

**SCHEDULE 495
STREET AND HIGHWAY LIGHTING
NEW TECHNOLOGY
COST OF SERVICE OPT-OUT**

AVAILABLE

In all territory served by the Company.

APPLICABLE

To municipalities or agencies of federal or state governments with no fewer than 30,000 lights purchasing Direct Access for lighting service utilizing Company approved streetlighting equipment for public streets and highways and public grounds where funds for payment of Electricity are provided through taxation or property assessment. 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

From dusk to dawn daily, controlled by a photoelectric control to be mutually agreeable to the Customer and Company for an average of 4,100 hours annually.

LUMINAIRE SERVICE OPTIONS - The Company offers the following Luminaire Service Options at the applicable rates specified herein.

The Customer will elect the Luminaire Service Option at the time of initial luminaire installation.

Option A - Luminaire

Option A provides electricity service to luminaires that are purchased, owned, and maintained by the Company with attachment to Company-owned poles at the monthly Option A rate applicable to the installed type of light.

Maintenance Service under Option A

The Company will only perform emergency maintenance on the luminaires listed in this schedule. The Company does not perform preventative maintenance on the luminaires listed in this schedule.

The Company will repair or replace inoperable luminaires as soon as reasonably possible, subject to the Company's operating schedule, following notification to PGE's Customer Service or PGE's Outdoor Lighting Services⁽¹⁾ department by the Customer, a member of the public, or a PGE employee performing luminaire replacement work. PGE has no obligation for repair or replacement of inoperable luminaires other than as described in this section of the tariff.

(1) Contact PGE's Outdoor Lighting Services at 503-736-5710, PGE's Customer Service 503-228-6322 or 1- 800-542-8818, or www.portlandgeneral.com to report an inoperable streetlight.

SCHEDULE 95 (Continued)

LUMINAIRE SERVICE OPTIONS (Continued)
Maintenance Service under Option B (Continued)

Maintenance under Option B luminaires specifically does not include replacement of luminaires that are deemed inoperable due to general deterioration, lack of replacement parts, or replacement of parts associated with Emergency Repair that will not bring the unit into operable status. Such inoperable luminaires will be designated as non-repairable luminaires. In addition, maintenance under Option B luminaires excludes maintenance related to vegetation management, luminaire relocation or modification of the luminaire (such as adding light shields).

Emergency Luminaire Replacement and Repair

The Company will repair or replace damaged luminaires that have been deemed inoperable due to the acts of vandalism, damage claim incidences and storm related events that cause a luminaire to become inoperable

Without obligation or notice to the Customer, luminaire repair or replacement shall occur as soon as reasonably possible subject to the Company's operating schedule, following actual knowledge of an inoperable luminaire. "Actual knowledge" for these purposes requires notification to PGE's Customer Service or PGE's Outdoor Lighting Services⁽¹⁾ department by the Customer, a member of the public, or a PGE employee performing luminaire replacement work. PGE has no obligation for repair or replacement of inoperable luminaires other than as described in this section of the tariff.

Non-operating luminaires will be repaired by the Company without additional charge to the Customer only when the luminaire can be restored to operable status by repair or replacement of the photoelectric controller. If repair efforts by the Company do not result in an operable luminaire, the luminaire will be designated as non-repairable and replaced, the cost of such replacement is the responsibility of the Customer.

Special Provisions for Option B Luminaire Maintenance

1. Non-repairable luminaires will be replaced with in-kind equipment, except as provided below, by the Company on the Company's schedule. Replacement is limited to Company-approved equipment at the date of installation, for which the Customer is charged and billed the appropriate prevailing costs upon completion of the work. The Company will provide to the Customer, subsequent to the luminaire replacement, a cost itemization of amounts to be paid by the Customer and additional information specifying luminaire location, age, repair history, replacement luminaire type, and reason for designation as non-repairable luminaire. The Company is not obligated to notify the Customer prior to replacement nor retain the replaced non-repairable luminaire.

(1) Contact PGE's Outdoor Lighting Services at 503-736-5710, PGE's Customer Service 503-228-6322 or 1-800-542-8818, or www.portlandgeneral.com to report an inoperable streetlight.

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SCHEDULE 95 (Continued)

LUMINAIRE SERVICE OPTIONS (Continued)

Special Provisions for Option B Luminaire Maintenance (Continued)

2. The Company may discontinue service to Option B luminaires and related equipment, which in the opinion of the Company have become unsafe or unsatisfactory for further service by reason of deterioration, storm, flood, lightning, proximity to or unsafe interference by trees or structures or other causes. The Company will notify the Customer of such discontinuance of service.

