



2302 Great N. Drive
Fargo, North Dakota 58102
(701) 241-8632
dave.sederquist@xcelenergy.com

March 9, 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: PROPOSED REVISIONS TO NORTH DAKOTA LIGHTING SERVICE TARIFFS
CASE NO. PU-20-___

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy, respectfully submits an original and seven copies of an 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. LED rates are being proposed for protective lighting service and for unmetered service to existing segments of municipally-owned street lighting systems. These rates will facilitate conversions to LED from less energy efficient lighting technologies.

This application is prompted by two factors: 1) a settlement provision (Case No. PU-12-813) requiring the Company to review and propose improvements to its rate book, and 2) requests about LED rates from cities desiring to convert their own street lighting systems to LED lighting.

We believe the proposed changes will make our lighting service tariffs clearer and more understandable, and improve access to lower cost LED technology.

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

Sincerely,

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

STATE OF NORTH DAKOTA
BEFORE THE
PUBLIC SERVICE COMMISSION

Brian Kroshus	Chair
Julie Fedorchak	Commissioner
Randy Christmann	Commissioner

IN THE MATTER OF THE PETITION OF
NORTHERN STATES POWER COMPANY
FOR APPROVAL OF MISCELLANEOUS
LIGHTING TARIFF REVISIONS

CASE NO. PU-20____

PETITION

INTRODUCTION

Pursuant to North Dakota Century Code 49-05-05, Northern States Power Company, doing business as Xcel Energy, submits to the North Dakota Public Service Commission (Commission) this Petition for Commission approval of improvements and additions to the Company's street lighting and protective lighting (.e.g., yard and parking lot lighting) services in North Dakota. The proposed revisions streamline and clarify existing lighting tariffs and add new rate options for the use of energy efficient Light Emitting Diode (LED) lighting.

This petition stems partly from a comprehensive review in 2018 of the Company's North Dakota Electric Rate Book No. 2 which was performed to comply with a previous rate case Settlement obligation¹. In the fall of 2018, the Company began preparing a North Dakota electric rate application based on a 2019 test year, and in conjunction with that conducted the required review of its existing Rate Book language. Ultimately, the rate case was avoided when the Company and PSC staff subsequently entered into a comprehensive rate Settlement in the Commission's investigation into the impact of the Tax Cuts and Jobs Act (Case No. PU-18-155).

In recent months, the Company has received inquiries from the cities of Minot and Grand Forks regarding whether the Company offered street lighting rates applicable to LED technology, which these municipalities were beginning to install on their own street lighting systems. In response to these municipal requests, and to make

¹ In the Settlement of Case No. PU-12-813, the Company agreed to a Commission staff request that the Company review its electric rate book and update it with more current terms and clearer explanations for improved understandability. The Settlement required the Company to submit its proposed rate book changes no later than its "next general rate case".

additional lighting service revisions to improve understanding and to also extend LED service to protective lighting, the Company proposes to move ahead at this time with a miscellaneous filing for lighting services.

The primary lighting service revisions that are proposed in this petition are:

- Adding new LED rates for protective lighting service,
- Adding new LED rates to accommodate conversions of existing customer owned street lighting systems to LED technology,
- Moving incandescent lighting rates from a separate closed tariff to the main street lighting tariff for customer-owned lighting systems,
- Cancelling Group 4 service for customer-owned street lighting systems,
- Updating the lighting tariff language, and
- Streamlining and improving the street lighting rules for application.

We respectfully request that the Commission approve these proposed lighting tariff improvements for the benefit of lighting customers and to lessen the future administrative management of these tariffs.

The following attachments are included with this Petition:

- Attachment A: Proposed Protective Lighting LED Rate Development
- Attachment B: Proposed Customer-owned LED Rate Development
- Attachment C: Proposed Lighting Tariff changes – Redline & Normal

I. GENERAL FILING INFORMATION

Pursuant to § 69-02-02-04 of the Commission's Rules of Practice and Procedure, the following information is provided.

Utility Employee Responsible for Filing

David Sederquist, Sr. Regulatory and Financial Consultant
2302 Great Northern Drive
PO Box 2747
Fargo, ND 58108-2747
(701) 241-8632

The Company requests that the following person be placed on the Commission's official service list for this proceeding:

Lynnette Sweet, Regulatory Administrator
401 Nicollet Mall – 7th Floor
Minneapolis, MN 55401
Regulatory.records@xcelenergy.com
(612) 321-3159

II. DESCRIPTION AND PURPOSE OF FILING

A. Background

On December 13, 2013 the Company and Commission staff agreed to a Settlement in Case No. PU-12-813. One of the terms of the Agreement was for the Company to “...submit to the Commission, no later than the date of its next general rate application, an updated and improved North Dakota Electric Rate Book.” The Company was to conduct a thorough review of all tariffs and general rules in the Rate Book, and update terminology, improve readability, and streamline language where applicable. On February 26, 2014 the Revised Second Amended Settlement was approved by the Commission.

In 2018, the Company made the decision to begin preparing a general electric rate application in North Dakota, based on a 2019 test year. As part of that effort, and to comply with the Settlement in Case No. PU-12-813, the Company began in earnest to review all sections of the Rate Book and identify changes to streamline, clarify, and/or improve the language and presentation of the tariffs and rules encompassed within. On October 1, 2018, the Company entered into a Settlement Agreement in Case No. PU-18-155, the Commission’s investigation into the impact of the Tax Cuts and Jobs Act (TCJA) on the Company’s electric costs of service. The Settlement was approved by the Commission on December 21, 2018, and it contained, among other things, a rate moratorium through 2020. As a result, the Company halted its preparation of a 2019 electric rate case test year and petition.

