

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: January 7, 2014 ****Agenda Item #6**

Company: Minnesota Power (MP)

Docket Nos. E-015/M-12-1359
In the Matter of a Petition by Minnesota Power for a Modification to its
Service Extension Tariff

E-015/M-95-1441
In the Matter of a Request by Minnesota Power for a Modification to its
Service Extension Tariff

Issue: Should the Commission approve MP's Compliance Petition in Docket No. E-015/M-12-1359 as meeting the October 7, 2013 Order requirements?

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Relevant Documents

Staff Briefing Papers August 29, 2013
Commission Order October 7, 2013
MP Compliance Filing - Tariffs October 17, 2013
Department Reply Comments November 15, 2013

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Table of Contents

Statement of the Issue	1
Introduction.....	1
Background.....	1
Ordering Points that required this compliance filing:.....	1
Party Positions	2
Minnesota Power (MP).....	2
MP’s service extension policies:.....	2
Department.....	3
Staff Discussion	4
Does the Commission have the authority to regulate utilities rates/charges applicable to its customers?.....	4
Has MP complied with the 10/7/13 Order requirements for Nos. 2, 3, and 4?.....	4
Has MP complied with the 10/7/13 Order requirement No 7?	4
MP added to its Tariff Section VI, EXTENSION RULES:.....	5
MP responded to the Data Requests with the following	5
Decision Alternatives.....	9
For Ordering Point 2	9
For Ordering Point 3	9
For Ordering Point 4	9
For Ordering Point 7	10
Service Extension Calculation Method.....	10
Additional Tariff Sheet Revisions	10

Statement of the Issue

Should the Commission approve MP's Compliance Petition in Docket No. E-015/M-12-1359 as meeting the October 7, 2013 Order requirements?

Introduction

Service extension policies regulate what a utility can charge when new facilities are constructed to serve a new customer. The service extension policies should be clear and transparent, and they should be fairly and uniformly administered throughout the Company's service area.

One of the reasons for designing fair extension policies is to ensure that the cost of extending service to new customers is fairly apportioned between the new customer and the utilities' current customers.

In this compliance filing, MP introduced a new methodology for calculating service extension costs and new tariff language. The Commission will need to decide whether to accept MP's proposed revisions to its service extension policy.

Background¹

On October 7, 2013, the Commission filed its Order² that modified MP's service extension tariffs and required a further compliance filing. The Order required MP to file certain revised tariff sheets and provide a cost study combining MP's General Service and Municipal Pumping service extension allowances.

Ordering Points that required this compliance filing:

2. Minnesota Power's service-extension allowance for Residential customers is revised and set at \$615.
3. Minnesota Power's service-extension allowance for Large Light and Power customers shall remain at \$30,000.
4. Minnesota Power's service-extension allowance for General Service and Municipal Pumping customers shall be set following its submission of cost studies combining data for the two classes. The Commission authorizes the Company to develop a single service-extension allowance to apply to both its General Service and Municipal Pumping customer classes based on cost studies using data from both classes. Within ten days of the date of this order, the Company shall make a filing proposing and explaining the new service-extension allowance it has developed.

¹ For the previous docket history, see staff briefing papers dated August 29, 2013.

² For Order Requirements, see the Commission's Order dated October 7, 2013, pp. 4 & 5.

7. Minnesota Power shall make a compliance filing revising its service-extension tariff to clarify how it determines the service-extension charges to be paid by individual customers requesting service to new points of delivery.

On October, 17, 2013, MP made its Compliance Filing to the Commission's October 7, 2013 Order (Order) requirements.

On November 15, 2013, the Department filed its comments on MP's compliance filing.

Party Positions³

Minnesota Power (MP)

On October 17, 2013, MP filed its compliance petition addressing the Commission Order requirements. MP stated that it provided the required tariff sheets⁴ that reflected the changes to service line extension allowances as required in Ordering Points 2, 3, and 4. For Ordering Point 4, MP stated that it provided the required average embedded line extension cost calculation for a combined General and Municipal Pumping service extension allowance that resulted in \$1,545.⁵

MP stated that it satisfied Ordering Point 7 requirements by stating its policies used in calculating the service extension cost charged to potential new customers and included the appropriate tariff sheets.

