

November 15, 2016

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

RE: Advice No. 16-21, Annual Update Tariff

Portland General Electric (PGE) submits this filing pursuant to Oregon Revised Statutes (ORS) 757.205 and 757.210, and Oregon Administrative Rules (OARs) 860-022-0025 and 860-022-0030, for filing proposed tariff sheets associated with Tariff P.U.C. No. 18 with a requested effective date of <u>January 1, 2017</u>:

Second Revision of Sheet No. 6-2 Tenth Revision of Sheet No. 7-1 Eighth Revision of Sheet No. 15-1 Ninth Revision of Sheet No. 15-2 Tenth Revision of Sheet No. 15-3 Eleventh Revision of Sheet No. 15-4 Ninth Revision of Sheet No. 32-1 Ninth Revision of Sheet No. 38-1 Ninth Revision of Sheet No. 47-1 Tenth Revision of Sheet No. 49-1 Twelfth Revision of Sheet No. 75-1 Eleventh Revision of Sheet No. 77-3 Eleventh Revision of Sheet No. 83-1 Eighth Revision of Sheet No. 85-1 Twelfth Revision of Sheet No. 89-1 Fourth Revision of Sheet No. 90-1 Twelfth Revision of Sheet No. 91-7 Eleventh Revision of Sheet No. 92-1 Sixth Revision of Sheet No. 95-3 Fifteenth Revision of Sheet No. 125-3 Nineteenth Revision of Sheet No. 128-1 Eighteenth Revision of Sheet No. 128-2 Twenty Sixth Revision of Sheet No. 128-4 Sixteenth Revision of Sheet No. 129-2 Twenty Sixth Revision of Sheet No. 129-3 Second Revision of Sheet No. 129-6 Ninth Revision of Sheet No. 485-3 Thirteenth Revision of Sheet No. 489-3 Fourth Revision of Sheet No. 490-2 Fourth Revision of Sheet No. 491-6

Seventh Revision of Sheet No. 491-8 Sixth Revision of Sheet No. 491-9 Sixth Revision of Sheet No. 491-10 Sixth Revision of Sheet No. 491-11 Fifth Revision of Sheet No. 491-12 Fifth Revision of Sheet No. 491-13 Fourth Revision of Sheet No. 492-1 Fourth Revision of Sheet No. 495-3 Sixth Revision of Sheet No. 495-8 Ninth Revision of Sheet No. 515-1 Tenth Revision of Sheet No. 515-2 Ninth Revision of Sheet No. 515-3 Eighth Revision of Sheet No. 532-1 Ninth Revision of Sheet No. 538-1 Ninth Revision of Sheet No. 549-1 Twelfth Revision of Sheet No. 575-1 Tenth Revision of Sheet No. 583-1 Seventh Revision of Sheet No. 585-1 Twelfth Revision of Sheet No. 589-1 Fourth Revision of Sheet No. 590-1 Fourteenth Revision of Sheet No. 591-6 Seventeenth Revision of Sheet No. 591-7 Twelfth Revision of Sheet No. 591-8 Eleventh Revision of Sheet No. 591-9 Eleventh Revision of Sheet No. 591-10 Ninth Revision of Sheet No. 591-11 Eighth Revision of Sheet No. 591-12 Ninth Revision of Sheet No. 592-1 Tenth Revision of Sheet No. 595-3 Seventh Revision of Sheet No. 595-6

The purpose of this filing is to revise Schedules 77, 125, and 128 consistent with the final net variable power costs (NVPC) of \$382.9 million determined in Docket No. UE 308. In addition, PGE resets the numerous System Usage, Distribution, and lighting fixture charges contained in PGE's base rate schedules consistent with the Special Conditions contained in Schedule 129. These charges are reset based on a combination of new long-term direct access participation during the September 2016 enrollment window and changes in Schedule 129 Transition Adjustments from 2016. The change in unit NVPC inclusive of revenue sensitive costs and changes in Production Tax Credits is a decrease of approximately \$58.2 million. The changes in System Usage, Distribution, and lighting fixture prices result in an increase of approximately \$5.9 million. The changes in Schedule 129 Long-Term Transition Adjustment yield a decrease of approximately \$4.0 million.

The Schedule 125 Annual Power Cost Update prices reflect the final NVPC submitted to the Commission November 15, 2016, in accordance with OPUC Order No. 16-419.

The Schedule 128, Short-term Transition Adjustment prices are calculated based on the methodology used to establish the current Schedule 128 prices. More specifically, the Schedule 128 prices reflect the difference between the sum of the current Energy Charges and the Schedule 125 prices and the 2017 forward market prices for power.

The Schedule 77 Firm Load Reduction Program reference fuel costs are updated based on the 2017 forward market gas prices contained in the final UE 308 NVPC.

To satisfy the requirements of Oregon Administrative Rules (OAR) 860-022-0025(2) and 860-22-0030(1), PGE provides the following responses:

The changes in Schedules 125 and the various System Usage, Distribution and lighting fixture charge changes result in a reduction of revenues for Cost-of-Service customers of approximately \$53.5 million or 3.0% of base revenues. The change in revenues inclusive of direct access customers is a reduction of approximately \$56.2 million or 3.1% of base revenues. Approximately 870,000 customers (2017 average) will be impacted by these price changes. A typical Schedule 7 Residential customer consuming 840 kWh monthly will see a bill reduction of \$3.11 or 3.1% inclusive of Public Purpose Charge effects.

The following work papers are included in this filing:

Attachment A Schedule 125 Annual Power Cost

Attachment B Schedule 128 Short-term Transition Adjustment Calculations

Attachment C System Usage Charge Calculations

Attachment D Production Tax Credit Changes to Schedule 129

Attachment E Table Demonstrating the Base Rate Impacts by Rate Schedule

Please direct any questions regarding this filing to Marc Cody at (503) 464-7434

Please direct all formal correspondence and requests to the following email address pge.opuc.filings@pgn.com

Sincerely,

Karla Wenzel

Manager, Pricing & Tariffs

**Enclosures** 

#### **APPLICABLE**

Subject to selection by the Company, eligible Residential (Schedule 7) Customers may elect to participate in the pilot as described in the Enrollment section of this tariff. The Company will select the pricing option under Monthly Rate. Eligible Customers must have a Network Meter. See the Special Conditions section for a list of relevant eligibility criteria. Customers participating in the pricing pilot will be transferred from Schedule 7 to Schedule 6 for the duration of the pilot.

#### MONTHLY RATE

The sum of the following charges per Point of Delivery (POD)\* will apply to Customers participating in the pricing pilot:

Basic Charge	\$10.50		
Transmission and Related Services Charge	0.237	¢ per kWh	
Distribution Charge	4.035	¢ per kWh	<b>(I)</b>
Energy Charge			

See options that follow. The Company will choose the energy price option for each Customer.

<sup>\*</sup> See Schedule 100 for applicable adjustments.

## SCHEDULE 7 RESIDENTIAL SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Residential Customers.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

φ10.50		
0.237	¢ per kWh	
4.035	¢ per kWh	(1)
6.850	d ner kMh	
	• •	
	p por xxxx	
13.197	¢ per kWh	
7.572	¢ per kWh	
4.399	¢ per kWh	
(0.722)	¢ per kWh	
	4.035 6.850 7.572 13.197 7.572 4.399	0.237 ¢ per kWh 4.035 ¢ per kWh 6.850 ¢ per kWh 7.572 ¢ per kWh 7.572 ¢ per kWh 7.572 ¢ per kWh 4.399 ¢ per kWh

See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> Not applicable to separately metered Electric Vehicle (EV) TOU option.

# SCHEDULE 15 OUTDOOR AREA LIGHTING STANDARD SERVICE (COST OF SERVICE)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Customers for outdoor area lighting.

#### CHARACTER OF SERVICE

Lighting services, which consist of the provision of Company-owned luminaires mounted on Company-owned poles, in accordance with Company specifications as to equipment, installation, maintenance and operation.

The Company will replace lamps on a scheduled basis. Subject to the Company's operating schedules and requirements, the Company will replace individual burned-out lamps as soon as reasonably possible after the Customer notifies the Company of the burn-out.

#### **MONTHLY RATE**

Included in the service rates for each installed luminaire are the following pricing components:

Transmission and Related Services Charge	0.162	¢ per kWh	
Distribution Charge	5.288	¢ per kWh	(I)
Cost of Service Energy Charge	5.636	¢ per kWh	

#### MONTHLY RATE (Continued)

Rates for Area Lighting

Rates for Area Lighting				Monthly Rate <sup>(1)</sup>	
Type of Light	Watts	Lumens	Monthly kWh	Per Luminaire	
Cobrahead					
Mercury Vapor	175	7,000	66	\$ 12.81 <sup>(2)</sup>	(1)
	400	21,000	147	22.21 <sup>(2)</sup>	
	1,000	55,000	374	47.77 <sup>(2)</sup>	
HPS	70	6,300	30	8.88 <sup>(2)</sup>	
	100	9,500	43	10.31	(İ)
	150	16,000	62	12.51	( )
	200	22,000	79	14.65	(1)
	250	29,000	102	17.15	T
	310	37,000	124	19.99 <sup>(2)</sup>	
	400	50,000	163	24.07	
Flood, HPS	100	9,500	43	10.17 <sup>(2)</sup>	
	200	22,000	79	15.05 <sup>(2)</sup>	
	250	29,000	102	17.57	
	400	50,000	163	24.32	
Shoebox, HPS (bronze color, flat	70	6,300	30	10.30	
lens or drop lens, multi-volt)	100	9,500	43	11.44	(İ)
	150	16,500	62	13.74	
Special Acorn Type, HPS	100	9,500	43	13.81	(1)
HADCO Victorian, HPS	150	16,500	62	15.95	
	200	22,000	79	18.58	(I)
	250	29,000	102	21.14	
Early American Post-Top, HPS					
Black	100	9,500	43	10.70	(1)

<sup>(1)</sup> See Schedule 100 for applicable adjustments.

<sup>(2)</sup> No new service.

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

rtates for fired Eighting (continues)				Monthly Rate	
Type of Light	<u>Watts</u>	<u>Lumens</u>	Monthly kWh	Per Luminaire <sup>(1)</sup>	
Special Types					
Cobrahead, Metal Halide	150	10,000	60	\$ 12.77	
	175	12,000	71	14.02	(ļ)
Flood, Metal Halide	350	30,000	139	21.92	
	400	40,000	156	23.73	
Flood, HPS	750	105,000	285	41.17	
HADCO Independence, HPS	100	9,500	43	14.61	(I)
•	150	16,000	62	15.72	```
HADCO Capitol Acorn, HPS	100	9,500	43	17.06	(1)
•	150	16,000	62	18.48	( )
	200	22,000	79	21.86	(1)
	250	29,000	102	22.92	
HADCO Techtra, HPS	100	9,500	43	23.20	(I)
	150	16,000	62	24.70	. ,
	250	29,000	102	29.07	(I)
HADCO Westbrooke, HPS	70	6,300	30	15.16	
,	100	9,500	43	16.03	(İ)
	150	16,000	62	18.13	• • •
	200	22,000	79	20.22	<b>(I)</b>
	250	29,000	102	22.94	(I)
Holophane Mongoose, HPS	150	16,000	62	16.28	

<sup>(1)</sup> See Schedule 100 for applicable adjustments.

