200	46	10.57
LED	156	16,300	53	12.02
LED	176	18,300	60	12.85
LED	201	21,400	69	13.80

(N)  
|  
(N)



**SCHEDULE 495 (Continued)**

**RATES FOR DECORATIVE LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>	
Acorn LED	60	5,488	21	\$ 12.76	
	70	4,332	24	14.70	
Westbrooke (Non-Flared)	36	3,369	12	17.13	(N)
LED	53	5,079	18	17.18	
	69	6,661	24	18.21	
	85	8,153	29	18.70	
	136	12,687	46	23.00	
	206	18,159	70	24.13	
Westbrooke (Flared)	36	3,369	12	19.26	(N)
LED	53	5,079	18	19.21	
	69	6,661	24	19.84	
	85	8,153	29	20.69	
	136	12,687	46	24.24	
	206	18,159	70	25.37	
Post-Top, American Revolution	45	3,395	15	7.77	(N)
LED	72	4,409	25	8.24	(N)

**SPECIALTY SERVICES OFFERED**

Upon Customer request and subject to the Company's operating constraints, the Company will provide the following streetlighting services based on the Company's total costs including Company indirect charges:

- . Trimming of trees adjacent to streetlight equipment and circuits.
- . Arterial patrols to ensure correct operation of streetlights.
- . Painting or staining of wood and steel streetlight poles.

**ESS CHARGES**

In addition to the above charges, the Customer is subject to charges from its serving ESS for Electricity, transmission and other services as well as any other charges specified in the service agreement between the Customer and the ESS.

(M)  
|  
(M)

**SCHEDULE 495 (Continued)**

**ADJUSTMENTS**

Service under this schedule is subject to adjustments approved by the Commission. Adjustments include those summarized in Schedule 100.

**SPECIAL CONDITIONS**

1. The Company may periodically offer temporary or experimental lighting equipment that is not otherwise listed in this rate schedule. Temporary or experimental lighting will be offered at a billing rate based on approved prices for near equivalent lighting service equipment. The use of temporary or experimental lighting will be for a limited duration not to exceed one year at which time the lighting service equipment will either be removed or the Company will file with the Commission to add the luminaire type to this rate schedule.
2. Customer is responsible for the cost associated with trenching, boring, conduit and restoration required for underground service to streetlighting.
3. Unless otherwise specifically provided, the location of Company-owned streetlighting equipment and poles may be changed at the Customer's request and upon payment by the Customer of the costs of removal and reinstallation.
4. If Company-owned streetlighting equipment or poles are removed at the Customer's request, a charge will be made consisting of the estimated original cost, less depreciation, less salvage value, plus removal cost. This provision does not pertain to the sale of Company-owned equipment. This condition applies if a Customer's selection of service under this Schedule requires the removal of Company-owned streetlighting equipment or poles.
5. If circuits or poles not already covered under Special Condition 2 or 3 are removed or relocated at the Customer's request, the Customer is responsible for all associated costs for labor and materials incurred when fulfilling this request.
6. For Option C lights: The Company does not provide the circuit on new installations.
7. For Option C lights in service prior to January 31, 2006: When the Company furnishes Electricity to luminaires owned and maintained by the Customer and installed on Customer-owned poles that are not included in the list of equipment in this schedule, usage for the luminaire will be estimated by the Company. When the Customer and the Company cannot agree, the Commission will determine the estimate usage.

(M)  
|  
(M)

**SCHEDULE 515 (Continued)**

MONTHLY RATE (Continued)  
Rates for Area Lighting (Continued)

