MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	February 17, 2022	Agenda Item 3*
Company	Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co.	
Docket No.	**G-004/D-21-372**	
	In the Matter of Great Plains Natural Gas Company's Petition for Approval of its 2021 Annual Depreciation Certification.	
Issues	Should the Commission approve Great Plains Natural Gas Co.'s 2021 annual depreciation certification?	
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✓ **Relevant Documents**	**Date**
Great Plains Natural Gas Company – Initial Filing	June 1, 2021
Minnesota Department of Commerce – Comments	October 5, 2021
Great Plains Natural Gas Company – Reply Comments	October 25, 2021

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I. Statement of the Issues

Should the Commission approve Great Plains Natural Gas Co.'s 2021 annual depreciation certification?

II. Background

On June 1, 2021, Great Plains Natural Gas Co., a Division of Montana-Dakota Utilities Co. (Great Plains, GPNG, or the Company) filed its 2021 Annual Depreciation Study (Petition) requesting approval of the depreciation rates and parameters proposed in its 2021 Annual Depreciation Study. The petition was filed in conjunction with its consultant-preparer, Concentric Advisors.

The Company's Petition included information about its 2020 capital asset additions, retirements, transfers, and adjustments as well as an update on its PVC replacement program.

On October 5, 2021, the Minnesota Department of Commerce, Division of Energy Resources (Department) filed its Comments recommending that the Commission approve Great Plains Petition.

On October 25, 2021, Great Plains submitted Reply Comments, in which it agreed with the Department's recommendations for the Commission to approve its petition.

III. Relevant Statutes, Rules and Procedures

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

> 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. Minn. Rules, pts. 7825.0500 – 7825.0900. Depreciation Certification

1. Minn. Rules, pt. 7825.0600, subp. 1. Depreciation Certification.

> Depreciation practices applicable to all utilities. 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 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. Minn. Rules, pt. 7825.0600, subp. 2 & 3. Depreciation Certification

   ... [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. Minn. Rules, pt. 7825.0900. Petition for Certification Procedure

   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. Parties' Comments

A. Great Plains' Petition

Great Plains' petition noted that the application of the proposed depreciation rates would result in an increase of $55,961 over the rates established in Docket No. G-004/D-20-511 and the composite annual depreciation rate would rise to 4.46 percent compared to 4.36 percent in the previous docket.

Table 1: Summary of Original Cost, Currently Approved Accrual Percentages and Amounts, and Updated Accrual Percentage and Amounts

Plant Group / Accounts	Original Cost	2019 Annual Accrual		Updated Annual Accrual	
Transmission Plant	$7,338,365	2.10%	$154,106	2.12%	$155,380
Distribution Plant	$55,084,262	4.68%	$2,577,943	4.75%	$2,616,879
General Plant	$6,598,072	4.40%	$290,315	4.64%	$306,066
TOTAL	**$69,020,699**	**4.36%**	**$3,022,364**	**4.46%**	**$3,078,325**

Concentric Advisors (Concentric), Great Plains' consultant preparer, noted that the purpose of this update was to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the actual surviving original cost as of December 31, 2020.

The annual depreciation accrual rates presented, according to Concentric, are based on the broad group straight line method of depreciation using the Average Life Group (ALG) procedure and were applied using the remaining life technique. Concentric pointed out that the calculations were based on the actual plant accounting ledger values as of December 31, 2020. Any variances between the actual book accumulated depreciation reserve and calculated accrued depreciation requirement are amortized over the composite remaining life of each group of assets.

Great Plains also reported on the progress of its PVC replacement program. The Company stated that, as of the end of 2020, approximately 46% of planned total mains and 50% of total services have been replaced. The Company observed that the previous year's report stated 45% of mains and 54% of services were completed. The discrepancy is due to the continual improvements to the Company's DIMP model, resulting to an increase in the quantity of identified PVC pipe.

B. Department's Comments

The Department reviewed Great Plains' Petition for the following purposes:

- to determine if the Petition complied with all applicable statutes, rules, and past Commission orders;
- to evaluate the reasonableness of proposed depreciation rates and parameters; and to examine 2020 capital asset activity (additions, retirements, transfers, and adjustments).