MONTHLY RATE (Continued) Rates for LED Area Lighting

<u>Type of Light</u> Acorn	<u>Watts</u>	Lumens	Monthly kWh	Monthly Rate <u>Per Luminaire<sup>(1)</sup></u>	
LED	60	5,488	21	\$ 14.11	
	70	4,332	24	16.23	
HADCO LED	70	5,120	24	19.11	
Cobrahead Equivalent		,			
LED	37	2,530	13	4.66	
	50	3,162	17	5.10	
	52	3,757	18	5.55	<b>(I)</b>
	67	5,050	23	6.34	` '
	106	7,444	36	8.45	
	134	14,200	46	12.06	(1)
	156	16,300	53	13.80	(I)
	176	18,300	60	15.00	. ,
	201	21,400	69	16.46	(I)
Westbrooke LED (Non-Flare)	36	3,369	12	15.31	
,	53	5,079	18	17.94	(1)
	69	6,661	24	18.01	( )
•	85	8,153	29	18.78	
	136	12,687	46	23.67	<b>(I)</b>
	206	18,159	70	26.26	(I)
Westbrooke LED (Flare)	36	3,369	12	17.15	
,	53	5,079	18	20.04	<b>(I)</b>
	69	6,661	24	20.70	( )
	85	8,153	29	20.20	
	136	12,687	46	24.75	(1)
	206	18,159	70	27.41	(I)
CREE XSP LED	25	2,529	9	3.49	
	42	3,819	14	4.13	
	48	4,373	16	4.78	
	56	5,863	19	5.59	(I)
	91	8,747	. 31	6.92	(1)
Post-Top, American Revolution					
LED	45	3,395	15	7.46	
	72	4,409	25	8.57	

(1) See Schedule 100 for applicable adjustments.

Advice No. 16-21 Issued November 15, 2016 James F. Lobdell, Senior Vice President

Effective for service on and after January 1, 2017

#### SCHEDULE 32 SMALL NONRESIDENTIAL STANDARD SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Small Nonresidential Customers. A Small Nonresidential Customer is a Customer that has not exceeded 30 kW more than once within the preceding 13 months, or with seven months or less of service has not exceeded 30 kW.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge Single Phase Service Three Phase Service	\$16.00 \$22.00		
Transmission and Related Services Charge	0.204	¢ per kWh	
Distribution Charge			
First 5,000 kWh	3.914	¢ per kWh	(1)
Over 5,000 kWh	1.080	¢ per kWh	(1)
Energy Charge Options			
Standard Service	6.487	¢ per kWh	
or			
Time-of-Use (TOU) Portfolio (enrollment is	s necessary)		
On-Peak Period	11.418	¢ per kWh	
Mid-Peak Period	6.487	¢ per kWh	
Off-Peak Period	3.806	¢ per kWh	

<sup>\*</sup> See Schedule 100 for applicable adjustments.

## SCHEDULE 38 LARGE NONRESIDENTIAL OPTIONAL TIME-OF-DAY STANDARD SERVICE (COST OF SERVICE)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

This optional schedule is applicable to Large Nonresidential Customers: 1) served at Secondary voltage with a monthly Demand that does not exceed 200 kW more than once in the preceding 13 months; or 2) who were receiving service on Schedule 38 as of December 31, 2015.

#### MONTHLY RATE

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge	\$25.00		
Transmission and Related Services Charge	0.204	¢ per kWh	
<u>Distribution Charge</u>	6.477	¢ per kWh	(1)
Energy Charge* On-Peak Period Off-Peak Period	6.444 5.444	¢ per kWh ¢ per kWh	

See Schedule 100 for applicable adjustments.

#### MINIMUM CHARGE

The Minimum Charge will be the Basic Charge. In Addition, the Company may require the Customer to execute a written agreement specifying a higher Minimum Charge if necessary, to justify the Company's investment in service facilities.

#### REACTIVE DEMAND

In addition to the Monthly Rate, the Customer will pay  $50 \c c$  for each kilovolt-ampere of Reactive Demand in excess of 40% of the maximum Demand. Such charge is separate from and in addition to the Minimum Charge specified.

<sup>\*\*</sup> On-peak Period is Monday-Friday, 7:00 a.m. to 8:00 p.m. off-peak Period is Monday-Friday, 8:00 p.m. to 7:00 a.m.; and all day Saturday and Sunday.

# SCHEDULE 47 SMALL NONRESIDENTIAL IRRIGATION AND DRAINAGE PUMPING STANDARD SERVICE (COST OF SERVICE)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Small Nonresidential Customers for irrigation and drainage pumping; may include other incidental service if an additional meter would otherwise be required. A Small Nonresidential Customer is a Customer that has not exceeded 30 kW more than once within the preceding 13 months, or with seven months or less of service has not exceeded 30 kW.

#### MONTHLY RATE

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge Summer Months** Winter Months**	\$35.00 No Charge		
Transmission and Related Services Charge	0.271	¢ per kWh	
<u>Distribution Charge</u> First 50 kWh per kW of Demand*** Over 50 kWh per kW of Demand	10.394 8.394	¢ per kWh ¢ per kWh	(I) (I)
Energy Charge	7.567	¢ per kWh	

See Schedule 100 for applicable adjustments.

#### MINIMUM CHARGE

The Minimum Charge will be the Basic Charge. In addition, the Company may require the Customer to execute a written agreement specifying a higher Minimum Charge if necessary, to justify the Company's investment in service facilities.

<sup>\*\*</sup> Summer Months and Winter Months commence with meter readings as defined in Rule B.

<sup>\*\*\*</sup> For billing purposes, the Demand will not be less than 10 kW.

# SCHEDULE 49 LARGE NONRESIDENTIAL IRRIGATION AND DRAINAGE PUMPING STANDARD SERVICE (COST OF SERVICE)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Large Nonresidential Customers for irrigation and drainage pumping; may include other incidental service if an additional meter would otherwise be required. A Large Nonresidential Customer is defined as having a monthly Demand exceeding 30 kW at least twice within the preceding 13 months, or with seven months or less of service having exceeding 30 kW once.

#### MONTHLY RATE

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge Summer Months** Winter Months**	\$40.00 No Charge		
Transmission and Related Services Charge	0.277	¢ per kWh	
<u>Distribution Charge</u> First 50 kWh per kW of Demand*** Over 50 kWh per kW of Demand	7.203 5.203	¢ per kWh ¢ per kWh	(I) (I)
Energy Charge	7.535	¢ per kWh	

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### MINIMUM CHARGE

The Minimum Charge will be the Basic Charge. In addition, the Company may require the Customer to execute a written agreement specifying a higher Minimum Charge if necessary, to justify the Company's investment in service facilities.

<sup>\*\*</sup> Summer Months and Winter Months commence with meter readings as defined in Rule B.

<sup>\*\*\*</sup> For billing purposes, the Demand will not be less than 30 kW.

### SCHEDULE 75 PARTIAL REQUIREMENTS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Large Nonresidential Customers supplying all or some portion of their load by self-generation operating on a regular basis, where the self-generation has a total nameplate rating of 2 MW or greater. A Large Nonresidential Customer is a Customer that has exceeded 30 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 30 kW.

#### **MONTHLY RATE**

The sum of the following charges at the applicable Delivery Voltage per Point of Delivery (POD)\*:

		Delivery Vol	tage
Pagia Chargo	<u>Secondary</u> \$2,590.00	Primary	Subtransmission
Basic Charge	φ2,590.00	\$1,560.00	\$2,990.00
Transmission and Related Services Charge per kW of monthly On-Peak Demand	\$0.75	\$0.73	\$0.72
<u>Distribution Charges</u>			
The sum of the following:			
per kW of Facility Capacity First 4,000 kW	\$1.09	\$1.06	\$1.06
Over 4,000 kW	\$1.09	\$1.06	\$1.06
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	,	4	¥ 1.55
per kW of monthly On-Peak Demand	\$2.33	\$2.27	\$1.19
Generation Contingency Reserves Charges Spinning Reserves			
per kW of Reserved Capacity > 2,000 kW	\$0.234	\$0.234	\$0.234
Supplemental Reserves			
per kW of Reserved Capacity > 2,000 kW	\$0.234	\$0.234	\$0.234
System Usage Charge	0 142 4	0.120.4	0.426.4
per kWh <u>Energy Charge</u>	0.142 ¢	0.139¢	0.136 ¢
per kWh	See	Energy Char	ge Below

<sup>\*</sup> See Schedule 100 for applicable adjustments.

**(I)** 

#### **SCHEDULE 77 (Continued)**

#### RESERVATION AND FIRM ENERGY PAYMENTS

The Customer receives a Reservation and Firm Energy payment as follows:

Reservation payment is the Customer commitment (per kW) multiplied by the applicable Reservation payment (per \$/kW) based on the Option selected by the Customer. The Reservation payment is made to the Customer no later than 60 days after the month in which they participated. If reductions are called during the applicable month, a Customer must fulfill all reductions prior to receiving the Reservation payment.

The Energy Payment is the Firm Energy Reduction Amount times the lesser of the hourly Mid-Columbia Electricity Index (Mid-C) as reported by the Powerdex or fuel cost per MWh for a Simple Cycle Combustion Turbine (SCCT) during the Load Reduction Event as shown below, adjusted for losses based on the Customer's delivery voltage. The Firm Energy Reduction Amount can be up to 120% of the commitment.

For the 2017 calendar year, the reference fuel costs per MWh for a SCCT are:

1	$\sim$	١
(	C	1

(C)

Jan 2017	Feb 2017	Jul 2017	Aug 2017	Sep 2017	Dec 2017
\$24.55	\$24.24	\$21.56	\$22.03	\$22.22	\$27.87

The Firm Energy Reduction Payment rates will be updated annually by December 1<sup>st</sup> for the next calendar year. Evaluation and settlement of the Firm Energy Reduction Payment will occur within 60 days of the Firm Load Reduction Event.

<sup>\*</sup>Holidays are New Year's Day (January 1), President's Day (February), Memorial Day (last Monday in May), Independence Day (July 4), Labor Day (first Monday in September), Thanksgiving Day (fourth Thursday in November), and Christmas Day (December 25). If a holiday falls on Saturday, Friday is designated a holiday. If a holiday falls on Sunday, the following Monday is designated a holiday.

#### SCHEDULE 83 LARGE NONRESIDENTIAL STANDARD SERVICE (31 – 200 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customers whose Demand has not exceeded 200 kW more than six times in the preceding 13 months and has not exceeded 4,000 kW more than once in the preceding 13 months, or with seven months or less of service has not had a Demand exceeding 4,000 kW. Service under this Schedule is available for Secondary Delivery Voltage only.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge Single Phase Service Three Phase Service	\$30.00 \$40.00	
Transmission and Related Services Charge per kW of monthly On-Peak Demand	\$0.75	
Distribution Charges** The sum of the following:     per kW of Facility Capacity     First 30 kW     Over 30 kW     per kW of monthly On-Peak Demand	\$2.74 \$2.64 \$2.33	
Energy Charge (per kWh) On-Peak Period*** Off-Peak Period*** See below for Daily Pricing Option description.	6.915 ¢ 5.415 ¢	
System Usage Charge per kWh	0.860 ¢	(1)

See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the applicable POD.