Later, in the spring of 2019, the Company re-initiated steps to complete its review of its North Dakota Electric Rate Book with the intention of filing a comprehensive miscellaneous tariff improvement proposal outside of a general rate case proceeding². At about the same time, the Company began receiving inquiries from certain cities in North Dakota about the availability and application of street lighting rates for their

² Given the amount of time and effort already invested in the project during the prior fall, it was prudent to complete the review and plan to file the miscellaneous proposed changes prior to the next North Dakota rate case to reduce the complexity of that future proceeding.

existing municipal-owned systems for LED lighting technology³. Xcel Energy then determined the time was right to make a separate, targeted filing for changes to its lighting tariffs that would incorporate the language and format improvements already identified and include proposed rates for LED conversions on municipal-owned street light systems and for protective lighting systems.

B. Description of the Proposed Tariff Changes

The Company's current street lighting tariffs reflect a composite of historical changes in terminology, policy, and lighting technology. The tariffs describe service differentiations such as ownership of the lighting systems, maintenance responsibility, and metering requirements. The Company's tariffs have been revised or amended over time to address the various changes as they occurred. The overall tariff book review prompted by the Commission staff and specified in the 2012 rate case Settlement has prompted the Company to take a more comprehensive look at its lighting service offerings and take steps to streamline and clarify the tariffs and rules for application.

The Company's current lighting tariffs and propose revisions are described below.

Automatic Protective Lighting Service (Rate Code D11) Rate Sheet Nos. 5-13 and 5-14

This tariff provides residential and commercial customers with comprehensive lighting service on private property, provided by Xcel Energy-owned facilities and infrastructure. The Company owns, energizes, operates, and maintains the lighting system. This unmetered service provides fixed monthly rates representing available lamp wattages for either area or directional lighting. Monthly energy usage is determined by service wattage applied to a photocell controlled operating schedule.

Proposed Revisions:

- Removed "Automatic" from the tariff title and from references in Rate Book Section 6, *General Rules and Regulations*.
- Added LED rates for area lighting service (rate development is provided as Attachment A).
- Added policy for LED conversions

³ Currently, the Company's unmetered street lighting service for existing municipal street lighting systems includes rates for mercury vapor, high pressure sodium, and incandescent lamp types.

Street Lighting System Service (Rate Code D30)

Rate Sheet No. 5-59

This tariff provides municipalities with comprehensive street lighting service provided by Company -owned street lights and infrastructure. The Company owns, energizes, operates, and maintains the lighting system. This unmetered service provides fixed monthly rates representing available combinations of the type of lighting (high pressure sodium (HPS) and LED more recently), wattage, overhead or underground service, and the type of fixture. Monthly energy usage is determined by service wattage applied to a photocell controlled operating schedule.

Proposed Revision:

- Moved the service description to the tariff from its current location in the *Rules for Application of Street Lighting Rates* tariff.

Street Lighting Service (Purchased Equipment) (Rate Code D31)

Rate Sheet Nos. 5-60 and 5-61

This tariff provides municipalities with electric energy and maintenance service for street lighting systems owned by the municipality⁴. This service is also unmetered, with electric usage determined consistent with the method used for *Street Lighting System Service*.

Proposed Revisions:

- Revised tariff title to: **Street Lighting Energy Service – Unmetered (Closed)**
- Added closed status description limiting availability to existing systems, which includes Company-approved extensions of existing system as further described in the *Rules for Application of Street Lighting Rates* tariff.
- Moved the service description to the tariff from its current location in the *Rules for Application of Street Lighting Rates* tariff.
- Added LED rates to accommodate municipalities' conversions of their existing lighting systems, with a continuation of unmetered service. (Rate development provided as Attachment B). This provides a practical option to convert existing unmetered lighting systems to LED lighting, recognizing that converting unmetered system configurations to metered configurations is generally not economically feasible.
- Specified that LED service and rates do not include Company provided maintenance, consistent with minimal LED maintenance requirements.

⁴ There is a small subset of 4 lamps (referred in this tariff as "Group 4" service) which does not include maintenance service.

- Eliminated energy-only Group IV service and moved the lights in this group to the default service that includes maintenance (previously described in the tariff as Group I). The Group IV option has been closed from over a decade and for that time period has been used by only four 70 Watt lights, which is an insufficient quantity to justify a separate service distinction and rate.
- Moved incandescent lighting rates (Rate Code D32) into the tariff from its current separate tariff, with the closed status retained.

**Street Lighting Service (Purchased Equipment- Closed) (Rate Code D32)
Rate Sheet No. 5-62**

This tariff, which is not open to new lighting installations, provides electric energy and maintenance service for incandescent street lighting systems owned by a municipality. This tariff provides unmetered service to only 73 incandescent lamps, which is the same quantity served since at least the year 2007.

Proposed Revision:

- Cancelled by moving the closed rates to the proposed *Street Lighting Energy Service – Unmetered* tariff.

**Street Lighting Energy Service – Metered (Rate Code D33)
Rate Sheet No. 5-63**

This tariff provides municipalities with electric energy-only service for their own street light systems. This metered lighting service requires the same operation schedule as unmetered lighting, which determines its cost basis, with energy usage determined by Company provided meters. Several lighting fixtures are typically served by each meter. The rate design includes a fixed monthly customer charge and an energy rate per kWh.

Proposed Revision:

- Consolidated the *Conditions of Service* provision with the *Availability* provision in the tariff.

