

## Staff Briefing Papers

Meeting Date	July 29, 2021	Agenda Item 3*
Company	Minnesota Power	
Docket No.	<b>E-015/D-21-229</b>	
	<b>In the Matter of Minnesota Power’s 2021 Intangible, Transmission, Distribution, and General Plant Depreciation Petition</b>	
Issues	Should the Commission accept Minnesota Power’s combined study for all intangible, transmission, distribution and general plant assets and the resulting proposed average service lives, net salvage rates and depreciation rates?	
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### Relevant Documents

### Date

Minnesota Power – Petition	April 1, 2021
Department of Commerce – Comments	June 1, 2021
Minnesota Power – Reply Comments	June 4, 2021

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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## I. Statement of the Issues

Should the Commission accept Minnesota Power's combined study for all intangible, transmission, distribution and general plant assets and the resulting proposed average service lives, net salvage rates and depreciation rates?

## II. Background

On April 1, 2021, Minnesota Power (MP or the Company) filed a Petition with the Minnesota Utilities Commission (Commission) for approval of its five-year study of transmission and distribution plant accounts, combined with its five-year depreciation study of intangible and general plant accounts.

MP pointed out that, in the past, it has filed one petition for intangible and general plant assets<sup>1</sup> and a separate petition for transmission and distribution assets.<sup>2</sup> In this filing and in the future, the Company proposes to file a combined petition and will conduct its depreciation study at least once every five years.

MP's most recent transmission and distribution five-year study was approved by the Commission in its September 4, 2018 Order in Docket No. E-015/D-18-226. The Company's most recent Intangible and general account five-year depreciation study was approved in the June 8, 2017 Order in Docket No. E-015/D-17-114.

MP will continue submitting annual remaining lives depreciation filings for its production assets. The most recently approved annual filing was in Docket No. E-015/D-20-701. The pending remaining lives depreciation filing for production assets is in Docket No. E-015/D-21-386.

## III. Relevant Statutes, Rules and Practice

### A. Depreciation Rates and Practices. Minn. Stat. §216B.11

The Commission shall fix proper and adequate rates and methods of depreciation, amortization, or depletion in respect of utility property, and every public utility shall conform its depreciation, amortization or depletion accounts to the rates and methods fixed by the commission.

### B. Depreciation Certification. Minn. Rules, pts. 7825.0500-7825.0900

#### 1. Depreciation practices applicable to all utilities. Minn. Rules, pt. 7825.0600, subp 1

All electric and gas utilities shall maintain and have available for inspection by the commission upon request, adequate accounts and records related to depreciation practices as defined herein. Each utility has the prime responsibility for proposing the depreciation rates and

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<sup>1</sup> Most recently in Docket No. E-015/D-17-114.

<sup>2</sup> Most recently in Docket No. E-015/D-18-226.

methods that will be used. The commission shall certify by order to the utility the depreciation rates and methods which it considers reasonable and proper.

Any allocation or adjustment of the depreciation reserve will require specific justification and certification by the commission.

Either the utility may submit, or the commission may request a petition for depreciation certification because of unusual circumstances or unique situations.

## **2. Frequency of review. Minn. Rules, pt. 7825.0600, subp. 2(D) & 3(C)**

All utilities shall review their depreciation rates annually to determine if they are still generally appropriate. Depreciation certification studies shall be made so that all primary accounts (class A & B utilities) or all functional groups of plant accounts (class C & D utilities) have been analyzed at least every five years.

## **3. Petition for Certification Procedure. Minn. Rules, pt. 7825.0900**

Depreciation rates and methods, once certified by order, are binding on all future rate proceedings and will remain in effect until the next certification or until the commission shall determine otherwise.

### **C. Commission Practice**

Depreciation methods, practices and rates are evaluated in depth once every five years in a depreciation study provided by the utility and then reviewed annually, usually in a request for certification of the remaining lives of the utility's assets. The depreciation rates established in these proceedings are incorporated into the Company's revenue requirement and rates in a general rate proceeding. These stand-alone depreciation filings allow for a thorough examination of the Company's depreciation methods, practices, and rates independent of the other issues examined and analyzed within a rate case. This is one of the main reasons for having separate depreciation filings.