<sup>\*\*\*</sup> Peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday. Off-peak hours are between 10:00 p.m. and 6:00 a.m. Monday through Saturday and all day Sunday.

#### SCHEDULE 85 LARGE NONRESIDENTIAL STANDARD SERVICE (201 – 4,000 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Secondary Delivery Voltage Large Nonresidential Customer whose Demand has exceeded 200 kW more than six times in the preceding 13 months but has not exceeded 4,000 kW more than once in the preceding 13 months, or with seven months or less of service has not had a Demand exceeding 4,000 kW. To each Primary Delivery Voltage Large Nonresidential Customer whose Demand has not exceeded 4,000 kW more than once in the preceding 13 months, or with seven months or less of service has not had a Demand exceeding 4,000 kW.

#### MONTHLY RATE

The sum of the following charges at the applicable Delivery Voltage per Point of Delivery (POD)\*:

	<u>Delivery Vo</u> <u>Secondary</u>	oltage <u>Primary</u>
Basic Charge	\$420.00	\$450.00
Transmission and Related Services Charge per kW of monthly On-Peak Demand	\$0.75	\$0.73
Distribution Charges** The sum of the following:     per kW of Facility Capacity     First 200 kW     Over 200 kW     per kW of monthly On-Peak Demand	\$2.97 \$2.07 \$2.33	\$2.90 \$2.00 \$2.27
Energy Charge (per kWh) On-Peak Period*** Off-Peak Period*** See below for Daily Pricing Option description.	6.757 ¢ 5.257 ¢	6.638 ¢ 5.138 ¢
System Usage Charge per kWh	0.181 ¢	0.176 ¢

<sup>\*</sup> See Schedule 100 for applicable adjustments.

(I)

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the applicable POD.

<sup>\*\*\*</sup> Peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday. Off-peak hours are between 10:00 p.m. and 6:00 a.m. Monday through Saturday and all day Sunday.

#### SCHEDULE 89 LARGE NONRESIDENTIAL STANDARD SERVICE (>4,000 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customer whose Demand has exceeded 4,000 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 4,000 kW.

#### MONTHLY RATE

The sum of the following charges at the applicable Delivery Voltage per Point of Delivery (POD)\*:

		Delivery Vol	tage	
	Secondary	<u>Primary</u>	<u>Subtransmission</u>	
Basic Charge	\$2,590.00	\$1,560.00	\$2,990.00	
<u>Transmission and Related Services Charge</u> per kW of monthly On-Peak Demand	\$0.75	\$0.73	\$0.72	
Distribution Charges**				
The sum of the following:				
per kW of Facility Capacity				
First 4,000 kW	\$1.09	\$1.06	\$1.06	
Over 4,000 kW	\$1.09	\$1.06	\$1.06	
per kW of monthly On-Peak Demand	\$2.33	\$2.27	\$1.19	
Energy Charge (per kWh)				
On-Peak Period***	6.641¢	6.531¢	6.457 ¢	
Off-Peak Period***	5.141¢	5.031 ¢	4.957 ¢	
See below for Daily Pricing Option desc	ription.			
System Usage Charge	0.440.4	0.400./	0.400.4	<i>(</i> 1)
per kWh	0.142¢	0.139¢	0.136 ¢	(I)

<sup>\*</sup> See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the applicable POD.

<sup>\*\*\*</sup> Peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday. Off-peak hours are between 10:00 p.m. and 6:00 a.m. Monday through Saturday and all day Sunday.

## SCHEDULE 90 LARGE NONRESIDENTIAL STANDARD SERVICE (>4,000 kW and Aggregate to >100 MWa)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customer who meet the following conditions: 1) Individual account demand has exceeded 4,000 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 4,000 kW; and 2) where combined usage of all accounts meeting condition 1 for the Large Nonresidential Customer aggregate to at least 100 MWa in a calendar year; and 3) the customer maintains a load factor of 80% or greater for each account.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge	\$25,000.00	
<u>Transmission and Related Services Charge</u> perkW of monthly On-Peak Demand	\$0.73	
<u>Distribution Charges</u> ** The sum of the following:    per kW of Facility Capacity    First 4,000 kW    Over 4,000 kW	\$1.03 \$1.03	
per kW of monthly on-peak Demand	\$2.27	
Energy Charge (per kWh) On-Peak Period*** Off-Peak Period*** See below for Daily Pricing Option description.	6.184 ¢ 4.684 ¢	
System Usage Charge per kWh	0.124 ¢	<b>(1)</b>

See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the applicable POD.

<sup>\*\*\*</sup> Peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday. Off-peak hours are between 10:00 p.m. and 6:00 a.m. Monday through Saturday and all day Sunday.

#### MONTHLY RATE

In addition to the service rates for Option A and B lights, all Customers will pay the following charges for each installed luminaire based on the Monthly kWhs applicable to each luminaire.

Transmission and Related Services Charge	0.162 ¢ per kWh
Distribution Charge	5.288 ¢ per kWh

**(l)** 

**Energy Charge** 

Cost of Service Option 5.636 ¢ per kWh

<u>Daily Price Option</u> — Available only to Customers with an average load of five MW or greater on Schedules 91 and 95 and those customers that met the five MW or greater threshold prior to converting to lights from Schedule 91 to Schedule 95. This selection of this option applies to all luminaires served under Schedules 91 and 95. This option gives eligible Customers an option between a daily Energy price and a Cost of Service option for the Energy charge. In addition to the daily Energy price, the Customer will pay a Basic Charge of \$75 per month to help offset the costs of billing this option. The daily Energy price for all kWh will be the Intercontinental Exchange Mid-Columbia Daily on- and off-peak Electricity Firm Price Index (ICE-Mid-C Firm Index) plus 0.305¢ per kWh for wheeling, plus losses. If prices are not reported for a particular day or days, the average of the immediately preceding and following reported days' on- and off-peak prices will be used to determine the price for the non-reported period.

Prices reported with no transaction volume or as "survey-based" will be considered reported. For the purposes of calculating the daily on- and off-peak usage, actual kWhs will be determined for each month, using Sunrise Sunset Tables with adjustments for typical photocell operation and 4,100 annual burning hours.

For Customers billed on the Daily price Option, an average of the daily rates will be used to bill installations and removals that occur during the month. Any additional analysis of billing options and price comparisons beyond the monthly bill will be billed at a rate of \$100 per manhour.

Losses will be included by multiplying the applicable daily Energy price by 1.0685.

The Daily Price Option is subject to Schedule 128, Short Term Transition Adjustment.

#### **Enrollment for Service**

To begin service under the Daily Price Option on January 1<sup>st</sup>, the Customer will notify the Company by 5:00 p.m. PPT on November 15<sup>th</sup> (or the following working day if the 15<sup>th</sup> falls on a weekend or holiday) of the year prior to the service year of its choice of this option. Customers selecting this option must commit to this option for an entire service year. The Customer will continue to be billed on this option until timely notice is received to return to the Cost of Service Option.

SCHEDULE 92 TRAFFIC SIGNALS (NO NEW SERVICE) STANDARD SERVICE (COST OF SERVICE)

#### **AVAILABLE**

In all territory served by the Company.

#### APPLICABLE

To municipalities or agencies of federal or state governments where funds for payment of Electricity are provided through taxation or property assessment for traffic signals and warning facilities in systems containing at least 50 intersections on public streets and highways. This schedule is available only to those governmental agencies receiving service under Schedule 92 as of September 30, 2001.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

Transmission and Related Services Charge	0.158 ¢ per kWh	
<u>Distribution Charge</u>	2.299 ¢ per kWh	(I)
Energy Charge	5.716 ¢ per kWh	

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### **ELECTION WINDOW**

#### Balance-of-Year Election Window

The Balance-of-Year Election Window begins at 8:00 a.m. on February 15<sup>th</sup> (or the following business day if the 15<sup>th</sup> falls on a weekend or holiday). The Window will remain open from 8:00 a.m. of the first day through 5:00 p.m. of the third business day of the Election Window.

Balance-of-Year Election Window, a Customer may notify the Company of its choice to move to Direct Access Service. For the February 15<sup>th</sup> election, the move is effective on the following April 1<sup>st</sup>. A Customer may not choose to move from an alternative option back to Cost of service during a Balance-of-Year Election Window.

#### STREETLIGHT POLES SERVICE OPTIONS

See Schedule 91 for Streetlight poles service options.

#### MONTHLY RATE

In addition to the service rates for Option A lights, all Customers will pay the following charges for each installed luminaire based on the Monthly kWhs applicable to each luminaire.

<u>Transmission and Related Services Charge</u>

0.162 ¢ per kWh

Distribution Charge

5.288 ¢ per kWh

(1)

**Energy Charge** 

Cost of Service Option

5.636 ¢ per kWh

#### NON-COST OF SERVICE OPTION

<u>Daily Price Option</u> – Available only to Customers with an average load of five MW or greater on Schedules 91 and 95 and those customers that met the five MW or greater threshold prior to converting to lights from Schedule 91 to Schedule 95. This selection of this option applies to all luminaires served under Schedules 91 and 95. This option gives eligible Customers an option between a daily Energy price and a Cost of Service option for the Energy charge. In addition to the daily Energy price, the Customer will pay a Basic Charge of \$75 per month to help offset the costs of billing this option. The daily Energy price for all kWh will be the Intercontinental Exchange Mid-Columbia Daily on- and offpeak Electricity Firm Price Index (ICE-Mid-C Firm Index) plus 0.305¢ per kWh for wheeling, plus losses. If prices are not reported for a particular day or days, the average of the immediately preceding and following reported days' on- and off-peak prices will be used to determine the price for the non-reported period.

Prices reported with no transaction volume or as "survey-based" will be considered reported. For the purposes of calculating the daily on- and off-peak usage, actual kWhs will be determined for each month, using Sunrise Sunset Tables with adjustments for typical photocell operation and 4,100 annual burning hours.

For Customers billed on the Daily Price Option, an average of the daily rates will be used to bill installations and removals that occur during the month. Any additional analysis of billing options and price comparisons beyond the monthly bill will be billed at a rate of \$100 per manhour.

Losses will be included by multiplying the applicable daily Energy price by 1.0685.

The Daily Price Option is subject to Schedule 128, Short Term Transition Adjustment.