**Rules for Application of Street Lighting Rates
Rate Sheet Nos. 5-64, 5-65, and 5-66**

This tariff section provides greater detail of lighting service distinctions and additional billing information common to all street lighting tariffs.

Proposed Revisions:

- Added metering requirement policy for energy-only service.
- Changed outage credit requirement from 24 hours to two business days
- Moved *Service Included in Rate* section to individual lighting tariffs.

The Company’s proposed lighting tariffs also include several terminology clarifications, and include the addition of an *Other Charges* provision to reference the application of the Transmission Cost Recovery Rider and the Renewable Energy Rider.

C. Rate Development

Proposed LED Rates for Protective Lighting

The proposed LED rates are comparable to existing area lighting options in the protective lighting tariff. The LED wattages that are comparable to current HPS lighting are shown in Table 1 below and are based on the specific LED fixtures the Company expects to provide for this service. These LED wattages are proposed to be represented by wattage ranges to accommodate future standardization of available LED wattages. These LED wattage levels for *protective lighting* are slightly different from those used for current *street lighting* tariffs, reflecting the different type of equipment used for protective lighting.

Table 1
Comparable HPS and LED Wattages

HPS Wattage	LED Wattage	LED Tariff Range
100W	33W	30-45W
250W	129W	110-165W

Consistent with the current maintenance practice for protective lighting and to minimize incremental labor costs for conversions, LED fixtures will be installed when current HPS and MV lighting requires maintenance or repair service. We currently provide service to approximately 1,500 protective area lights in North Dakota and anticipate a complete replacement with LED lighting over the next several years. This conversion 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 current lighting options. This cost reduction is included in proposed LED rates as an estimated expense savings of \$0.91 per month.

The reductions in system costs allocations for LED conversions are shown below in Table 2, as the result of lower energy use and peak demand requirements. This results in a credit to the proposed LED rates. 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 that offsets part of the energy and maintenance cost savings. The net impact is a 15 to 17 percent decrease in the monthly rate and an overall bill savings of

22 to 24 percent when combined with the fuel cost savings from lower energy usage. The anticipated rate impact and bill impact estimates are outlined in Table 2.

Table 2
LED Protective Lighting Rate Design

RATE IMPACT	Per HPS/LED Area Light Equivalent	
	100W/33W	250W/129W
Current HPS Protective Lighting Service Prices Per Area Light	\$6.70	\$11.63
<i>Maintenance Savings</i>	(\$0.91)	(\$0.91)
<i>System Allocation Cost Reduction</i>	(\$0.94)	(\$1.98)
<i>Incremental Capital Revenue Requirement</i>	\$0.73	\$1.18
<i>LED Fixture Rate Impact - Company Owned Street Lights</i>	(\$1.12)	(\$1.71)
Proposed LED Protective Lighting Service Prices per Area Light	\$5.58	\$9.92
BILL IMPACT (Estimated)	100W/33W	250W/129W
Current HPS Monthly Average Bill Per Area Light	\$7.68	\$14.21
<i>LED Fixture Impact on HPS Street Lighting Rate</i>	(\$1.12)	(\$1.71)
<i>Fuel Clause and Rider Savings Estimate</i>	(\$0.71)	(\$1.50)
Total Monthly Bill Impact	(\$1.83)	(\$3.21)
Proposed LED Monthly Average Bill Per Area Light	\$5.86	\$11.00
<i>Percentage Savings (increase)</i>	23.8%	22.6%

These adjustments are consistent with the approach used to develop LED rates for Company-owned street lights that was approved in Case No. PU-15-692. Attachment A includes the workpapers for the LED *Protective Lighting Service* rates. These workpapers provide a summary of the adjustment and a more detailed breakout of the cost saving components.

Proposed LED Rates for Street Lighting Energy Service – Unmetered

The proposed LED rates for existing -owned lighting systems also use LED fixtures that are comparable to existing HPS lighting options. Consistent with the rate design process used to determine unmetered rates for existing HPS and MV lighting options, the proposed LED rates were derived from metered lighting rates. This is a two-step process that first applies average monthly usage for LED lighting to the metered energy rate per kWh. The second step is adding the fixed monthly customer charge from the metering lighting tariff, assuming eight LED lights per meter. This process was used to establish existing lighting options that assumed ten lights per meter and included maintenance costs. The change addresses uncertainty in the assumption and

adds only \$0.13 per month to proposed LED rates, which retains substantial cost savings for street lighting customers without requiring metered energy service. It also provides a reasonable transition to a further review of lighting service costs in the Company's next rate case filing.

D. Proposed Implementation

If this miscellaneous tariff request is approved, the Company would begin to offer, within 30 days of Commission Order, the proposed LED rates for existing customer-owned street lighting systems as these municipalities convert to LED lighting. LED rates would also be made available for protective lighting, with individual conversions when maintenance or repair of the lights is required.

Street lighting LED rates are currently available for municipalities being served by Company-owned street lights. Metered energy-only lighting service is also currently available for LED street lighting systems.

CONCLUSION

The Company respectfully requests approval of the improvements proposed to the lighting service tariffs offered in the state of North Dakota, as well as the addition of LED rates options for existing customer-owned lighting systems now served with the unmetered street lighting tariff, and for protective lighting service. This proposal will streamline and clarify our lighting services and provide access to energy efficient LED lighting. This proposal is in the public interest, and reflects just and reasonable rates that respond to customer interest in LED lighting technology.