## **IV. Minnesota Power's Petition**

### **A. Introduction**

On April 1, 2021, Minnesota Power (MP or the Company) petitioned the Minnesota Public Utilities Commission (PUC) for approval of the Company's 2021 Intangible, Transmission, Distribution, and General Plant Depreciation.

Minnesota Power recommends that the average service lives, net salvage rates, and depreciation rates be modified, based on the results of the study, which is included as Part III of the Company's petition. MP stated that the financial impact of the recommended changes will decrease depreciation expense by \$2,819,075.

## B. Asset Retirement Obligation

Minnesota Power stated that it owns and operates a transmission and distribution network of 9,160 miles of lines and 153 substations. All these facilities must be viewed as one large system asset, and since MP intends to operate these facilities indefinitely, there is no established retirement date; this allows deferral of any asset retirement obligation (ARO) under Accounting Standards Codification 410-20, Asset Retirement Obligations. The Company stated that there have been no changes in accounting for AROs since its last petition.<sup>3</sup>

## C. Depreciation Study

Minnesota Power contracted with a consulting firm specializing in utility depreciation to prepare the Intangible, Transmission, Distribution, and General Property Book Depreciation Accrual Rate Study ("Study"). The Study is attached to the petition as Appendix II.

The Study uses a straight line-broad group, remaining life system to compute depreciation rates (described in the Functional Rate Calculation section of the Study). MP said that a Simulated Plant Record – Balances approach was analyzed, as well as actuarial analysis (based on the retirement rate method).

The Company said:

*This study recommends and uses reserve reallocation to rebalance reserves within each business unit and function. The book depreciation reserve was derived from Company records at the individual account level. This study used a reserve model that relied on a prospective concept relating to future retirement and accrual patterns for property, given current life and salvage estimates.<sup>4</sup>*

MP stated that its consultant, Alliance Consulting Group (ACG), analyzed depreciation reserves and discovered that the positions of accounts were out of alignment with the life analysis of the underlying assets. When that occurred, MP reallocated the depreciation reserves for all accounts within each function. The Company noted that the reallocation process of depreciation reserves does not change the total reserve for each function, it only changes [reserves] at the account level.

The Company concluded by saying that the proposed rates represent a decrease in annual depreciation expense of \$2,819,075.

## V. Department of Commerce Comments

The Minnesota Department of Commerce, Division of Energy Resources (Department) explained that it reviewed Minnesota Power's Petition to (1) determine whether the Petition complies with applicable statutes, rules, and Commission orders and (2) evaluate the

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<sup>3</sup> Petition, April 1, 2021, p. 5.

<sup>4</sup> Ibid, p. 7.

reasonableness of the Company's proposed depreciation parameters and the resulting depreciation rates. Additionally, the Department reviewed other depreciation parameters, factors, and activities.

### **A. Compliance with Depreciation Statutes, Rules, Commission Orders, and Corresponding Filing Requirements**

Minnesota Power filed its last five-year depreciation studies in 2017 under Docket No. E015/D-17-114 and in 2018 under Docket No. E015/D-18-226 for general/intangible plant accounts and transmission and distribution (T&D) plant accounts, respectively. The Company continues to use a straight-line depreciation methodology.

#### **1. Annual Depreciation Filings**

The Department explained that, prior to 2008, MP used the average service life (ASL) technique to calculate the depreciation rates and expense for its transmission and distribution (T&D) accounts. The ASL technique requires filing depreciation studies every five years. However, in 2008, MP began using the remaining life (RL) technique, which require annual depreciation filings.

In its September 4, 2018 Order<sup>5</sup>, the Commission agreed with the Department's recommendations and required Minnesota Power to continue to conduct depreciation studies at least once every five years for its T&D plant accounts as well as to begin filing annual updates to its depreciation rates for these accounts to reflect changes that occur in between five-year studies. MP filed its 2019 and 2020 annual T&D plant depreciation updates as compliance filings in Docket No. E-015/D-18-226 on March 27, 2019 and March 31, 2020, respectively.

Responding to a Department information request, MP explained that its petition proposed, on a going-forward basis, to apply a remaining life technique rather than average service life, to its general plant accounts.<sup>6</sup> The Department stated that, since MP proposed to begin applying remaining life to its T&D and general/intangible accounts, the depreciation rates will change with each year with the passage of time. Therefore, the Department recommended that future filings for these accounts be in the form of a petition with a unique docket number. The Department also asked MP to reply in its comments on whether it agrees.