Advice No. 16-21 Issued November 15, 2016 James F. Lobdell, Senior Vice President

Effective for service on and after January 1, 2017

#### SCHEDULE 125 (Concluded)

#### **ADJUSTMENT RATES**

Schedule 7		¢ per kWh (0.359)	(R)
15 22		(0.290)	
32	Large Managidantial	(0.334)	
38 47	Large Nonresidential	(0.309)	
47 49		(0.390)	
49 75		(0.388)	
73	Secondary	(0.310) <sup>(1)</sup>	
	Primary	(0.304) <sup>(1)</sup>	
	Subtransmission	(0.305) <sup>(1)</sup>	
83	Cast anomicsion	(0.330)	
85		(0.000)	
00	Secondary	(0.321)	
	Primary	(0.314)	
89		,	
	Secondary	(0.310)	
	Primary	(0.304)	
	Subtransmission	(0.305)	
90		(0.286)	
91		(0.290)	
92		(0.294)	1
95		(0.290)	(R)

<sup>(1)</sup> Applicable only to the Baseline and Scheduled Maintenance Energy.

#### SPECIAL CONDITIONS

1. Costs recovered through this schedule will be allocated to each schedule using the applicable schedule's forecasted energy on the basis of an equal percent of generation revenue applied on a cents per kWh basis to each applicable rate schedule.

### SCHEDULE 128 SHORT-TERM TRANSITION ADJUSTMENT

#### **PURPOSE**

The purpose of this Schedule is to calculate the Short-Term Transition Adjustment to reflect the results of the ongoing valuation under OAR 860-038-0140.

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To all Nonresidential Customers served who receive service at Daily pricing (other than Cost of Service) on Schedules 32, 38, 75, 83, 85, 89, 90, 91 or 95 or Direct Access service on Schedules 515, 532, 538, 549, 575, 583, 585, 589, 590, 591, 592 and 595. This Schedule is not applicable to Customers served on Schedules 485, 489, 490, 491, 492 and 495.

#### SHORT-TERM TRANSITION ADJUSTMENT

The Short-Term Transition Adjustment will reflect the difference between the Energy Charge(s) under the Cost of Service Option including Schedule 125 and the market price of power for the period of the adjustment applied to the load shape of the applicable schedule.

#### ANNUAL SHORT-TERM TRANSITION ADJUSTMENT RATE

For Customers who have made a service election other than Cost of Service in 2016, the (C) Annual Short-Term Transition Adjustment Rate will be applied to their bills for service effective on and after January 1, 2017:

(C)

		Annual	
Schedul	e	¢ per kWh <sup>(1)</sup>	
32		3.551	(R)
38		3.025	
75	Secondary	3.141 <sup>(2)</sup>	
	Primary	3.087 <sup>(2)</sup>	
	Subtransmission	3.108 <sup>(2)</sup>	
83		3.466	
85	Secondary	3.315	
	Primary	3.226	(R)

<sup>(1)</sup> Not applicable to Customers served on Cost of Service.

<sup>(2)</sup> Applicable only to the Baseline and Scheduled Maintenance Energy.

#### ANNUAL SHORT-TERM TRANSITION ADJUSTMENT RATE (Continued)

0.1.1.1		Annual	
Schedule		¢ per kWh <sup>(1)</sup>	(D)
89	Secondary	3.141	(R)
	Primary	3.087	
	Subtransmission	3.108	
90		2.736	
91		2.937	
95		2.937	
515		2.937	
532		3.551	
538		3.025	
549		4.531	
575	Secondary	3.141 <sup>(2)</sup>	
	Primary	3.087 <sup>(2)</sup>	
	Subtransmission	3.108 <sup>(2)</sup>	
583		3.466	
585	Secondary	3.315	
	Primary	3.226	
589	Secondary	3.141	
	Primary	3.087	
	Subtransmission	3.108	
590		2.736	
591		2.937	
592		2.866	
595		2.937	(R)
000			

<sup>(1)</sup> Not applicable to Customers served on Cost of Service.

#### ANNUAL SHORT-TERM TRANSITION ADJUSTMENT REVISIONS

The Annual Short-Term Transition Adjustment rate will be filed on November 15<sup>th</sup> (or the next business day if the 15<sup>th</sup> is a weekend or holiday) to be effective for service on and after January 1<sup>st</sup> of the next year. Indicative, non-binding estimates for the Annual Short-Term Transition Adjustment and Cost-of-Service Energy Prices will be posted by the Company by September 1 and then again one week prior to the filing date. These prices will be for informational purposes only and are not to be considered the adjustment rates.

<sup>(2)</sup> Applicable only to the Baseline and Scheduled Maintenance Energy.

#### **SCHEDULE 128 (Concluded)**

#### Second Quarter – April 1st Balance of Year Adjustment Rate (1)

		Annual	
Schedule		¢ per kWh <sup>(2)</sup>	
38		0.000	(Ċ)
75	Secondary	0.000 (3)	
	Primary	0.000 <sup>(3)</sup>	
	Subtransmission	0.000 <sup>(3)</sup>	
83		0.000	
85	Secondary	0.000	
	Primary	0.000	
89	Secondary	0.000	
	Primary	0.000	
	Subtransmission	0.000	
90		0.000	
91		0.000	
95		0.000	
538		0.000	
575	Secondary	0.000 <sup>(3)</sup>	
	Primary	0.000 <sup>(3)</sup>	
	Subtransmission	0.000 <sup>(3)</sup>	
583		0.000	
585	Secondary	0.000	
	Primary	0.000	
589	Secondary	0.000	
	Primary	0.000	
	Subtransmission	0.000	
590		0.000	
591		0.000	
592		0.000	
595		0.000	(C)

<sup>(1)</sup> Applicable April 1, 2017 through December 31, 2017.

(C)

<sup>(2)</sup> Not applicable to Customers served on Cost of Service.

<sup>(3)</sup> Applicable only to the Baseline and Scheduled Maintenance Energy.

TRANSITION COST ADJUSTMENT (Continued)
Minimum Five Year Opt-Out

For Enrollment Period L (2013), the Transition Cost Adjustment will be:

	Sch. 485 Secondary Voltage	Sch. 485 Primary Voltage	Sch. 489 Secondary Voltage	Sch. 489 Primary Voltage	Sch. 489 Subtransmission Voltage
Period	¢ per kWh	¢ per kWh	¢ per kWh	¢ per kWh	¢ per kWh
2014	1.992	1.956	1.398	1.728	1.709
2015	1.718	1.695	1.113	1.466	1.450
2016	1.482	1.466	0.860	1.239	1.226
2017	1.228	1.223	0.589	0.997	0.987
2018	1.154	1.147	0.483	0.921	0.914
After 2018	0.000	0.000	0.000	0.000	0.000

Commencing with enrollment Period M, the Schedule 129 Transition Cost Adjustment will be updated to reflect OPUC-approved changes in fixed generation costs during the five-year period.

For Enrollment Period M (2014), the current Transition Cost Adjustments are:

Period	Sch. 485 Sec. Vol. ¢ per kWh	Sch. 485 Pri. Vol. ¢ per kWh	Sch. 489 Sec. Vol. ¢ per kWh	Sch. 489 Pri. Vol. ¢ per kWh	Sch. 489 Sub. Vol. ¢ per kWh	Sch. 490 Pri. Vol. ¢ per kWh	Schs. 491/492/495 ¢ per kWh	
2015	1.712	1.704	1.443	1.415	1.383	1.381	1.311	
2016	2.172	2.151	1.890	1.854	1.824	1.798	1.789	
2017	2.196	2.174	1.913	1.876	1.846	1.820	1.811	(I)
2018	2.196	2.174	1.913	1.876	1.846	1.820	1.811	T
2019	2.196	2.174	1.913	1.876	1.846	1.820	1.811	(l)
After 2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(-/

TRANSITION COST ADJUSTMENT (Continued)

Minimum Five Year Opt-Out

Commencing with enrollment Period M, the Schedule 129 Transition Cost Adjustment will be updated to reflect OPUC-approved changes in fixed generation costs during the five-year period.

For Enrollment Period N (2015), the current Transition Cost Adjustments are:

Period	Sch. 485 Sec. Vol. ¢ per kWh	Sch. 485 Pri. Vol. ¢ per kWh	Sch. 489 Sec. Vol. ¢ per kWh	Sch. 489 Pri. Vol. ¢ per kWh	Sch. 489 Sub. Vol. ¢ per kWh	Sch. 490 Pri. Vol. ¢ per kWh	Schs. 491/492/495 ¢ per kWh
2016	2.866	2.832	2.695	2.647	2.590	2.295	2.455
2017	2.890	2.855	2.718	2.669	2.612	2.317	2.477
2018	2.890	2.855	2.718	2.669	2.612	2.317	2.477
2019	2.890	2.855	2.718	2.669	2.612	2.317	2.477
2020	2.890	2.855	2.718	2.669	2.612	2.317	2.477
After 2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000

For Enrollment Period O (2016), the current Transition Cost Adjustments are:

Period	Sch. 485 Sec. Vol. ¢ per kWh	Sch. 485 Pri. Vol. ¢ per kWh	Sch. 489 Sec. Vol. ¢ per kWh	Sch. 489 Pri. Vol. ¢ per kWh	Sch. 489 Sub. Vol. ¢ per kWh	Sch. 490 Pri. Vol. ¢ per kWh	Schs. 491/492/495 ¢ per kWh
2017	3.015	2.963	2.854	2.803	2.739	2.431	2.586
2018	3.015	2.963	2.854	2.803	2.739	2.431	2.586
2019	3.015	2.963	2.854	2.803	2.739	2.431	2.586
2020	3.015	2.963	2.854	2.803	2.739	2.431	2.586
2021	3.015	2.963	2.854	2.803	2.739	2.431	2.586
After 2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000

James F. Lobdell, Senior Vice President

#### **SCHEDULE 129 (Concluded)**

#### SPECIAL CONDITIONS (Continued)

3. In determining changes in fixed generation revenues from movement to or from Schedules 485, 489, 490, 491, 492, and 495, the following factors will be used:

Schedule		¢ per kWh	
85	Secondary	3.808	(1)
	Primary	3.737	
89	Secondary	3.598	
	Primary	3.531	
	Subtransmission	3.492	
90		3.494	
91		3.448	
92		3.448	
95		3.448	ď
			1-7

#### **TERM**

The term of applicability under this schedule will correspond to a Customer's term of service under Schedules 485, 489, 490, 491, 492 or 495.

#### CHANGE IN APPLICABILITY

If a Customer's usage changes such that their facility capacity falls below 201 kW, they will have their service terminated under this schedule and will be moved to an otherwise applicable schedule.

#### MONTHLY RATE

The Monthly Rate will be the sum of the following charges at the applicable Delivery Voltage per POD\*:

	Delivery Voltage			
	Secondary	<u>Primary</u>		
Basic Charge	\$420.00	\$450.00		
Distribution Charges**				
The sum of the following:				
per kW of Facility Capacity				
First 200 kW	\$2.97	\$2.90		
Over 200 kW	\$2.07	\$2.00		
per kW of monthly On-Peak Demand	\$2.33	\$2.27		
System Usage Charge				
per kWh	0.030 ¢	0.029¢	(1)	

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

#### **Direct Access Service**

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.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

#### MONTHLY RATE

The Monthly Rate will be the sum of the following charges at the applicable Delivery Voltage per POD\*:

	Delivery Voltage					
	<u>Secondary</u>	<u>Primary</u>	<u>Subtransmission</u>			
Basic Charge	\$2,590.00	\$1,560.00	\$2,990.00			
Distribution Charges**						
The sum of the following:						
per kW of Facility Capacity						
First 4,000 kW	\$1.09	\$1.06	\$1.06			
Over 4,000 kW	\$1.09	\$1.06	\$1.06			
per kW of monthly On-Peak Demand System Usage Charge	\$2.33	\$2.27	\$1.19			
per kWh	(0.002)¢	(0.003)¢	(0.003)¢	(I)		

See Schedule 100 for applicable adjustments.