MP's service extension policies:

1. For all single phase service extensions of 1,000 feet or less the service line extension cost is calculated at \$12.00⁶ per foot.
2. For all single phase service extensions over 1,000 feet the service line extension cost is calculated using the Company's Compatible Unit Estimator (CUE) program. The CUE is an add-on application to Maximo, the Company's Asset Management System. The CUE consists of Compatible Units Identifications (CU IDs),⁷ which contain descriptions and costs of service-extension components such as distribution materials, labor, and vehicle usage.

³ For the previous history on this docket, see staff briefing papers dated August 29, 2013.

⁴ See MP's Compliance Petition dated October 17, 2013, Attachments B and C.

⁵ See MP's Compliance Petition dated October 17, 2013, Attachment A.

⁶ The current rate of \$12.00 is derived as follows: each year the Company takes a random sampling of completed single phase work orders and determines the cost per foot for each work order, and calculates the average cost for the sample of work orders. The Company then compares its calculated average cost to the per-foot rate of neighboring utilities to ensure reasonableness in comparison to the other area utilities.

⁷ MP chooses the necessary CU IDs needed for the line extension. A total job cost is estimated using the CUE based on data for the applicable CU IDs. The distribution material cost is the actual cost of items listed in the Company's inventory data base, based on actual purchase prices. The labor cost is based on one lead lineman and two linemen, the typical crew used to install a new service-extension. The vehicle use cost is based on a percentage of labor based on prior year actual labor overheads.

3. For three phase service-extension cost estimates, MP stated that it used the Company's CUE methodology.

[Staff note: This service extension calculation methodology and tariff language was not presented before the Commission for review until this compliance filing. MP's compliance filing did provide some explanation⁸, but did not provide a full explanation which spurred the Department to issue its data requests.]

Department

The Department analysis concluded that MERC addressed each of the tariff changes required by Ordering Points 2, 3, and 4, as reflected in MP's Compliance Petition, Attachment B and C.

For Commission's Ordering Paragraph 7, the Department concluded that MP complied by including in its tariff⁹ an explanation of how service-extension charges were calculated for individual customers. However, as noted above by staff, this tariff provision had not been previously reviewed by the Department or the Commission until this compliance filing.

The Department concluded that MP did not sufficiently address Ordering Point 7 requirements in its Compliance Petition that led to the Department issuing data requests seeking additional information from MP regarding the additional tariff language introduced by MP in its compliance petition, see the following:

1. *Support for the service-extension costs of \$12/foot for extensions of 1,000 feet or less*
2. *Support for CUE Program usage for service extensions greater than 1,000 feet in length*
3. *Explanation of CUE cost estimator in the tariff*
4. *Service-extension guaranteed annual revenues*
5. *Miscellaneous tariff clean-up items*

⁸ See MP's Compliance Filing, pp. 2 and 3.

⁹ For the tariff language filed by MP, see MP's Compliance Petition, p. 2.

Staff Discussion

Does the Commission have the authority to regulate utilities rates/charges applicable to its customers?

Minn. Statute 216B.03 provides the Commission with the authority to regulate rates/charges for utilities operating in Minnesota.

The Statute states:

“Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be **just and reasonable**. Rates shall not be unreasonably preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to a class of consumers.” [Emphasis added]

The Commission has the authority to regulate **“all”** rates/charges that a utility uses during its course of business, which includes MP’s service extension allowances and the associated general terms and conditions of extending service to new customers.

Has MP complied with the 10/7/13 Order requirements for Nos. 2, 3, and 4?

MP filed its 10/17/13 Compliance Petition with revised tariff sheets reflecting the Commission approved service extension allowance for Residential and Large Light and Power customers. MP further provided an embedded cost study combining the allowances for General Service and Municipal Pumping services.

The Department reviewed 11/17/13 Compliance Petition and concluded that MP addressed each of the immediate tariff changes required by the 10/7/13 Commission Order. The tariff reflected the required service-extension allowance of \$615 for Residential customers¹⁰ and \$30,000 for Large Light and Power customers.¹¹ Further, the Department concluded that the calculation of the combined service-extension allowance for General Service and Municipal Pumping customers was based on the average embedded costs for these two groups and appears reasonable; and the result was \$1,545.¹²

Staff agrees.

