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(701) 241-8632  
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May 5, 2020

**VIA U. S. AND ELECTRONIC MAIL**

Mr. Steven M. Kahl, Executive Secretary  
North Dakota Public Service Commission  
State Capitol Building, Dept. 0408  
600 East Boulevard  
Bismarck, ND 58505-0480

RE: SUPPLEMENTAL FILING TO THE PROPOSED REVISIONS TO NORTH DAKOTA  
LIGHTING SERVICE TARIFFS (CASE NO. PU-20-093)

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy, respectfully submits an original and seven copies of this supplement to its March 6<sup>th</sup> application for various format and language improvements to its North Dakota lighting service tariffs as well as the addition of rates for Light Emitting Diode (LED) lighting.

This supplemental filing proposes new LED rates for *Directional Lighting* services within the Protective Lighting Service tariff (e.g., yard lights and parking lot lighting, etc.). The Company recently received favorable pricing information from lighting suppliers that has made LED technology beneficial to customers with *Directional Lighting* equipment on their premises.

In addition, we are correcting in this supplement minor errors impacting four previously filed tariff pages. The *Street Lighting Service – Unmetered* tariff was incorrectly referenced as the *Street Lighting Energy Service – Unmetered* tariff on Sheet 1-2 (*Table of Contents*), Sheet 5-TOC-1 (*Rate Schedules Table of Contents*), and Sheets 5-64 and 5-65 (*Rules for Application of Street Lighting Rates*). The bullets on Sheet 5-65 were also mis-numbered and are corrected in this filing.

At the May 13<sup>th</sup> Informal Hearing scheduled for this docket, the Company will discuss this supplemental tariff filing along with the other lighting service proposals contained in our March 6<sup>th</sup> petition.

If you have any questions please contact me at [dave.sederquist@xcelenergy.com](mailto:dave.sederquist@xcelenergy.com) or (701) 241-8632. Thank you.

Sincerely,

A handwritten signature in blue ink that reads "David H. Sederquist". The signature is written in a cursive style with a large initial 'D'.

David H. Sederquist  
Sr. Regulatory/Financial Consultant  
Xcel Energy



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RE: SUPPLEMENTAL FILING - PROPOSED REVISIONS TO NORTH DAKOTA LIGHTING  
SERVICE TARIFFS (CASE NO. PU-20-093)

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy, submits to the North Dakota Public Service Commission (Commission) this Supplement to our March 6<sup>th</sup> petition for Commission approval of improvements and additions to the Company's Street Lighting Services and Protective Lighting Services in North Dakota.

In our original petition we proposed, among other things, a new Light Emitting Diode (LED) rate option for the *Area Lighting* group within our Protective Lighting Service tariff. With this supplement, the Company wishes to propose a similar LED option for the *Directional Lighting* group within the same Protective Lighting Service tariff. Until very recently, LED technology for directional lighting was significantly more expensive than for area lighting. A LED directional light is a larger light with more metal and other components inside the fixture, and is thus more expensive. However, manufacturers have been making progress in developing LED directional lights at lower cost. Since our original petition, the Company has been notified by our suppliers of new, lower pricing, and we have incorporated this new cost information into a *Directional Lighting* LED rate that will benefit customers.

The following attachments are included with this Supplement:

- Attachment A: Rate Development for the Proposed *Directional Lighting* Group within the Protective Lighting Services Tariff
- Attachment B: Proposed Protective Lighting Services Tariff changes (Legislative and Non-Legislative formats)

## A. Background

The Company's March 6<sup>th</sup> petition of improvements and additions to the Company's Street Lighting and Protective Lighting Services in North Dakota proposed the following:

- New LED rates for the *Area Lighting* group within Protective Lighting Service,
- New LED rates to accommodate conversions of existing municipally-owned street lighting systems to LED technology,
- Moving incandescent lighting rates from a separate closed tariff to the main street lighting tariff for city-owned lighting systems,
- Cancelling Group 4 service for city-owned street lighting systems,
- Updating the lighting tariff language, and
- Streamlining and improving the street lighting rules for application.