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

#### **Direct Access Service**

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.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

#### MONTHLY RATE

The Monthly Rate will be the sum of the following charges per Point of Delivery (POD)\*:

Basic Charge	\$25,000.00
Distribution Charges** The sum of the following:    per kW of Facility Capacity    First 4,000 kW    Over 4,000 kW	\$1.03 \$1.03
per kW of monthly On-Peak Demand System Usage Charge per kWh	\$2.27 (0.021) ¢ <b>(I)</b>

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

#### **Direct Access Service**

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.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

STREETLIGHT POLES SERVICE OPTIONS (Continued)

<u>Option B – Pole maintenance</u> (Continued)

#### **Emergency Pole Replacement and Repair**

The Company will repair or replace damaged streetlight poles that have been damaged due to the acts of vandalism, damage claim incidences and storm related events that cause a pole to become structurally unsound at no additional cost to the customer.

Without notice to the Customer, individual poles that are damaged or destroyed by unexpected events will be replaced on determination that the pole is unfit for further use as soon as reasonably possible. Replacement is subject to the Company's operating schedules and requirements.

#### Special Provisions for Option B - Poles

- If damage occurs to any streetlighting pole more than two times in any 12-month period
  measured from the first incidence of damage that requires replacement, the Customer will
  be responsible to pay for future installations or mutually agree with the Company and pay to
  have the pole either completely removed or relocated.
- 2. Non-Standard or Custom poles are provided at the Company's discretion to allow greater flexibility in the choice of equipment. The Company will not maintain an inventory of this equipment and thus delays in maintenance may occur. The Company will order and replace the equipment subject to availability since non-standard and custom equipment is subject to obsolescence. The Customer will pay for any additional cost to the Company for ordering non-standard equipment.

#### **MONTHLY RATE**

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

Distribution Charge

5.137 ¢ per kWh

(1)

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

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

Labor Rates

Straight Time

Overtime (1)

\$135.00 per hour

\$193.00 per hour

#### RATES FOR STANDARD LIGHTING High-Pressure Sodium (HPS) Only – Service Rates

Type of Light Cobrahead Power Doors **	Watts	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	Option A	Nonthly Rate Option B	es <u>Option C</u>	
	70	6,300	30	*	\$ 2.86	\$ 1.54	
	100	9,500	43	*	3.52	2.21	<b>(I)</b>
	150	16,000	62	*	4.50	3.18	
	200	22,000	79	*	5.42	4.06	(1)
	250	29,000	102	*	6.57	5.24	
	400	50,000	163	*	9.74	8.37	<b>(I)</b>
Cobrahead, Non-Power Door	70	6.300	30	\$ 6.17	3.09	1.54	
	100	9,500	43	6.81	3.75	2.21	(l)
	150	16,000	62	7.89	4.74	3.18	
	200	22,000	79	9.37	5.66	4.06	<b>(l)</b>
	250	29,000	102	10.49	6.83	5.24	
	400	50,000	163	13.79	9.98	8.37	
Flood	250	29,000	102	10.92	6.89	5.24	
	400	50,000	163	14.04	10.01	8.37	
Early American Post-Top	100	9,500	43	7.21	3.80	2.21	(1)
Shoebox (Bronze color, flat Lens, or drop lens, multi-volt)	70 100 150	6,300 9,500 16,000	30 43 62	7.59 7.95 9.13	3.29 3.90 4.91	1.54 2.21 3.18	(I)

<sup>\*</sup> Not offered.

<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.

<sup>\*\*</sup> Service is only available to customers with total power doors luminaires in excess of 2,500.

#### **RATES FOR STANDARD POLES**

		Monthly	y Rates
Type of Pole	Pole Length (feet)	Option A	Option B
Fiberglass, Black, Bronze or Gray	20	\$ 4.78	\$ 0.15
Fiberglass, Black or Bronze	30	7.53	0.23
Fiberglass, Gray	30	8.12	0.25
Fiberglass, Smooth, Black or Bronze	18	4.77	0.15
Fiberglass, Regular	18	4.26	0.13
Black, Bronze, or Gray	35	6.99	0.21
Wood, Standard	30 to 35	5.44	0.17
Wood, Standard	40 to 55	7.11	0.22

#### RATES FOR CUSTOM LIGHTING

IVALED FOR COOLOM EIGHT							
		Nominal	Monthly	N	Ionthly Rate	es	
Type of Light	<u>Watts</u>	<u>Lumens</u>	<u>kWh</u>	Option A	Option B	Option C	
Special Acorn-Types							
HPS	100	9,500	43	\$ 10.68	\$ 4.24	\$ 2.21	(I)
HADCO Victorian, HPS	150	16,000	62	11.68	5.22	3.18	
	200	22,000	79	13.31	6.21	4.06	(I)
	250	29,000	102	14.49	7.39	5.24	
HADCO Capitol Acorn, HPS	100	9,500	43	13.93	4.68	2.21	(1)
	150	16,000	62	14.22	5.57	3.18	
	200	22,000	79	16.59	6.65	4.06	(1)
	250	29,000	102	16.28	7.63	5.24	
Special Architectural Types							
HADCO Independence, HPS	100	9,500	43	11.47	4.33	2.21	<b>(l)</b>
	150	16,000	62	11.46	5.17	3.18	
HADCO Techtra, HPS	100	9,500	43	20.07	5.50	2.21	(1)
	150	16,000	62	20.44	6.39	3.18	
	250	29,000	102	22.43	8.45	5.24	(I)
HADCO Westbrooke, HPS	70	6,300	30	12.80	3.95	*	
	100	9,500	43	12.90	4.53	2.21	<b>(I)</b>

<sup>\*</sup> Not offered.

Advice No. 16-21 Issued November 15, 2016 James F. Lobdell, Senior Vice President

Effective for service on and after January 1, 2017

#### RATES FOR CUSTOM LIGHTING (Continued)

Type of Light	Watts	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	Option A	Monthly Rate Option B	es <u>Option C</u>	
HADCO Westbrooke, HPS	150	16,000	62	\$ 13.87	\$ 5.50	\$ 3.18	
	200	22,000	79	14.95	6.42	4.06	(1)
	250	29,000	102	16.30	7.62	5.24	
Special Types							
Flood, Metal Halide	350	30,000	139	13.08	9.06	7.14	
Flood, HPS	750	105,000	285	23.64	17.49	14.64	<b>(I)</b>
Option C Only **							
Ornamental Acorn Twin	85	9,600	64	*	*	3.29	(1)
Ornamental Acorn	55	2,800	21	*	*	1.08	
Ornamental Acorn Twin	55	5,600	42	*	*	2.16	<b>(I)</b>
Composite, Twin	140	6,815	54	*	*	2.77	
	175	9,815	66	*	*	3.39	<b>(I)</b>

#### **RATES FOR CUSTOM POLES**

		Monthly	Rates
Type of Pole	Pole Length	Option A	Option B
	<u>(feet)</u>		
Aluminum, Regular	25	\$ 10.77	\$ 0.33
	30	11.63	0.36
	35	13.91	0.43
Aluminum Davit	25	10.74	0.33
	30	10.69	0.33
	35	11.69	0.36
	40	15.86	0.49
Aluminum Double Davit	30	15.78	0.48
Aluminum, Fluted Ornamental	14	9.50	0.29

Not offered

<sup>\*\*</sup> Rates are based on current kWh energy charges.

# RATES FOR CUSTOM POLES (Continued)

		Monthly	/ Rates
Type of Pole	Pole Length	Option A	Option B
	<u>(feet)</u>		
Aluminum, HADCO, Smooth Techtra Ornamental	18	\$ 18.68	\$ 0.57
Aluminum, Fluted Ornamental	16	9.70	0.30
Aluminum, HADCO, Fluted Westbrooke	18	18.73	0.57
Aluminum, HADCO, Smooth Westbrooke	18	19.85	0.61
Fiberglass, Fluted Ornamental Black	14	11.48	0.35
Fiberglass, Anchor Base, Gray or Black	35	12.76	0.39

#### SERVICE RATE FOR OBSOLETE LIGHTING

The following equipment is <u>not</u> available for new installations under Options A and B. Tothe extent feasible, maintenance will be provided. Obsolete Lighting will be replaced with the Customer's choice of Standard or Custom equipment. The Customer will then be billed at the appropriate Standard or Custom rate. If an existing mercury vapor luminaire requires the replacement of a ballast, the unit will be replaced with a corresponding HPS unit.

		Nominal	Monthly	N	Monthly Rate	es	
Type of Light	<u>Watts</u>	<u>Lumens</u>	<u>kWh</u>	<u>Option</u>	Option B	Option C	
				<u>A</u>			
Cobrahead, Metal Halide	150	10,000	60	\$ 8.28	\$ 4.93	\$ 3.08	
Cobrahead, Mercury Vapor	100	4,000	39	*	*	2.00	
	175	7,000	66	7.95	4.88	3.39	<b>(I)</b>
	250	10,000	94	*	*	4.83	
	400	21,000	147	12.89	9.17	7.55	
	1,000	55,000	374	24.95	21.13	19.21	(1)
Holophane Mongoose,	150	16,000	62	12.02	5.26	3.18	
HPS	250	29,000	102	13.48	7.23	*	<b>(I)</b>

<sup>\*</sup> Not offered.