Has MP complied with the 10/7/13 Order requirement No 7?

The Commission Ordering Paragraph 7 required MP to revise its service extension tariff sheets to demonstrate that it has procedures in place to ensure accuracy, clarity, and consistency in

¹⁰ 10/7/13 Commission Ordering Point No. 2.

¹¹ 10/7/13 Commission Ordering Point No. 3.

¹² 10/7/13 Commission Ordering Point No. 4.

calculating charges and in communicating these charges to customers.¹³ MP's compliance petition included the following tariff provisions:

MP added to its Tariff Section VI, EXTENSION RULES:

III. EXTENSION COST CALCULATION

The Extension Cost shall be calculated by Company as follows:

1. All single phase line extensions of 1,000 feet or less shall be calculated using a unit cost of \$12 per foot.
2. All single phase line extensions over 1,000 feet and three phase line extensions shall be estimated based on Company's Compatible Unit Estimator (CUE), a software package that contains actual costs of materials and labor typically used to install service extensions.

As noted above, the Department and Commission had not seen and were not aware of MP's service extension policies until this tariff language was submitted in MP's Compliance Petition. Previously, MP had charged \$6 and \$7 per foot for service extensions under \$1,000 feet. From staff's review of the record, staff cannot determine if these \$/foot charges were approved by the Commission. As previously mentioned the Department issued data requests as a result of MP filing the additional tariff language.

MP responded to the Data Requests with the following.

1. Support for the service-extension costs of \$12/foot for extensions of 1,000 feet or less

In its response to DOC IR 1, MP stated that in determining the \$/foot charge, it prepared a study that included a random sampling of 24 line extension work orders of less than 1,000 feet, which resulted in an average actual cost of \$19/foot.¹⁴ MP stated that it charged \$6/foot for several years before increasing the charge to \$7/foot approximately 5 years ago. MP's analysis compared its actual average \$/foot charge to that charged by Lake Country Power (LPC) and Xcel Energy (Xcel).¹⁵ MP's comparison led to the current charge of \$12/foot instead of its average \$19/foot of actual charges. MP further stated that using its available CUE estimator methodology, the \$/foot charge for the 24 customers test group, resulted a charge of \$16.43/foot.¹⁶ MP supported its use of the \$/foot for service extension request of under 1,000 feet by stating because of the number of requests received, it simplified the process by using the \$/foot charge instead any other method.

The Department considered MP's justifications for the proposed \$12-per-foot rate and concluded that the \$12-per-foot rate for single-phase extensions of 1,000 feet or less appears to be reasonable at this time.

¹³ 10/7/13 Commission Order, p. 4.

¹⁴ For calculation details, see the Department 11/15/13 Reply Comments, Attachment 1, p. 4.

¹⁵ For LPC the per foot charge was between \$6 (summer) and \$14 (winter) and for Xcel the per foot charge was \$6.85 (single phase) and \$8.76 (three phase) with additional construction charge during winter for Xcel.

¹⁶ For calculation details, see the Department 11/15/13 Reply Comments, Attachment 1, p. 4.

Staff does not necessarily disagree with the Department's conclusion, but the Commission may wish to consider that by approving MP's proposed \$12/foot charge, the existing MP customers would be asked to *subsidize* the new system customers. MP provided an actual cost of \$19/foot of its 24 customer sample group and if the 24 customers had received an estimate using the CUE estimator program, the customers would pay \$16.43/foot for service extension service request. Using the \$12/foot service extension cost methodology would result in a *cross subsidization* between new and existing customers. The Commission may wish to consider the CUE estimator charge of \$16.43 or use the actual historical charge of \$19/foot.

Staff understands MP's desire to be able to price service extension requests by using the \$/foot charge, but staff does not understand why MP is not using the CUE estimator when calculating these estimates. The technology is available that should give MP employees the ability to use the CUE estimator program whether the employee is in the office or in the field. Staff believes using the CUE estimation program would allow MP to ensure that cross subsidization does not occur to extent that it would happen if the \$12/foot method is used.

