

August 27, 2015

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E015/M-15-694

Dear Mr. Wolf:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

A Request by Dakota Electric Association (DEA or the Cooperative) to Implement LED [Light Emitting Diode] Lighting Rate Schedules.

The petition was filed on July 22, 2015 by:

Douglas R. Larson
Vice President of Regulatory Services
Dakota Electric Association
4300 220th Street West
Farmington, MN, 55024

The Department **requests that DEA provide further information in reply comments.** The Department will provide final recommendations after reviewing DEA's reply comments.

Sincerely,

/s/ MICHAEL N. ZAJICEK
Rates Analyst

MNZ/ja
Attachment

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE
MINNESOTA DEPARTMENT OF COMMERCE
DIVISION OF ENERGY RESOURCES

DOCKET No. E015/M-15-694

I. SUMMARY OF FILING

On July 22, 2015, Dakota Electric Association (DEA or the Cooperative) filed with the Minnesota Public Utilities Commission (Commission) its *Request to Implement LED [Light Emitting Diode] Lighting Rate Schedules (Petition)*. The *Petition* included a request for approval of LED street lighting rates in several new tariff sheets.

DEA does not currently have rates in place for LED lighting options. The Cooperative stated that it has been monitoring LED lighting technology developments for several years and tested several LED lights on a designated street in Apple Valley,¹ allowing the city to evaluate the characteristics of LED lighting in real-world conditions on an existing city street. Further, in 2013 and 2014 DEA tested 36 different light fixtures from several different companies in DEA's pole yard behind the Cooperative's headquarters. DEA used these tests to determine the best options available for LED street lighting and to determine costs of various fixtures. DEA noted that the Cooperative has received increasing amounts of interest in LED lighting from its member communities. The *Petition* is a request to expand LED service throughout DEA's service territory.

The Cooperative proposed to add three new sections to its Schedule 44 of its Electric Rate Book including Schedule 44-4 LED Security Lighting, Schedule 44-5 LED Street Lighting (Member-Owned), and Schedule 44-6 LED Street Lighting (DEA-Owned – Contribution by Member). DEA provided data showing its calculations of new LED lighting rates for members under each of these schedules.

¹ Funded by DEA. See *Petition* Section III.

II. DEPARTMENT ANALYSIS

The Department's analysis is split into five sections covering applicable Minnesota Rules, each of DEA's three proposed new tariff schedules, and a discussion pertaining to the billing of undepreciated costs to members for the replacement of security or street lights and the potential for recovery of salvage value by the Cooperative.

A. *Minnesota Rules*

Minn. Rule 7825.3200 requires that utilities serve notice to the Commission at least 90 days prior to the proposed effective date of modified rates. DEA is not proposing to implement the LED street lighting rates prior to Commission approval. Therefore, the Department recommends that, if approved, the Cooperative's proposed LED street lighting rates be implemented 90 days after the *Petition's* filing date, or within 30 days of the Commission's Order, whichever is later.

B. *LED Security Lighting Service*

DEA's proposed LED Security Lighting Service would include only one option so as to reduce the amount of inventory for installation and maintenance that the Cooperative would have to retain. To reduce costs to members and avoid conflicts with on-going Cooperative pole maintenance, DEA proposed that it would only install LED security lights on existing poles. The Cooperative would require a contribution in aid of construction (CIAC) if extra equipment is required for installation or if the LED Security light is replacing an existing security light. DEA calculated a rate of \$7.80 per month plus applicable taxes using data from its test cases.

The Department reviewed this rate and concludes that the rate is correctly calculated based on the Cooperative's data. Further the Department reviewed the details of the new LED Security Lighting Service schedule and concludes, with one exception, that they are generally reasonable. The Department notes that the Cooperative did not indicate how the CIAC would be calculated for the replacement of security lights with LED security lights, while in the other proposed LED lighting schedules the Cooperative requires the payment to equal the undepreciated cost of the existing light. The Department requests that DEA provide in reply comments an explanation of what would be charged in the CIAC to members requesting to replace an existing security light with an LED security light. As explained in section II.E below the Department recommends that salvage value be deducted from any CIAC.

C. *LED Street Lighting (Member-Owned)*

DEA's proposed LED Street Lighting (Member-Owned) Service would require the member to furnish and own all lighting facilities. DEA expressed a preference for having the Member-Owned LED Street Lighting facilities be metered and charged for the power they consume at the applicable rate, but DEA would allow for unmetered service in situations where meters are not practical. Unmetered service would be billed under one of five consumption groups specified by ranges of lamp wattages as shown in Table 1 below. Maintenance is not included in the monthly rate schedules as DEA would require Members to contract for their street light maintenance through outside vendors.