# SERVICE RATE FOR OBSOLETE LIGHTING (Continued)

Type of Light	Watts	Nominal Lumens	Monthly kWh	M Option A	lonthly Rate Option B	es Option C	
Special Box Similar to GE "Space-Glo"	vvalls	Lumens	KVVII	<u>Option A</u>	Орион Б	<u>Option C</u>	
HPS	70	6,300	30	\$ 7.23	*	*	
Mercury Vapor	175	7,000	66	9.03	\$ 4.98	\$ 3.39	<b>(I)</b>
Special box, Anodized Aluminum							
Similar to GardCo Hub							
HPS	Twin 70	6,300	60	*	*	3.08	
	70	6,300	30	*	*	1.54	
	100	9,500	43	*	4.18	2.21	(I)
	150	16,000	62	*	5.17	3.18	
	250	29,000	102	*	*	5.24	<b>(l)</b>
	400	50,000	163	*	*	8.37	
Metal Halide	250	20,500	99	*	6.34	5.09	
	400	40,000	156	*	9.26	*	
Cobrahead, Metal Halide	175	12,000	71	*	5.35	3.65	
Flood, Metal Halide	400	40,000	156	13.88	9.87	8.01	
Cobrahead, Dual Wattage HPS							
70/100 Watt Ballast	100	9,500	43	*	3.77	*	
100/150 Watt Ballast	100	9,500	43	*	3.77	*	(I)
100/150 Watt Ballast	150	16,000	62	*	4.75	3.18	
Special Architectural Types							
KIM SBC Shoebox, HPS	150	16,000	62	*	5.68	3.18	
KIM Archetype, HPS	250	29,000	102	*	7.79	5.24	<b>(I)</b>
	400	50,000	163	*	10.59	8.37	(1)

<sup>\*</sup> Not offered

# SERVICE RATE FOR OBSOLETE LIGHTING (Continued)

<u>Type of Light</u> Special Acorn-Type, HPS	<u>Watts</u> 70	Nominal <u>Lumens</u> 6,300	Monthly <u>kWh</u> 30	V Option A \$ 10.03	lonthly Rate <u>Option B</u> \$ 3.59	es Option C *	
Special GardCo Bronze Alloy	70	0,000	30	Ψ 10.00	Ψ 3.33		
HPS	70	5,000	30	*	*	\$ 1.54	
Mercury Vapor	175	7,000	66	*	*	3.39	(I)
Early American Post-Top, HPS							
Black	70	6,300	30	6.48	3.06	1.54	
Rectangle Type	200	22,000	79	*	*	4.06	(I)
Incandescent	92	1,000	31	*	*	1.59	
	182	2,500	62	* .	*	3.18	
Town and Country Post-Top							
Mercury Vapor	175	7,000	66	8.34	4.92	3.39	(l)
Flood, HPS	70	6,300	30	6.05	2.98	*	
	100	9,500	43	6.69	3.76	2.21	(1)
	200	22,000	79	9.77	5.74	4.06	
Cobrahead, HPS							
Power Door	310	37,000	124	12.03	8.36	6.37	
Special Types Customer- Owned & Maintained							
Ornamental, HPS	100	9,500	43	*	*	2.21	
Twin ornamental, HPS	Twin 100	9,500	86	*	*	4.42	(1)
Compact Fluorescent	28	N/A	12	*	*	0.62	

<sup>\*</sup> Not offered.

# SCHEDULE 492 TRAFFIC SIGNALS COST OF SERVICE OPT-OUT

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To municipalities or agencies of federal or state governments served on Schedule 92, who purchase Electricity from an Electricity Service Supplier (ESS) for traffic signals and warning facilities in systems containing at least 500 intersections on public streets and highways, where funds for payment of Electricity are provided through taxation or property assessment. This schedule is available only to those governmental agencies receiving service under Schedule 92 as of September 30, 2001. Service under this schedule is limited to the first 300 MWa that applies to Schedules 485, 489, 490, 491, 492, and 495

#### CHARACTER OF SERVICE

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### MONTHLY RATE

The charge per Point of Delivery (POD)\* is:

Distribution Charge

2.146 ¢ per kWh

**(l)** 

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

#### **Direct Access Service**

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.

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### STREETLIGHT POLES SERVICE OPTIONS

#### Option A - Poles

See Schedule 91/491/591 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

5.137 ¢ per kWh

**(i)** 

#### MARKET BASED PRICING OPTION

#### **Energy Supply**

The Customer may elect to purchase Energy from an Electricity Service Supplier (ESS) (Direct Access Service) or from the Company. Such election will be for all of the Customer's POD under this schedule.

#### **Direct Access Service**

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.

#### Company Supplied Energy

Upon not less than five business days notice, the Customer may choose the Company Supplied Energy Charge option. The election of this option will be effective on the next regularly scheduled meter reading date, but with not less than a five business day notice to the Company prior to the scheduled meter read date.

The Company Supplied Energy Option is the Intercontinental Exchange Mid-Columbia Daily on- and off-peak Electricity Firm Price Index (ICE-Mid-C Index) plus 2 mills per kWh plus losses. If prices are not reported for a particular day or days, the average of the immediately preceding and following reported days' on- and off-peak prices will be used to determine the price for the non-reported period. Prices reported with no transaction volume or as "survey-based" will be considered reported.

#### RATES FOR DECORATIVE LIGHTING

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

Type of Light	Watts	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	Monthly Rate Option A	
Acorn LED	60	5,488	21	\$ 12.29	
	70	4,332	24	14.23	
HADCO Acorn LED	70	5,120	24	18.10	
Westbrooke (Non-Flared)	36	3,369	12	15.02	
LED	53	5,079	18	16.29	
	69	6,661	24	16.00	
	85	8,153	29	16.48	
	136	12,687	46	20.36	
	206	18,159	70	21.53	<b>(I)</b>
Westbrooke (Flared)	36	3,369	12	16.86	
LED	53	5,079	18	18.39	
	69	6,661	24	18.70	
	85	8,153	29	17.91	
	136	12,687	46	21.44	
	206	18,159	70	22.68	<b>(I)</b>
Post-Top, American Revolution	45	3,395	15	7.00	
LED	72	4,409	25	7.51	

#### **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.

# SCHEDULE 515 OUTDOOR AREA LIGHTING DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Nonresidential Customers purchasing Direct Access Service for outdoor area lighting.

#### **CHARACTER OF SERVICE**

Lighting services, which consist of the provision of Company-owned luminaires mounted on Company-owned poles, in accordance with Company specifications as to equipment, installation, maintenance and operation.

The Company will replace lamps on a scheduled basis. Subject to the Company's operating schedules and requirements, the Company will replace individual burned-out lamps as soon as reasonably possible after the Customer or Electricity Service Supplier (ESS) notifies the Company of the burn-out.

# MONTHLY RATE

Rates for Area Lighting Monthly Rate(1) Monthly Per Luminaire Type of Light Watts Lumens kWh Cobrahead Mercury Vapor \$ 8.88 <sup>(2)</sup> 175 7,000 66 (1)21,000 13.46 <sup>(2)</sup> 400 147 1,000 55,000 374 25.52 <sup>(2)</sup> (1) $7.09^{(2)}$ **HPS** 70 6.300 30 100 9,500 43 7.75 (I)150 16,000 62 8.82 200 22.000 79 9.95 (I)250 29,000 102 11.08 12.61 <sup>(2)</sup> 37,000 310 124 400 50,000 163 14.37 Flood, HPS 7.61 <sup>(2)</sup> 100 9,500 43 10.35 <sup>(2)</sup> 200 22,000 79 250 29,000 102 11.50 50.000 400 163 14.62 (1) Shoebox, HPS (bronze color, flat lens, 70 6,300 30 8.51 or drop lens, multi-volt) 100 9,500 43 8.88 **(I)** 150 16,500 62 10.05

<sup>(1)</sup> See Schedule 100 for applicable adjustments.

<sup>(2)</sup> No new service.

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

Rates for Area Lighting (C	continued)			N. A. a. a. A. la Iv.	NA	
Type of Light		<u>Watts</u>	Lumens	Monthly <u>kWh</u>	Monthly Rate <sup>(1)</sup> <u>Per Luminaire</u>	
Special Acorn Type, HPS		100	9,500	43	\$ 11.25	(1)
HADCO Victorian, HPS		150	16,500	62	12.26	
		200	22,000	79	13.88	(I)
		250	29,000	102	15.07	
Early American Post-Top,	HPS, Black	100	9,500	43	8.14	(l)
Special Types						
Cobrahead, Metal Halid	e	150	10,000	60	9.20	
Cobrahead, Metal Halid	е	175	12,000	71	9.80	(1)
Flood, Metal Halide		350	30,000	139	13.65	
Flood, Metal Halide		400	40,000	156	14.45	
Flood, HPS		750	105,000	285	24.21	
HADCO Independence,	HPS	100	9,500	43	12.05	(l)
		150	16,000	62	12.03	
HADCO Capitol Acorn,	HPS	100	9,500	43	14.50	(1)
		150	16,000	62	14.79	
		200	22,000	79	17.16	(l)
		250	29,000	102	16.85	
HADCO Techtra, HPS		100	9,500	43	20.64	(l)
		150	16,000	62	21.01	
		250	29,000	102	23.00	(1)
HADCO Westbrooke, H	PS	70	6,300	30	13.37	
		100	9,500	43	13.47	(I)
		150	16,000	62	14.44	
		200	22,000	79	15.52	(1)
		250	29,000	102	16.87	(1)
Holophane Mongoose,	HPS	150	16,000	62	12.59	

<sup>(1)</sup> See Schedule 100 for applicable adjustments.

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

Type of Light	<u>Watts</u>	Lumens	Monthly <u>kWh</u>	Monthly Rate <sup>(1)</sup> Per Luminaire	
Acorn					
LED	60	5,488	21	\$ 12.86	
	70	4,332	24	14.80	
HADCO LED	70	5,120	24	17.68	
Cobrahead					
LED	37	2,530	13	3.89	
	50	3,162	17	4.09	
	52	3,757	18	4.47	
	67	5,050	23	4.97	
	106	7,444	36	6.31	
	134	14,200	46	9.32	
	156	16,300	53	10.64	
	176	18,300	60	11.43	
	201	21,400	69	12.35	
Westbrooke LED (Non-Flare)	36	3,369	12	14.60	
	53	5,079	18	16.86	
	69	6,661	24	16.58	
	85	8,153	29	17.06	
	136	12,687	46	20.93	
	206	18,159	70	22.10	(1)
Westbrooke LED (Flare)	36	3,369	12	16.44	
	53	5,079	18	18.96	
	69	6,661	24	19.27	
	85	8,153	29	18.48	
	136	12,687	46	22.01	
	206	18,159	70	23.25	(1)
CREE XSP LED	25	2,529	9	2.95	
	42	3,819	14	3.30	
	48	4,373	16	3.83	
	56	5,863	19	4.46	<b>(l)</b>
	91	8,747	31	5.07	( )
Post-Top, American Revolution					
LED	45	3,395	15	6.57	
	72	4,409	25	7.08	
		,		y - <u>-</u> -	

<sup>(1)</sup> See Schedule 100 for applicable adjustments.

# SCHEDULE 532 SMALL NONRESIDENTIAL DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Small Nonresidential Customers who have chosen to receive Electricity from an Electricity Service Supplier (ESS).

#### CHARACTER OF SERVICE

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

_		$\sim$		
$\mu_{\alpha}$	CIC	1 h	ara	$\overline{}$
Dα	SIL	OH	arge	≂

Single Phase \$16.00 Three Phase \$22.00

#### Distribution Charge

First 5,000 kWh

Over 5,000 kWh

0.906 ¢ per kWh

#### **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.

#### **ADJUSTMENTS**

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

**(I)** 

**(I)** 

<sup>\*</sup> See Schedule 100 for applicable adjustments.

# SCHEDULE 538 LARGE NONRESIDENTIAL OPTIONAL TIME-OF-DAY DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

This optional schedule is applicable to Large Nonresidential Customers who have chosen to receive service from an Electricity Service Supplier (ESS), and: 1) served at Secondary voltage with a monthly Demand that does not exceed 200 kW more than once in the preceding 13 months; or 2) who were receiving service on Schedule 38 as of December 31, 2015.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

**Basic Charge** 

\$25.00

Distribution Charge

6.316 ¢ per kWh

(1)

#### MINIMUM CHARGE

The Minimum Charge will be the Basic Charge. In Addition, the Company may require the Customer to execute a written agreement specifying a higher Minimum Charge if necessary, to justify the Company's investment in service facilities.