2. Support for CUE Program usage for service extensions greater than 1,000 feet in length

MP supported its use of the CUE program for line extension of over 1,000 feet by stating it began using the program several years ago and at that time a review of historical service extension costs indicated a definite distinction in project cost for above and below 1,000 feet.

MP's support for the 1,000 foot break point was:

- a) doing several shorter service extensions requires moving and remobilizing of equipment, which increases the average project cost per foot;¹⁷ and
- b) the greater complexity of service extensions over 1,000 feet justifies the time and effort required to make a more detailed cost estimate; and
- c) MP completes hundreds of new service installations a year and receives thousands of requests to estimate the costs of service-extension installations.

MP's compliance petition provided the following cost per foot data that reflects the difference between projects that are 1,000 feet or less and greater than 1,000 feet. The Department stated that from the data MP provided, it appears there is a difference between projects over or under 1,000 feet.

¹⁷ MP states that while a single 1,000-foot service-extension installation could be done in one day, five 200-foot service extension installations totaling 1,000 feet could take two to three days depending on the location and variation of the terrain and that the same set-up and tear-down work is generally required whether the service extension is for 100 or 1,000 feet.

Minnesota Power Average Service-Extension Costs per Foot¹⁸

	CUE Estimated Avg. Cost per foot	Actual Avg. Cost per foot
Line Extensions Under 1,000 feet	\$16.43	\$19.02
Line Extensions Over 1,000 feet	\$8.61	\$9.10

For the reasons described above and ease of estimating smaller projects with the \$/foot charge process, the threshold for using the more detailed cost estimation methodology (CUE) was set at 1,000 feet. MP's data seems to demonstrate that the \$/foot costs are lower for larger service extension projects because shorter service extension projects have higher initial fixed costs on a per foot basis due to their shorter length.

MP's data indicated that there is justification for using a different service extension cost estimate method for service extensions more than 1,000 feet than is used for extensions of 1,000 feet or less. The Department concluded that the above explanation is a reasonable for the use of the CUE estimator program for service extensions greater than 1,000 feet.

Staff does not necessarily disagree with Department conclusion. Staff understands the differences in cost per foot calculations between different customers' service requests. But, the Commission may wish to consider that the CUE estimator program is the most accurate method in calculating service extension costs of all lengths and may wish to require MP to use the CUE estimation program in calculating these types of cost estimates. As previously mentioned, with today's available technology, MP should be able to use the CUE estimation program for all service extension service requests.

3. Explanation of CUE cost estimator in the tariff

MP referred the Department to its October 17, 2013 compliance petition, pp. 2 and 3 for a complete explanation¹⁹ of how the CUE estimator works.

The Department concluded that this response is reasonable, and recommended to the Commission that it requires MP to include this description in the Company's Tariff Section VI, Page No. 4 under section III: Extension Cost Calculation.

¹⁸ See the Department 11/15/13 Reply Comments, Attachment 1, pp. 3 and 4.

¹⁹ The compliance petition states that The CUE consists of Compatible Units Identifications (CU IDs), which contain descriptions and costs of service extension components such as distribution materials, labor, and vehicle usage. The service-extension designer chooses the necessary CU IDs needed for the line extension. A total job cost is estimated using the CUE based on data for the applicable CU IDs. The distribution material cost is the actual cost of items listed in the Company's inventory data base, based on actual purchase prices. The labor cost is based on one lead lineman and two linemen, the typical crew used to install a new service-extension. The vehicle use cost is based on a percentage of labor based on prior year actual labor overheads.

Staff agrees inclusion of this information would make the tariff more transparent and understandable for consumers.

4. Service-extension annual revenues

The Department requested that MP provide further explanation regarding how the Company estimates “annual revenues.” in its Guaranteed Annual Revenue (GAR) calculation. MP responded that its current tariff sheets reflect the provisions for service extensions in Section VI, page No. 4.2 of MP’s Extension Rules Tariff which states, “The annual revenues used in the Electric Service Agreement shall be estimated by Company and determined under the existing rate schedule for providing service to the Customer.”