#### **2. Five-Year Depreciation Study Schedule**

The Commission's September 4, 2018 Order in Docket No. E-015/D-18-226 required the Company to file its next T&D five-year depreciation study no later than April 1, 2023. MP filed its latest general/intangible plant account five-year study on February 1, 2017 in Docket No. E-015/D-17-114 and the Commission ordered its next filing by May 1, 2022.<sup>7</sup> The Department said that the Company met both deadlines by filing the instant petition, combining both T&D

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<sup>5</sup> Docket No. E-015/D-18-226.

<sup>6</sup> Department Comments, June 1, 2021, Attachment 3.

<sup>7</sup> Docket No. E-015/D-17-114, June 8, 2017, Order.

and general/intangible accounts. The Department said that it had no objection to MP's plan to combine five-year studies and noted that the time period is consistent with Minnesota Rule 7825.0600.

Regarding its early filing, MP told the Department,<sup>8</sup> that the Company filed earlier than required (before the May 1, 2022 deadline) primarily because it placed over \$300 million of Great Northern Transmission Line (GNTL) assets into service in 2020. These assets are expected to have longer lives than existing transmission assets and this is reflected by the reduced annual depreciation expense. Additionally, MP would like to incorporate the Commission approved depreciation rates into its rate case filing expected in November 2021.

### 3. Required Depreciation Schedules

The Department said that, in response to information requests (IR),<sup>9</sup> Minnesota Power provided the following schedules for each year since the last filing:

- Plant in service: beginning and ending plant balances; additions and retirements; adjustments and transfers.
- Analysis of depreciation reserve: beginning and ending reserve balances; depreciation accruals and plant retirements; cost of removal and gross salvage value; transfers, adjustments, and other debits (credits).
- Summary of annual depreciation accruals: plant balance; estimated net salvage; depreciation reserve; probable service life; depreciation accrual and rate.

The Department concluded that MP provided the required information per Minnesota Rule 7825.0700, Subpart 1 and asked the Company to confirm in reply comments that it plans to file all information required by this rule in the future.

### 4. Major Future Additions and Retirements

In response to the Department's IR,<sup>10</sup> the Company stated that it had no major future additions or retirements planned. The Department concluded that the information required by Minnesota Rule 7825.0700, Subpart 2 was provided by MP's IR response and asked that the Company confirm, in reply comments, that it will provide this information in future petitions.

### 5. Asset Retirement Obligation Reporting

In its most recent T&D depreciation docket, MP was ordered<sup>11</sup> to provide an update on its accounting and reporting for the Accounting Standards Codification (ASC) 410-20, which

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<sup>8</sup> Department Comments, June 1, 2021, Attachment 2.

<sup>9</sup> Ibid, Attachment 5.

<sup>10</sup> Ibid, Attachment 5.

<sup>11</sup> Docket No. E-015/D-18-226, September 4, 2018, Order.

addresses financial accounting for obligations associated with the retirement of tangible, long-lived assets and their related retirement costs.

Minnesota Power indicated<sup>12</sup> that there have been no changes in its accounting for asset retirement obligations since its last filing. The Department concluded that MP has reasonably met its reporting obligation and recommended that the Commission require an update in the Company's next T&D and general/intangible plant five-year depreciation study

## **B. Minnesota Power's Depreciation Methodology**

The Department explained that MP's depreciation study applied the straight-line, broad group, remaining life system to calculate the depreciation parameters proposed in the Company's petition.<sup>13</sup> The Department pointed out that MP's proposal would transition the general/intangible accounts from an average service life methodology to a remaining life methodology. The Company noted that it sought this change because the remaining life technique amortizes any differences between theoretical and actual depreciation reserves automatically over time.<sup>14</sup>

The Department said that it had no objection to MP's proposed depreciation methodology change and recommended that the Commission approve the proposed transition from the ASL to the remaining life technique for Minnesota Power's general/intangible plant accounts.

## **C. Minnesota Power's Depreciation Parameter Proposals**

The Department pointed out that MP's study resulted in proposed depreciation parameters that resulted in a theoretical reduction in depreciation expense of about \$2.8 million per year or about 4.45 percent.

The Company proposed an effective date of January 1, 2021 and the Department concluded that this date is reasonable.