## B. Rate Development

### **Proposed LED Rates for Protective Lighting (*Directional Lighting*)**

The proposed *Directional Lighting* LED rates are comparable to the proposed *Area Lighting* LED rates within the Protective Lighting Services tariff. The LED wattages that are comparable to current High Pressure Sodium (HPS) lighting wattages are shown in Table 1 below. These are based on the specific LED fixtures the Company expects to provide for the *Directional Lighting* group. The Company proposes to represent these LED wattages within wattage ranges to accommodate future standardization of available LED wattages.<sup>1</sup>

**Table 1**  
**Comparable HPS and LED Wattages**

<b>HPS Wattage</b>	<b>LED Wattage</b>	<b>LED Tariff Range</b>
250W	129W	110-165W
400W	192W	170-250W

The LED rates for the *Directional Lighting* group were developed using the same methodology used to establish LED rate options for other lighting services. Consistent with the current maintenance practice for Protective Lighting Service and to minimize incremental labor costs for conversions, when current HPS and Mercury Vapor (MV) lights require maintenance or repair service they will instead be replaced by LED fixtures. We currently provide service to approximately 850 *Directional Lighting* units in North Dakota and anticipate a complete conversion to LED lighting

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<sup>1</sup> LED wattage levels for Protective Lighting Services are slightly different from those used for Street Lighting Service tariffs, reflecting differences in the type of equipment.

over the next several years. This gradual replacement approach will avoid the need to replace HPS and MV lamps. Installing LED fixtures will also reduce future maintenance costs by eliminating the need to replace lamps and broken glassware that are common maintenance requirements for the current HPS and MV lighting options. This maintenance cost component is included in the proposed LED rates as an estimated expense savings of \$0.91 per month for the 192W size.

The reductions in system cost<sup>2</sup> allocations for LED conversions are shown below in Table 2, as the result of lower energy use and lower peak demand requirements. This results in an expense savings of \$3.23 per month for the 192W size. Also recognized in the proposed rates, since the LED fixtures will replace current fixtures prior to the end of their useful life, is the cost of the required incremental capital investment. This produces a higher revenue requirement of \$3.04 per month for the 192W size that offsets part of the energy and maintenance cost savings. Overall, the net impact is a 2 to 7 percent decrease in the monthly base rate and a total bill savings of approximately 13 to 20 percent when combined with the fuel cost savings from lower energy usage. The anticipated base rate impact and total bill impact estimates are outlined in Table 2.

**Table 2**  
**LED Directional Lighting Rate Design**

Per HPS/LED Directional Light Equivalent

RATE IMPACT	250W/129W	400W/192W
<b>Current HPS Protective Lighting Service Prices Per Directional Light</b>	<b>\$12.89</b>	<b>\$15.82</b>
<i>Maintenance Savings</i>	(\$0.91)	(\$0.91)
<i>System Allocation Cost Reduction</i>	(\$1.98)	(\$3.23)
<i>Incremental Capital Revenue Requirement</i>	\$2.62	\$3.04
<i>LED Fixture Rate Impact - Company Owned Directional Protective Lighting</i>	(\$0.27)	(\$1.10)
<b>Proposed LED Protective Lighting Service Prices per Directional Light</b>	<b>\$12.62</b>	<b>\$14.72</b>
<i>Percentage Savings (increase)</i>	2.1%	7.0%
BILL IMPACT (Estimated)	250W/129W	400W/192W
<b>Current HPS Monthly Average Bill Per Directional Light</b>	<b>\$15.98</b>	<b>\$20.67</b>
<i>LED Fixture Rate Impact - Company Owned Directional Protective Lighting</i>	(\$0.27)	(\$1.10)
<i>Fuel Clause and Rider Savings Estimate</i>	(\$1.79)	(\$2.92)
<b>Total Monthly Bill Impact</b>	<b>(\$2.06)</b>	<b>(\$4.02)</b>
<b>Proposed LED Monthly Average Bill Per Directional Light</b>	<b>\$13.92</b>	<b>\$16.65</b>
<i>Percentage Savings (increase)</i>	12.9%	19.5%

<sup>2</sup> System costs include all indirect capital and operating costs needed to energize and support the company-owned lighting systems. These costs are allocated to the lighting services customer class using primarily demand and energy allocators.