1. Compliance with Statutes, Rules, and Filing Requirements

According to Minnesota Statutes, Section 216B.11 and Minnesota Rules, parts 7825.0500-7825.0900, public utilities are required to seek Commission approval of their depreciation rates and methods. At least once every five years utilities must file comprehensive depreciation studies using Straight Line depreciation (unless the utility can justify a different method). In 2017, Great Plains filed its last five-year depreciation study in Docket No. G-004/D-17-450. Additionally, the Company filed its 2020 annual depreciation certification in Docket No. G-004/D-20-511 and has continued to use the straight line depreciation method.

The Department observed that Great Plains is applying the remaining life technique in its depreciation methodology. When the remaining life technique is used to depreciate group property, the underlying life and salvage factors may not change, but depreciation rates must be updated annually to reflect the passage of time. Additionally, the impacts to plant account activity, such as capital additions and retirements, must be accounted for in updating the assets remaining lives. The Petition proposed the current year update as required.

Consequently, the Department concluded that Great Plains has complied with the applicable statutes, rules, and filing requirements.

2. Compliance with previous Commission Orders

The Department reviewed Great Plains' compliance with previous orders as follow:

- Great Plains' Petition properly requested that its proposed depreciation rates be effective on January 1, 2021, and was based on December 31, 2020, plant and reserve balances.[1]
- An analysis of the accounts affected by the Company's PVC replacement program.[2] A summary of the additions, retirements, adjustments, and transfers for plant-in-service accounts and their associated accumulated depreciation accounts, as required by Minnesota Rule 7825.0700.[3]
- The Minnesota jurisdictional amounts for the Company's gas plant-in-service accounts.[4]

The Commission's Order in Great Plains' 2019 annual depreciation study required the Company to continue to report the details of its building retirements in Account 390.0 General Structures and Improvements in future deprecation filings.[5] The Department noted that Great Plains provided this information in Attachment B of this petition.

Great Plains was required by the Commission's Order for its 2020 annual depreciation study to provide the following in its next annual depreciation update for Account 390.0[6]:

1. Move all the structures (buildings) in Account 390.0 out of their group and depreciate them individually, such that they can be depreciated individually going forward;
2. Propose allocations of the existing depreciation reserve among the structures in Account 390.0;
3. Propose individual remaining lives for the structures in Account 390.0

The 2020 Order also stated that the Company should continue to exclude Account 388.0 (Asset Retirement Obligations) from future depreciation studies; provide an update on the Company's PVC replacement program in future depreciation studies; and in future depreciation filings use the updated format of Petition Table 2.[7]

The Department noted that Great Plains complied with the Commission's Orders regarding Accounts 390.0 and 388.0and provided an update on the Company's PVC replacement program. Additionally, the Department noted that the Company, for the most part, "appeared to use the updated format discussed in Attachment 6 of the Department's July 14, 2020 Comments in Docket No. G004/D-20-511".[8]

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[1] Great Plains' Petition, Docket No. G-004/D-21-372; pp. 1-2
[2] Ibid; p. 3-2
[3] Great Plains' Petition, Docket No. G-004/D-21-372; pp. 5-39 and 5-42, Tables 2 and 3.
[4] Great Plains' 2020 Jurisdictional Annual Report was filed on May 1, 2021 under Docket No. 21-04.
[5] Commission's January 15, 2020 Order in Docket No. G-004/D-19-376.
[6] Commission's December 30, 2020 Order in Docket No. G-004/D-20-511, Ordering Point No. 3.
[7] Ibid; Ordering Point Nos. 4, 5 and 6.
[8] Petition, Docket No. G-004/D-21-372; page 5-39 Table 2.

Based on the above, the Department concluded that the Company has complied with prior Commission orders, as applicable.