#### REACTIVE DEMAND

In addition to the Monthly Rate, the Customer will pay 50¢ for each kilovolt-ampere of Reactive Demand in excess of 40% of the maximum Demand. Such charge is separate from and in addition to the Minimum Charge specified.

#### **ADJUSTMENTS**

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

<sup>\*</sup> See Schedule 100 for applicable adjustments.

# SCHEDULE 549 IRRIGATION AND DRAINAGE PUMPING LARGE NONRESIDENTIAL DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Large Nonresidential Customers who have chosen to receive Electricity from an Electricity Service Supplier (ESS) for irrigation and drainage pumping; may include other incidental service if an additional meter would otherwise be required.

#### **CHARACTER OF SERVICE**

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

The sum of the following charges per Point of Delivery (POD)\*:

		$\sim$		
H 2	CIC		$\sim$	rae
υa	OIL		10	uc

Summer Months\*\* \$40.00 Winter Months\*\* No Charge

#### Distribution Charge

First 50 kWh per kW of Demand 7.000 ¢ per kWh
Over 50 kWh per kW of Demand 5.000 ¢ per kWh (I)

#### **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.

See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> Summer Months and Winter Months commence with meter readings as defined in Rule B.

# PARTIAL REQUIREMENTS SERVICE DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To Large Nonresidential Customers who receive Electricity Service from an Electricity Service Supplier (ESS) and who supply all or some portion of their load by self generation operating on a regular basis, where the self-generation has a total nameplate rating of 2 MW or greater. A Large Nonresidential Customer is a Customer that has exceeded 30 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 30 kW.

#### CHARACTER OF SERVICE

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

	<u>Delivery Voltage</u>				
	<u>Secondary</u>	<b>Primary</b>	Subtransmission		
Basic Charge					
Three Phase Service	\$2,590.00	\$1,560.00	\$2,990.00		
Distribution Charge					
The sum of the following:					
per kW of Facility Capacity					
First 4,000 kW	\$1.09	\$1.06	\$1.06		
Over 4,000 kW	\$1.09	\$1.06	\$1.06		
per kW of monthly On-Peak Demand**	\$2.33	\$2.27	\$1.19		
Generation Contingency Reserves Charges***					
Spinning Reserves					
per kW of Reserved Capacity > 1,000 kW	\$0.234	\$0.234	\$0.234		
Supplemental Reserves					
per kW of Reserved Capacity > 1,000 kW	\$0.234	\$0.234	\$0.234		
System Usage Charge					
per kWh	(0.002)¢	(0.003)¢	(0.003) ¢	(1)	

<sup>\*</sup> See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> Peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday. Off-peak hours are between 10:00 p.m. and 6:00 a.m. Monday through Saturday and all day Sunday.

<sup>\*\*\*</sup> Not applicable when ESS is providing Energy Regulation and Imbalance services as described in Schedule 600.

# SCHEDULE 583 LARGE NONRESIDENTIAL DIRECT ACCESS SERVICE (31 – 200 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customers whose Demand has not exceeded 200 kW more than six times in the preceding 13 months and has not exceeded 4,000 kW more than once in the preceding 13 months, or with seven months or less of service has not had a Demand exceeding 4,000 kW and who has chosen to receive Electricity from an Electricity Service Supplier (ESS).

#### CHARACTER OF SERVICE

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

Basic Charge		
Single Phase Service	\$30.00	
Three Phase Service	\$40.00	•
Distribution Charges**		
The sum of the following:		
per kW of Facility Capacity		
First 30 kW	\$2.74	
Over 30 kW	\$2.64	
per kW of monthly On-Peak Demand	\$2.33	
System Usage Charge		
per kWh	0.688 ¢	(l)

See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

# SCHEDULE 585 LARGE NONRESIDENTIAL DIRECT ACCESS SERVICE (201 – 4,000 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customers whose Demand has exceeded 200 kW more than six times in the preceding 13 months and has not exceeded 4,000 kW more than once in the preceding 13 months, or with seven months or less of service has not had a Demand exceeding 4,000 kW and who has chosen to receive Electricity from an Electricity Service Supplier (ESS).

#### CHARACTER OF SERVICE

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

	<u>Delivery V</u> Secondary	<u>oltage</u> <u>Primary</u>	
Basic Charge	\$420.00	\$450.00	
Distribution Charges** The sum of the following:     per kW of Facility Capacity     First 200 kW     Over 200 kW     per kW of monthly On-Peak Demand	\$2.97 \$2.07 \$2.33	\$2.90 \$2.00 \$2.27	
System Usage Charge per kWh	0.030 ¢	0.029 ¢	<b>(I)</b>

<sup>\*</sup> See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

# SCHEDULE 589 LARGE NONRESIDENTIAL DIRECT ACCESS SERVICE (>4,000 kW)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customer whose Demand has exceeded 4,000 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 4,000 kW, and who has chosen to receive Electricity from an ESS.

#### **CHARACTER OF SERVICE**

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### **MONTHLY RATE**

Basic Charge	<u>Secondary</u> \$2,590.00	Delivery Volta Primary \$1,560.00	nge Subtransmission \$2,990.00
Distribution Charges** The sum of the following:    per kW of Facility Capacity    First 4,000 kW    Over 4,000 kW	\$1.09 \$1.09	\$1.06 \$1.06	\$1.06 \$1.06
per kW of monthly on-peak Demand	\$2.33	\$2.27	\$1.19
System Usage Charge per kWh	(0.002) ¢	(0.003) ¢	(0.003) ¢ (I)

<sup>\*</sup> See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

# SCHEDULE 590 LARGE NONRESIDENTIAL DIRECT ACCESS SERVICE (>4,000 kW and Aggregate to >100 MWa)

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To each Large Nonresidential Customer who meet the following conditions: 1) Individual account demand has exceeded 4,000 kW at least twice within the preceding 13 months, or with seven months or less of service has had a Demand exceeding 4,000 kW; and 2) where combined usage of all accounts meeting condition 1 for the Large Nonresidential Customer aggregate to at least 100 MWa in a calendar year; and 3) the customer maintains a load factor of 80% or greater for each account; and 4) who has chosen to receive Electricity from an ESS.

#### **CHARACTER OF SERVICE**

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### MONTHLY RATE

The sum of the following charges per Point of Delivery (POD)\*:

Basic Charge	\$25,000.00	
<u>Distribution Charges</u> ** The sum of the following:    per kW of Facility Capacity    First 4,000 kW    Over 4,000 kW	\$1.03 \$1.03	
per kW of monthly on-peak Demand	\$2.27	
System Usage Charge per kWh	(0.021) ¢	(1)

<sup>\*</sup> See Schedule 100 for applicable adjustments.

<sup>\*\*</sup> The Company may require a Customer with dedicated substation capacity and/or redundant distribution facilities to execute a written agreement specifying a higher minimum monthly Facility Capacity and monthly Demand for the POD.

STREETLIGHT POLES SERVICE OPTIONS (Continued)
Option B – Pole maintenance (Continued)

#### Emergency Pole Replacement and Repair

The Company will repair or replace damaged streetlight poles that have been damaged due to the acts of vandalism, damage claim incidences and storm related events that cause a pole to become structurally unsound at no additional cost to the customer.

Without notice to the Customer, individual poles that are damaged or destroyed by unexpected events will be replaced on determination that the pole is unfit for further use as soon as reasonably possible. Replacement is subject to the Company's operating schedules and requirements.

#### Special Provisions for Option B - Poles

- 1. If damage occurs to any streetlighting pole more than two times in any 12-month period measured from the first incidence of damage that requires replacement, the Customer will be responsible to pay for future installations or mutually agree with the Company and pay to have the pole either completely removed or relocated.
- 2. Non-Standard or Custom poles are provided at the Company's discretion to allow greater flexibility in the choice of equipment. The Company will not maintain an inventory of this equipment and thus delays in maintenance may occur. The Company will order and replace the equipment subject to availability since non-standard and custom equipment is subject to obsolescence. The Customer will pay for any additional cost to the Company for ordering non-standard equipment.

#### **MONTHLY RATE**

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

Distribution Charge

5.137 ¢ per kWh

**(l)** 

**Energy Charge** 

Provided by Energy Service Supplier

#### **NOVEMBER ELECTION WINDOW**

The November Election Window begins at 2:00 p.m. on November 15<sup>th</sup> (or the following business day if the 15<sup>th</sup> falls on a weekend or holiday). The November Election Window will remain open until 5:00 p.m. at the close of the fifth consecutive business day.

During a November Election Window, a Customer may notify the Company of its choice to change to any service options for an effective date of January 1<sup>st</sup>. Customers may notify the Company of a choice to change service options using the Company's website, <u>PortlandGeneral.com/business</u>

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

Labor Rates

Straight Time

Overtime (1)

\$135.00 per hour

\$193.00 per hour

# RATES FOR STANDARD LIGHTING High-Pressure Sodium (HPS) Only – Service Rates

Type of Light	<u>Watts</u>	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	N Option A	Nonthly Rate Option B	es <u>Option C</u>	
Cobrahead Power Doors **							
	70	6,300	30	*	\$ 2.86	\$ 1.54	
	100	9,500	43	*	3.52	2.21	(1)
	150	16,000	62	*	4.50	3.18	
	200	22,000	79	*	5.42	4.06	<b>(l)</b>
	250	29,000	102	*	6.57	5.24	
	400	50,000	163	*	9.74	8.37	(l)
Cobrahead, Non-Power Door	70	6.300	30	\$ 6.17	3.09	1.54	
	100	9,500	43	6.81	3.75	2.21	<b>(l)</b>
	150	16,000	62	7.89	4.74	3.18	
	200	22,000	79	9.37	5.66	4.06	(1)
	250	29,000	102	10.49	6.83	5.24	
	400	50,000	163	13.79	9.98	8.37	
Flood	250	29,000	102	10.92	6.89	5.24	
	400	50,000	163	14.04	10.01	8.37	
Early American Post-Top	100	9,500	43	7.21	3.80	2.21	(1)
Shoebox (Bronze color, flat Lens, or drop lens, multi-volt)	70 100 150	6,300 9,500 16,000	30 43 62	7.59 7.95 9.13	3.29 3.90 4.91	1.54 2.21 3.18	(1)

Not offered.

<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.

<sup>\*\*</sup> Service is only available to customers with total power doors luminaires in excess of 2,500.