These incremental rate and bill impact calculations are consistent with the approach used to develop LED rates for Company-owned Street Lighting System Service that was approved in Case No. PU-15-692 and the *Area Lighting* LED rate within the Protective Lighting Service tariff proposed in the original petition in this docket. Attachment A includes the workpapers for the *Directional Lighting* LED rates. These workpapers provide a summary of the rate and bill impacts of LED versus HPS lighting, and a more detailed breakout of the cost saving components.

We respectfully request that the Commission approve these proposed *Directional Lighting* LED rates within the Protective Lighting Service Tariff to expand our lighting customers' access to lower cost LED technology.

If you have any questions please contact me at [dave.sederquist@xcelenergy.com](mailto:dave.sederquist@xcelenergy.com) or (701) 241-8632. Thank you.

Sincerely,



David H. Sederquist  
Sr. Regulatory/Financial Consultant  
Xcel Energy

## Directional Protective Lighting Service - LED Rate Design

Rate Code D11

### Monthly LED Rate Design Summary

Rate Impact	NSP-ND r HPS/LED Directional Light Equivale	
	250W/129W	400W/192W
<b>Current HPS Monthly Directional Lighting Service Rates - D11</b>	<b>\$12.89</b>	<b>\$15.82</b>
Maintenance Expense Impact (Savings)	(\$0.91)	(\$0.91)
System Cost Allocation Reduction	(\$1.98)	(\$3.23)
Incremental Capital Revenue Requirement	\$2.62	\$3.04
Net LED Fixture Rate Impact - Company Owned Directional Lights	(\$0.27)	(\$1.10)
<b>Proposed Monthly LED Directional Lighting Service Rates</b>	<b>\$12.62</b>	<b>\$14.72</b>
<i>Percentage Savings (increase)</i>	2.1%	7.0%

Bill Impact	NSP-ND r HPS/LED Directional Light Equivale	
	250W/129W	400W/192W
<b>Current HPS Directional Lighting Monthly Average Bill per Light - D11</b>	<b>\$15.98</b>	<b>\$20.67</b>
LED Fixture Impact on HPS Directional Lighting Rate	(\$0.27)	(\$1.10)
Fuel & Other Rider Savings Estimate	(\$1.79)	(\$2.92)
Total Monthly Bill Impact (savings)	(\$2.06)	(\$4.02)
<b>Proposed Monthly LED Directional Lighting Average Bill per Light - D11</b>	<b>\$13.92</b>	<b>\$16.65</b>
<i>Percentage Savings (increase)</i>	12.9%	19.4%

### Annual Impact of LED Fixtures on the D11 Directional Lighting Service Rate

	NSP-ND r HPS/LED Directional Light Equivale	
	250W/129W	400W/192W
<b>Maintenance Savings</b>		
Relamp Expense Savings	\$4.57	\$4.57
Service Order Expense Savings	\$6.36	\$6.36
Total Maintenance Savings	\$10.93	\$10.93
<i>Monthly Savings (increase)</i>	\$0.91	\$0.91
<b>System Cost Allocation Reduction</b>		
Energy Related System Cost Allocation Reduction	\$13.37	\$21.79
Demand Related System Cost Allocation Reduction	\$10.42	\$16.98
Total System Allocation Cost Reduction	\$23.79	\$38.77
<i>Monthly Savings (increase)</i>	\$1.98	\$3.23
<b>Incremental Capital Revenue Requirement</b>	(\$31.49)	(\$36.49)
<i>Monthly Savings (increase)</i>	(\$2.62)	(\$3.04)
<b>LED SL Base Rate Savings (Increase)</b>	<b>\$3.23</b>	<b>\$13.21</b>
<i>Monthly Savings (increase)</i>	\$0.27	\$1.10
<b>Fuel &amp; Other Rider Savings Estimate</b>	<b>\$21.47</b>	<b>\$35.00</b>
<i>Monthly Savings (increase)</i>	\$1.79	\$2.92
<b>Annual Bill Savings - LED Directional Lights</b>	<b>\$24.70</b>	<b>\$48.21</b>
<i>Monthly Savings (increase)</i>	\$2.06	\$4.02