3. Depreciation Methodology

a. Statistical Determination of Asset Lives and Retirement Patterns

The Department noted that through Great Plains' work with consultants, it has assigned statistical survivor curves[9] to the majority of the Company's group property accounts.[10] The Department further observed that the Company also applied average service lives (ASLs) to most of its capital accounts,[11] which are based on the statistical retirement analyses associated with the property groups in different accounts.

b. Depreciation Calculations

The Department stated that, generally, Great Plains depreciates its assets using the straight line method and Average Life Group (ALG or Broad Group) procedure applied on a remaining life basis. The Company uses a depreciation software to calculate the ALG remaining life associate with each vintage (i.e. year) in which the Company capitalized costs[12] under a given account. To compute the composite remaining life of a group property account, each vintage's remaining life is weighted by the proportion of the costs capitalized in that vintage to the total amount capitalized in the account, and then the weighted vintage remaining lives are added together.[13]

While the Company's underlying computations related to depreciation are complex, Great Plains continues to calculate its proposed depreciation rates in a manner that is typical of the Straight-Line depreciation methodology: (total annual depreciation accrual/total original surviving capitalized cost included in the group property account).[14]

4. Great Plains' Proposed Depreciation Rates

The Department noted that Great Plains calculated depreciation rates at the individual account level. As summarized in Table 2, the Department considered the proposed depreciation rates

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[9] In the context of utility depreciation, the survivor curve assigned to a capital asset account represents a probability distribution pertaining to the remaining useful life of the group of assets included in the relevant account. Department Comments at X.

[10] At this time, Great Plains does not assign a survivor curve to accounts 375.0, 378.0, 381.0, and 383.0. Department Comments at X.

[11] Department Comments, Docket No. G-004/D-21-372; p. 4

[12] The remaining life figures are documented under the columns titled "ALG Remaining Life" in Section 5, Detailed Depreciation Calculations, of the Petition.

[13] Calculation procedure: SUM OF [(original surviving capitalized cost for vintage X / total surviving capitalized cost for all vintages under account Y) x (remaining life of vintage X)] = composite remaining life for account Y.

[14] See the annual depreciation accrual and original cost figures documented under columns titled "Annual Accrual" and "Original Cost," respectively, in Section 5 Detailed Depreciation Calculations, of the Petition.

presented in the Petition's page 4-2, and compared them to the corresponding rates approved in the Company's 2020 annual depreciation study in Docket No. G-004/D-20-511.

Table 2: Summary of Approved and Proposed Depreciation Rates for Great Plains[15]

Plant Group	**Composite Depreciation Rate Percentage (%)**		*Proposed Percentage (%) Increase (B – A) ÷ (A)*
	2020 Approved (A)	*2021 Proposed (B)*	
Transmission	2.10	2.12	<1
Distribution	4.68	4.75	1.50
General	4.40	4.64	5.45
All Plant	4.36	4.46	2.29

Table 2 (Department's Table 1) shows that Great Plains' proposals would slightly increase the composite depreciation rate for each major plant group between 2020 and 2021. These proposed increases resulted from a combination of the effects of 2020 capital asset additions, retirements, transfers, and adjustments as well as the outcomes of the statistical analyses documented in Petition Section 5, *Detailed Depreciation Calculations.*

The Department noted that the Company's annual depreciation expense estimate for 2021 is based on the plant-in-service balances as of December 31, 2020. When applied to the December 31, 2020 plant-in-service balances, the newly proposed depreciation rates result in a theoretical total annual depreciation expense of $3,078,325.[16] This theoretical estimate does not reflect the actual depreciation expense that Great Plains will book for 2021. The Company actually calculates depreciation expense on a monthly, not annual basis, and it will likely book some combination of capital asset additions, retirements, transfers, and adjustments during 2021, so the actual annual depreciation expense for 2021 will differ from the theoretical estimate.

Additionally, the Department verified that Great Plains has not requested modifications to the previously established average service lives, salvage rates, or survivor curves assigned to the Company's accounts. Given that the Petition is an annual depreciation update, rather than a 5-year comprehensive depreciation study, the Department concluded that it is appropriate for these depreciation parameters to remain unchanged.

The Department noted that since depreciation expense is established in a general rate case, Great Plains' ratepayers will pay the currently established rates throughout 2020, regardless of the Company's booked 2020 depreciation expense amount. The Department emphasized that the Commission's determinations in depreciation proceedings are for accounting purposes only and are not determinations for purposes of rates.