Dated: March 9, 2020

Northern States Power Company

Protective Lighting Service - LED Rate Design

Rate Code D11

Monthly LED Area Lighting Rate Design Summary

	NSP-ND	
	Per HPS/LED Area Light Equivalent	
	100W/33W	250W/129W
HPS Monthly Protective Area Lighting Service Rates - D11	\$6.70	\$11.63
Maintenance Expense Impact (Savings)	(\$0.91)	(\$0.91)
System Allocation Cost Reduction	(\$0.94)	(\$1.98)
Incremental Capital Revenue Requirement	\$0.73	\$1.18
Net LED SL Fixture Rate Impact - Company Owned Area Lights	(\$1.12)	(\$1.71)
Proposed Monthly LED Protective Area Lighting Service Rates	\$5.58	\$9.92
<i>Percentage Savings (increase)</i>	16.7%	14.7%
Current HPS Monthly Average Bill Per Area Light - D11	\$7.68	\$14.21
LED Fixture Impact on HPS Area Lighting Rate	(\$1.12)	(\$1.71)
Fuel & Resource Adj. Savings Estimate	(\$0.71)	(\$1.50)
Total Monthly Bill Impact (savings)	(\$1.83)	(\$3.21)
Proposed LED Monthly Average Bill Per Area Light - D11	\$5.86	\$11.00
<i>Percentage Savings (increase)</i>	23.8%	22.6%

Annual Impact of LED Fixtures on the D11 Protective Lighting System Service Rate

	NSP-ND	
	Per HPS/LED Area Light Equivalent	
	100W/33W	250W/129W
Maintenance Savings		
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
System Allocation Cost Reduction		
Energy Related System Cost Allocation Reduction	\$6.32	\$13.37
Demand Related System Cost Allocation Reduction	\$4.92	\$10.42
Total System Allocation Cost Reduction	\$11.24	\$23.79
<i>Monthly Savings (increase)</i>	\$0.94	\$1.98
Incremental Capital Revenue Requirement	(\$8.80)	(\$14.20)
<i>Monthly Savings (increase)</i>	(\$0.73)	(\$1.18)
LED SL Base Rate Savings (Increase)	\$13.37	\$20.52
<i>Monthly Savings (increase)</i>	\$1.12	\$1.71
Fuel & Resource Adj. Savings Estimate	\$8.48	\$17.94
<i>Monthly Savings (increase)</i>	\$0.71	\$1.50
Annual Bill Savings - LED Area Lights	\$21.85	\$38.46
<i>Monthly Savings (increase)</i>	\$1.83	\$3.21

**Street Lighting Service (Purchased Equipment)
 Proposed LED Rate Development**

Rate Code D31

Metered (D33) Rates for LED Rate Determinations

Energy Rate per kWh ⁽¹⁾	\$0.04078
Monthly Customer Charge ⁽¹⁾	\$5.25

(1) Street Lighting Energy Service - Metered (Rate Code D33)

Monthly Rate per Lamp =

(a) Energy Rate x Annual kWh / 12	Variable
(b) + Monthly Customer Charge / 8 Assumed Lights per Meter =	\$0.66

LED Wattage	Annual LED KWH/Lt	Proposed Rate per Month		
		Energy (a)	Customer (b)	Total (a+b)
< 30	104	\$0.35	\$0.66	\$1.01
30-45	162	\$0.55	\$0.66	\$1.21
50-75	270	\$0.92	\$0.66	\$1.57
110-165	645	\$2.19	\$0.66	\$2.85
200-250	1019	\$3.46	\$0.66	\$4.12

LED Rate Comparison with Comparable HPS Lighting Wattages

Wattage		Monthly Rate		LED Savings	
LED	HPS	LED	HPS ⁽²⁾	Amount	Percent
< 30	70	\$1.01	\$2.93	\$1.92	66%
30-45	100	\$1.21	\$3.44	\$2.23	65%
50-75	150	\$1.57	\$4.21	\$2.64	63%
110-165	250	\$2.85	\$6.13	\$3.28	54%
200-250	400	\$4.12	\$8.60	\$4.48	52%

(2) Maintenance included in HPS and excluded in LED

Legislative

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

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~~1st~~^{2nd} Revised Sheet No. 1

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Date Filed:	12-07-07 ⁰³⁻⁰⁹⁻²⁰	By: David M. Sparby ^{Christopher B. Clark}	Effective Date:	03-01-09
	President, and CEO of Northern States Power Company, a Minnesota corporation			
Case No.	PU- 07-776 ²⁰⁻		Order Date:	12-31-08

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Date Filed:	05-27-14 ⁰⁵⁻²⁷⁻¹⁴ 03-09-20	By:	David M. Sparby ^{Christopher B. Clark}	Effective Date:	07-06-14
			President, and CEO of Northern States Power Company, a Minnesota corporation		
Case No.	PU-12-81320-			Order Date:	N/A

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

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

Section No. 5
~~7th~~8th 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>
Area Nightwatch-	
100W High Pressure Sodium-	\$6.70
175W Mercury-	\$6.70 (1)
250W High Pressure Sodium-	\$11.63
400W Mercury	\$11.63 (1)
Directional Nightwatch	
250W High Pressure Sodium-	\$12.89
400W Mercury	\$14.80 (1)
400W High Pressure Sodium	\$15.82

~~(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>
Area Lighting	
100W HPS (1)	\$6.70
175W MV (1)	\$6.70
250W HPS (1)	\$11.63
400W MV (1)	\$11.63

(Continued on Sheet No. 5-14)

Date Filed: ~~40-31-4403-09-20~~ By: ~~David M. Sparby~~Christopher B. Clark Effective Date: ~~01-01-15~~
President, ~~and CEO~~ of Northern States Power Company, a Minnesota corporation
Case No. ~~PU-12-84320-~~ Order Date: ~~02-26-14~~