# Legislative

**NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2**

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~~6th~~<sup>7th</sup> Revised Sheet No. 2

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Date Filed:	<u>05-27-14</u> <u>03-06-20</u>	By:	<del>David M. Sparby</del> <u>Christopher B. Clark</u>	Effective Date:	<u>07-06-14</u>
			President, <del>and CEO of</del> Northern States Power Company, a Minnesota corporation		
Case No.	<u>PU-12-81320-</u>			Order Date:	N/A

**NORTH DAKOTA ELECTRIC RATE BOOK – NDPSC NO. 2**

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Date Filed:	<del>12-18-12</del> <sup>203-06-20</sup>	By: <del>David M. Sparby</del> <sup>Christopher B. Clark</sup>	Effective Date:	<del>05-01-14</del>
	President, and CEO of Northern States Power Company, a Minnesota corporation			
Case No.	<del>PU-12-81320-</del>		Order Date:	<del>02-26-14</del>

**NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2**

**~~AUTOMATIC-PROTECTIVE LIGHTING SERVICE~~**  
**~~RATE CODE D11~~**

Section No. 5  
~~7th~~<sup>8th</sup> Revised Sheet No. 13

**~~AVAILABILITY~~**

~~Available to any customer for illumination of areas of private property.~~

**~~RATE~~**

<u>Designation of Lamp</u>	<u>Monthly Rate per Unit</u>
<del>Area Nightwatch-</del>	
<del>100W High Pressure Sodium-</del>	<del>\$6.70</del>
<del>175W Mercury-</del>	<del>\$6.70 (1)</del>
<del>250W High Pressure Sodium-</del>	<del>\$11.63</del>
<del>400W Mercury</del>	<del>\$11.63 (1)</del>
<del>Directional Nightwatch</del>	
<del>250W High Pressure Sodium-</del>	<del>\$12.89</del>
<del>400W Mercury</del>	<del>\$14.80 (1)</del>
<del>400W High Pressure Sodium</del>	<del>\$15.82</del>

~~(1) Available to existing installations only.~~

**~~FUEL COSTS~~**

~~Bills subject to the charges provided for in the Fuel Cost Rider.~~

**~~SURCHARGE~~**

~~In certain communities, bills are subject to a surcharge provided for in a Surcharge Rider.~~

**~~LATE PAYMENT CHARGE~~**

~~A 1% late payment charge will be added to the unpaid balance on date due.~~

**~~SERVICE INCLUDED IN RATE~~**

~~Company shall own, operate, and maintain the lighting unit including the fixture, lamp, ballast, photoelectric control, mounting brackets, and all necessary wiring. Company shall furnish all electric energy required for operation of the unit.~~

**~~AVAILABILITY~~**

~~Available to any customer for illumination of areas of private property. Types of lighting include Mercury Vapor (MV), High Pressure Sodium (HPS) and Light Emitting Diode (LED). Company will provide all electric energy and own, operate, and maintain the protective lighting system including the fixture, lamp, ballast, photocell, mounting brackets, and all necessary wiring.~~

**~~RATE~~**

<u>Wattage and Type</u>	<u>Monthly Charge per Fixture</u>
<del>Area Lighting</del>	
<del>100W HPS (1)</del>	<del>\$6.70</del>
<del>175W MV (1)</del>	<del>\$6.70</del>
<del>250W HPS (1)</del>	<del>\$11.63</del>
<del>400W MV (1)</del>	<del>\$11.63</del>

(Continued on Sheet No. 5-14)