Table 1: DEA's LED Street Lighting (Member-Owned) Unmetered Service Rates

Consumption Group	Monthly Rate per Fixture
40 to 80 watts	\$4.81
81 to 150 watts	\$6.71
151 to 250 watts	\$9.66
251 to 350 watts	\$13.05
351 to 450 watts	\$16.52

The Department reviewed DEA's rate calculations and agrees that the data provided by the Cooperative from its test cases supports the proposed monthly rate per fixture for unmetered service.

D. *LED Street Lighting (DEA-Owned – Contribution by Member)*

DEA's proposed LED Street Lighting (DEA-Owned – Contribution by Member) Service would give members an option of four different LED light designs in a variety of shapes that are common designs of lighting fixtures today. The limited fixture choices reduce the inventory required for installation and maintenance. The Cooperative stated that costs vary by type of fixture to reflect the different installation costs as well as the cost of wholesale power and allocated distribution costs.² DEA noted that conversions to LED lighting may be limited to accommodate workload. DEA stated that LED street lights falling under this schedule will be owned, operated, and maintained by DEA. Further, members would be required to make an upfront CIAC equal to the initial installation cost, and, if replacing existing DEA-owned lights, a payment for the undepreciated cost of the existing light. These LED street lights would be unmetered and members will be charged a monthly rate per fixture as shown below in Table 2.

² See *Petition* tables entitled "LED Lighting Cost Analysis (DEA-Owned)" for details.

Table 2: DEA's LED Street Lighting (DEA-Owned – Contribution by Member) Service Rates

Designation of Fixture	Monthly Rate Per Fixture
LED Coach Light (Post)	\$12.27
LED Acorn Light (Post)	\$16.40
LED Cobra Light (Mast)	\$8.69
LED Shoebox Light (Mast)	\$13.16

The Department reviewed DEA's rate calculations and agrees that the data provided by the Cooperative from its test cases supports the proposed monthly rate per fixture for members. The Department discusses below its recommendations on adjusting the members' CIAC by the salvage value of any replaced street lighting fixtures.

E. Undepreciated Cost Recovery and Salvage Value

In reviewing this filing the Department also examined the results of a similar filing for Minnesota Power in Docket No. E015/M-14-675. In that case the Department noted that if a customer requested to replace a light that was less than 10 years old, Minnesota Power would charge the customer for the undepreciated cost of the light. The Department, however, noticed that these lights have a longer lifetime than 10 years, and thus a replaced light could still be reused by Minnesota Power. Thus the Department recommended that Minnesota Power reduce the undepreciated costs charged to customers replacing existing Sodium Vapor lights with LED fixtures by the salvage value of the facilities. The Commission approved this methodology in its January 9, 2015 *Order*. Thus the Department recommends that a similar adjustment be made to this *Petition*. Therefore, the Department recommends that the required CIAC to recover undepreciated costs in the Cooperative's proposed LED Security Lighting and LED Street Lighting (DEA-Owned – Contribution by Member) schedules be reduced by the salvage value of the replaced facilities if the replaced facilities are 10 years old or less.

III. RECOMMENDATIONS

The Department requests that DEA provide in reply comments an explanation of what would be charged in the CIAC to members requesting to replace an existing security light with an LED security light. The Department will provide final recommendations after reviewing DEA's reply comments.

/ja

CERTIFICATE OF SERVICE

I, Linda Chavez, hereby certify that I have this day served copies of the following document on the attached list of persons by electronic filing, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

MINNESOTA DEPARTMENT OF COMMERCE – COMMENTS

Docket Nos. **E111/M-15-694**

Dated this **27th** day of **August, 2015**.

/s/Linda Chavez

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_15-694_M-15-694
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-694_M-15-694
Corey	Hintz	chintz@dakotaelectric.com	Dakota Electric Association	4300 220th Street Farmington, MN 550249583	Electronic Service	No	OFF_SL_15-694_M-15-694
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_15-694_M-15-694
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-694_M-15-694
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_15-694_M-15-694
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_15-694_M-15-694
Ron	Spangler, Jr.	rlspangler@otpc.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_15-694_M-15-694
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_15-694_M-15-694
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-694_M-15-694