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

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

AUTOMATIC-PROTECTIVE LIGHTING SERVICE
RATE CODE D11

Section No. 5
~~7th~~8th Revised Sheet No. 13

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

Directional Lighting

250W HPS \$12.89
400W MV (1) \$14.80
400W HPS \$15.82

(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: ~~10-31-14~~03-09-20 By: ~~David M. Sparby~~Christopher B. Clark 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~~

~~AUTOMATIC PROTECTIVE LIGHTING SERVICE~~
(Continued)
~~RATE CODE D11-~~

Section No. 5
~~2nd~~^{3rd} Revised Sheet No. 14

~~SPECIAL TERMS AND CONDITIONS~~

- ~~1. Service available subject to the provisions for Automatic Protective Lighting Service of the General Rules and Regulations.~~
- ~~2. The lamp shall be lighted and extinguished by a photoelectric control furnished by the Company. The hours of burning shall be from approximately one-half hour after sunset until one-half hour before sunrise every night.~~
- ~~3. If illumination of a lamp is interrupted and said illumination is not resumed within seventy-two hours from the time Company receives notice thereof from customer, 1/30 of the monthly compensation for such unit shall be deducted for each night of non-illumination after such notice is received.~~
- ~~4. Company reserved the right to discontinue service if equipment is abused.~~
- ~~5. Company will convert mercury vapor lighting units to high-pressure sodium upon failure of the mercury-vapor ballast.~~

~~TERM OF AGREEMENT~~

~~Agreement shall be for a term of three years; if not then terminated by at least 30 days' written notice by either party, the agreement shall continue until so terminated.~~

SPECIAL TERMS AND CONDITIONS

1. Service is available subject to the provisions for Protective Lighting Service in the General Rules and Regulations.
2. The operating schedule is controlled by a photocell furnished by the Company to energize lighting from approximately one-half hour after sunset until one-half hour before sunrise.
3. If protective lighting service is interrupted and illumination is not resumed within 2 business days from the time the Company receives notice from the customer, 1/30 of the applicable monthly charges for each night of service outage will be credited to the customer after notice is received.
4. The Company may convert high pressure sodium or mercury vapor area lighting to LED area lighting when providing required maintenance or repair service.
5. The Company reserves the right to discontinue service if lighting equipment is abused.

TERM OF AGREEMENT

The initial protective lighting agreement will be for a term of three years; if it is not then terminated with at least 30 days' written notice by either party, the agreement will continue until so terminated.

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**STREET LIGHTING SYSTEM SERVICE
 RATE CODE D30**

Section No. 5
~~8th~~^{9th} Revised Sheet No. 59

AVAILABILITY

Available for year-round illumination of public streets and highways by electric lamps in luminaires supported on poles, where the facilities for this service are furnished by Company. Underground Service under this schedule is limited to areas having a Company owned underground electric distribution system.

RATE

<u>Designation of Lamp</u>	<u>Monthly Rate Per Luminaire</u>		
	<u>Overhead</u>	<u>Underground</u>	<u>Decorative Underground</u>
100W High Pressure Sodium	\$10.80	\$20.83	\$33.26
150W High Pressure Sodium	\$11.89	\$21.98	\$34.40
250W High Pressure Sodium	\$15.02		\$36.94
400W High Pressure Sodium	\$18.01		
39W (or less) Light Emitting Diode	\$10.99	\$21.02	
65W (or less) Light Emitting Diode	\$11.98	\$22.07	
155W (or less) Light Emitting Diode	\$15.66		
246W (or less) Light Emitting Diode	\$19.22		

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FUEL COSTS

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

LATE PAYMENT CHARGE

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

OTHER PROVISIONS

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

AVAILABILITY

Available for the year-round illumination of public roadways with standard street lighting facilities and equipment furnished by the Company. Underground service is limited to areas served by a Company-owned underground electric distribution system. The Company will provide all electric energy and install, own, operate, and maintain the street lighting system. Available types of lighting include High Pressure Sodium (HPS) and Light Emitting Diode (LED).

RATE

<u>Wattage and Type</u>	<u>Monthly Charge Per Fixture</u>		
	<u>Overhead</u>	<u>Underground</u>	<u>Decorative</u>
100W HPS	\$10.80	\$20.83	\$33.26
150W HPS	\$11.89	\$21.98	\$34.40
250W HPS	\$15.02		\$36.94
400W HPS	\$18.01		

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

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**STREET LIGHTING SYSTEM SERVICE
RATE CODE D30**

Section No. 5
~~8th~~^{9th} Revised Sheet No. 59

<u>30-40W LED</u>	<u>\$10.99</u>	<u>\$21.02</u>
<u>50-75W LED</u>	<u>\$11.98</u>	<u>\$22.07</u>
<u>110-165W LED</u>	<u>\$15.66</u>	
<u>200-250W LED</u>	<u>\$19.22</u>	

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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.

LATE PAYMENT CHARGE

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

OTHER PROVISIONS

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

STREET LIGHTING SERVICE - UNMETERED
(PURCHASED EQUIPMENT)(CLOSED)
 RATE CODES D31, D32-

Section No. 5
 6th7th Revised Sheet No. 60

AVAILABILITY

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer purchases an ornamental street lighting system complete with standards, luminaires with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's facilities as designated by Company.