3. If damage occurs to any streetlight more than two times in any 12-month period measured from the first incidence of damage that requires replacement, the Customer will then pay for future installations or mutually agree with the Company and pay to have the pole either completely removed or relocated.

Option C – Luminaire

Option C provides electricity service to luminaires that are purchased, owned and maintained by the Customer and installed on non-Company owned poles or Company-owned distribution poles. As a condition to the election of Option C, Customer is responsible for ensuring that all new underground service installations of Option C luminaires are isolated by a disconnect switch or fuse. Both the equipment used to isolate the luminaire and its location must be approved by the Company.

Maintenance Service under Option C

The Company has no obligation to maintain Customer-purchased lighting if the Customer selects this option. Such maintenance and service is the sole responsibility of the Customer.

Special Provisions for Schedule 91/95/491/495/591/595 Option B to Schedule 95/495/595 Option C Luminaire Conversion and Future Maintenance Election

1. If Customer elects to convert any of its luminaires from Schedule 91/95 Option B to Schedule 95 Option C, the Customer must at the same time commit to convert the entirety of Customer's Schedule 91/95 Option B luminaires to Schedules 91 Option C and Schedule 95 Option C using one of two methods: (A) within five years following PGE's group lamp replacement cycle or (B) within three years on a schedule mutually agreed upon between the Company and Customer. Customer may elect to have some of its luminaires on Schedule 91 Option C and some on Schedule 95 Option C.

2. Upon such conversion, the Customer will assume and bear the cost of all on-going maintenance responsibilities for the luminaires and associated circuits in accordance with this schedule's provisions for Option C luminaires from the date each luminaire is converted to Option C. After the three or five year period, any remaining Option B luminaires will be converted to Option C. The Company may not provide new Option B lighting under Schedule 91/95 following the election to convert any Option B luminaires to Schedule 91 or Schedule 95 Option C luminaires.

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SCHEDULE 495 (Continued)

STREETLIGHT POLES SERVICE OPTIONS

Option A and Option B – Poles

See Schedule 91/491/591 for Streetlight poles service options.

MONTHLY RATE

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

Distribution Charge 6.259 ¢ per kWh (R)

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 Service Points (SPs) 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.

SCHEDULE 495 (Continued)

MARKET BASED PRICING OPTION (Continued)

Wheeling Charge

The Wheeling Charge will be \$1.793 per kW of monthly Demand.

Transmission Charge

Transmission and Ancillary Service Charges will be as specified in the Company's Open Access Transmission Tariff (OATT) as filed and approved by the Federal Energy Regulatory Commission.

ON AND OFF PEAK HOURS

On-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.

LOSSES

The following adjustment factors will be used where losses are to be included in the energy charges:

Secondary Delivery Voltage	1.0685
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SCHEDULE 495 (Continued)

REPLACEMENT OF NON-REPAIRABLE LUMINAIRES INSTALLATION LABOR RATES

Labor Rates ⁽¹⁾	Straight Time	Overtime	
	\$169.00 per hour	\$254.00 per hour	(I)

(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 and Option B 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 Rates</u>	
				<u>Option A</u>	<u>Option B</u>
Roadway LED	29	3,470	10	\$2.84	\$1.00
	37	2,530	13	3.67	1.20
	45	5,020	15	3.37	1.32
	50	3,162	17	3.90	1.45
	52	3,757	18	4.31	1.52
	67	5,050	23	4.79	1.83
	88	10,230	30	4.97	2.27
	106	7,444	36	5.90	2.66
	134	14,200	46	10.06	3.31
	156	16,300	53	11.01	3.77
	160	18,700	55	10.45	3.88
	176	18,300	60	12.34	4.23
	201	21,400	69	12.40	4.78

SCHEDULE 495 (Continued)

RATES FOR STANDARD LIGHTING (Continued)

Light-Emitting Diode (LED) Only – Option C Energy Use

<u>Type of Light</u>	<u>Watts*</u>	<u>Monthly kWh**</u>
LED	5 - 10	3
LED	>10 - 15	4
LED	>15 - 20	6
LED	>20 - 25	8
LED	>25 - 30	9
LED	>30 - 35	11
LED	>35 - 40	13
LED	>40 - 45	15
LED	>45 - 50	16
LED	>50 - 55	18
LED	>55 - 60	20
LED	>60 - 65	21
LED	>65 - 70	23
LED	>70 - 75	25
LED	>75 - 80	26
LED	>80 - 85	28
LED	>85 - 90	30
LED	>90 - 95	32
LED	>95 - 100	33
LED	>100 - 110	36
LED	>110 - 120	39
LED	>120 - 130	43
LED	>130 - 140	46
LED	>140 - 150	50
LED	>150 - 160	53
LED	>160 - 170	56