MP stated:

The Guaranteed Annual Revenue (GAR) is the minimum annual amount of revenue from billings under the applicable rate schedule that a Customer who enters into an Electric Service Agreement (ESA) commits to pay to Minnesota Power to support extension costs for installing a three phase line extension.

To determine the required GAR, the Company estimates the costs of the service extension from which the revenue is derived. The service-extension job is estimated using the Compatible Unit Estimator (CUE). The cost estimate is divided by three according to the three-times-annual revenue methodology. This is the annual amount the Customer will pay under the GAR agreement

The Department concluded that the above response is reasonable and recommended to the Commission that it require that this clarification be added to the Tariff Section VI, page No. 4.2, Part V to clarify the calculation of excess charges for service extensions to customers.

Staff agrees.

5. Miscellaneous Clean-up Items

The Department identified and recommended changes to MP’s current tariff for some miscellaneous tariff clean-up items²⁰ to MP’s proposed Service Extension Tariff Section VI, pages 4 through 4.2

Staff agrees.

²⁰ See the Department 11/15/13 Reply Comments, pp. 7 and 8.

Decision Alternatives

For Ordering Point 2

(Minnesota Power's service-extension allowance for Residential customers is revised and set at \$615); and

For Ordering Point 3

(Minnesota Power's service-extension allowance for Large Light and Power customers shall remain at \$30,000).

1. Approve the tariff sheets provided in MP's Compliance Petition, Attachment B and C as satisfying the October 7, 2013 Commission Order requirements and authorize the tariff sheets to be put into effect on the date of the Commission Order. (Minnesota Power and Department Recommendation)

For Ordering Point 4

(Minnesota Power's service-extension allowance for General Service and Municipal Pumping customers shall be set following its submission of cost studies combining data for the two classes. The Commission authorizes the Company to develop a single service-extension allowance to apply to both its General Service and Municipal Pumping customer classes based on cost studies using data from both classes. Within ten days of the date of this order, the Company shall make a filing proposing and explaining the new service-extension allowance it has developed.)

2. Approve the embedded cost study provided by MP that combines the General Service and Municipal Pumping service extension allowances into a single allowance as provided in MP's Compliance Petition, Attachment A. Approve the tariff sheets provided in MP's Compliance Petition, Attachment B and C as satisfying the October 7, 2013 Commission Order requirements and authorize the tariff sheets to be put into effect on the date of the Commission Order. (Minnesota Power and Department Recommendation)

or

3. Approve some other method of calculating a combined General Service and Municipal Pumping service extension allowances into a single allowance.

For Ordering Point 7

(Minnesota Power shall make a compliance filing revising its service-extension tariff to clarify how it determines the service-extension charges to be paid by individual customers requesting service to new points of delivery.)

Service Extension Calculation Method

4. Approve MP's proposed method of calculating service extension costs using the \$/foot approach for 1,000 feet or less **and** the CUE estimation program to calculate service extensions over 1,000 feet. Approve the tariff sheets provided in MP's Compliance Petition, Attachment B and C as satisfying the October 7, 2013 Commission Order requirements and authorize the tariff sheets to be put into effect on the date of the Commission Order. (Minnesota Power and Department Recommendation)

or

5. Approve CUE estimation program for calculating **all** service extensions and require MP to file revised tariff sheets within 10 days from the date of the Order. (Staff Recommendation)

or

6. Approve a service extension cost estimation method that is based on MP's experience from the prior year adjusted for known changes, such as labor costs and require MP to file revised tariff sheets within 10 days from the date of the Commission Order.

or

7. Approve some other method of calculating MP's service extension costs, and require MP to file revised tariff sheets within 10 days from the date of the Commission Order.

Additional Tariff Sheet Revisions – Department Recommendations

8. Approve the Department recommendation to require MP to include in its tariff an explanation of its CUE service extension cost calculation method in Tariff Section VI, page No. 4, Part III. **and**
9. Approve the Department recommendation to require MP to include in its tariff an explanation of Guaranteed Annual Revenues (GAR) calculation in its Tariff Section VI, page No. 4.2. **and**
10. Approve the Department recommendation to require MP to include certain edits as described by the Department in its November 15, 2013 Reply Comments in Tariff Section VI, pages 4 to 4.2.