Based on its review, the Department recommended approval of Great Plains' proposed depreciation rates, as outlined on page 4-2, Table 1 of the Petition.

[15] Department Comments, October 5, 2021, "Department Table 1".
[16] Petition, Docket No. G-004/D-21-372; page 4-2, Table 1, "Annual Accrual Amount."

5. Great Plain's 2020 Depreciation Calculations and the Corresponding Capital Asset Additions, Retirements, Transfers and Adjustments.

The Department referenced Tables 2 and 3 of the Petition, which presented a summary of Great Plains' 2020 capital asset additions, retirements, transfers, and adjustments as well as the Company's 2020 schedule of accumulated depreciation, respectively.

a. Plant Balance and Depreciation Provisions Over Time

Table 3 (Department's Table 2) shows that, over time, the Company's depreciation reserve (i.e. accumulated depreciation) ratio has generally trended downward, with notable reserve ratio decreases between 2014 and 2015 as well as between 2017 and 2018. These changes in Great Plains' reserve ratio are consistent with the Company's continued investment in its system and the especially significant plant-in-service increases reported for 2015 and 2018. Moreover, Table 3 shows that the Company's annual booked depreciation expense has trended steadily upward, a pattern that is logical in the context of the increasing plant-in-service balances and composite depreciation rates.

Table 3: Great Plains' Plant-In-Service and Depreciation Provision Summary 2013 - 2020

Year	*Year-end Plant Balance ($)*	*Increase in Plant Balance ($)*	*Annual Depreciation Expense Booked ($)*	*Approved Composite Depreciation Accrual Rate*	*Year-end Depreciation Reserve Balance[17] ($)*	*Increase in Depreciation Reserve Balance ($)*	*Year-end Depreciation Reserve Ratio*
2020	71,941,189	3,425,574	3,083,610	4.36%	33,855,871	1,366,741	47.06%
2019	68,515,615	4,495,793	2,863,934	4.32%	32,489,130[18]	2,000,551	47.42%
2018	64,019,822	8,403,694	2,540,871	4.31%	30,488,579	63,186	47.62%
2017	55,616,128	1,231,739	2,245,003	4.31%	30,425,393	1,273,926	54.71%
2016	54,384,389	6,029,130	2,073,206	3.81%	29,151,467	2,196,537	53.60%
2015	48,355,259	6,894,986	1,828,985	3.78%	26,954,930	993,921	55.74%
2014	41,460,273	2,984,892	1,515,365	3.65%	25,961,009	942,482	62.62%
2013	38,475,381	n/a	1,404,487	3.65%	25,018,527	n/a	65.02%

[17] For better comparability among all years documented in Department Table 3, the depreciation reserve balances exclude Risk Work in Progress (RWIP) reserve amounts.

[18] The year-end 2019 depreciation reserve shown in Department Table 2 does not match the depreciation reserve shown in Petition Table 3 in Docket No. G-004/D-20-511, because Petition Table 3 erroneously included a depreciation reserve balance for Account 388.0 – ARO (Asset Retirement Obligation). In response to a Department's information request, Great Plains clarified that it should have excluded Account 388.0 from the depreciation study (Department Attachment 3). Therefore, the Department excluded the Account 388.0 depreciation reserve balance from the corresponding 2019 total documented in Department Table 2. ($33,861,539 - $1,372,409) = 32,489,130. Figures in the preceding calculation are shown in Petition Table 3, page 5-40.

b. Depreciation Expense Provision Calculations for 2020

As part of its review, the Department performed an analysis of the 2020 expense provisions reported by Great Plains and concluded that the 2020 amounts in the Table 3 are reasonable.

c. Great Plains' Building Requirements

As shown in Attachment B of the Petition, Great Plains reported $45,959 in 2020 building-related retirements in Account 390.0 – General Structures and Improvements. The Department reviewed these transactions for reasonableness and does not have any concerns, especially given the rather small dollar amount of the transactions.

6. Update on PVC Replacement Program

Great Plains provided an update on its PVC replacement program on page 3-2 of its Petition (Attachment A, Section 3).