RATE

Group I

<u>Designation of Lamp</u>	<u>Monthly Rate Per Luminaire</u>
175W Mercury	\$4.66
250W Mercury	\$5.82
400W Mercury	\$8.29
70W High-Pressure Sodium	\$2.93
100W High-Pressure Sodium	\$3.44
150W High-Pressure Sodium	\$4.21
200W High-Pressure Sodium	\$5.14
250W High-Pressure Sodium	\$6.13
310W High-Pressure Sodium	\$7.41
400W High-Pressure Sodium	\$8.60
1,000W High-Pressure Sodium	\$17.76

Group IV (Closed)

	<u>Monthly Rate Per Luminaire</u>
70W High-Pressure Sodium	\$1.62
400W High-Pressure Sodium	\$7.97

AVAILABILITY

Available for year-round illumination of public roadways by Company approved street lighting systems owned by customer. The Company will provide all electric energy necessary to operate the lights. Street lighting systems must include standards with a maximum height of 50 feet, fixtures, photocells, and conductors necessary for connection to the Company's distribution facilities. Service is limited to existing lighting systems being served under this schedule.

The Company will provide maintenance service for High Pressure Sodium (HPS), Mercury Vapor (MV), and Incandescent (INCD) types of lighting. Maintenance service is not provided for Light Emitting Diode (LED) lighting.

RATE

<u>Wattage and Type (D31)</u>	<u>Monthly Charge Per Fixture</u>
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(Continued on Sheet No. 5-61)

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

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

STREET LIGHTING SERVICE - UNMETERED
~~(PURCHASED EQUIPMENT)(CLOSED)~~
RATE CODES ~~D31, D32-~~

Section No. 5
~~6th~~^{7th} Revised Sheet No. 60

<u>< 30W LED</u>	<u>\$1.01</u>
<u>30-45W LED</u>	<u>\$1.21</u>
<u>50-75W LED</u>	<u>\$1.57</u>
<u>110-165W LED</u>	<u>\$2.85</u>
<u>200-250W LED</u>	<u>\$4.12</u>
<u>70W HPS</u>	<u>\$2.93</u>
<u>100W HPS</u>	<u>\$3.44</u>
<u>150W HPS</u>	<u>\$4.21</u>
<u>200W HPS</u>	<u>\$5.14</u>
<u>250W HPS</u>	<u>\$6.13</u>
<u>310W HPS</u>	<u>\$7.41</u>
<u>400W HPS</u>	<u>\$8.60</u>
<u>1,000W HPS</u>	<u>\$17.76</u>
<u>175W MV</u>	<u>\$4.66</u>
<u>250W MV</u>	<u>\$5.82</u>
<u>400W MV</u>	<u>\$8.29</u>
<u>Lumens and Type (1 Lamp per Fixture) (D32)</u>	
<u>1,000 L INCD</u>	<u>\$2.74</u>
<u>4,000 L INCD</u>	<u>\$5.12</u>

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(Continued on Sheet No. 5-61)

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

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

STREET LIGHTING SERVICE - UNMETERED
~~(PURCHASED EQUIPMENT)~~~~CLOSED~~ (Continued)
RATE CODES ~~D31, D342-~~

Section No. 5
~~4th~~5th Revised Sheet No. 61

FUEL COSTS

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.

LATE PAYMENT CHARGE

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

OTHER PROVISIONS

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

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

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

**STREET LIGHTING SERVICE
(PURCHASED EQUIPMENT) (CLOSED)
RATE CODE D32-**

Section No. 5
~~7th~~^{8th} Revised Sheet No. 62

~~AVAILABILITY CANCELED~~

~~Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer purchases an ornamental street lighting system complete with standards, luminaries with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's facilities as designated by Company. Service under this schedule is limited to installations being served as of the effective date of this schedule.~~

~~RATE~~

<u>Designation of Lamp</u>	<u>Number of Lamps Per Luminaire</u>	<u>Monthly Rate Per Luminaire</u>
1,000-Lumen Incandescent	4	\$2.74
4,000-Lumen Incandescent	4	\$5.12

~~FUEL COSTS~~

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

~~LATE PAYMENT CHARGE~~

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

~~OTHER PROVISIONS~~

~~This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.~~

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

**STREET LIGHTING ENERGY SERVICE – METERED
RATE CODE D33**

Section No. 5
7th Revised Sheet No. 63

AVAILABILITY

~~Available for year-round illumination of public streets, parkways, and highways by uncommon electric lamps mounted on standards where customer purchases and maintains an ornamental street lighting system complete with standards, luminaires with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's meter as designated by Company.~~

RATE

~~Customer Charge per Meter per Month \$5.25~~

~~Energy Charge per kWh 4.078¢~~

FUEL COSTS

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

LATE PAYMENT CHARGE

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

CONDITIONS OF SERVICE

~~The customer owns and maintains 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 metered distribution point designated by Company. The daily operating schedule of the lamps shall be from approximately one-half hour after sunset until one-half hour before sunrise.~~

AVAILABILITY

Available for year-round illumination of public roadways by street lighting systems owned and maintained by customer. A customer-owned lighting system must include all necessary underground cables extending between standards and to the Company's meter at a central distribution point of connection designated by Company. The Company will provide all electric energy necessary according to the operating schedule in the Rules for Application of Street Lighting Rates.

RATE

Customer Charge per Meter per Month \$5.25

Energy Charge per kWh 4.078¢

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.