### **1. Average Service Life and Survivor Curve Determination**

The Department stated that, as in the past, MP has used a combination of Simulated Plant Record (SPR) analysis combined with actuarial analysis for three accounts<sup>15</sup> to estimate the average service lives

The Department said that it reviewed the Company's SPR and actuarial analyses and concluded that the proposed average service lives and survivor curves are supported by the analyses and are therefore reasonable.

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<sup>12</sup> Petition, April 1, 2021, p. 5-6.

<sup>13</sup> Ibid, p. 6.

<sup>14</sup> Department Comments, June 1, 2021, Attachment 3.

<sup>15</sup> Account 368 - Distribution Line Transformers, Account 370 - Meters, and Account 3722 - Leased Property on Customer Premises- Lightning.



## **2. Net Salvage Rate Determination**

MP studied the asset account salvage experience by analyzing salvage trends over time. The Department stated that it reviewed MP's analyses and the underlying data and concluded that the proposed net salvage rates are reasonable.

## **3. Remaining Life Determination**

The Department explained that remaining life is determined by three factors: its average service life, its survivor curve, and the age of the assets in the account. The Department said that Minnesota Power provided the derivation of the proposed remaining life for each account shown in Petition Attachment A. After reviewing this information, the Department concluded that MP's proposed remaining lives are reasonable.

## **4. Depreciation Rates**

Based on its review of all proposed depreciation parameters, the Department said that it concluded that the proposed depreciation rates are reasonable.

### **D. Proposed Depreciation Reserve Allocation**

Depreciation reserves are accrued at an account level and reflect the amount of depreciation expense (including net salvage) accumulated over the useful lives of the assets in the account.

Minnesota Power said that:

*In the process of analyzing the Company's depreciation reserve, Alliance Consulting Group observed that the depreciation reserve positions of the accounts were generally not in line with the life characteristics found in the analysis of the Company's assets. To allow the relative reserve positions of each account within a function to mirror the life characteristics of the underlying assets, we reallocated the depreciation reserves for all accounts within each function.<sup>16</sup>*

The Department emphasized that the reallocation redistributes reserves within a functional plant category but does not change the functional plant category's total depreciation reserve. The Department pointed out that the difference between the reserve amounts was substantial for many accounts, with some requiring reallocations in the millions or a change of more than 20 percent.<sup>17</sup>

The Department prepared Table 1, below, showing several accounts subjected to relatively large reserve allocations.

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<sup>16</sup> Petition, April 1, 2021, p. 7.

<sup>17</sup> The proposed reallocation detail can be found in Petition Appendix E.

**Table 1: Select Accounts with Substantial Proposed Reserve Reallocations<sup>18</sup>**

Account	Absolute <sup>19</sup> Dollar Change in Depreciation Reserve	Percentage Change in Depreciation Reserve
3540 – Towers & Fixtures	\$5,271,911	26%
3561 – Clearing Land & Rights of Way	\$1,974,952	25%
3620 – Station Equipment	\$13,854,728	38%
3640 – Poles, Towers and Fixtures	\$18,308,806	24%
3691 – Services Overhead	\$2,070,020	41%
3692 – Services Underground	\$2,371,167	32%
3700 – Meters	\$5,414,551	26%
3910 – Office Furniture & Equipment	\$4,499,846	779%
3926 – Transportation Equip. Vehicle Class 6	\$946,376	45%
3940 – Tools, Shop & Garage Equipment	\$1,804,359	102%
3973 – Communication Equip. Mobile Radio	\$1,776,105	24%
3976 – Communication Equip. Fiber Optic Cable	\$9,828,985	44%

The Department concluded with the comment that:

*[B]ecause the Company’s proposed depreciation reserve reallocation is intended to align the depreciation reserve with the corresponding life characteristics of the assets in Minnesota Power’s plant accounts, the proposed reallocation is appropriate at this time. Therefore, we recommend that the Commission approve the proposed depreciation reserve reallocation, as shown in Petition Appendix E. However, as applicable, the Department intends to evaluate in the Company’s future depreciation petitions whether substantial reserve reallocations are becoming a chronic issue and, if so, whether modifications to the depreciation parameters or the methods used to predict the depreciation parameters are necessary to reduce the magnitude of these reallocations.<sup>20</sup>*

### **E. Prior Year Plan Activity and Depreciation Reserve**

Based on MP’s response to a Department IR, the Department prepared Table 2, below, summarizing certain plant activity and depreciation provisions from 2017 through 2020.