<u>Type of Light</u>	<u>Watts</u>	<u>Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate<sup>(1)</sup> Per Luminaire</u>	
Acorn					
LED	60	5,488	21	\$ 13.39	
	70	4,332	24	15.34	
Cobrahead					
LED	37	2,530	13	4.31	
	50	3,162	17	4.50	
	52	3,757	18	4.91	
	67	5,050	23	5.43	
	106	7,444	36	6.84	
	134	14,200	46	10.06	(N)
	156	16,300	53	11.51	
	176	18,300	60	12.35	
	201	21,400	69	13.30	
Westbrooke LED (Non-Flare)	36	3,369	12	16.63	(N)
	53	5,079	18	17.81	
	69	6,661	24	18.85	
	85	8,153	29	19.33	
	136	12,687	46	23.64	
	206	18,159	70	24.77	
Westbrooke LED (Flare)	36	3,369	12	18.76	(N)
	53	5,079	18	19.85	
	69	6,661	24	20.48	
	85	8,153	29	21.33	
	136	12,687	46	24.88	
	206	18,159	70	26.01	
CREE XSP LED	25	2,529	9	3.17	
	42	3,819	14	3.51	
	48	4,373	16	4.06	
	56	5,863	19	4.70	
	91	8,747	31	5.26	
Post-Top, American Revolution					(N)
LED	45	3,395	15	7.27	
	72	4,409	25	7.74	(N)

(1) See Schedule 100 for applicable adjustments.



**SCHEDULE 595 (Continued)**

**STREETLIGHT POLES SERVICE OPTIONS**

Option A – Poles

See Schedule 91/591 for Streetlight poles service options.

**MONTHLY RATE**

The service rates for Option A lights include the following charges for each installed luminaire based on the Monthly kWhs applicable to each luminaire.

Distribution Charge 4.693 ¢ per kWh

Energy Charge Provided by Energy Service Supplier

**REPLACEMENT OF NON-REPAIRABLE LUMINAIRES INSTALLATION LABOR RATES**

Labor Rates	Straight Time	Overtime <sup>(1)</sup>
	\$133.00 per hour	\$189.00 per hour

(1) Per Article 20.2 of the Collective Bargaining Agreement Union No. 125 Contract, overtime is paid at the Overtime Rate for a minimum of one hour.

**RATES FOR STANDARD LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

LED lighting is new to the Company and pricing is changing rapidly. The Company may adjust rates under this schedule based on actual frequency of maintenance occurrences and changes in material prices.

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>
LED	37	2,530	13	\$ 3.90
LED	50	3,162	17	4.09
LED	52	3,757	18	4.50
LED	67	5,050	23	5.18
LED	106	7,444	36	6.59
LED	134	14,200	46	10.57
LED	156	16,300	53	12.02
LED	176	18,300	60	12.85
LED	201	21,400	69	13.80

(N)  
|  
(N)

**SCHEDULE 595 (Continued)**

**RATES FOR DECORATIVE LIGHTING**

**Light-Emitting Diode (LED) Only – Option A Service Rates**

<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rate Option A</u>	
Acorn LED	60	5,488	21	\$ 12.76	
	70	4,332	24	14.70	
Westbrooke (Non-Flared)	36	3,369	12	17.13	(N)
LED	53	5,079	18	17.18	
	69	6,661	24	18.21	
	85	8,153	29	18.70	
	136	12,687	46	23.00	
	206	18,159	70	24.13	
Westbrooke (Flared)	36	3,369	12	19.26	(N)
LED	53	5,079	18	19.21	
	69	6,661	24	19.84	
	85	8,153	29	20.69	
	136	12,687	46	24.24	
	206	18,159	70	25.37	
Post-Top, American Revolution	45	3,395	15	7.77	(N)
LED	72	4,409	25	8.24	(N)

**SPECIALTY SERVICES OFFERED**

Upon Customer request and subject to the Company's operating constraints, the Company will provide the following streetlighting services based on the Company's total costs including Company indirect charges:

- . Trimming of trees adjacent to streetlight equipment and circuits.
- . Arterial patrols to ensure correct operation of streetlights.
- . Painting or staining of wood and steel streetlight poles.

**ESS CHARGES**

In addition to the above charges, the Customer is subject to charges from its serving ESS for Electricity, transmission and other services as well as any other charges specified in the service agreement between the Customer and the ESS. If the Customer chooses to receive an ESS Consolidated Bill, the Company's charges for Direct Access Service are not required to be separately stated on an ESS Consolidated Bill.