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* 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)

SCHEDULE 495 (Continued)

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

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<u>Type of Light</u>	<u>Watts*</u>	<u>Monthly kWh**</u>
LED	>170 - 180	60
LED	>180 - 190	63
LED	>190 - 200	67
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)

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SCHEDULE 495 (Continued)

RATES FOR DECORATIVE LIGHTING

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

	<u>Type of Light</u>	<u>Watts</u>	<u>Nominal Lumens</u>	<u>Monthly kWh</u>	<u>Monthly Rates</u>	
					<u>Option A</u>	<u>Option B</u>
Acorn LED		38	3,262	13	\$12.51	\$1.35
		60	4,213	21	13.68	1.88
		70	4,332	24	13.35	2.04
		75	4,897	26	13.99	2.19
	Acrylic LED	60	5,488	21	12.24	1.84
HADCO LED	70	5,120	24	17.00	2.13	
Westbrooke LED (Non-Flared)		36	3,369	12	15.38	1.36
		53	5,079	18	17.04	1.77
		69	6,661	24	18.67	2.12
		85	8,153	29	17.62	2.46
		136	12,687	46	20.27	3.56
		206	18,159	70	21.51	5.06
Westbrooke LED (Flared)		36	3,369	12	15.74	1.37
		53	5,079	18	17.59	1.78
		69	6,661	24	18.12	2.16
		85	8,153	29	19.16	2.50
		136	12,687	46	19.89	3.55
		206	18,159	70	22.79	5.09
Post-Top, American Revolution LED		45	3,395	15	7.85	1.37
		72	4,409	25	7.97	1.99
Flood LED		85	10,530	29	8.18	2.23
		128	16,932	44	9.72	3.19
		184	23,797	63	11.81	4.40
		371	48,020	127	20.48	8.52

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.

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SCHEDULE 495 (Continued)

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.

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.

SCHEDULE 495 (Continued)

SPECIAL CONDITIONS (Continued)

8. For Option A and Option B 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.
9. 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.
10. 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.

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SCHEDULE 495 (Continued)

SPECIAL CONDITIONS (Continued)

- b. For Option B 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 10.d. below. 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, agents, or contractors that arise under this Schedule.
- c. 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 10.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.
- d. For Option B and 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.

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SCHEDULE 495 (Continued)

SPECIAL CONDITIONS (Continued)

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- e. 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.
 - f. 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.
11. 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.
12. 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.
13. Customer is giving up the right granted under state law to receive Electricity from the Company at a rate based on the cost of electric generating resources owned in whole or in part by the Company. Customers enrolled for service under the Minimum Five-Year Option must give the Company not less than three years notice to terminate service under this schedule. Such notice will be binding.
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SCHEDULE 495 (Concluded)

SPECIAL CONDITIONS (Continued)

14. At the time service terminates under this schedule, the Customer will be considered a new Customer for purposes of determining available service options. A Customer served under the Company Supplied Energy option must meet the terms of the service agreement associated with that service prior to termination of service under this schedule.
15. The rate the Customer pays for Electricity may be higher or lower than the rates charged by the Company to similar customers not taking service under this schedule, including competitors to the Customer.
16. Neither the Company, its employees and agents, the Commission nor any other agency of the State of Oregon has made any representation to the Customer regarding future Electricity prices that will result from the Customer's election of service under this schedule.
17. The Customer is selecting this schedule based solely upon its own analysis of the benefits of this schedule. The Customer has available to it Energy experts that assisted in making this decision.
18. The Customer warrants that the person signing the service agreement has full authority to bind the Customer to such agreement.
19. Direct Access Service is available only on acceptance of a Direct Access Service Request (DASR) by the Company. Where applicable, a Customer is required to have interval metering and meter communications in place prior to initiation of service under this schedule.
20. All lights corresponding to an individual municipal department must choose service under this schedule and/or Schedule 491.
21. Customers selecting service under this Schedule will be limited to a Company/ESS Split Bill.

TERM

Minimum Five-Year Option

The term of service will not be less than five years. Service will be year-to-year thereafter. Customers must give the Company not less than three years notice to terminate service under this schedule. Such notice will be binding.

Fixed Three-Year Option

The term of service will be three years. Upon completion of this three year term, the Customer will select service under any other applicable rate schedule, subject to all notice requirements and provisions of the schedule.