Date Filed: ~~40-31-14~~<sup>03-06-20</sup> By: ~~David M. Sparby~~<sup>Christopher B. Clark</sup> Effective Date: ~~01-01-15~~  
President, ~~and CEO~~ of Northern States Power Company, a Minnesota corporation  
Case No. ~~PU-12-81320-~~ Order Date: ~~02-26-14~~

Northern States Power Company, a Minnesota corporation  
Minneapolis, Minnesota 55401

**NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2**

**AUTOMATIC-PROTECTIVE LIGHTING SERVICE**  
**RATE CODE D11**

Section No. 5  
~~7th~~<sup>8th</sup> Revised Sheet No. 13

30-45W LED \$5.58  
110-165W LED \$9.92

**Directional Lighting**

250W HPS (1) \$12.89  
400W MV (1) \$14.80  
400W HPS (1) \$15.82  
110-165W LED \$12.62  
170-250W LED \$14.72

(1) Available to existing installations only.

**FUEL COST**

Bills subject to the charges provided for in the Fuel Cost Rider.

**OTHER RIDERS**

Bills are subject to the charges provided for in the Transmission Cost Recovery Rider and the Renewable Energy Rider.

**SURCHARGE**

In certain communities, bills are subject to a surcharge provided for in a Surcharge Rider.

**LATE PAYMENT CHARGE**

A 1% late payment charge will be added to the unpaid balance on date due.

(Continued on Sheet No. 5-14)

Date Filed: ~~40-31-14~~<sup>03-06-20</sup> By: ~~David M. Sparby~~<sup>Christopher B. Clark</sup> Effective Date: ~~01-01-15~~  
President, ~~and CEO of~~ Northern States Power Company, a Minnesota corporation  
Case No. ~~PU-12-81320-~~ Order Date: ~~02-26-14~~

**RULES FOR APPLICATION OF  
STREET LIGHTING RATES**

Section No. 5  
~~3rd~~<sup>4th</sup> Revised Sheet No. 64

~~1. Service Included in Rate:~~

~~a. System Service~~

~~Company shall own, operate and maintain the overhead and underground street lighting systems using Company's standard street lighting equipment.~~

~~b. Purchased Equipment~~

~~Group I rates are available only for lighting standards of 50 feet or less in height. (Lighting standards over 50 feet in height, being served on Group I rates as of the effective date of the schedule, may continue service under Group I.)~~

~~Group I and Closed Schedule~~

~~Company shall furnish all electric energy necessary to operate customer's ornamental street lighting system, shall make all lamp and globe renewals, clean the globes, light and extinguish all lamps, make all ballast renewals, and furnish all the materials and labor necessary therefor.~~

**1. Energy Service Metering Requirement**

Street Lighting Energy Service – Metered is the required rate schedule for new customer-owned lighting systems. The Street Lighting Service – Unmetered rate schedule will continue to be available for existing and Company-approved extensions of customer-owned lighting systems. The Company will evaluate a conversion to metering for sections of unmetered lighting systems included in areas of distribution system reconstruction or relocation.

**2. Operating Schedule**

All street lighting rate schedules require a photocell controlled operating schedule that energizes lighting from approximately one-half hour after sunset until one-half hour before sunrise.

**3. Billing Adjustment for Outages**

If electric energy under any unmetered service is interrupted and illumination is not resumed within 2 business days from the time the Company receives notice from the customer, 1/30<sup>th</sup> of the applicable monthly metered energy and fuel cost charges for the affected street lights for each night of service outage will be credited to the customer after notice is received. The Company will apply outage credits to all affected customers one time annually in the month of February of each year, together with an itemized list of the street lights associated with the credits.

**4. Maintenance Service – Street Lighting Service – Unmetered**

Company-provided maintenance service for non-LED lighting systems includes materials and labor for both: 1) the replacement of lamps, ballasts, and photocells, and 2) the cleaning and replacement of glassware. Customer is responsible for required lighting fixture replacements.