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
~~3rd~~^{4th} 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 Energy 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, 1/30th 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 Energy 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)

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

Section No. 5
~~3rd~~^{4th} 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, 1/30th of the monthly energy-related rate for such lamp shall be deducted for each night of nonillumination after such notice is received.~~

~~1. **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.~~

~~2. **Special Services – Street Light Energy 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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**RULES FOR APPLICATION OF
STREET LIGHTING RATES (Continued)**

Section No. 5
~~2nd~~^{4th} Revised Sheet No. 66

4. Special Services: CANCELED

a. ~~System Service~~

~~Temporary Disconnection of Service~~

~~(Street lighting facilities remain in place.) When requested by the customer, Company will temporarily disconnect service to individual street lighting units provided the customer pays a monthly facilities charge equal to the regular monthly rate less the product of the average monthly kWh for the lighting unit and the energy charge from the street lighting service metered (purchased equipment) rate schedule. The customer must pay a charge of \$25.00 to disconnect or reconnect each lighting unit.~~

~~Termination of Street Lighting Facilities~~

~~When requested by the customer, Company will remove all or a portion of a street lighting system and cease billing. The customer must pay estimated termination costs for the removal and undepreciated value of facilities, less any salvage value, if the number of lights requested to be removed in any twelve-month period exceeds 5% of the municipalities' leased street lighting system.~~

b. ~~Purchased Equipment~~

~~Daily Operating Schedule Option~~

~~Reduced hours of operating from the standard daily operating schedule is available under the applicable commercial and industrial rate, subject to the following provisions:~~

- ~~(1) Customer must install a meter socket at the service point.~~
- ~~(2) Customer shall provide all maintenance to lighting units and identify the lighting units with Company approved markings.~~
- ~~(3) Company inspection of lighting units for adaptability to Company's maintenance service must precede a transfer back to the applicable street lighting service rate.~~

Disconnection of Service

~~During the period between customer disconnection and reconnection of street lighting units, Company will cease billing provided the disconnection is made on the line side of the lighting unit ballast. Customer disconnection not on the line side will require the customer pay a charge to compensate for the lighting unit ballast core loss. When requested by the customer, Company will disconnect or reconnect street lighting units provided the customer pays a charge of \$25.00 for the disconnection or reconnection of each lighting unit. The customer must identify all disconnected street lighting units with Company approved markings.~~

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

GENERAL RULES AND REGULATIONS
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Section No. 6
~~2nd~~3rd Revised Sheet No. TOC-2

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GENERAL RULES AND REGULATIONS (Continued)

Section No. 6

~~1st~~2nd Revised Sheet No. 29

5.3 SPECIAL FACILITIES (Continued)

The customer will execute an agreement or service form pertaining to the installation, operation and maintenance of the facilities. Payments required will be made on a nonrefundable basis and may be required in advance of construction unless other arrangements are agreed to in writing by the Company. The facilities installed by the Company shall be the property of the Company. Any payment by a customer will not entitle the customer to any ownership interest or rights therein.

Payment for special facilities may be required by either of the following methods, or a combination of these methods, as prescribed by the Company:

- A. A single charge for the costs incurred or to be incurred by the Company due to such a special installation, or
- B. A monthly charge of one-twelfth of the Company's annual fixed cost, plus cost of maintenance to provide such a special installation. The monthly charge will be discontinued if the special requested facilities are removed or if the customer eventually qualifies for the originally requested special facilities.

5.4 ~~AUTOMATIC~~ PROTECTIVE LIGHTING SERVICE

When requested by a customer, the Company will provide area and directional ~~units~~protective lighting service to that customer, except a municipality or other governmental body if the service would be used for street lighting purposes. The Company will own, operate and maintain the protective lighting unit including the fixture, lamp, ballast, photocell, ~~electric control~~, mounting brackets, and all necessary wiring. The Company will furnish all electric energy required for ~~operation of the~~ lighting service unit at the monthly rate per unit-fixture provided in the Company's rate schedule for ~~Automatic~~ Protective Lighting Service.

The Company will install a protective lighting unit-fixture on an existing utility-owned ~~wood~~ pole upon which the Company's 120 volt or 277 volt lines are attached without an additional charge. Additional ~~wood~~ poles, overhead lines and underground service are available upon payment of a one-time charge. Optional monthly payments are available for requests for ~~wood~~ poles and overhead lines. A removal charge will be made if the customer discontinues service in less than three years.

Non-Legislative

NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

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 2nd Revised Sheet No. 1

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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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PROTECTIVE LIGHTING SERVICE (Continued)
RATE CODE D11

Section No. 5
3rd Revised Sheet No. 14

SPECIAL TERMS AND CONDITIONS

1. Service is available subject to the provisions for Protective Lighting Service in the General Rules and Regulations.
2. The operating schedule is controlled by a photocell furnished by the Company to energize lighting from approximately one-half hour after sunset until one-half hour before sunrise.
3. If protective lighting service is interrupted and illumination is not resumed within 2 business days from the time the Company receives notice from the customer, 1/30 of the applicable monthly charges for each night of service outage will be credited to the customer after notice is received.
4. The Company may convert high pressure sodium or mercury vapor area lighting to LED area lighting when providing required maintenance or repair service.
5. The Company reserves the right to discontinue service if lighting equipment is abused.

TERM OF AGREEMENT

The initial protective lighting agreement will be for a term of three years; if it is not then terminated with at least 30 days' written notice by either party, the agreement will continue until so terminated.

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**STREET LIGHTING SYSTEM SERVICE
RATE CODE D30**

Section No. 5
9th Revised Sheet No. 59

AVAILABILITY

Available for the year-round illumination of public roadways with standard street lighting facilities and equipment furnished by the Company. Underground service is limited to areas served by a Company-owned underground electric distribution system. The Company will provide all electric energy and install, own, operate, and maintain the street lighting system. Available types of lighting include High Pressure Sodium (HPS) and Light Emitting Diode (LED).