<sup>18</sup> Department Comments, June 1, 2021, p. 10.

<sup>19</sup> Ibid, Department Footnote 25: “All figures in Table 1 are shown as positive numbers, but please note that the proposed reserve reallocations, depending on the specific account, would either increase or decrease the account’s book depreciation reserve. Petition Appendix E contains additional details on the proposed reserve reallocations.” [emphasis added]

<sup>20</sup> Department Comments, June 1, 2021, p. 10.

**Table 2: Minnesota Power's Plant Balance and Depreciation Summary 2017 – 2020<sup>21</sup>**

Year	Plant \$ Balance at December 31 A	\$ Increase in Plant Balance B	Depreciation Reserve \$ Balance at December 31 C	\$ Increase in Depreciation Reserve Balance D	Depreciation Reserve Ratio E=A/C
2020 <sup>22</sup>	1,977,217,248	352,161,800	691,654,186	1,991,766	35%
2019	1,625,055,448	39,900,119	689,662,420	20,927,460	42%
2018	1,585,155,329	44,372,355	668,734,960	33,942,225	42%
2017	1,540,782,974	N/A	634,792,735	N/A	41%

The Department said that table 2, above, shows MP's declining depreciation ratio, which fell from 42 to 35 percent between 2019 and 2020; is primarily due to placing a substantial amount – over \$300 million of its Great Northern Transmission Line assets into service in 2020.

#### F. Department Conclusions and Recommendations

The Department said that Minnesota Power's depreciation proposals in the current docket are reasonable for accounting purposes. The Department recommended the Commission:

- Approve Minnesota Power's proposed average service lives, survivor curves, net salvage rates, remaining lives, and the corresponding depreciation rates, with an effective date of January 1, 2021.
- Require the Company to include an update on its reporting and accounting for ASC 410-20 in its next transmission, distribution, and general/intangible plant five-year depreciation study.
- Approve the proposed transition from the average service life to the remaining life depreciation technique for Minnesota Power's general/intangible plant accounts.
- Approve the proposed depreciation reserve reallocation.

The Department also requested that Minnesota Power explain in reply comments:

- Whether the Company agrees to file future annual T&D and general/intangible depreciation updates in the form of a petition, rather than a compliance filing, with a unique docket number.
- Whether the Company agrees to, going forward, file with each depreciation certification petition the schedules required by Minnesota Rule 7825.0700, Subpart 1.

<sup>21</sup> Ibid, p. 11, Department Footnote 28: "Data in Table 2 data was retrieved from Minnesota Power's response to Department IR 7, Appendix A of Minnesota Power's initial filing in Docket No. E015/D-18-226, and Petition Appendix A."

<sup>22</sup> Ibid, p. 11, Department Footnote 29: "In conversations with Minnesota Power, the Company confirmed that the 2020 plant and reserve balances shown in Petition Appendix A are the correct balances, not those shown in the Company's response to Department IR 7."

- Whether the Company agrees to, going forward, include with each depreciation certification petition the discussion around major future additions and retirements required by Minnesota Rule 7825.0700, Subpart 2.

## **VI. Minnesota Power's Reply Comments**

In its June 4, 2021 comments, Minnesota Power said that it agrees with all the Department recommendations and requests, including the additional filings and procedures in future submittals.

## **VII. Staff Comment**

Staff appreciates the thoroughness of the Department's review and analyses and concurs with all its recommendations.

## **VIII. Decision Alternatives**

1. Approve Minnesota Power's proposed average service lives, survivor curves, net salvage rates, remaining lives, and the corresponding depreciation rates, with an effective date of January 1, 2021. (DOC, MP)
2. Approve the proposed transition from the average service life to the remaining life depreciation technique for Minnesota Power's general/intangible plant accounts. (DOC, MP)
3. Require the Company to include an update on its reporting and accounting for ASC 410-20 in its next transmission, distribution, and general/intangible plant five-year depreciation study. (DOC, MP)
4. Approve the proposed depreciation reserve reallocation. (DOC, MP)
5. Require Minnesota Power to file its next five-year depreciation study no later than April 1, 2026. (Staff)