(Continued on Sheet No. 5-65)

Date Filed: 12-18-1203-06-20 By: David M. SparbyChristopher B. Clark Effective Date: 05-01-14  
President, ~~and CEO~~ of Northern States Power Company, a Minnesota corporation  
Case No. PU-12-81320- Order Date: 02-26-14

**RULES FOR APPLICATION OF  
STREET LIGHTING RATES (Continued)**

Section No. 5  
~~3rd~~<sup>4th</sup> Revised Sheet No. 65

~~1. Service Included in Rate: (Continued)~~

~~b. Purchased Equipment (Continued)~~

~~Group IV (Closed)~~

~~The customer owns and maintains entire ornamental street lighting system including underground cables, posts, lamps, ballasts, glassware, and photocells conforming to specified daily operating schedule. Company furnishes energy only at central distribution points designated by Company. See individual street lighting contracts for terms and conditions not covered herein.~~

~~2. Daily Operating Schedule: The daily operating schedule of lamps be from approximately one-half hour after sunset until one-half hour before sunrise. All lamps served under Company owned street lighting rate schedules operate on the above all-night schedule.~~

~~3. Outages: If illumination from any lamp is interrupted and said illumination is not resumed within 24 hours from the time Company receives notice thereof from customer, 1/30<sup>th</sup> of the monthly energy related rate for such lamp shall be deducted for each night of nonillumination after such notice is received.~~

~~5. **Special Services – Street Lighting System Service**~~

~~a. Temporary Disconnection of Service (in which facilities remain in place)~~

~~When requested by the customer, the Company will temporarily disconnect service to individual street lights provided the customer pays a monthly facilities charge equal to the regular monthly rate less the product of the average monthly kWh for the light and the energy charge from the Street Lighting Energy Service – Metered rate schedule. The customer must pay a charge of \$25 to disconnect or reconnect each lighting unit.~~

~~b. Removal of Street Lighting Facilities~~

~~When requested by the customer, the Company will remove all, or a portion of, its street lighting system and cease billing. If the number of lights requested to be removed in any twelve-month period exceeds five percent of the lighting system, the customer will pay estimated costs for the removal and undepreciated value of the facilities, less any salvage value.~~

~~6. **Special Services – Street Lighting Service – Unmetered**~~

~~a. Daily Operating Schedule Option~~

~~Reduced hours of operation from the standard Daily Operating Schedule is available under the applicable commercial and industrial rate, subject to the following provisions:~~

- ~~1) The customer must install a meter socket at the service point.~~
- ~~2) The customer will provide all lighting maintenance and identify lighting units with Company approved markings.~~

~~b. Disconnection of Service~~

~~During the time period between disconnection and reconnection of street lights, the Company will cease billing provided the disconnection is made on the line side of the lighting unit ballast. If otherwise disconnected, the customer will pay a charge to compensate for the ballast core loss. Upon a request by the customer, the Company will disconnect or reconnect street lights at a charge of \$25 per lighting unit. The customer must identify all disconnected street lights with Company-approved markings.~~

~~(Continued on Sheet No. 5-66)~~

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President, and CEO of Northern States Power Company, a Minnesota corporation  
Case No. ~~PU-42-84320-~~ Order Date: ~~02-26-14~~

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**Non-Legislative**

**NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2**

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**NORTH DAKOTA ELECTRIC RATE BOOK – NDPSC NO. 2**

**RATE SCHEDULES  
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**NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2**

**PROTECTIVE LIGHTING SERVICE  
RATE CODE D11**

Section No. 5  
8th Revised Sheet No. 13

**AVAILABILITY**

Available to any customer for illumination of areas of private property. Types of lighting include Mercury Vapor (MV), High Pressure Sodium (HPS) and Light Emitting Diode (LED). Company will provide all electric energy and own, operate, and maintain the protective lighting system including the fixture, lamp, ballast, photocell, mounting brackets, and all necessary wiring.