RATE

<u>Wattage and Type</u>	<u>Monthly Charge Per Fixture</u>		
	<u>Overhead</u>	<u>Underground</u>	<u>Decorative</u>
100W HPS	\$10.80	\$20.83	\$33.26
150W HPS	\$11.89	\$21.98	\$34.40
250W HPS	\$15.02		\$36.94
400W HPS	\$18.01		
30-40W LED	\$10.99	\$21.02	
50-75W LED	\$11.98	\$22.07	
110-165W LED	\$15.66		
200-250W LED	\$19.22		

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.

LATE PAYMENT CHARGE

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

OTHER PROVISIONS

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

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**STREET LIGHTING SERVICE - UNMETERED
(CLOSED)
RATE CODES D31, D32**

Section No. 5
7th Revised Sheet No. 60

AVAILABILITY

Available for year-round illumination of public roadways by Company approved street lighting systems owned by customer. The Company will provide all electric energy necessary to operate the lights. Street lighting systems must include standards with a maximum height of 50 feet, fixtures, photocells, and conductors necessary for connection to the Company's distribution facilities. Service is limited to existing lighting systems being served under this schedule.

The Company will provide maintenance service for High Pressure Sodium (HPS), Mercury Vapor (MV), and Incandescent (INCD) types of lighting. Maintenance service is not provided for Light Emitting Diode (LED) lighting.

RATE

<u>Wattage and Type (D31)</u>	<u>Monthly Charge Per Fixture</u>
< 30W LED	\$1.01
30-45W LED	\$1.21
50-75W LED	\$1.57
110-165W LED	\$2.85
200-250W LED	\$4.12
70W HPS	\$2.93
100W HPS	\$3.44
150W HPS	\$4.21
200W HPS	\$5.14
250W HPS	\$6.13
310W HPS	\$7.41
400W HPS	\$8.60
1,000W HPS	\$17.76
175W MV	\$4.66
250W MV	\$5.82
400W MV	\$8.29
<u>Lumens and Type (1 Lamp per Fixture) (D32)</u>	
1,000 L INCD	\$2.74
4,000 L INCD	\$5.12

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STREET LIGHTING SERVICE - UNMETERED
(CLOSED) (Continued)
RATE CODES D31, D32

Section No. 5
5th Revised Sheet No. 61

FUEL COST

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

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OTHER RIDERS

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

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LATE PAYMENT CHARGE

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

OTHER PROVISIONS

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

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**STREET LIGHTING SERVICE
(PURCHASED EQUIPMENT) (CLOSED)
RATE CODE D32**

Section No. 5
8th Revised Sheet No. 62

CANCELED

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSC NO. 2

**STREET LIGHTING ENERGY SERVICE – METERED
RATE CODE D33**

Section No. 5
7th Revised Sheet No. 63

AVAILABILITY

Available for year-round illumination of public roadways by street lighting systems owned and maintained by customer. A customer-owned lighting system must include all necessary underground cables extending between standards and to the Company's meter at a central distribution point of connection designated by Company. The Company will provide all electric energy necessary according to the operating schedule in the Rules for Application of Street Lighting Rates.

RATE

Customer Charge per Meter per Month \$5.25

Energy Charge per kWh 4.078¢

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.

LATE PAYMENT CHARGE

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

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPS NO. 2

**RULES FOR APPLICATION OF
STREET LIGHTING RATES**

Section No. 5
4th Revised Sheet No. 64

1. **Energy Service Metering Requirement.** Street Lighting Energy Service – Metered is the required rate schedule for new customer-owned lighting systems. The Street Lighting Energy 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, 1/30th 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 Energy 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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(Continued on Sheet No. 5-65)

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NORTH DAKOTA ELECTRIC RATE BOOK - NDPSO NO. 2

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

Section No. 5
4th Revised Sheet No. 65

1. **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.

2. **Special Services – Street Light Energy 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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**RULES FOR APPLICATION OF
STREET LIGHTING RATES (Continued)**

Section No. 5
4th Revised Sheet No. 66

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5.3 SPECIAL FACILITIES (Continued)

The customer will execute an agreement or service form pertaining to the installation, operation and maintenance of the facilities. Payments required will be made on a nonrefundable basis and may be required in advance of construction unless other arrangements are agreed to in writing by the Company. The facilities installed by the Company shall be the property of the Company. Any payment by a customer will not entitle the customer to any ownership interest or rights therein.

Payment for special facilities may be required by either of the following methods, or a combination of these methods, as prescribed by the Company:

- A. A single charge for the costs incurred or to be incurred by the Company due to such a special installation, or
- B. A monthly charge of one-twelfth of the Company's annual fixed cost, plus cost of maintenance to provide such a special installation. The monthly charge will be discontinued if the special requested facilities are removed or if the customer eventually qualifies for the originally requested special facilities.

5.4 PROTECTIVE LIGHTING SERVICE

When requested by a customer, the Company will provide area and directional protective lighting service to that customer, except a municipality or other governmental body if the service would be used for street lighting purposes. The Company will own, operate and maintain the protective lighting including the fixture, lamp, ballast, photocell, mounting brackets, and all necessary wiring. The Company will furnish all electric energy required for the lighting service at the monthly rate per fixture provided in the Company's rate schedule for Protective Lighting Service.

The Company will install a protective lighting fixture on an existing utility-owned pole upon which the Company's 120 volt or 277 volt lines are attached without an additional charge. Additional poles, overhead lines and underground service are available upon payment of a one-time charge. Optional monthly payments are available for requests for poles and overhead lines. A removal charge will be made if the customer discontinues service in less than three years.

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