The Department noted that Great Plains continued its mains and services PVC replacement program and, at the end of 2020, approximately 46% of total mains and 50% of total services planned to be replaced has been completed. During 2020, 41,187 feet of mains and 567 services were replaced. Great Plains will continue to monitor the status of the PVC replacement program; and will provide an update in future depreciation studies.[19]

As explained in the Company's prior 5-year depreciation study,[20] in 2011 Great Plains initiated a 15-year PVC Replacement program, which involves replacing meter bars, house regulators, and older meters that cannot be refurbished. Hence, the depreciation rates developed for these accounts reflect the planned PVC replacement program's impact on the existing assets' retirement. The current Petition proposes to continue using the same depreciation rates initially approved by the Commission in Great Plains' most recent 5-year depreciation study;[21] this proposal is also consistent with the depreciation rates approved for the relevant accounts in the Company's 2018, 2019, and 2020 annual depreciation studies.[22]

Table 4 (Department's Table 3) shows the depreciation rates approved for accounts 378.0, 381.0, and 383.0 between 2013 and 2020. The Department noted that it is plausible for the depreciation rates to remain unchanged between years, as Great Plains has proposed in its current Petition for 2020.

Table 4: Depreciation Rates Approved for Great Plains' Accounts 378.0, 381.0, and 383.0

Year	Approved Depreciation Rate (%)		
	Account 378.0	*Account 381.0*	*Account 383.0*
2013	2.70	7.49	5.38
2014	5.11	8.05	6.14

[19] Petition, Docket No. G-004/D-21-372; p. 8
[20] See Department's October 2, 2017 Comments, pages 4 and 5, in Docket No. G004/D-17-450.
[21] Docket No. G-004/D-17-450.
[22] Docket Nos. G-004/D-18-369, G004/D-19-376, and G-004/D-20-511.

2015	2.83	8.14	6.38
2016	2.83	8.14	6.38
2017	12.55	9.91	6.62
2018	12.55	9.91	6.62
2019	12.55	9.91	6.62
2020	12.55	9.91	6.62

The Department concluded that using the previously approved depreciation rates for these accounts for 2021 is reasonable. However, as this program progresses, the Department expects Great Plains to adjust the depreciation rates as needed to reflect changes associated with the relevant asset replacements. The Department subsequently recommended that the Commission continue to require Great Plains to provide an update on the Company's PVC replacement program in its future depreciation studies.

C. Department Conclusion and Recommendations

Based on their review, the Department concluded that Great Plains' Petition complies with the applicable statutes and Commission orders, and that the Company's depreciation proposals in the instant docket are reasonable. Therefore, the Department recommended that the Commission takes the following actions:

- Approve Great Plains' proposed depreciation rates, as outlined in Table 1 of the Petition, with an effective date of January 1, 2021.
- Require Great Plains to continue to exclude Account 388.0 – Asset Retirement Obligations from its future depreciation studies.
- Require Great Plains to continue to provide an update on the Company's PVC replacement program in its future depreciation studies.

The Department emphasized that the Commission's determination in depreciation proceedings is for accounting purposes only and are not a determination for purposes of rates.

D. Great Plains – Reply Comments

On October 25, 2021, Great Plains filed Reply Comments to the Comments of the Minnesota Department of Commerce. The Company agreed with the Department's analysis and recommendations.

V. Staff Comments

Staff appreciates Great Plains efforts to provide updated information on its capitalized asset plans and activities. Staff agrees with the Company's and the Department's recommendations to approve the 2021 Annual Depreciation Study and associated depreciation rates and parameters, as well as reporting on Great Plains' PVC replacement program.

VI. Decision Alternatives

1. Approve Great Plains' proposed depreciation rates, as outlined in Table 1 of the Petition, with an effective date of January 1, 2021. (Great Plains, DOC)

2. Require Great Plains to continue to exclude Account 388.0 – Asset Retirement Obligations from its future depreciation studies. (Great Plains, DOC)

3. Require Great Plains to continue to provide an update on the Company's PVC replacement program in its future depreciation studies. (Great Plains, DOC)