**RATE**

<u>Wattage and Type</u>	<u>Monthly Charge per Fixture</u>
<b>Area Lighting</b>	
100W HPS (1)	\$6.70
175W MV (1)	\$6.70
250W HPS (1)	\$11.63
400W MV (1)	\$11.63
30-45W LED	\$5.58
110-165W LED	\$9.92
<b>Directional Lighting</b>	
250W HPS (1)	\$12.89
400W MV (1)	\$14.80
400W HPS (1)	\$15.82
110-165W LED	\$12.62
170-250W LED	\$14.72

(1) Available to existing installations only.

**FUEL COST**

Bills subject to the charges provided for in the Fuel Cost Rider.

**OTHER RIDERS**

Bills are subject to the charges provided for in the Transmission Cost Recovery Rider and the Renewable Energy Rider.

**SURCHARGE**

In certain communities, bills are subject to a surcharge provided for in a Surcharge Rider.

**LATE PAYMENT CHARGE**

A 1% late payment charge will be added to the unpaid balance on date due.

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**RULES FOR APPLICATION OF  
STREET LIGHTING RATES**

Section No. 5  
4th Revised Sheet No. 64

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1. **Energy Service Metering Requirement**

Street Lighting Energy Service – Metered is the required rate schedule for new customer-owned lighting systems. The Street Lighting Service – Unmetered rate schedule will continue to be available for existing and Company-approved extensions of customer-owned lighting systems. The Company will evaluate a conversion to metering for sections of unmetered lighting systems included in areas of distribution system reconstruction or relocation.

2. **Operating Schedule**

All street lighting rate schedules require a photocell controlled operating schedule that energizes lighting from approximately one-half hour after sunset until one-half hour before sunrise.

3. **Billing Adjustment for Outages**

If electric energy under any unmetered service is interrupted and illumination is not resumed within 2 business days from the time the Company receives notice from the customer, 1/30<sup>th</sup> of the applicable monthly metered energy and fuel cost charges for the affected street lights for each night of service outage will be credited to the customer after notice is received. The Company will apply outage credits to all affected customers one time annually in the month of February of each year, together with an itemized list of the street lights associated with the credits.

4. **Maintenance Service – Street Lighting Service – Unmetered**

Company-provided maintenance service for non-LED lighting systems includes materials and labor for both: 1) the replacement of lamps, ballasts, and photocells, and 2) the cleaning and replacement of glassware. Customer is responsible for required lighting fixture replacements.

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**RULES FOR APPLICATION OF  
STREET LIGHTING RATES (Continued)**

Section No. 5  
4th Revised Sheet No. 65

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**5. Special Services – Street Lighting System Service**

a. Temporary Disconnection of Service (in which facilities remain in place)

When requested by the customer, the Company will temporarily disconnect service to individual street lights provided the customer pays a monthly facilities charge equal to the regular monthly rate less the product of the average monthly kWh for the light and the energy charge from the Street Lighting Energy Service – Metered rate schedule. The customer must pay a charge of \$25 to disconnect or reconnect each lighting unit.

b. Removal of Street Lighting Facilities

When requested by the customer, the Company will remove all, or a portion of, its street lighting system and cease billing. If the number of lights requested to be removed in any twelve-month period exceeds five percent of the lighting system, the customer will pay estimated costs for the removal and undepreciated value of the facilities, less any salvage value.

**6. Special Services – Street Lighting Service – Unmetered**

a. Daily Operating Schedule Option

Reduced hours of operation from the standard Daily Operating Schedule is available under the applicable commercial and industrial rate, subject to the following provisions:

- 1) The customer must install a meter socket at the service point.
- 2) The customer will provide all lighting maintenance and identify lighting units with Company approved markings.

b. Disconnection of Service

During the time period between disconnection and reconnection of street lights, the Company will cease billing provided the disconnection is made on the line side of the lighting unit ballast. If otherwise disconnected, the customer will pay a charge to compensate for the ballast core loss. Upon a request by the customer, the Company will disconnect or reconnect street lights at a charge of \$25 per lighting unit. The customer must identify all disconnected street lights with Company-approved markings.

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