#### **RATES FOR STANDARD POLES**

		Monthly	Rates
Type of Pole	Pole Length (feet)	Option A	Option B
Fiberglass, Black, Bronze or Gray	20	\$ 4.78	\$ 0.15
Fiberglass, Black or Bronze	30	7.53	0.23
Fiberglass, Gray	30	8.12	0.25
Fiberglass, Smooth, Black or Bronze	18	4.77	0.15
Fiberglass, Regular	18	4.26	0.13
Black, Bronze, or Gray	35	6.99	0.21
Wood, Standard	30 to 35	5.44	0.17
Wood, Standard	40 to 55	7.11	0.22

#### RATES FOR CUSTOM LIGHTING

		Nominal	Monthly	N	Ionthly Rate	es	
Type of Light	<u>Watts</u>	<u>Lumens</u>	<u>kWh</u>	Option A	Option B	Option C	
Special Acorn-Types							
HPS	100	9,500	43	\$ 10.68	\$ 4.24	\$ 2.21	<b>(I)</b>
HADCO Victorian, HPS	150	16,000	62	11.68	5.22	3.18	
	200	22,000	79	13.31	6.21	4.06	<b>(I)</b>
	250	29,000	102	14.49	7.39	5.24	
HADCO Capitol Acorn, HPS	100	9,500	43	13.93	4.68	2.21	(1)
	150	16,000	62	14.22	5.57	3.18	
	200	22,000	79	16.59	6.65	4.06	<b>(I)</b>
	250	29,000	102	16.28	7.63	5.24	
Special Architectural Types							
HADCO Independence, HPS	100	9,500	43	11.47	4.33	2.21	(I)
	150	16,000	62	11.46	5.17	3.18	
HADCO Techtra, HPS	100	9,500	43	20.07	5.50	2.21	(1)
	150	16,000	62	20.44	6.39	3.18	
	250	29,000	102	22.43	8.45	5.24	<b>(I)</b>
HADCO Westbrooke, HPS	70	6,300	30	12.80	3.95	*	
	100	9,500	43	12.90	4.53	2.21	<b>(I)</b>

Not offered.

Advice No. 16-21 Issued November 15, 2016 James F. Lobdell, Senior Vice President

Effective for service on and after January 1, 2017

# RATES FOR CUSTOM LIGHTING (Continued)

		Nominal	Monthly		Monthly Rate		
Type of Light	<u>Watts</u>	<u>Lumens</u>	<u>kWh</u>	<u>Option</u> <u>A</u>	Option B	Option C	
HADCO Westbrooke, HPS	150	16,000	62	\$ 13.87	\$ 5.50	\$ 3.18	
	200	22,000	79	14.95	6.42	4.06	(1)
	250	29,000	102	16.30	7.62	5.24	
Special Types							
Flood, Metal Halide	350	30,000	139	13.08	9.06	7.14	
Flood, HPS	750	105,000	285	23.64	17.49	14.64	(1)
Option C Only **							
Ornamental Acorn Twin	85	9,600	64	*	*	3.29	(1)
Ornamental Acorn	55	2,800	21	*	*	1.08	
Ornamental Acorn Twin	55	5,600	42	*	*	2.16	(1)
Composite, Twin	140	6,815	54	*	*	2.77	
	175	9,815	66	*	*	3.39	<b>(I)</b>

#### **RATES FOR CUSTOM POLES**

		Monthly	Rates
Type of Pole	Pole Length	Option A	Option B
	<u>(feet)</u>		
Aluminum, Regular	25	\$ 10.77	\$ 0.33
	30	11.63	0.36
	35	13.91	0.43
Aluminum Davit	25	10.74	0.33
	30	10.69	0.33
	35	11.69	0.36
	40	15.86	0.49
Aluminum Double Davit	30	15.78	0.48
Aluminum, Fluted Ornamental	14	9.50	0.29

Not offered.

<sup>\*\*</sup> Rates are based on current kWh energy charges.

# RATES FOR CUSTOM POLES (Continued)

(33.1)		Monthly	/ Rates
Type of Pole	Pole Length (feet)	Option A	Option B
Aluminum, HADCO, Smooth Techtra Ornamental	18	\$ 18.68	\$ 0.57
Aluminum, Fluted Ornamental	16	9.70	0.30
Aluminum, HADCO, Fluted Westbrooke	18	18.73	0.57
Aluminum, HADCO, Smooth Westbrooke	18	19.85	0.61
Fiberglass, Fluted Ornamental Black	14	11.48	0.35
Fiberglass, Anchor Base, Gray or Black	35	12.76	0.39

#### SERVICE RATE FOR OBSOLETE LIGHTING

The following equipment is <u>not</u> available for new installations under Options A and B. Tothe extent feasible, maintenance will be provided. Obsolete Lighting will be replaced with the Customer's choice of Standard or Custom equipment. The Customer will then be billed at the appropriate Standard or Custom rate. If an existing mercury vapor luminaire requires the replacement of a ballast, the unit will be replaced with a corresponding HPS unit.

Type of Light	<u>Watts</u>	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	Option <u>A</u>	Monthly Rate Option B	es <u>Option C</u>	
Cobrahead, Metal Halide	150	10,000	60	\$ 8.28	\$ 4.93	\$ 3.08	
Cobrahead, Mercury Vapor	100	4,000	39	*	*	2.00	
	175	7,000	66	7.95	4.88	3.39	(1)
	250	10,000	94	*	*	4.83	
	400	21,000	147	12.89	9.17	7.55	
	1,000	55,000	374	24.95	21.13	19.21	<b>(I)</b>
Holophane Mongoose,	150	16,000	62	12.02	5.26	3.18	
HPS	250	29,000	102	13.48	7.23	*	(1)

<sup>\*</sup> Not offered.

# SERVICE RATE FOR OBSOLETE LIGHTING (Continued)

Type of Light	<u>Watts</u>	Nominal Lumens	Monthly kWh	M Option A	lonthly Rate Option B	es Option C	
Special Box Similar to GE "Space-Glo"							
HPS	70	6,300	30	\$ 7.23	*	*	
Mercury Vapor	175	7,000	66	9.03	\$ 4.98	\$ 3.39	<b>(I)</b>
Special box, Anodized Aluminum							
Similar to GardCo Hub							
HPS	Twin 70	6,300	60	*	*	3.08	
	70	6,300	30	*	*	1.54	
	100	9,500	43	*	4.18	2.21	(I)
	150	16,000	62	*	5.17	3.18	
	250	29,000	102	*	*	5.24	(1)
	400	50,000	163	*	*	8.37	
Metal Halide	250	20,500	99	*	6.34	5.09	
	400	40,000	156	*	9.26	*	
Cobrahead, Metal Halide	175	12,000	71	*	5.35	3.65	
Flood, Metal Halide	400	40,000	156	13.88	9.87	8.01	
Cobrahead, Dual Wattage HPS							
70/100 Watt Ballast	100	9,500	43	*	3.77	*	
100/150 Watt Ballast	100	9,500	43	*	3.77	*	(l)
100/150 Watt Ballast	150	16,000	62	*	4.75	3.18	
Special Architectural Types							
KIM SBC Shoebox, HPS	150	16,000	62	*	5.68	3.18	
KIM Archetype, HPS	250	29,000	102	*	7.79	5.24	(1)
	400	50,000	163	*	10.59	8.37	<b>(I)</b>

<sup>\*</sup> Not offered

# SERVICE RATE FOR OBSOLETE LIGHTING (Continued)

Type of Light Special Acorn-Type, HPS Special GardCo Bronze Alloy	<u>Watts</u> 70	Nominal <u>Lumens</u> 6,300	Monthly <u>kWh</u> 30	Option A \$ 10.03	onthly Rate <u>Option B</u> \$ 3.59	es Option C *	
HPS	70	5,000	30	*	*	\$ 1.54	
Mercury Vapor	175	7,000	66	*	*	3.39	(I)
Early American Post-Top, HPS							
Black	70	6,300	30	6.48	3.06	1.54	
Rectangle Type	200	22,000	79	*	*	4.06	<b>(I)</b>
Incandescent	92	1,000	31	*	*	1.59	
	182	2,500	62	*	*	3.18	
Town and Country Post-Top							
Mercury Vapor	175	7,000	66	8.34	4.92	3.39	<b>(I)</b>
Flood, HPS	70	6,300	30	6.05	2.98	*	
	100	9,500	43	6.69	3.76	2.21	(1)
	200	22,000	79	9.77	5.74	4.06	
Cobrahead, HPS							
Power Door	310	37,000	124	12.03	8.36	6.37	
Special Types Customer- Owned & Maintained							
Ornamental, HPS	100	9,500	43	*	*	2.21	
Twin ornamental, HPS	Twin 100	9,500	86	*	*	4.42	(I)
Compact Fluorescent	28	N/A	12	*	*	0.62	

<sup>\*</sup> Not offered.

## SCHEDULE 592 TRAFFIC SIGNALS DIRECT ACCESS SERVICE

#### **AVAILABLE**

In all territory served by the Company.

#### **APPLICABLE**

To municipalities or agencies of federal or state governments served on Schedule 92, who purchase Electricity from an Electricity Service Supplier (ESS) for traffic signals and warning facilities in systems containing at least 50 intersections on public streets and highways, where funds for payment of Electricity are provided through taxation or property assessment. This schedule is available only to those governmental agencies receiving service under Schedule 92 as of September 30, 2001.

#### **CHARACTER OF SERVICE**

Sixty-hertz alternating current of such phase and voltage as the Company may have available.

#### MONTHLY RATE

The charge per Point of Delivery (POD)\* is:

Distribution Charge

2.146 ¢ per kWh

(1)

#### **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.

#### **ADJUSTMENTS**

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

<sup>\*</sup> See Schedule 100 for applicable adjustments.

#### 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

5.137 ¢ per kWh

**(l)** 

**Energy Charge** 

Provided by Energy Service Supplier

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

Labor Rates

Straight Time

Overtime (1)

\$135.00 per hour

\$193.00 per 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.

		Nominal	Monthly	Monthly Rate
Type of Light	<u>Watts</u>	<u>Lumens</u>	<u>kWh</u>	Option A
LED	37	2,530	13	\$ 3.56
LED	50	3,162	17	3.76
LED	52	3,757	18	4.14
LED	67	5,050	23	4.78
LED	106	7,444	36	6.12
LED	134	14,200	46	9.74
LED	156	16,300	53	11.06
LED	176	18,300	60	11.86
LED	201	21,400	69	12.77

Advice No. 16-21

Issued November 15, 2016

James F. Lobdell, Senior Vice President

Effective for service on and after January 1, 2017

<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 DECORATIVE LIGHTING

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

Type of Light	Watts	Nominal <u>Lumens</u>	Monthly <u>kWh</u>	Monthly Rate Option A	
Acorn LED	60	5,488	21	\$ 12.29	
	70	4,332	24	14.23	
HADCO Acorn LED	70	5,120	24	18.10	
Westbrooke (Non-Flared)	36	3,369	12	15.02	
LED	53	5,079	18	16.29	
	69	6,661	24	16.00	
	85	8,153	29	16.48	
	136	12,687	46	20.36	
	206	18,159	70	21.53	(I)
Westbrooke (Flared)	36	3,369	12	16.86	
LED	53	5,079	18	18.39	
	69	6,661	24	18.70	
	85	8,153	29	17.91	
	136	12,687	46	21.44	
	206	18,159	70	22.68	<b>(I)</b>
Post-Top, American Revolution	45	3,395	15	7.00	
LED	72	4,409	25	7.51	

#### 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.